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INTELLECTUAL OUTPUT 3

Skill Validation

The Project Partners

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ABSTRACT

This intellectual output presents the collaborative work of the project partners under the project name (as stated above) and the project number 2020-2-TR01-KA205-095580, supported by Turkish EU Agency. This output outlines the contents of intellectual output 3 ''skill validation'' for young IT skilled/interested people to learn about various IT job areas and what they ask from new employers for recruitment. We have listed diverse questions which were gathered via our scientific and sectoral data analysis. Some of these questions were used in our software called ''online skill validation platform'' created as a part of this project.

Legal warning

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COMPUTER NETWORK ARCHITECTS

Job Description

Computer network architects design and build data communication networks, including local area networks (LANs), wide area networks (WANs), and Intranets. These networks range from small connections between two offices to next-generation networking capabilities such as a cloud infrastructure that serves multiple customers. Network architects must have extensive knowledge of an organization's business plan to design a network that can help the organization achieve its goals.

Duties

Computer network architects typically do the following:

	Create plans and layouts for data communication networks
	Present plans to management and explain why they are in the organization's best
intere	st to pursue them
	Consider information security when designing networks
	Upgrade hardware, such as routers or adaptors, and software, such as network drivers,
as nee	ded to support computer networks
	Research new networking technologies to determine what would best support their
organ	ization in the future
Comp	uter network architects, or network engineers, design and deploy computer and
inforn	nation networks. After deployment, they also may manage the networks and
troubl	eshoot any issues as they arise. Network architects also predict future network needs by
analyz	zing current data traffic and estimating how growth will affect the network.

Some computer network architects work with other IT workers, such as network and computer system administrators and computer and information systems managers to ensure workers' and clients' networking needs are being met. They also must work with equipment and software vendors to manage upgrades and support the networks.

Work Environment

Computer network architects spend most of their time in offices, but occasionally work in server rooms where they have access to the hardware that make up an organization's computer and information network.

Work Schedules

Most computer network architects work full time. Some work more than 40 hours per week.

How to Become a Computer Network Architect

Computer network architects typically need a bachelor's degree in a computer-related field and experience in a related occupation, such as network and computer systems administrators.

Education

Computer network architects typically need at least a bachelor's degree in computer and information technology, engineering or a related field. Degree programs in a computer-related field give prospective network architects hands-on experience in classes such as network security or database design. These programs prepare network architects to be able to work with the wide array of technologies used in networks.

Employers of network architects sometimes prefer applicants to have a master's of business administration (MBA) in information systems. MBA programs generally require 2 years of study beyond the undergraduate level and include both business and computer-related courses.

Work Experience in a Related Occupation

Network architects generally need to have at least 5 to 10 years of experience working with information technology (IT) systems. They often have experience as a network and computer system administrator but also

may come from other computer-related occupations such asdatabase administrator or computer systems analyst.

Licenses, Certifications, and Registrations

Certification programs are generally offered by product vendors or software firms. Vendorspecific certification verifies a set of skills to ensure network architects are able to work in specific networking environments. Companies may require their network architects to be certified in the products they use.

Advancement

Some network architects advance to become computer and information systems managers.

Important Qualities

Analytical skills. Computer network architects have to examine data networks and decide how to best connect the networks based on the needs and resources of the organization.

Detail oriented. Computer network architects create comprehensive plans of the networks they are creating with precise information describing how the network parts will work together.

Interpersonal skills. These workers must work with different types of employees to successfully design and implement computer and information networks.

Leadership skills. Many computer network architects direct teams of engineers, such as computer hardware engineers, who build the networks they have designed.

Organizational skills. Computer network architects who work for large firms must coordinate many different types of communication networks and make sure they work well together.

Pay (Expected Average Salary)

The median annual wage for computer network architects was \$116,780 in May 2020. The median wage is the wage at which half the workers in an occupation earned more than that

amount and half earned less. The lowest 10 percent earned less than \$67,190, and the highest 10 percent earned more than \$175,570.

Job Outlook

Employment of computer network architects is projected to grow 5 percent from 2020 to 2030, slower than the average for all occupations.

Despite limited employment growth, about 11,000 openings for computer network architects are projected each year, on average, over the decade. Most of those openings are expected to result from the need to replace workers who transfer to different occupations or exit the labor force, such as to retire.

Employment

Demand for computer network architects will grow as firms continue to design and build new information technology (IT) networks and upgrade existing ones. The expansion of healthcare information technology will also contribute to employment growth.

Adoption of cloud computing, which allows users to access storage, software, and other computer services online, is likely to dampen the demand for computer network architects. Organizations will no longer have to design and build networks in-house; instead, firms that provide cloud services will be able to offer network resources.

Smaller firms with minimal IT requirements will find it more cost effective to contract services from cloud service providers. However, because computer network architects at cloud providers can work on more than one organization's network, these providers will not have to employ as many computer network architects as individual organizations do.

INTERVIEW QUESTIONS

How would your colleagues describe you?

Asking this will give you a better idea of how they view themselves in the eyes of others and should reveal clues on their ability to work within a team environment.

Are they known as the quiet one, the goofball, the communicator, the workaholic, or something else?

What motivates you to work?

Do you like working with a team or working alone?

This really depends on what opening the job seekers are applying for. Is it a desk job that only requires them to be by themselves self or is it work that demands coordination and communication with others?

If you analyze that the applicants are people who are flexible, willing to do multi-tasking, and wouldn't be bothered if at times they work alone or with a team, these could be the best professionals to hire.

Reveal something about yourself not on your resume

Sometimes there are quirks about prospective employees that you simply can't see on a resume.

Questions about company culture

Questions about company culture will help the interviewer determine if your values align with the prospective employer. When asking these questions, you can also highlight your compatibility with workplace culture. Asking questions about company culture can also show the interviewer that you have an interest in getting to know others and becoming part of a community.

	How does this company promote its core values?
	What team-building activities does your team participate in?
	In what ways does this company support its employees?
	Does this company have any workplace traditions?
	What changes have you seen in this company while you have worked here?
	What are the characteristics of a person who would succeed in this company's
environment?	
	How does the team I would be working on support the company's goals

Questions about the position

Asking questions about the position will not only show the interviewer that you have put thought and effort into your application but will also give you valuable details about the job. Gauging the expectations of the employer can help you understand what they are looking for in an applicant. These questions can help you understand the scope of the position and possibilities for growth.

What traits would help me be successful in this position?
How often would I collaborate with others in this position?
Are there opportunities for this position to change or expand?
Who are the main people that I would regularly interact with?
What tasks would I complete on an average day?
What did the person who previously held this position do well?
What changes would you like to see in how this job is done?

Questions about performance

Showing an interest in how job performance is evaluated demonstrates to the employer that you have plans to grow at the company. Employers often look for candidates who will remain at their company for as long as possible to avoid turnover costs. Ask questions about performance to assure employers of your ability to meet and exceed expectations.

How often will my manager be available to discuss my performance?
Can you describe the formal performance review process for this position?
How and how often can I expect to receive feedback on my work?
How can I get support in setting goals and expectations?
What should I hope to accomplish in my first 90 days if I am hired for this position?
How does this company or team celebrate success?
How do you evaluate the success of your employees?

Questions about training

Ask questions about the training process to learn about opportunities for advancement and signal to the interviewer that you are an ambitious candidate. This kind of question signals to the hiring team that you are forward-thinking regarding your career. Learning about the

trainin	training procedures of a possible new employer can prepare you to adjust quickly to your new		
enviro	nment and stand out as an employee.		
	Can you describe the training process for this position?		
	How have successful employees advanced in this company?		
	Does this company offer frequent opportunities for promotion or on-the-job training?		
	Will I have opportunities to shadow my coworkers and learn about other roles?		
	How will working in this position grow my skills?		
	Does your company offer continued training for interested employees?		
Questi	ions about development		
Asking	g questions about professional development shows the interviewer that you are not only		
interes	ted in the position you are applying for, but want to grow within the company.		
Emplo	yees who bring new skills and education to their company are often desirable		
candid	ates. Asking a question about professional development opportunities can also teach		
you about how the company can support your own goals.			
	Does this company send employees to conferences?		
	What organizations does this company work with to grow the skills of its employees?		
	Does this company organize any volunteer opportunities?		
	Does the company offer any incentives for learning new skills?		
	How does this company stay competitive in its field?		
	Does the company ever sponsor the continued education of its employees?		
Questi	ions about the team		
By ask	ting questions about the people you could be working with, you can determine if you		
would	thrive as part of their team. The personalities, strengths and weaknesses of the team can		
influer	nce your ability to succeed in the workplace. These questions show the interviewer that		
you are	e committed to teamwork and cooperation.		
	How would you describe your team's dynamic?		
	What can you tell me about the people I will be working with?		
	Who will I report to directly and how would you describe their management style?		
П	What would you consider to be your team's greatest success?		

	Which other departments does this team collaborate with? How does your team manage conflicts? What are this department's greatest strengths and weaknesses?
	What is the turnover like for this department?
Questi	ions about hiring
In order to set reasonable expectations about when the hiring team will make a decision, ask questions about the hiring process. Understanding their timeline and process for onboarding a new employee allows you to make plans for your future. Additionally, the interviewer might indicate the success of your interview by their mood and enthusiasm when answering questions about hiring.	
	What are the next steps in the hiring process?
	Who can I contact with any questions?
	If I were hired for this position, when would I be able to start?
	When can I expect to hear your decision about my application?
	Do you have any concerns about my qualifications?
	What have other applicants
	Can you describe the onboarding process?
TECHNICAL INTERVIEW QUESTIONS	
What a	are the functions of nodes and links in a computer network?
What i	s an IPv4 address, and can you describe some of the different classes of IPv4?
What a	are private and special IP addresses, and how are these used?

Are you comfortable presenting a network plan to management? Tell me about how you

create a successful presentation.

How do you typically go about estimating network traffic?
What do you anticipate will be some of the future technology developments in the field of computer networking?
Please provide me with more details about a local area network or LAN.
What is the definition of network topology?
Can you discuss HTTP and HTTPS protocols and describe how they differ from each other?
What is the TCP/IP reference model? Can you describe its layers?
What is the OSI reference model?
Can you describe some of the different types of network topologies?
Can you describe the different types of VPNs?
Can you explain the features of the different types of networks?
Have you ever worked with a construction team while designing a network? How do you manage this?

When you come across a networking problem where you are unsure of the correct approach, what steps do you take to figure out a solution?
Tell me about the last time you undertook a project that demanded a lot of initiative.
Tell us about a specific time when you had to handle a challenging problem that challenged fairness or ethical issues.
What is the latest wireless router technology?
Which do you prefer, wireless or hard-wired network connections?
What are the different classifications for computer networks, and what criteria are used to determine these?
What is a VPN (Virtual Private Network), and why would you recommend implementing one?
Briefly describe the 7 different layers of the OSI reference model.
What are the key differences between the OSI and the TCP/IP reference models?
Please define and discuss SMTP protocol.
What steps do you take to estimate network traffic?

Tell Me About a Work Problem That Required a Complicated Solution and How You Worked With Your Team to Resolve It.

What's a New Software or Technology You Recently Worked With and How Did You Come to Learn It?

What Do You Do When It Looks Like a Project You Are Working on Might Miss a Deadline?

Tell Me About the Stakeholders and Internal Clients You Work With Outside of IT and How Your Work Supports Overall Business Goals.

Tell Me About a Time When You Explained a Technical Process or Concept to Someone Who Didn't Have a Technical Background.

Can You Tell Me About a Project Where You Volunteered to Help or Offered Support?

Can You Provide an Example of a Challenging Coworker Relationship? How Did You Handle It?

Tell Me About a Work Product You Delivered That You're Particularly Proud Of.

What Tools and Strategies Do You Use to Organize and Prioritize Your Work to Best Meet Team Goals, Expectations, and Deliverables?

DATA ADMINISTERS, DATA ARCHITECTS AND DATA MODELLING

Job Describtion

Database administrators and architects create or organize systems to store and secure a variety of data, such as financial information and customer shipping records. They also make sure that the data are available to authorized users.

Duties

Database administrators and architects typically do the following:	
	Identify user needs to create and administer databases
	Design and build new databases
	Ensure that organizational data are secure
	Back up and restore data to prevent data loss
	Ensure that databases operate efficiently and without error
	Make and test modifications to database structure when needed
	Maintain databases and update permissions

Database administrators, often called DBAs, make sure that data analysts and other users can easily use databases to find the information they need. They also ensure that systems perform as they should by monitoring database operation and providing support.

Many databases contain personal, proprietary, or financial information. Database administrators often are responsible for planning security measures to protect this important information.

Database architects design and build new databases for systems and applications. They research the technical requirements of an organization during the design phase and then create models for building the database. Finally, they code new data architecture, integrating existing databases or infrastructure, and check for errors or inefficiencies.

The duties of database administrators and database architects may overlap. For example, administrators and architects may be generalists who work on both systems and applications. However, some DBAs specialize in certain tasks, such as maintenance, that vary with an organization and its needs. Two common specialties are as follows:

System DBAs are responsible for the physical and technical aspects of a database, such as installing upgrades and patches to fix program bugs. They ensure that the firm's database management systems work properly.

Application DBAs do all the tasks of a general DBA focusing solely on a database for a specific application or set of applications, such as customer-service software. They may write or debug programs and must be able to manage the applications that work with the database.

Work Environment

Many database administrators and architects work in firms that provide computer design services or in industries that have large databases, such educational institutions and insurance companies. Most database administrators and architects work full time.

How to Become a Database Administrator or Architect

Database administrators and architects typically need a bachelor's degree in computer and information technology or a related field.

Pay

The median annual wage for database administrators and architects was \$98,860 in May 2020.

Job Outlook

Employment of database administrators and architects is projected to grow 8 percent from 2020 to 2030, about as fast as the average for all occupations.

About 13,900 openings for database administrators and architects are projected each year, on average, over the decade. Many of those openings are expected to result from the need to replace workers who transfer to different occupations or exit the labor force, such as to retire.

Education

Database administrators and architects typically need a bachelor's degree in computer and information technology or a related field, such as engineering, some DBAs study business.

Employers may prefer to hire applicants who have a master's degree focusing on data or database management, typically either in computer science, information systems, or information technology.

Database administrators and architects need an understanding of database languages, such as Structured Query Language, or SQL. DBAs will need to become familiar with whichever programming language their firm uses.

Licenses, Certifications, and Registrations

Certification is typically offered directly from software vendors or vendor-neutral certification providers. Employers may require their database administrators and architects to be certified in the products they use.

Advancement

Database administrators and architects may advance to become computer and information systems managers. Experienced database administrators may advance to become database architects.

Important Qualities

Analytical skills. DBAs monitor a database system's performance to determine when action is needed. They must evaluate information from a variety of sources to decide on an approach.

Communication skills. Most database administrators and architects work on teams and need to convey information effectively to developers, managers, and other workers.

Detail oriented. Working with databases requires an understanding of complex systems, in which a minor error can cause major problems.

Problem-solving skills. When database problems arise, administrators and architects must troubleshoot and correct the problems.

State & Area Data

Explore resources for employment and wages by state and area for database administrators and architects.

Similar Occupations

Compare the job duties, education, job growth	, and pay of database administrators and
architects with similar occupations.	

TECHNICAL INTERVIEW QUESTIONS
Describe your experience of working with database servers.
Describe how you assisted a client set up a server.
State how you prevent data losses.
Show that you can help to secure data at all times.
Clearly explain the purpose of the SQL agent.
Clearly define a Database Query
In simple terms, state the function of the database query
Explain the Function of a Primary Key
Differentiate between a Navigational Database and a Relational Database
Share your Experience with Cloud Databases?

What Do You Understand by ODBC?	
Expla	in How You Troubleshoot Database Issues?
What	Do You Understand by a Database Schema?
Expla	in Log Shipping in the Microsoft SQL Server
Briefl	y describe your experience with Hadoop?
Descr	ibe Hadoop and its application
What	is SQL? Name the most common SQL queries.
The a	rchitecture of ODBC-based data connectivity consists of the following components:
	ODBC Enabled Application
	ODBC Driver Manager
	ODBC Driver
	Data Source
Expla	in SQLOS. The main functions of the SQLOS include:
	Scheduling
	Synchronization
	Asynchronous IO
	Memory management
	Deadlock detection and management
	SQL server exception handling

☐ Hosting services for external components
What is the difference between T-SQL and PL/SQL?
Explain the difference between navigational and relational databases.
What is a Join clause?
How will you handle data loss during a database migration?
What are the operating modes in which Database Mirroring runs? What are the differences between them?
What is the difference between a data processor and a data controller?
How do you subset or filter data in SQL?
What is the difference between a WHERE clause and a HAVING clause in SQL?
How are Union, Intersect, and Except used in SQL?

CLOUD ARCHITECT/CLOUD SYSTEM ENGINEER

Job description

A cloud architect is an IT professional who is responsible for overseeing a company's cloud computing strategy. This includes cloud adoption plans, cloud application design, and cloud management and monitoring. Cloud architects oversee application architecture and deployment in cloud environments – including public cloud, private cloud and hybrid cloud. Additionally, they act as consultants to their organization and need to stay current on the latest trends and issues. Companies that hire cloud architects either use cloud services or are planning to move to the cloud.

Cloud architects may also be involved in the legal areas of cloud computing and may negotiate contracts and work with legal and procurement departments. Architects ensure service-level agreement requirements are met.

Duties

The main responsibilities of a cloud architect are to plan, design, implement and maintain all cloud environments in the organization. The responsibilities of the cloud architect are as follows:

- **.Cloud adoption.** If the company does not already use cloud infrastructure, the architect's role is to help determine the need for cloud infrastructure and manage its adoption. Part of the process of cloud adoption is managing the cultural change in the organization that comes with changing infrastructure, employee roles and procedures. Another aspect of this is vendor management. The cloud architect should be able to communicate effectively with cloud providers and third parties that are involved in the program.
- **.Cloud architecture development.** After adoption, the architect is tasked with developing the architecture, which spans several areas of IT including application development, data management, and identity and access management. It is the role of the architect to ensure that all these pieces work in harmony.
- **.Cloud management and monitoring**. Once the architecture is established, the cloud architect's job is to maintain the architecture and monitor its performance according to business objectives.

Education and Licenses, Certifications, and Registrations

Cloud architects require a combination of soft, or non-technical skills and technical skills to be successful. The soft skills necessary for cloud architects include the following: ☐ **Program leadership.** They should be able to organize and plan programs around an organization's cloud implementation. ☐ **Communication.** Cloud architects should be able to communicate complex technical concepts to team members. □ **Collaboration.** They should be able to work effectively with other architecture team members and delegate responsibilities. ☐ **Thought leadership.** Cloud architects should be a change agent in their organization, suggesting ways to push the program forward. ☐ **Change management.** They should be adaptable and be able to plan for and carry out changes in the program. ☐ The hard skills necessary for a cloud architect include the following: ☐ **Application architecture.** Cloud architects should be able to coordinate different applications together in the cloud environment. ☐ **Orchestration.** They should use automation for maintenance of certain areas of cloud infrastructure. ☐ Governance. Cloud architects should be able to handle benefits and risks when implementing key management points in cloud operations and set boundaries with competing organizational interests. ☐ **Virtualization.** Architects should be able to understand how to provision virtual machines efficiently and integrate them with cloud technologies. ☐ **Security.** They should be able to design infrastructure with enterprise data security and identity and access management in mind. This will ensure that only authorized people or code can access applications. □ Operating system (OS) knowledge. Architects must understand the spectrum of

OSes that exist in the complex enterprise cloud ecosystem. Examples include Windows,

□ **Networking.** Cloud architects should understand domain name system, TCP/IP and

HTTP. They should also understand the infrastructure of main cloud providers like

Solaris, Linux and Ubuntu.

Azure, Google Cloud and Amazon Web Services.

□ Programming languages. Many cloud architects have a significant software	
development background which often includes languages like Java, Python or C#.	
☐ Finance. Architects should understand the costs of different services and	
implementations and be able to balance those costs.	
☐ Big data . They should understand big data architecture and design principles.	
Most cloud architect jobs require a bachelor's degree in an area such as computer science,	
ngineering or mathematics. Some companies prefer a master's degree.	
Additional certifications, both vendor-specific and vendor-neutral, may be necessary. Some one following certifications may be useful in pursuing a cloud architect career:	of
☐ AWS Certified Solutions Architect. This certifies the individual's ability to manage	
Amazon Web Services (<u>AWS</u>) applications and infrastructure, as well as knowledge of	
AWS deployment and management services.	
☐ Arcitura Certified Cloud Architect. This certification validates the skills used in	
cloud platform management and tests the individual's knowledge against real-world	
problems.	
☐ Google Professional Cloud Architect. Earning this certification shows the	
individual's ability to plan, design, manage and provision cloud architecture, and	
validates their knowledge of cloud security, complicance and architecture optimization.	
The exam tests the individual using real-world scenarios.	
☐ IBM Certified Solution Architect -Cloud Solutions Architect v4. This certification	n
validates the individual's ability to design, plan and architect IBM cloud architecture,	
service management and security, among other skills.	
☐ Microsoft Certified Azure Solutions Architect Expert. This certification validates	
the individual's skills, including designing cloud architecture, virtualization, security and	t
business continuity using Azure cloud platforms.	

Cloud architect career path and salary expectations

According to 2022 salary research from Payscale, cloud architects can expect to earn base pay between \$80,000 and \$167,000 per year, depending on a variety of factors, including education, location, skills and experience. The average salary for a cloud architect according to Payscale is \$128,418.

In addition to the certifications noted above, prospective cloud architects can study the field in school to earn a degree to validate their skills. Existing IT professionals may be able to transition into the role with the right skill set. Different IT skills sets may also lend themselves to different cloud architect specializations. For example, a business savvy architect who possesses an understanding of IT trends may specialize in buying emerging cloud technologies. IT professionals with virtualization and IaaS experience may bring a specialized skill set to a larger, more encompassing cloud program. In addition, cloud architects with previous DevOps experience may find that their skills fit the job description.

TECHNICAL INTERVIEW QUESTIONS

What best describes the role of a Google Cloud Architect?

Your company has made plans to roll out OpenShift, a Kubernetes platform solution offered by IBM Red Hat, across all its on-premises and public cloud environments. Given that you are the lead architect responsible for your company's GCP deployments, what type of shared responsibility model will this deployment entail for you? Ex. IaaS, PaaS, SaaS, on promises

You need to leverage a consistent set of host names for your pods. Which feature should you use?

Persistent volumes

persistent disk

instance templates

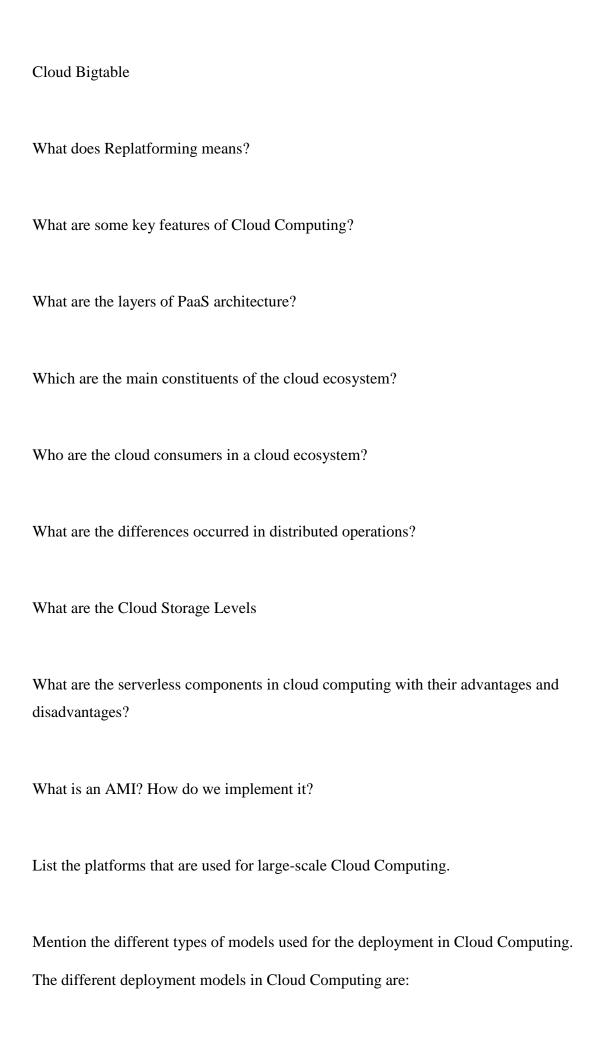
statefulsets

BankyBank wants to build an online transactional processing tool that requires a relational database with petabyte-scale data. What tool should you use?

BigQuery

Cloud SQL

Cloud Spanner



	Private Cloud
	Public Cloud
	Community Cloud
	Hybrid Cloud
What i	is meant by Edge Computing?
What a	are the uses of APIs in cloud services?
What	and the building blocks of aloud analyteature?
w nat a	are the building blocks of cloud architecture?
	Reference architecture
	Technical architecture
	Deployment operation architecture
Mentio	on the key components of AWS.
	ey components of AWS are as follows:
	AWS Route 53: AWS Route 53 is a DNS (Domain Name Server) web-based service
platfor	
	Simple E-mail Service: Sending of e-mail is done by using a RESTFUL API call or
via reg	gular SMTP (Simple Mail Transfer Protocol).
	Identity and Access Management: Improvised security and identity management are
provid	led for an AWS account.
	Simple Storage Device (S3): It is a huge storage medium, widely used for AWS
service	es.
	Elastic Compute Cloud (EC2): It allows on-demand computing resources for hosting
applica	ations and is essentially useful for unpredictable workloads.
	Elastic Block Stores (EBS): They are storage volumes attached to EC2 and allow the
data li	fespan of a single EC2.

CloudWatch: Amazon CloudWatch is used to monitor AWS resources, and it allows administrators to view and collect the keys required. Access is provided so that one can set a notification alarm in the case of trouble.
How does Resource Replication take place in Cloud Computing?
What is Containers as a Service (CaaS)?
What is Elastic Utility Computing Architecture – EUCALYPTUS?
What is the difference between RTO and RPO in Cloud Computing services?
Give architectural details for VPC - Virtual Private Cloud?
How is Data protection in S3 achieved?
Explain the types of EC2 instances?
How does AWS provide defence from Distributed Denial of Service (DDoS) attacks?
What is the EC2 (Elastic Compute Cloud) instance?
Graphic Designers
Job description

Graphic Designers produce visual concepts to communicate ideas that inspire, inform and

captivate consumers. Graphic Designers are responsible for developing various types of

creative content for advertisements, brochures, or magazines. They do this with multiple tools depending on the medium and goals of the final project.

Duties

Graphic Designers typically do the following:

- Study design briefs and determine requirements
- Schedule projects and define budget constraints
- Conceptualize visuals based on requirements
- Prepare rough drafts and present ideas
- Develop illustrations, logos and other designs using software or by hand
- Use the appropriate colors and layouts for each graphic
- Work with copywriters and creative director to produce final design
- Test graphics across various media
- Amend designs after feedback
- Ensure final graphics and layouts are visually appealing and on-brand

Work environment

Graphic Designers typically work on a team with other designers and marketing experts to complete a project. Often, a Senior Designer supervises and directs the team or individuals on the necessary tasks to complete the final project.

Work schedule

Most Graphic Designers work full time. Some work more than 40 hours per week.

How to become a Graphic Designer

To become a Graphic Designer, you first need a solid understanding of the principles of graphic design. Good design is carefully crafted. It involves a lot of planning and requires an expertise in applying design theory and principles. Graphic Designers need to consider elements such as lines, color, shape, space, texture, typography, scale, dominance and emphasis, and harmony. All of these elements impact a design and can shape how an audience feels.

Education

Although a sense of creativity, style, originality, excellent communication skills, and a familiarity with computer graphics, animation, and design software are desirable, planning your continued education requires careful preparation, including a visual portfolio of creative work that you've cultivated throughout high school to showcase your graphic design skills. Many universities recommend that students complete a year of basic art and design courses during high school to develop and learn the fundamentals of art and design. It's essential for students to find out the specific requirements for the school or university you're applying to and retrieve as much information as possible from your high school's art department, guidance counselors, and other administration to help you learn and get started in the application process.

For most entry-level and advanced graphic design positions, you will need a minimum of a bachelor's degree from an accredited university, college, or private design school. However, if you are seeking an associate's degree, you can obtain your certification from a variety of schools. Upon graduation, a 2-year degree will allow you to try assistant-level positions within the graphic design field. For those who already possess a bachelor's degree in another major, you can complete a 2 or 3-year program in graphic design to learn the technical requirements and receive the certification needed to pursue a career in this field. If you are going back to college (continuing education), it's usually best to contact the admissions office of whatever school you're applying to find out the application process and what will be required (i.e., portfolio samples, transcripts, resume, etc.).

Work Experience in a Related Occupation

There are a few key steps to starting a career in graphic design: learn the principles of design, enroll in a graphic design course, practice graphic design tools, work on projects, and build your graphic design portfolio.

The first and most obvious step is to learn about graphic design theory and elements. This can be done through your own research or enrolling in a graphic design course. A graphic design course will equip you with the necessary knowledge and give you a chance to work on different projects (a graphic design degree will almost never be required for a graphic design job).

You will also need to master common graphic design tools, such as Photoshop, Illustrator and InDesign. These tools are used by any professional Graphic Designer in their day-to-day work, so becoming familiar with these tools and their functions is essential.

After you're equipped with knowledge on graphic design principles and tools, it's time to practice. The best way to grow your skills and master graphic design software is to work on your own design projects. To get started, you can create mock ads and logos for real or made-up companies. You can also take a company's existing designs and try creating a new design — this is good practice for identifying and designing for target audiences. Another option is to volunteer with local non-profits or brands. Offer your design skills to these organizations so you get more practice, as well as gain real-world experience.

Licenses, Certifications, and Registrations

A graphic design course teaches you the fundamentals of design and helps you build your skills through working on projects. Graphic design courses will also introduce you to mentors and peers, who will be invaluable as you grow your network. Most graphic design courses will cover topics such as color theory, typography, layout, and graphic design tools and software. Depending on the depth, some courses will also teach you about graphic design history, user experience(UX), and website design principles.

Although it may seem like a field you can break into by learning on the job or on your own, there are a number of advantages to receiving your bachelor's degree in graphic design. For starters, you'll be qualified for more graphic designer jobs — most employers won't even consider you for a position unless you possess some form of degree or certification in graphic design. Secondly, your earning potential increases significantly if you have a degree — you can sometimes make many thousands of dollars more than an employee without a degree.

Also, those with certifications and a college education stand out amongst their peers: employers are more willing to hire those with formal training, expertise, and skills than someone who is self-taught or less educated. Finally, studying in a collegiate setting will not only provide you with the skillset and experience you need for your career but allow you to work alongside industry professionals, both on-campus and off-site (for example, an internship during your studies), and to build a graphic design portfolio that encapsulates all of the work you've amassed in your design courses. Your school's faculty provides a level of

instruction and personal mentoring that you just cannot replicate by watching online training courses or YouTube videos. Thus, it is highly encouraged for those interested in pursuing a graphic design career to enroll in a bachelor's degree program.

Advancement

The typical graphic design career path begins as a junior graphic designer at a creative agency or an in-house design team at a big company. From there you might seek to progress through to midweight designer, followed by senior designer, art director, creative director and beyond.

Alternatively, there's the freelance route. Many graphic designers go freelance once they've got a few years' job experience. But there's no rule saying you have to go straight into a job, and if you're attracted by the freedom offered by freelancing (and ideally have some funds to get you through the first few months), it could be worth considering straight after graduation.

Important Qualities

1. Communication

A designer's job is to communicate a client's story, brand and ideas, but you'll also need excellent communication skills to present, charm and negotiate for your work. It's imperative to maintain professional in tricky situations and to be clear with a client on the brief.

2. Curiosity

You won't get far in design if you don't have a love of art or an interest in the world around you. Designers love to look beyond the surface of things, to explore both the minute detail and the big picture.

3. Passion and Drive

You don't end up in a creative industry unless you do what you love. But even with passion and talent, design is a labour of love. The work inevitably entails odd hours, big edits, bizarre briefs and tricky workloads. You have to use that passion to keep going when you are exhausted, but you know it could make it better. You learn to balance projects and master time management, but you must be driven from the start.

4. Openness

In graphic design, you have to be open-minded, willing to try new things and comfortable taking advice from unexpected sources. Great designers often share pieces of themselves in their work, so you can't be afraid to expose yourself and wear your heart on your sleeve.

5. Ability to Take Criticism

Possibly the toughest thing for any designer, but everyone has to deal with criticism. As a designer, you have to be good at taking direction to improve your work and build on communication. It's an evolving process and often produces positives in the end.

6. Problem Solving

As well as the aesthetic aspect of design, it's good to enjoy the problem-solving side too. As a designer, you have to think logistically and critically to make things work. Creativity is needed not only to produce something brilliant but also to work out how the pieces fit together and turn ideas into a finished product.

7. Self-doubt

A little self-doubt can be a good thing in the design world. It's self-doubt that ensures you are continually assessing your decisions and striving to do better. It's healthy to question and challenge yourself!

8. Patience

Design work can be slow going—answers don't often come quickly. It takes patience to let an idea develop, work on communication and try out creative alternatives before getting to the result. You have to go with the flow!

9. Reliability

Clients don't just want talent. They want to get to know someone they can count on. It's important to be reliable, manage client needs, develop consistency and prove trustworthiness. It's a sure road to a long and happy working relationship.

10. Evolution

Nobody knows it all. It's good to keep growing and seeking new inspiration. Try new technology, share ideas with the wider creative community and never stop learning.

PAY (EXPECTED AVERAGE SALARY)

Salaries for graphic designers can vary based on education level, work experience, design skills and knowledge of tools and graphic design software, geographical location, and type of employer. According to Payscale, the average salary for a Graphic Designer is \$47,284, but this average pay does vary. For instance, graphic designers who work in San Francisco earn an average of 44.7% more than the national average.

Job Outlook

Employment of graphic designers is projected to grow 3 percent from 2020 to 2030, slower than the average for all occupations.

Despite limited employment growth, about 23,900 openings for graphic designers are projected each year, on average, over the decade. Most of those openings are expected to result from the need to replace workers who transfer to different occupations or exit the labor force, such as to retire.

Employment

Since graphic designers can work in many settings, your tasks and responsibilities may vary. You may work in-house at a company or agency, or at home as a freelancer. Graphic designers often work in:

- Ad agencies
- Web design firms
- Marketing firms
- Print and online publishers
- Online and brick-and-mortar retailers
- Non-profit organizations

INTERVIEW QUESTIONS (Please add as many questions as possible)

Please add questions that **Employers** and **Employees** ask during job interviews.

How would your colleagues describe you?

Asking this will give you a better idea of how they view themselves in the eyes of others and should reveal clues on their ability to work within a team environment.

Are they known as the quiet one, the goofball, the communicator, the workaholic, or something else?

What motivates you to work?

Do you like working with a team or working alone?

This really depends on what opening the job seekers are applying for. Is it a desk job that only requires them to be by themselves self or is it work that demands coordination and communication with others?

If you analyze that the applicants are people who are flexible, willing to do multi-tasking, and wouldn't be bothered if at times they work alone or with a team, these could be the best professionals to hire.

Reveal something about yourself not on your resume

Sometimes there are quirks about prospective employees that you simply can't see on a resume.

Questions about company culture

Questions about <u>company culture</u> will help the interviewer determine if your values align with the prospective employer. When asking these questions, you can also highlight your compatibility with workplace culture. Asking questions about company culture can also show the interviewer that you have an interest in getting to know others and becoming part of a community.

- How does this company promote its core values?
- What team-building activities does your team participate in?
- In what ways does this company support its employees?
- Does this company have any workplace traditions?
- What changes have you seen in this company while you have worked here?
- What are the characteristics of a person who would succeed in this company's environment?
- How does the team I would be working on support the company's goals?

Questions about the position

Asking questions about the position will not only show the interviewer that you have put thought and effort into your application but will also give you valuable details about the job. Gauging the expectations of the employer can help you understand what they are looking for

in an applicant. These questions can help you understand the scope of the position and possibilities for growth.

- What traits would help me be successful in this position?
- How often would I collaborate with others in this position?
- Are there opportunities for this position to change or expand?
- Who are the main people that I would regularly interact with?
- What tasks would I complete on an average day?
- What did the person who previously held this position do well?
- What changes would you like to see in how this job is done?

Questions about performance

Showing an interest in how job performance is evaluated demonstrates to the employer that you have plans to grow at the company. Employers often look for candidates who will remain at their company for as long as possible to avoid turnover costs. Ask questions about performance to assure employers of your ability to meet and exceed expectations.

- How often will my manager be available to discuss my performance?
- Can you describe the formal performance review process for this position?
- How and how often can I expect to receive feedback on my work?
- How can I get support in setting goals and expectations?
- What should I hope to accomplish in my first 90 days if I am hired for this position?
- How does this company or team celebrate success?
- How do you evaluate the success of your employees?

 $\underline{https://www.indeed.com/career-advice/career-development/performance-evaluation}$

Questions about training

Ask questions about the training process to learn about opportunities for advancement and signal to the interviewer that you are an ambitious candidate. This kind of question signals to the hiring team that you are forward-thinking regarding your career. Learning about the

training procedures of a possible new employer can prepare you to adjust quickly to your new environment and stand out as an employee.

- Can you describe the training process for this position?
- How have successful employees advanced in this company?
- Does this company offer frequent opportunities for promotion or on-the-job training?
- Will I have opportunities to shadow my coworkers and learn about other roles?
- How will working in this position grow my skills?
- Does your company offer continued training for interested employees?

Questions about development

Asking questions about professional development shows the interviewer that you are not only interested in the position you are applying for, but want to grow within the company. Employees who bring new skills and education to their company are often desirable candidates. Asking a question about professional development opportunities can also teach you about how the company can support your own goals.

- Does this company send employees to conferences?
- What organizations does this company work with to grow the skills of its employees?
- Does this company organize any volunteer opportunities?
- Does the company offer any incentives for learning new skills?
- How does this company stay competitive in its field?
- Does the company ever sponsor the continued education of its employees?

Questions about the team

By asking questions about the people you could be working with, you can determine if you would thrive as part of their team. The personalities, strengths and weaknesses of the team can influence your ability to succeed in the workplace. These questions show the interviewer that you are committed to <u>teamwork</u> and cooperation.

- How would you describe your team's dynamic?
- What can you tell me about the people I will be working with?

- Who will I report to directly and how would you describe their management style?
- What would you consider to be your team's greatest success?
- Which other departments does this team collaborate with?
- How does your team manage conflicts?
- What are this department's greatest strengths and weaknesses?
- What is the turnover like for this department?

Questions about hiring

In order to set reasonable expectations about when the hiring team will make a decision, ask questions about the hiring process. Understanding their timeline and process for onboarding a new employee allows you to make plans for your future. Additionally, the interviewer might indicate the success of your interview by their mood and enthusiasm when answering questions about hiring.

- What are the next steps in the hiring process?
- Who can I contact with any questions?
- If I were hired for this position, when would I be able to start?
- When can I expect to hear your decision about my application?
- Do you have any concerns about my qualifications?
- What have other applicants
- Can you describe the onboarding process?

Interview Questions about SPECIFIC SKILLS, FEATURES of the position?

Let's look through your portfolio! Tell me about a design project that you're proud of and walk us through your process.

- What are your strengths and weaknesses?
- Why are you interested in working for our company?
- What do you think makes someone a good designer?

- What is the latest design campaign that you've seen and what do you like/or not like about it?
- Where do you get design inspiration from?
- Do you prefer to work as a team or solo?
- How do you handle tight deadlines?
- What kind of design projects do you love to work on?
- Were there any mistakes you've made as a designer and what did you learn from that experience?
- Where do you see yourself in the next few years?
- If you weren't doing design what would you be doing?
- What made you decide to be a designer?
- Why do you want to work here?
- Walk us through your design process.
- Do you prefer to work independently or as part of a team?
- What do you think the next big design trend will be?
- What do you do to improve your design skills?
- What are your favorite sources of design inspiration?
- How do you deal with creative blocks?
- How do you handle negative feedback?
- What's your favorite project that you've worked on?
- What are some graphic designing tools that you are familiar with?
- What are the differences between associative hatching and non-associative hatching in CAD?
- What is 3D Graphic Art and how is it useful for a designer?
- What is the use of Adobe Pagemaker?
- What are the components of graphic design?
- Explain the components of graphic design?
- What is the difference between a window polygon and a crossing polygon?
- What is Linked Layer?
- What is Lasso tool?
- What is the shortcut to reset zoom?
- What are the core graphic design principles?

- Explain 4 crucial core graphic design principles
- What are the basic composition laws graphic designers follow?
- What is color theory and why is it important in graphic design?
- What is the Golden ratio in graphic design composition and why is it important?
- How are UX, Visual and Graphic design different from each other?
- How comfortable are you with short deadlines and new trends in a fast-paced environment?
- How do you sustain long-term interest in designing for one brand?
- How do you measure the success of your designs?
- Which graphic designer hero do you take your inspiration from?
- Is there a need for graphic designers to improve their knowledge? How do you keep up with changing trends?
- Are you comfortable collaborating cross-functionally on your design projects?
- Can graphic designers impact society with their works?
- How do you deal with negative feedback?
- How can graphic designers overcome creative block?
- What is your process to create design?
- On what parameters do you draft the design brief?
- How is designing for print media different from designing for digital media? Are you comfortable working with both?
- What do you do to meet deadlines?
- How would you describe the process of graphic design?
- Walk us through a design that you are proud of and describe the process involved.
- How do you incorporate feedback into your work?
- What is the latest design campaign that you saw? What did you like or dislike about it?
- Do you like working alone or with a team?
- What is the use of JavaScript in graphic design?

https://resources.workable.com/graphic-designer-job-description#:~:text=The%20Graphic%20Designer%20job%20description,product%20packagi

ng%2C%20exhibitions%20and%20more.

https://www.betterteam.com/graphic-designer-job-description

https://newschoolarch.edu/blog/how-to-become-a-graphic-designer-step-by-step/

https://www.shillingtoneducation.com/blog/graphic-design-

<u>career/#:~:text=The%20typical%20graphic%20design%20career,director%2C%20creative%20design%20career,director%2C%20creative%20design%20career,director%20and%20beyond.</u>

https://www.creativeboom.com/tips/20-essential-traits-of-a-successful-graphic-designer/

https://www.bls.gov/ooh/arts-and-design/graphic-

designers.htm#:~:text=in%20May%202021.-

"Job% 20Outlook, on% 20average% 2C% 20over% 20the% 20decade.

https://www.coursera.org/articles/what-does-a-graphic-designer-do

https://www.naukri.com/blog/graphic-design-interview-questions-and-answers-2/

https://blog.shillingtoneducation.com/graphic-design-interview-questions/

<u>Tell Me About a Work Problem That Required a Complicated Solution and How You</u> Worked With Your Team to Resolve It.

https://www.themuse.com/advice/it-interview-questions-answers-examples - 4d3e472d-3f29-45a3-996f-cd28796b8394

What's a New Software or Technology You Recently Worked With and How Did You Come to Learn It?

https://www.themuse.com/advice/it-interview-questions-answers-examples - 766bef58-0754-4423-b924-c57b693a1130

What Do You Do When It Looks Like a Project You Are Working on Might Miss a Deadline?

 $\underline{\text{https://www.themuse.com/advice/it-interview-questions-answers-examples-9efbdb09-4195-4576-9495-f5b46857c87c}$

Tell Me About the Stakeholders and Internal Clients You Work With Outside of IT and How Your Work Supports Overall Business Goals.

https://www.themuse.com/advice/it-interview-questions-answers-examples - ad81561d-7d98-46d8-8da0-2574daecf3ad

<u>Tell Me About a Time When You Explained a Technical Process or Concept to Someone</u> Who Didn't Have a Technical Background.

 $\underline{https://www.themuse.com/advice/it-interview-questions-answers-examples-38943381-f1ff-433a-83e3-dbc119af5dbf}$

Can You Tell Me About a Project Where You Volunteered to Help or Offered Support?

https://www.themuse.com/advice/it-interview-questions-answers-examples - 262cf0a3-a9df-43c8-adeb-43d1da437302

Can You Provide an Example of a Challenging Coworker Relationship? How Did You Handle It?

https://www.themuse.com/advice/it-interview-questions-answers-examples - 620134b2-5dcb-4374-a6e1-e4ab49775dc6

Tell Me About a Work Product You Delivered That You're Particularly Proud Of.

https://www.themuse.com/advice/it-interview-questions-answers-examples - 54ae1750-f26f-4ce7-96cc-f19e99d20f75

What Tools and Strategies Do You Use to Organize and Prioritize Your Work to Best Meet Team Goals, Expectations, and Deliverables?

Web Administrators

Job description

Web administrators design, develop, maintain and troubleshoot websites. Most importantly, they ensure a safe and efficient user experience. This may include implementing security protocols, modifying programs, creating backups, resolving software problems, updating content and more. They may work with many clients or for one organization to design, program and monitor websites.

Duties

Web Administrators typically do the following:

 Create and maintain internal and external websites in collaboration with web developers.

- Review web content, links, and design; provides necessary updates and enhancements in a timely manner.
- Monitor site security; reports suspected or actual security breaches and denial of service attacks to appropriate staff.
- Implement appropriate security measures such as firewalls or message encryption.
- Manage internet and/or intranet infrastructure including but not limited to web, file transfer protocol (FTP), mail servers, and news.
- Identify useful site performance metrics; collect, track, record, compile, analyze, and report site usage data.
- Conduct user testing and use analysis to assess usability and effectiveness of site; recommends improvements based on analysis.
- Discuss, analyze, review, and resolve usability issues in conjunction with development teams.
- Communicate with site visitors and users regarding site updates, anticipated and unanticipated downtime, and resolution of bugs and outages.
- Draft, document, and implement backup, recovery, and business continuity plans.
- Maintain knowledge and expertise in web design and development; participate in professional conferences, workshops, and groups.
- Perform other related duties as assigned.

Work environment

Web administrators work in a variety of settings, including corporate offices, government agencies, colleges and universities, and non-profit organizations. They typically work in teams with other web administrators, web developers, web designers, and web content creators. Web administrators typically work regular business hours, although they may be required to work evenings and weekends to handle website updates or maintenance. They may also be on call 24 hours a day to respond to website outages or other emergencies.

Work schedule

Website administrators typically work full-time schedules of at least 40 hours per week and can have flexible working hours. Web Administrators most often work in office settings at the companies they serve, which can involve long periods sitting at a desk and using a computer.

However, some website administrators prefer to operate on a freelance basis, which means they find and sign their own clients and can perform many of their job duties from home.

How to become a Web Administrator

- 1. Earn a bachelor's degree
- 2. Obtain certification
- 3. Apply for jobs as a website administrator

Education

Requirements for a web administrator range from a high school diploma to a bachelor's degree, but the most common requirement is an associate's degree in web design or a similar field. More technical positions require a bachelor's degree in a computer science—related field.

Enroll in an undergraduate program at a four-year college or university. Most employers of website administrators require candidates to have at least a bachelor's degree to ensure they receive training and education in the specialized aspects of website administration. Because of this, many aspiring website administrators pursue bachelor's degrees in computer science in programs that offer courses on website administration. These programs can offer classes on web design, computer programming and other technical subjects that relate to website administration.

To make sure you consider all aspects of website administration during your education, you might also take courses in subjects like systems engineering, web development and business.

Alternatively, IT certifications like CompTIA A+, CompTIA Network+ and CompTIA Security+ can give you the foundational skills you need, and CompTIA Linux+ can supplement your knowledge of programming languages and open-source operating systems.

The most common languages used by web administrators are HTML and JavaScript. Many web administrators also have training in graphic design. These can be learned in a traditional classroom environment or from self-study and hands-on practice.

Work Experience in a Related Occupation

Find job openings for website administrators and apply to any that you might be a good fit for. Much of a website administrator's training takes place on the job, so entering the field right after you complete your education and certification can give you the chance to start

developing your skills through practical experience. You can find jobs for website administrators by reaching out to companies with large online presences or IT departments and asking about potential employment opportunities. You might also conduct an independent job search online by using search engines and job websites to find openings near you.

Licenses, Certifications, and Registrations

Pursue certification in information technology or computer programming. While certification is typically voluntary for website administrators, having certification in some of the more technical aspects of the job can emphasize your qualifications and might increase your chances of being noticed by potential employers. This can help you find employment more quickly, as an application that includes certification is more likely to stand out among candidates who are not certified. You can find certification programs in many aspects of website administration, like programming languages and coding computer systems.

Here are a few certifications that a website administrator might apply for:

- CompTIA A+
- CompTIA Network+
- CompTIA Security+
- CompTIA Linux+

Advancement

Web administrators typically start out in entry-level positions and advance to webmaster or other managerial positions. Advancement depends on the size of the organization, the administrator's level of experience, and the administrator's willingness to take on additional responsibilities.

In small organizations, web administrators may be responsible for all aspects of website development and maintenance. In larger organizations, web administrators typically specialize in one or more areas, such as website design, coding, graphics, user experience, or website administration. Those who specialize in website administration may be responsible for managing a team of web administrators and developers.

Web administrators with experience and expertise in multiple areas of website development and maintenance may be promoted to senior-level positions, such as director of web operations or chief information officer.

Important Qualities

Web administrators need a mix of technical and soft skills. First and foremost, web administrators must be comfortable working the back end of websites, so they need to be knowledgeable in programming languages and open-source software. Having a foundational knowledge of systems, servers and security will help web administrators develop efficient websites and troubleshoot problems. They also need soft skills like problem solving, critical thinking, active listening and time management.

Arguably the most important personality trait for a Web Administrator to have happens to be Problem-solving skills. An example from a resume said this about the skill, "Administrators must quickly resolve problems that arise with computer networks." Additionally, other resumes have pointed out that Web Administrators can use Problem-solving skills to "Implement SharePoint solution Content management systems like Drupal, Word press for 4 websites."

While it may not be the most important skill, we found that many Web Administrator duties rely on Analytical skills. This example from a Web Administrator explains why:

"Administrators need to evaluate networks and systems to make sure that they perform reliably and to anticipate new requirements as customers' needs change." This resume example is just one of many ways Web Administrators are able to utilize Analytical skills:

"Configured and Administered JDBC connection of WebLogic server with Oracle9i database."

Another skill that is quite popular among Web Administrators is Communication skills. This skill is very critical to fulfilling every day responsibilities as is shown in this example from a Web Administrator resume: "Administrators must describe problems and their solutions to non-IT workers." This example from a resume shows how this skill is used: "Configured database connection pool using Weblogic JDBC for backend communication."

PAY (EXPECTED AVERAGE SALARY)

Salaries for graphic designers can vary from \$39,550 to \$142,080 with a median annual wage of \$73,760 (U.S. Bureau of Labor Statistics (BLS)).

Job Outlook

Demand for web administrators will stem from the continued growth of e-commerce and online retail sales. Web administrators will be needed to ensure that websites are easy to navigate and load quickly. In addition, web administrators will be needed to maintain and update websites as new technologies become available.

Employment

The growth of DevOps is a trend that is quickly changing the way businesses operate. As more and more companies adopt this approach, web administrators will need to learn new skills in order to keep up with the changes.

As the internet becomes an increasingly dangerous place, businesses are starting to focus more on security. This means that web administrators will need to have a strong understanding of security measures and how to implement them.

In order to stay ahead of the curve, web administrators should focus on learning about the latest threats and how to protect against them. They should also consider attending training courses or conferences that focus on security.

Cloud computing is becoming more popular as businesses realize the benefits of moving their operations to the cloud. This trend is likely to continue as more and more businesses see the value in using cloud services.

Web administrators can capitalize on this trend by becoming experts in cloud computing. This will allow them to help businesses make the switch to cloud-based services and ensure that they are getting the most out of their cloud investments.

INTERVIEW QUESTIONS

How would your colleagues describe you?

Asking this will give you a better idea of how they view themselves in the eyes of others and should reveal clues on their ability to work within a team environment.

Are they known as the quiet one, the goofball, the communicator, the workaholic, or something else?

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Questions about <u>company culture</u> will help the interviewer determine if your values align with the prospective employer. When asking these questions, you can also highlight your compatibility with workplace culture. Asking questions about company culture can also show the interviewer that you have an interest in getting to know others and becoming part of a community.

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- What changes would you like to see in how this job is done?

Questions about performance

Showing an interest in how job performance is evaluated demonstrates to the employer that you have plans to grow at the company. Employers often look for candidates who will remain at their company for as long as possible to avoid turnover costs. Ask questions about performance to assure employers of your ability to meet and exceed expectations.

- How often will my manager be available to discuss my performance?
- Can you describe the formal performance review process for this position?
- How and how often can I expect to receive feedback on my work?
- How can I get support in setting goals and expectations?
- What should I hope to accomplish in my first 90 days if I am hired for this position?
- How does this company or team celebrate success?
- How do you evaluate the success of your employees?

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Questions about training

Ask questions about the training process to learn about opportunities for advancement and signal to the interviewer that you are an ambitious candidate. This kind of question signals to the hiring team that you are forward-thinking regarding your career. Learning about the

training procedures of a possible new employer can prepare you to adjust quickly to your new environment and stand out as an employee.

- Can you describe the training process for this position?
- How have successful employees advanced in this company?
- Does this company offer frequent opportunities for promotion or on-the-job training?
- Will I have opportunities to shadow my coworkers and learn about other roles?
- How will working in this position grow my skills?
- Does your company offer continued training for interested employees?

Questions about development

Asking questions about professional development shows the interviewer that you are not only interested in the position you are applying for, but want to grow within the company. Employees who bring new skills and education to their company are often desirable candidates. Asking a question about professional development opportunities can also teach you about how the company can support your own goals.

- Does this company send employees to conferences?
- What organizations does this company work with to grow the skills of its employees?
- Does this company organize any volunteer opportunities?
- Does the company offer any incentives for learning new skills?
- How does this company stay competitive in its field?
- Does the company ever sponsor the continued education of its employees?

Questions about the team

By asking questions about the people you could be working with, you can determine if you would thrive as part of their team. The personalities, strengths and weaknesses of the team can influence your ability to succeed in the workplace. These questions show the interviewer that you are committed to <u>teamwork</u> and cooperation.

- How would you describe your team's dynamic?
- What can you tell me about the people I will be working with?

- Who will I report to directly and how would you describe their management style?
- What would you consider to be your team's greatest success?
- Which other departments does this team collaborate with?
- How does your team manage conflicts?
- What are this department's greatest strengths and weaknesses?
- What is the turnover like for this department?

Questions about hiring

In order to set reasonable expectations about when the hiring team will make a decision, ask questions about the hiring process. Understanding their timeline and process for onboarding a new employee allows you to make plans for your future. Additionally, the interviewer might indicate the success of your interview by their mood and enthusiasm when answering questions about hiring.

- What are the next steps in the hiring process?
- Who can I contact with any questions?
- If I were hired for this position, when would I be able to start?
- When can I expect to hear your decision about my application?
- Do you have any concerns about my qualifications?
- What have other applicants
- Can you describe the onboarding process?

Interview Questions about SPECIFIC SKILLS, FEATURES of the position?

- If we wanted to design a new microsite for our company page, what would your responsibilities be?
- How would you check and fix broken links?
- What firewalls would you set up to ensure security?
- What would you check if a website didn't load for one specific web browser?
- Why would or wouldn't you give admin rights to local users?

- What do you think are the server capacity needs for a company of our size?
- What guidelines would you give to our employees to minimize security threats?
- What are the functions of nodes and links in a computer network?
- What web management tools have you used?
- What computer protocols are you familiar with?
- What's the role of a web proxy server?
- Mention two or three common reasons for low loading speeds on a corporate website.
 How would you troubleshoot these issues?
- What is the software Bonjour? Is it safe for a corporate web environment?
- How do you measure conversion rates for a web page?
- Are you familiar with keyword research to improve a page's Google rankings? What kinds of tools do you use to research keywords? (e.g. Keyword Planner and Moz)
- Describe the biggest job-related challenge you've faced so far. What was the situation and how did you manage to overcome obstacles?
- How do you learn about new web technologies and tools? Do you read any specific blogs or attend conferences, meetups, etc?
- Have you ever suggested a solution that helped a company improve its website? (e.g. in rankings or traffic) If so, what was your suggestion, how did you implement it and what were the results?
- Describe a website you recently visited that was poorly designed. What did you feel was wrong with it? In your opinion, what features enhance user experience?

https://www.shrm.org/resourcesandtools/tools-and-samples/job-descriptions/pages/web-administrator.aspx

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https://job-descriptions.careerplanner.com/Web-Administrator.cfm

https://totempool.com/job-descriptions/website-administrator/

https://www.indeed.com/career-advice/finding-a-job/what-is-website-administrator#:~:text=Work%20environment%20for%20website%20administrators,desk%20and%20using%20a%20computer.

https://climbtheladder.com/web-administrator/

https://resources.workable.com/web-administrator-interview-questions

https://www.projectpractical.com/web-administrator-interview-questions-and-answers/

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https://www.themuse.com/advice/it-interview-questions-answers-examples - 4d3e472d-3f29-45a3-996f-cd28796b8394

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https://www.themuse.com/advice/it-interview-questions-answers-examples - 766bef58-0754-4423-b924-c57b693a1130

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<u>Tell Me About the Stakeholders and Internal Clients You Work With Outside of IT and How Your Work Supports Overall Business Goals.</u>

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Tell Me About a Work Product You Delivered That You're Particularly Proud Of.

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What Tools and Strategies Do You Use to Organize and Prioritize Your Work to Best Meet Team Goals, Expectations, and Deliverables?

Web Developers

Job description

Web Developers create and maintain websites. They will typically spend time creating coding languages like HTML5, which powers many modern mobile devices and managing the site's technical aspects, such as its performance and capacity to handle traffic without crashing.

Duties

Web Developers typically do the following:

- Write well designed, testable, efficient code by using best software development practices
- Create website layout/user interface by using standard HTML/CSS practices
- Integrate data from various back-end services and databases
- Gather and refine specifications and requirements based on technical needs
- Create and maintain software documentation
- Be responsible for maintaining, expanding, and scaling our site
- Stay plugged into emerging technologies/industry trends and apply them into operations and activities
- Cooperate with web designers to match visual design intent

A Web Developer is in charge of ensuring websites look good and function properly. Web developers collaborate with website and graphic designers, monitor website traffic, troubleshoot website problems when they arise, and update websites as necessary.

Work environment

Web Developers typically work in teams that include other Web Developers, Software Developers, Web Designers and IT professionals. most web developers work regular schedules in office-based settings. Most enjoy some freedom in their tasks, including a balance between structured and unstructured work. They also value collaborative work, with over 70% of web developers rating work with others in a group or team as very or extremely important. However, since they are often at the forefront of new technology, Web Developers can work closely with various individuals from different disciplines. Web developers increasingly work remotely but also spend time at the office when needed.

Work schedule

Most Web Developers work full time. Some work more than 40 hours per week.

How to become a Web Developer

Skilled web developers must complete formal education, gain practical experience, build a resume and portfolio, and, in some cases, earn additional certifications. An aspiring web developer must first complete an education to develop basic coding and programming skills. In most cases, this is a computer science degree program with core courses in systems design, data management, and the essential programming languages used by industry professionals.

Education

An associate degree in computer science typically takes two years to complete, while a bachelor's degree in computer science could require four years. Senior-level roles may require more advanced education, like a master's or a doctorate, which include several more years beyond a bachelor's.

The level of education required for employment varies among companies and sectors. While it is possible to land an entry-level web development position with an associate degree or certificate, a bachelor's degree will open up a wider range of opportunities and better position you for future advancement.

Work Experience in a Related Occupation

Landing a solid internship as a new web developer provides vital work experience. Internship opportunities give learners the chance to apply their knowledge and develop new skills as they engage with clients and collaborate with other developers.

Some web developer degree programs provide internship placements. If your program does not provide placements, ask around your professional network. Employers and corporate partners often sponsor internship opportunities for new web developers.

Licenses, Certifications, and Registrations

Certificates in web development offer several distinct advantages. These programs attest to any additional skills or coding competencies learners possess and keep professionals up to date with the latest developments in this evolving field. A certificate can also give applicants an extra boost on the job hunt.

Some schools offer standalone certificates in front-end or full-stack web development.

Conversely, businesses like Microsoft, Adobe, and Amazon offer exam-based certifications in areas like JavaScript and cloud development. Zend has similar opportunities in PHP training.

Certification renewal requirements vary by provider.

Advancement

Web developers can advance their careers in several ways, such as by pursuing certification, continuing education, and networking opportunities. Career advancement can lead to advanced titles and better salaries. Professionals can also find more opportunities for management positions as they improve their resumes.

Important Qualities

Skills Web Developers need to build include:

Soft Skills

- Operations evaluation
- Project management
- Complex problem-solving
- Data analysis
- Deductive reasoning

Hard Skills

- Coding and programming
- SEO strategy
- Testing and debugging
- User interface design
- Database management

PAY (EXPECTED AVERAGE SALARY)

Web Developers made a median salary of \$77,200 in 2020. The best-paid 25 percent made \$107,620 that year, while the lowest-paid 25 percent made \$55,390.

Web developer salaries can increase along with experience. PayScale reports an average annual salary of just under \$51,000 for entry-level web developers as of August 2021. In contrast, late-career professionals with over 10 years of experience earn over \$72,000.

Job Outlook

Employment of web developers and digital designers is projected to grow 13 percent from 2020 to 2030, faster than the average for all occupations.

About 17,900 openings for web developers and digital designers are projected each year, on average, over the decade. Many of those openings are expected to result from the need to replace workers who transfer to different occupations or exit the labor force, such as to retire.

Employment

Web developers can choose to work in a variety of industries. Potential sectors include healthcare, finance, and software publishing.

Job-seekers might consider which industries provide the highest salaries or positive job outlooks. For example, the BLS projects that rising demand in online retail sales and mobile applications will drive demand for web developers. As the table below illustrates, the toppaying industries for web developers include software publishing, finance, and credit intermediation.

Large companies can offer many benefits, including larger teams. These environments may provide more focused job duties and greater advancement opportunities than smaller environments. Some web developers may prefer to work for smaller companies where they

can take on a variety of duties. The BLS reports that 10% of web developers work for themselves.

INTERVIEW QUESTIONS (Please add as many questions as possible)

Please add questions that Employers and Employees ask during job interviews.

How would your colleagues describe you?

Asking this will give you a better idea of how they view themselves in the eyes of others and should reveal clues on their ability to work within a team environment.

Are they known as the quiet one, the goofball, the communicator, the workaholic, or something else?

What motivates you to work?

Do you like working with a team or working alone?

This really depends on what opening the job seekers are applying for. Is it a desk job that only requires them to be by themselves self or is it work that demands coordination and communication with others?

If you analyze that the applicants are people who are flexible, willing to do multi-tasking, and wouldn't be bothered if at times they work alone or with a team, these could be the best professionals to hire.

Reveal something about yourself not on your resume

Sometimes there are quirks about prospective employees that you simply can't see on a resume.

Questions about company culture

Questions about <u>company culture</u> will help the interviewer determine if your values align with the prospective employer. When asking these questions, you can also highlight your compatibility with workplace culture. Asking questions about company culture can also show the interviewer that you have an interest in getting to know others and becoming part of a community.

- How does this company promote its core values?
- What team-building activities does your team participate in?

- In what ways does this company support its employees?
- Does this company have any workplace traditions?
- What changes have you seen in this company while you have worked here?
- What are the characteristics of a person who would succeed in this company's environment?
- How does the team I would be working on support the company's goals?

Questions about the position

Asking questions about the position will not only show the interviewer that you have put thought and effort into your application but will also give you valuable details about the job. Gauging the expectations of the employer can help you understand what they are looking for in an applicant. These questions can help you understand the scope of the position and possibilities for growth.

- What traits would help me be successful in this position?
- How often would I collaborate with others in this position?
- Are there opportunities for this position to change or expand?
- Who are the main people that I would regularly interact with?
- What tasks would I complete on an average day?
- What did the person who previously held this position do well?
- What changes would you like to see in how this job is done?

Questions about performance

Showing an interest in how job performance is evaluated demonstrates to the employer that you have plans to grow at the company. Employers often look for candidates who will remain at their company for as long as possible to avoid turnover costs. Ask questions about performance to assure employers of your ability to meet and exceed expectations.

- How often will my manager be available to discuss my performance?
- Can you describe the formal performance review process for this position?
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- How does this company or team celebrate success?
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Questions about training

Ask questions about the training process to learn about opportunities for advancement and signal to the interviewer that you are an ambitious candidate. This kind of question signals to the hiring team that you are forward-thinking regarding your career. Learning about the training procedures of a possible new employer can prepare you to adjust quickly to your new environment and stand out as an employee.

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- Does this company send employees to conferences?
- What organizations does this company work with to grow the skills of its employees?
- Does this company organize any volunteer opportunities?
- Does the company offer any incentives for learning new skills?

- How does this company stay competitive in its field?
- Does the company ever sponsor the continued education of its employees?

Questions about the team

By asking questions about the people you could be working with, you can determine if you would thrive as part of their team. The personalities, strengths and weaknesses of the team can influence your ability to succeed in the workplace. These questions show the interviewer that you are committed to teamwork and cooperation.

- How would you describe your team's dynamic?
- What can you tell me about the people I will be working with?
- Who will I report to directly and how would you describe their management style?
- What would you consider to be your team's greatest success?
- Which other departments does this team collaborate with?
- How does your team manage conflicts?
- What are this department's greatest strengths and weaknesses?
- What is the turnover like for this department?

Questions about hiring

In order to set reasonable expectations about when the hiring team will make a decision, ask questions about the hiring process. Understanding their timeline and process for onboarding a new employee allows you to make plans for your future. Additionally, the interviewer might indicate the success of your interview by their mood and enthusiasm when answering questions about hiring.

- What are the next steps in the hiring process?
- Who can I contact with any questions?
- If I were hired for this position, when would I be able to start?
- When can I expect to hear your decision about my application?
- Do you have any concerns about my qualifications?

- What have other applicants
- Can you describe the onboarding process?

Interview Questions about SPECIFIC SKILLS, FEATURES of the position?

- How do you differentiate between ID and Class selector?
- What is the difference between undefined value and null value?
- What are the differences between HTML and XHTML?
- What is type coercion in JavaScript?
- Please describe what an ETag is and how it works.
- How do you differentiate between responsive design and adaptive design?
- How do you define progressive rendering in HTML?
- Can you explain the distinction between span and div tag in HTML5?
- What are CSS selectors? Name some.
- Please help us understand quirks, full standards, and almost standards mode.
- What is HTML5 Web Storage?
- How do you differentiate between ES5 and ES6?
- How do you organize your assets and class modules?
- How would you help non-technical stakeholders understand APIs?
- How do you differentiate between black box and white box testing?
- In the simplest terms, please explain big-O notation.
- Looking to the future of web development, what do you think will be the biggest trends?
- What are the biggest differences between mobile and desktop development?
- Please explain push technology. What are its benefits and drawbacks?
- How can Page Visibility API be useful?
- What are the advantages of HTTP 2.0 over HTTP 1.1?
- As a Web Developer, what steps do you take to optimize your site's loading time?
- What is your approach for keeping on top of web development industry news and trends? How do you apply this to your work?

- Please explain JavaScript to me in a way that even someone with no coding experience could understand.
- Tell me about a project you're particularly proud of. What did you do that worked out well?
- Tell me about a project that did not turn out the way you would have wanted. What would you change?
- Tell me about a time when you got stuck while coding. How did you work your way through the problem?
- Describe a time when your program didn't run. How did you troubleshoot your code?
- Have you ever failed to meet a deadline? What went wrong? How did you rectify the situation?
- What is your approach for conflict management on your team?
- How would you implement integer division if your language did not offer it?
- Vertically and horizontally center an element on the screen using CSS.
- Implement a SortedMap in JavaScript.
- How would you make your web pages load fast?
- Write a JavaScript function that creates HTML based on a given input dataset.
- Outline how you would implement a simple tic tac toe game in a programming language of your choice.
- How would you reverse a linked list?
- Design a webpage, which can auto-post new posts when you reach the bottom of the page by using JavaScript.
- Write the code to find the balance point of the array.

https://brainstation.io/career-guides/web-developer-interview-questions

https://www.interviewbit.com/web-developer-interview-questions/

https://resources.workable.com/web-developer-job-

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https://www.betterteam.com/web-developer-job-description

https://thebestschools.org/careers/career-guide/web-developer/

https://www.computerscience.org/web-development/careers/web-developer/career-outlook-and-salary/

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What Tools and Strategies Do You Use to Organize and Prioritize Your Work to Best Meet Team Goals, Expectations, and Deliverables?

Webmasters

Job description

The Webmaster serves as the primary contact for all aspects of the organizations website(s), handling a range of responsibilities that may include web design and development, routine site and content maintenance, and various updates to ensure sites align with the goals and objectives of the company.

Webmasters design, implement, and maintain Internet Web sites for corporations, educational institutions, not-for-profit organizations, government agencies, or other institutions.

Webmasters should have working knowledge of network configurations, interface, graphic design, software development, business, writing, marketing, and project management.

Because the function of a webmaster encompasses so many different responsibilities, the position is often held by a team of individuals in a large organization.

Duties

Webmasters typically do the following:

- Serve as the primary contact for all aspects of the organizations website(s).
- Develop and maintain internet and intranet portals, forms, and structures in accordance
 with the organizations needs; collaborates closely with MIS/Database Manager,
 Communications/Public Relations Director, Human Resource Director, Operations
 Director, and others invested leadership staff.
- Develop, implement, and maintain e-commerce applications in collaboration with the organizations retail operations, sales, marketing, and related departments.

- Encourage and facilitate consistent, creative, and unified web design across the organizations web properties.
- Collect and analyze web analytics and similar data; identifies opportunities to improve search engine optimization (SEO), time on site, web traffic, and other relevant metrics.
- Maintain and document ownership of company's internet domains.
- Assist employees with use of company websites through one-on-one support, user guides, and training sessions.
- Ensure compliance with company policies, procedures, and ethical standards; software licenses; and applicable state and federal laws and regulations including data security, privacy, and intellectual property laws.
- Maintain current knowledge of best practices and emerging developments in web design, web development, and technology.
- Perform other related duties as assigned.

Webmasters typically work for corporations across industries to oversee company websites or servers. They work closely with upper management personnel and other web professionals to identify website needs and improve the user's experience. Their job is to use one or more programming languages to design or update website code. They may also be responsible for monitoring website traffic and creating features to track the number of site visitors, clicks or purchases that occur through the website.

Work environment

Although much of the webmaster's day may be spent alone, it is nonetheless important that he or she be able to communicate and work well with others. Depending on the organization for which he or she works, the webmaster may have periodic meetings with graphic designers, marketing specialists, writers, or other professionals who have input into Web site development. In many larger organizations, there is a team of webmasters rather than just one. Although each team member works alone on his or her own specific duties, the members may meet frequently to discuss and coordinate their activities.

Because technology changes so rapidly, this job is constantly evolving. Webmasters must spend time reading and learning about new developments in online communication. They may be continually working with new computer software or hardware. Their actual job responsibilities may even change, as the capabilities of both the organization and the World

Wide Web itself expand. It is important that these employees be flexible and willing to learn and grow with the technology that drives their work.

Work schedule

Because they don't deal with the general public, most webmasters are allowed to wear fairly casual attire and to work in a relaxed atmosphere. In most cases, the job calls for standard working hours, although there may be times when overtime is required.

How to become a Webmaster

What most webmasters have in common is a strong knowledge of computer technology. Most people who enter this field are already well versed in computer operating systems, programming languages, computer graphics, and Internet standards. When considering candidates for the position of webmaster, employers usually require at least two years of experience with World Wide Web technologies. In some cases, employers require that candidates already have experience in designing and maintaining Web sites. It is, in fact, most common for someone to move into the position of webmaster from another computer-related job in the same organization.

Education

High school students who are interested in becoming webmasters should take as many computer science classes as they can. Mathematics classes are also helpful. Finally, because writing skills are important in this career, English classes are good choices.

A number of community colleges, colleges, and universities offer classes and certificate programs for webmasters, but there is no standard educational path or requirement for becoming a webmaster. While many have bachelor's degrees in computer science, information systems, or computer programming, liberal arts degrees, such as English, are not uncommon. There are also webmasters who have degrees in engineering, mathematics, and marketing.

Work Experience in a Related Occupation

Most people become webmasters by moving into the position from another computer-related position within the same company. Since most large organizations already use computers for various functions, they may employ a person or several people to serve as computer "specialists." If these organizations decide to develop their own Web sites, they frequently

assign the task to one of these employees who is already experienced with the computer system. Often, the person who ultimately becomes an organization's webmaster at first just takes on the job in addition to his or her other, already established duties.

Licenses, Certifications, and Registrations

There is strong debate within the industry regarding certification. Some, mostly corporate chief executive officers, favor certification. They view certification as a way to gauge an employee's skill and expertise. Others argue, however, that it is nearly impossible to test knowledge of technology that is constantly changing and improving. Despite the split of opinion, webmaster certification programs are available at many colleges, universities, and technical schools throughout the United States. Programs vary in length, anywhere from three weeks to nine months or more. Topics covered include client/server technology, Web development, programs, and software and hardware. The International webmasters Association and World Organization of webmasters also offer voluntary certification programs.

Advancement

Experienced webmasters employed by a large organization may be able to advance to the position of chief Web officer. Chief Web officers supervise a team of webmasters and are responsible for every aspect of a company's presence on the Web. Others might advance by starting their own business, designing Web sites on a contractual basis for several clients rather than working exclusively for one organization.

Opportunities for webmasters of the future are endless due to the continuing development of online technology. As understanding and use of the World Wide Web increase, there may be new or expanded job duties in the future for individuals with expertise in this field.

Important Qualities

Webmasters should be creative. It is important for a Web page to be designed well in order to attract attention. Good writing skills and an aptitude for marketing are also excellent qualities for anyone considering a career in Web site design.

Webmasters require lots of technical skills. They need to have experience with whatever software and hardware your company uses, and they need extensive knowledge of web servers, such as Apache. Other essential skills and qualifications include:

- Experience with a programming language, like JavaScript
- The ability to work with a team
- Time-management skills
- Problem-solving skills
- Decision-making skills

PAY (EXPECTED AVERAGE SALARY)

The median salary for webmasters was between \$30,000 and \$40,000 a year, but pay ranged from less than \$20,000 to \$100,000 or more. In some cases, the demand for webmasters is so great that some companies are offering stock options, sign-on bonuses, and other perks, in addition to high salaries. However, many webmasters move into the position from another position within their company or have taken on the task in addition to other duties. These employees are often paid approximately the same salary they were already making.

The starting salary for graduates with a bachelor's degree in computer sciences was approximately \$52,464 in 2005; those with master's degree's averaged salaries of \$60,354. Career information Web site Salary. com reports that webmasters earn a median salary of \$66,782.

Job Outlook

According to the U.S. Department of Labor, the field of computer and data processing services is projected to be among the fastest growing industries for the next decade. As a result, the employment rate of webmasters and other computer specialists is expected to grow much faster than the average rate for all occupations through 2014.

There can be no doubt that computer, and specifically online, technology will continue its rapid growth for the next several years. Likewise, then, the number of computer-related jobs, including that of webmaster, should also increase. The study by Interactive Week finds the field to be currently male-dominated, with men making up 74.9 percent of workers. However, there are great opportunities for women in computer science. Many large companies, such as Wal-Mart, are looking for talented individuals who, according to a female Wal-Mart webmaster, "can combine a lot of technical knowledge with the ability to cooperate with people who don't know a lot of technology. Women can often be very good at that."

Employment

As more and more businesses, not-for-profit organizations, educational institutions, and government agencies choose to "go online," the total number of Web sites will grow, as will the need for experts to design them. Companies are starting to view Web sites not as temporary experiments, but rather as important and necessary business and marketing tools. Growth will be largest for Internet content developers (webmasters responsible for the information displayed on a Web site) and chief Web officers.

One thing to keep in mind, however, is that when technology advances extremely rapidly, it tends to make old methods of doing things obsolete. If current trends continue, the responsibilities of the webmaster will be carried out by a group or department instead of a single employee, in order to keep up with the demands of the position. It is possible that in the next few years, changes in technology will make the Web sites as we know it today a thing of the past. Another possibility is that, like desktop publishing, user-friendly software programs will make Web site design so easy and efficient that it no longer requires an "expert" to do it well. Webmasters who are concerned with job security should be willing to continue learning and using the very latest developments in technology, so that they are prepared to move into the future of online communication, whatever it may be.

INTERVIEW QUESTIONS

How would your colleagues describe you?

Asking this will give you a better idea of how they view themselves in the eyes of others and should reveal clues on their ability to work within a team environment.

Are they known as the quiet one, the goofball, the communicator, the workaholic, or something else?

What motivates you to work?

Do you like working with a team or working alone?

This really depends on what opening the job seekers are applying for. Is it a desk job that only requires them to be by themselves self or is it work that demands coordination and communication with others?

If you analyze that the applicants are people who are flexible, willing to do multi-tasking, and wouldn't be bothered if at times they work alone or with a team, these could be the best professionals to hire.

Reveal something about yourself not on your resume

Sometimes there are quirks about prospective employees that you simply can't see on a resume.

Questions about company culture

Questions about <u>company culture</u> will help the interviewer determine if your values align with the prospective employer. When asking these questions, you can also highlight your compatibility with workplace culture. Asking questions about company culture can also show the interviewer that you have an interest in getting to know others and becoming part of a community.

- How does this company promote its core values?
- What team-building activities does your team participate in?
- In what ways does this company support its employees?
- Does this company have any workplace traditions?
- What changes have you seen in this company while you have worked here?
- What are the characteristics of a person who would succeed in this company's environment?
- How does the team I would be working on support the company's goals?

Questions about the position

Asking questions about the position will not only show the interviewer that you have put thought and effort into your application but will also give you valuable details about the job. Gauging the expectations of the employer can help you understand what they are looking for in an applicant. These questions can help you understand the scope of the position and possibilities for growth.

- What traits would help me be successful in this position?
- How often would I collaborate with others in this position?

- Are there opportunities for this position to change or expand?
- Who are the main people that I would regularly interact with?
- What tasks would I complete on an average day?
- What did the person who previously held this position do well?
- What changes would you like to see in how this job is done?

Questions about performance

Showing an interest in how job performance is evaluated demonstrates to the employer that you have plans to grow at the company. Employers often look for candidates who will remain at their company for as long as possible to avoid turnover costs. Ask questions about performance to assure employers of your ability to meet and exceed expectations.

- How often will my manager be available to discuss my performance?
- Can you describe the formal performance review process for this position?
- How and how often can I expect to receive feedback on my work?
- How can I get support in setting goals and expectations?
- What should I hope to accomplish in my first 90 days if I am hired for this position?
- How does this company or team celebrate success?
- How do you evaluate the success of your employees?

https://www.indeed.com/career-advice/career-development/performance-evaluation

Questions about training

Ask questions about the training process to learn about opportunities for advancement and signal to the interviewer that you are an ambitious candidate. This kind of question signals to the hiring team that you are forward-thinking regarding your career. Learning about the training procedures of a possible new employer can prepare you to adjust quickly to your new environment and stand out as an employee.

- Can you describe the training process for this position?
- How have successful employees advanced in this company?

- Does this company offer frequent opportunities for promotion or on-the-job training?
- Will I have opportunities to shadow my coworkers and learn about other roles?
- How will working in this position grow my skills?
- Does your company offer continued training for interested employees?

Questions about development

Asking questions about professional development shows the interviewer that you are not only interested in the position you are applying for, but want to grow within the company. Employees who bring new skills and education to their company are often desirable candidates. Asking a question about professional development opportunities can also teach you about how the company can support your own goals.

- Does this company send employees to conferences?
- What organizations does this company work with to grow the skills of its employees?
- Does this company organize any volunteer opportunities?
- Does the company offer any incentives for learning new skills?
- How does this company stay competitive in its field?
- Does the company ever sponsor the continued education of its employees?

Questions about the team

By asking questions about the people you could be working with, you can determine if you would thrive as part of their team. The personalities, strengths and weaknesses of the team can influence your ability to succeed in the workplace. These questions show the interviewer that you are committed to <u>teamwork</u> and cooperation.

- How would you describe your team's dynamic?
- What can you tell me about the people I will be working with?
- Who will I report to directly and how would you describe their management style?
- What would you consider to be your team's greatest success?
- Which other departments does this team collaborate with?

- How does your team manage conflicts?
- What are this department's greatest strengths and weaknesses?
- What is the turnover like for this department?

Questions about hiring

In order to set reasonable expectations about when the hiring team will make a decision, ask questions about the hiring process. Understanding their timeline and process for onboarding a new employee allows you to make plans for your future. Additionally, the interviewer might indicate the success of your interview by their mood and enthusiasm when answering questions about hiring.

- What are the next steps in the hiring process?
- Who can I contact with any questions?
- If I were hired for this position, when would I be able to start?
- When can I expect to hear your decision about my application?
- Do you have any concerns about my qualifications?
- What have other applicants
- Can you describe the onboarding process?

Interview Questions about SPECIFIC SKILLS, FEATURES of the position?

- What would you check first if many users complained about the website load speed?
- If you identified a bug on our contact page and didn't know how to address it, how would you inform our engineering team about it?
- What would you do if you spotted unusual numbers in Web Analytics? (e.g. significant drops in traffic or conversion rates)
- How would you make our interface more user-friendly?
- What measures would you take to make our site secure? What guidelines would you give to users to minimize their security risks?

- What data do you collect from Google PageSpeed Insights? How do you use this information?
- Are you familiar with keyword research to improve a page's rankings? What kinds of tools do you use? (e.g. Keyword Planner and Moz)
- What is your role in designing a new web page?
- How do you check if links work and how do you fix broken links?
- What web management tools have you used?
- Briefly describe the steps to install and configure a web server.
- What do you consider when managing web access rights for different users?
- What topic would you like to learn more about in web development and/or design? How would this knowledge help you as a webmaster?
- Tell me about a time when your attention to detail helped you quickly identify a
 website flaw.
- What's the biggest challenge you've faced so far? What was the situation and how did you overcome the obstacles?
- Describe a website you recently visited that had a poor design. What did you feel was wrong with it? In your opinion, what features enhance user experience?
- Where can I find current and past examples of your work?
- May I have a list of your current and past clients?
- What's your favorite website and why do you like it?
- Which publishing, design and content technologies would you use to build and maintain my website?
- How will you optimize my website for search engines?
- What kind of special features can you integrate into my site?
- What is your approach to security issues and other potential website problems?
- How well versed are you in copyright issues?
- Who will own the website?
- What are your fees and payment terms?

https://www.shrm.org/resourcesandtools/tools-and-samples/jobdescriptions/pages/webmaster.aspx#:~:text=The%20Webmaster%20serves%20as%20the,and%20objectives%20of%20the%20company.

https://www.indeed.com/hire/job-description/webmaster

https://resources.workable.com/webmaster-job-description

https://www.betterteam.com/webmaster-job-description

http://career.iresearchnet.com/career-information/webmaster-career/

https://breezy.hr/resources/interview-questions/webmaster

https://www.betterteam.com/webmaster-interview-questions

https://resources.workable.com/webmaster-interview-questions

https://www.entrepreneur.com/article/225573

<u>Tell Me About a Work Problem That Required a Complicated Solution and How You</u> Worked With Your Team to Resolve It.

https://www.themuse.com/advice/it-interview-questions-answers-examples - 4d3e472d-3f29-45a3-996f-cd28796b8394

What's a New Software or Technology You Recently Worked With and How Did You Come to Learn It?

https://www.themuse.com/advice/it-interview-questions-answers-examples - 766bef58-0754-4423-b924-c57b693a1130

What Do You Do When It Looks Like a Project You Are Working on Might Miss a Deadline?

https://www.themuse.com/advice/it-interview-questions-answers-examples - 9efbdb09-4195-4b76-9495-f5b46857c87c

Tell Me About the Stakeholders and Internal Clients You Work With Outside of IT and How Your Work Supports Overall Business Goals.

https://www.themuse.com/advice/it-interview-questions-answers-examples - ad81561d-7d98-46d8-8da0-2574daecf3ad

Tell Me About a Time When You Explained a Technical Process or Concept to Someone Who Didn't Have a Technical Background.

https://www.themuse.com/advice/it-interview-questions-answers-examples - 38943381-f1ff-433a-83e3-dbc119af5dbf

Can You Tell Me About a Project Where You Volunteered to Help or Offered Support?

https://www.themuse.com/advice/it-interview-questions-answers-examples - 262cf0a3-a9df-43c8-adeb-43d1da437302

Can You Provide an Example of a Challenging Coworker Relationship? How Did You Handle It?

https://www.themuse.com/advice/it-interview-questions-answers-examples - 620134b2-5dcb-4374-a6e1-e4ab49775dc6

Tell Me About a Work Product You Delivered That You're Particularly Proud Of.

https://www.themuse.com/advice/it-interview-questions-answers-examples - 54ae1750-f26f-4ce7-96cc-f19e99d20f75

What Tools and Strategies Do You Use to Organize and Prioritize Your Work to Best Meet Team Goals, Expectations, and Deliverables?

Application Support Analyst

JOB DESCRIPTION

Application support analysts respond to application support requests for smartphone or computer applications. Often part of a wider team, they are responsible for the smooth operation of specific software applications within an organisation or to the end-user.

They may also be involved in the maintenance and upgrade of apps as they uncover bugs or common issues faced by the end-user, as well as reporting on the functions of the app itself. Because they are often the first point-of-contact for the end-user, they have a great depth of knowledge when it comes to user experience. As such, they may also provide reports and suggestions on next iterations or updates.

Duties

Application support analysts assess problems, actively problem-solving these issues as they arise, and inform developers of these support requests. They are also responsible for:

- Keeping a record of any issues, problems, or bugs, usually within a database
- Providing on-call support
- Maintaining and updating technical and instruction manuals, policies, and procedures
- Training users
- Ensuring compliance with all local and international regulations
- Managing a support ticket system
- Testing prototypes, upgrades, or updates

Work Environment

Application analysts typically work in office environment or computer labs and spend most of their days working on a computer. They may travel to other locations within an organisation to help maintain, install or repair technological components. Some travel analysts may also work from home.

Work Schedules

It's typical for application analysts to work a full-time schedule, or 36-40 hours per week. Overtime, evening and weekend hours may be required when working on time-sensitive projects.

How to Become an Application Support Analyst

Because Application support analysts straddle the line between technician, analyst and customer support, they require a good mix of hard and soft skills.

While a tertiary education in computer science or software development is recommended, it is not necessary. Instead, Application support analysts should be able to demonstrate:

- A high level of knowledge in the organisation's computer system
- Relevant programming languages, like SQL, Java, UNIX, or Oracle
- Troubleshooting methodologies and issue resolution techniques

Education

Application analysts are typically expected to at least have a minimum of a bachelor's degree in a computer-related field of study, such as computer science or IT. However, there are several application analysts positions that might require specialized knowledge and thus might need a master's degree focusing on subjects like IT management, database administration, engineering, and so on.

Work Experience in a Related Occupation

Work experiences outside of a formal education that should be considered necessary can include technical experience, as well as knowing relevant computer languages, such as CSS, Microsoft SQL, #C, and HMLS. Depending on what kind of position you are aiming for, examples of past work might be necessary, too.

Licenses, Certifications, and Registrations

Businesses determine the qualifications of application support analysts based on their educational background, experience and skills. Some of the specific qualifications of an applications support analyst include:

- A degree in business administration, information systems, computing studies, IT or any other related fields.
- Knowledge of programming languages like SQL, Java and .Net Languages
- Interpersonal skills
- Previous experience as an application support analyst or a similar role
- Understand IT management software
- Professional certifications through Amazon, Apple, Microsoft, IBM or any other major
 IT certification

Advancement

With time, application analysts can further specialize their abilities, or they can rise up the ranks to become team leaders or senior application analysts. They can also switch career tracks into positions such as software development.

Important Qualities

Just as the role and responsibilities of an applications analyst can change, so too can the skills that apply to the specific positions that they find. Aside from the technical and analytical skills that would be a necessary part of the job, however, here are some other skills that tend to be essential for their careers:

- Excellent written and verbal communication
- Communicating technical problems and solutions to non-technical users and stakeholders
- Problem-solving and reporting skills
- Project management skills for design and development
- The ability to construct and work to deadlines

PAY (EXPECTED AVERAGE SALARY)

The average application systems analyst salary, according to the latest figures from Payscale, is around \$68,736, which is an hourly rate of around \$28.01. In total pay, including bonuses and profit-sharing, the yearly pay tends to range from \$48,765 to \$98,760. Application support analyst salary differs slightly, coming in slightly lower at \$62,136.

Job Outlook

The job outlook for application analysts is positive. According to the Bureau of Labor Statistics, the growth rate for application analysts is an estimated 7% between 2019 and 2029, which is faster than the national average of 4% for all jobs. That equates to the addition of 46,600 new jobs during that time.

Employment

Application analyst jobs existing a wide range of sectors, many of them working for financial services, health care, retail firms, education, and the public sector.

Opportunities for application analysts exist in all sectors of employment from financial services, education and public administration, to healthcare and retail.

The main players are the big organisations with well-developed IT systems and these often run their own graduate schemes.

Networking and personal contacts can provide opportunities for freelance work. Competition is strong, as advertised jobs attract specialists from all over the world. However, the demand for jobs in IT is growing, with further growth expected over the next ten years.

Information technology is booming with new websites, applications and products. Another factor contributing to the high demand for IT specialists is the increased awareness of cyber crimes and their prevention.

INTERVIEW QUESTIONS

How would your colleagues describe you?

Asking this will give you a better idea of how they view themselves in the eyes of others and should reveal clues on their ability to work within a team environment.

Are they known as the quiet one, the goofball, the communicator, the workaholic, or something else?

What motivates you to work?

Do you like working with a team or working alone?

This really depends on what opening the job seekers are applying for. Is it a desk job that only requires them to be by themselves self or is it work that demands coordination and communication with others?

If you analyze that the applicants are people who are flexible, willing to do multi-tasking, and wouldn't be bothered if at times they work alone or with a team, these could be the best professionals to hire.

Reveal something about yourself not on your resume

Sometimes there are quirks about prospective employees that you simply can't see on a resume.

Questions about company culture

Questions about company culture will help the interviewer determine if your values align with the prospective employer. When asking these questions, you can also highlight your compatibility with workplace culture. Asking questions about company culture can also show the interviewer that you have an interest in getting to know others and becoming part of a community.

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- What team-building activities does your team participate in?
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- Who are the main people that I would regularly interact with?
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• How often will my manager be available to discuss my performance?

- Can you describe the formal performance review process for this position?
- How and how often can I expect to receive feedback on my work?
- How can I get support in setting goals and expectations?
- What should I hope to accomplish in my first 90 days if I am hired for this position?
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- How would you describe your team's dynamic?
- What can you tell me about the people I will be working with?
- Who will I report to directly and how would you describe their management style?
- What would you consider to be your team's greatest success?
- Which other departments does this team collaborate with?
- How does your team manage conflicts?
- What are this department's greatest strengths and weaknesses?
- What is the turnover like for this department?

Questions about hiring

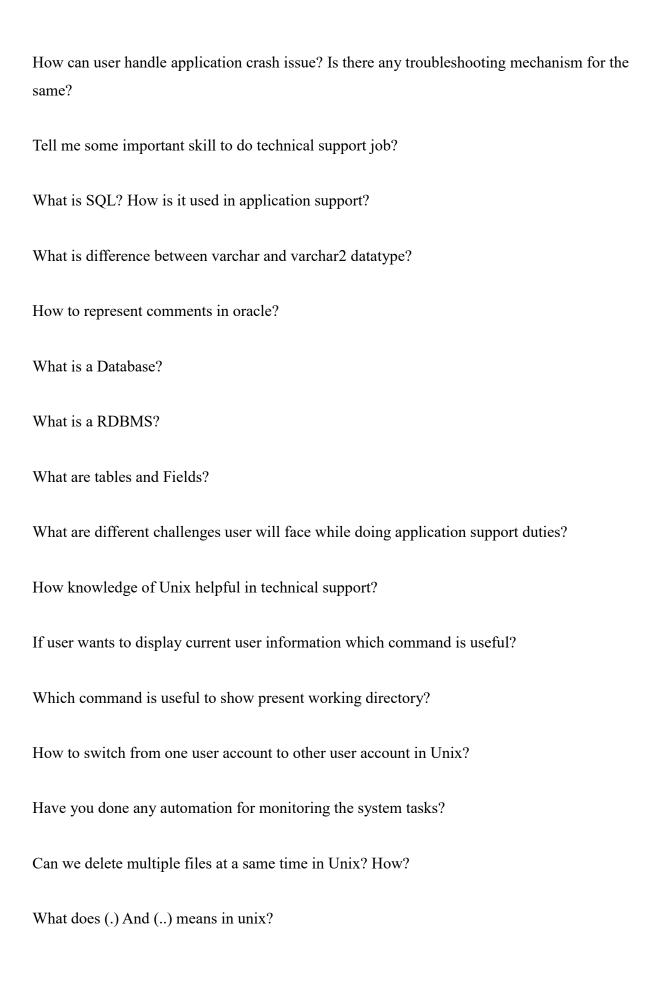
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- What are the next steps in the hiring process?
- Who can I contact with any questions?
- If I were hired for this position, when would I be able to start?
- When can I expect to hear your decision about my application?
- Do you have any concerns about my qualifications?
- What have other applicants?
- Can you describe the onboarding process?

Interview Questions about **SPECIFIC SKILLS**, **FEATURES** of the position?

What is application support? What technologies it includes?

Explain one common scenario of application support you have faced.



What is the UNIX command to list files/folders in alphabetical order?

What code would you use in a shell script to determine if a directory exists?

What is the biggest challenge you come across as IT support analyst role and how did you solve the problem?

How did you manage the urgent issue when customer request and how did you manage it with time to over the situation to solve the problem?

How did you manage the difficult customer request and what action took to solve the issue?

If application down how to troubleshoot the issue?

How to resolve P1 issue? If 2 P1 issues come at a same time how to act?

Management Information Systems

JOB DESCRIPTION

Information systems managers, or IT managers, are responsible for the secure and effective operation of all computer systems, related applications, hardware and software that is used within a wide range of public and private sector organisations.

Duties

The responsibilities of information systems managers professionals vary depending on the position. However, the work often includes the following:

- Securing information
- Analyzing business data and processes
- Implementing and auditing security controls
- Managing users and data
- Building dashboards and reports
- Developing and administering databases

- Designing and implementing algorithms
- Ensuring the security of networks and devices

Work Environment

Information systems managers work in office environment and spend most of their hours working on a computer.

Work Schedules

Most computer and information systems managers work full time. Some work more than 40 hours per week.

How to Become a Management Information Systems

Systems managers generally hold bachelor's degrees in computer science or information technology. Additional field experience also prepares computer and information systems professionals for managerial roles.

Education

Typically, candidates need a bachelor's degree in computer or information science and related work experience. Many computer and information systems managers also have a graduate degree.

By building knowledge in computer programming, software development, and mathematics, aspiring systems managers build hard skills required for the profession.

Work Experience in a Related Occupation

To become an information systems manager, candidates usually have to work their way up from an entry-level role, such as information systems officer.

Such roles are often competitive, so relevant industrial experience (particularly experience gained within the fields of project management, technical support, systems programming or computer operations) is beneficial. You can achieve this through industrial placements, summer internships and insight programs.

Licenses, Certifications, and Registrations

Systems managers enjoy opportunities to complete training through technology companies like Cisco and Microsoft. Many colleges and universities offer certificate programs like:

- CompTIA Training CompTIA offers certifications, training, and testing through
 partnerships with organisations around the world. Systems management professionals
 can access self-study tools, exam preparation materials, and instructor-led programs.
- Cisco Learning Cisco Learning offers comprehensive career, technical, and specialty courses and certifications. Computer and information systems managers can explore Cisco's worldwide offerings through the Cisco Learning Locator.
- CompTIA Continuing Education CompTIA's continuing education program facilitates
 certification renewal. Learners can renew through single or multiple activities.
 CompTIA provides detailed processes for renewal to meet computer and IT
 professionals' personal and professional needs.
- Microsoft Learning Microsoft Learning offers instructor-led and online certification programs for technology and office professionals. Systems managers can earn fundamental, associate, expert, or specialty certificates in Microsoft applications, platforms, and server technologies.

Advancement

Individuals with master's degrees can advance into administrative and director roles, even excelling to executive positions. Many systems managers focus on an aspect of information technology such as network architecture, security, or data analysis.

Possible graduates for systems management are:

- Computer and Information System Manager
- Computer Hardware Engineer
- Computer Network Architect
- Computer System Analyst
- Database Administrator

Important Qualities

Information systems managers depend on a variety of skills each day. Whether you're communicating with company leaders or personally integrating software programs, you'll depend on a deep technology-related skill set.

The exact skills you'll need as an information systems manager include:

- Technological proficiency: The ability to use all required hardware and software systems that a company depends on.
- Network management: The ability to manage all aspects of a company's networks, allocating proper user permissions to connect all employees with the resources they need.
- Research: The ability to identify, and selectively integrate, new technology-based tools that can further improve a company's output.
- Interpersonal communication: The ability to correspond effectively with team members, company executives, and technology representatives.
- Instruction: The ability to teach employees how to effectively use a company's hardware and software.
- Public speaking: The ability to confidently address employees and company executives regarding a company's use of technology in the workplace.
- Teamwork: The ability to collaborate well in a shared work environment to integrate programs according to company needs.

PAY (EXPECTED AVERAGE SALARY)

The median annual wage for computer and information systems managers was \$159,010 in May 2021.

Job Outlook

Employment of computer and information systems managers is projected to grow 11% from 2020 to 2030, faster than the average for all occupations.

About 42,400 openings for computer and information systems managers are projected each year, on average, over the decade. Many of those openings are expected to result from the

need to replace workers who transfer to different occupations or exit the labor force, such as to retire.

Employment

Information systems managers can explore employment opportunities through college and university career services, job fairs, and mentors and instructors.

Professional organisation membership also provides access to job boards and career guidance. Annual conferences bring together systems managers from around the world, as well.

Professional resources for systems managers provide valuable avenues to network, gain additional knowledge, and stay current in the field. Organisations and associations offer annual conferences for communities of like-minded professionals.

INTERVIEW QUESTIONS

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- How often would I collaborate with others in this position?
- Are there opportunities for this position to change or expand?
- Who are the main people that I would regularly interact with?
- What tasks would I complete on an average day?
- What did the person who previously held this position do well?
- What changes would you like to see in how this job is done?

Questions about performance

Showing an interest in how job performance is evaluated demonstrates to the employer that you have plans to grow at the company. Employers often look for candidates who will remain at their company for as long as possible to avoid turnover costs. Ask questions about performance to assure employers of your ability to meet and exceed expectations.

- How often will my manager be available to discuss my performance?
- Can you describe the formal performance review process for this position?
- How and how often can I expect to receive feedback on my work?
- How can I get support in setting goals and expectations?
- What should I hope to accomplish in my first 90 days if I am hired for this position?
- How does this company or team celebrate success?
- How do you evaluate the success of your employees?

Questions about training

Ask questions about the training process to learn about opportunities for advancement and signal to the interviewer that you are an ambitious candidate. This kind of question signals to the hiring team that you are forward-thinking regarding your career. Learning about the training procedures of a possible new employer can prepare you to adjust quickly to your new environment and stand out as an employee.

- Can you describe the training process for this position?
- How have successful employees advanced in this company?
- Does this company offer frequent opportunities for promotion or on-the-job training?
- Will I have opportunities to shadow my coworkers and learn about other roles?
- How will working in this position grow my skills?
- Does your company offer continued training for interested employees?

Questions about development

Asking questions about professional development shows the interviewer that you are not only interested in the position you are applying for, but want to grow within the company.

Employees who bring new skills and education to their company are often desirable

candidates. Asking a question about professional development opportunities can also teach you about how the company can support your own goals.

- Does this company send employees to conferences?
- What organisations does this company work with to grow the skills of its employees?
- Does this company organise any volunteer opportunities?
- Does the company offer any incentives for learning new skills?
- How does this company stay competitive in its field?
- Does the company ever sponsor the continued education of its employees?

Questions about the team

By asking questions about the people you could be working with, you can determine if you would thrive as part of their team. The personalities, strengths and weaknesses of the team can influence your ability to succeed in the workplace. These questions show the interviewer that you are committed to teamwork and cooperation.

- How would you describe your team's dynamic?
- What can you tell me about the people I will be working with?
- Who will I report to directly and how would you describe their management style?
- What would you consider to be your team's greatest success?
- Which other departments does this team collaborate with?
- How does your team manage conflicts?
- What are this department's greatest strengths and weaknesses?
- What is the turnover like for this department?

Questions about hiring

In order to set reasonable expectations about when the hiring team will make a decision, ask questions about the hiring process. Understanding their timeline and process for onboarding a new employee allows you to make plans for your future. Additionally, the interviewer might indicate the success of your interview by their mood and enthusiasm when answering questions about hiring.

- What are the next steps in the hiring process?
- Who can I contact with any questions?
- If I were hired for this position, when would I be able to start?
- When can I expect to hear your decision about my application?

- Do you have any concerns about my qualifications?
- What have other applicants?
- Can you describe the onboarding process?

Interview Questions about **SPECIFIC SKILLS**, **FEATURES** of the position?

What are the main job duties and responsibilities of "computer and information systems manager" employee?

What are the skills required from computer and information systems manager employee in order to success in his work?

Describe the abilities you have in order to work with us as computer and information systems manager?

What are the knowledge elements you obtained from your education, training and work experience would support your computer and information systems manager career?

How would you describe (computer and information systems manager or your) needed work style?

Tell about yourself and why you think you are successful computer and information systems manager?

Why do you like to work as computer and information systems manager?

What could you do not like to work as computer and information systems manager?

What are your future steps after experience you'll gain from your computer and information systems manager job?

As computer and information systems manager, what training courses or extra education that you think will improve your work performance?

What salary do you expect you'll get from being computer and information systems manager employee?

How do you track technical performance in your department?

Do you have any project management experience?

What would you say is the most important function of being an IT manager?

Give an example of aligning the team's work with company goals. What went well? What went poorly?

What is your approach to strategic planning? How do you build an effective IT roadmap?

Describe a time that you had to be persistent when solving a tough problem.

Describe the most innovative change that you have initiated and why you made this change.

How do you decide when to outsource tasks to external companies or develop internal talent?

Can you tell me about a time when things did not go the way you wanted? What happened and what would you do differently today?

How do you keep the team motivated?

How do you track technical performance in your department?

Mobile App Developer

JOB DESCRIPTION

Mobile application developers write programs inside of a mobile development environment using the Objective-C, C#, C++, Java, Swift or Kotlin programming languages. A mobile application developer chooses the operating system they will create an app for, such as Android or iOS, then learns the programming languages and development environment for that platform.

Duties

Application developers have a wide variety of responsibilities related to managing an application lifecycle, including:

- Understanding the requirements of the client to create specifications for applications they're going to develop
- Creating prototypes for the application according to the specifications
- Writing quality code to create the completed applications within a set amount of time
- Performing testing before launch
- Troubleshooting and debugging the application
- Evaluating existing applications and adding new features, reprogramming them or completing updates
- Developing documents and handbooks that represent the design and code for the application

The duties and responsibilities of an app developer will depend on the level of experience.

A mobile app developer's primary duty is to create, maintain, and implement the source code to develop mobile apps and mobile platform programs that meet the needs and requirements of the clients using the computer programming languages.

Additionally, mobile application developers may also design prototype applications, provide the unit structure, and help the application development team or clients in the plans.

Work Environment

Many mobile application developers work on a contract basis for companies and work from home on a schedule they set themselves.

Application development is a collaborative process and many work on teams with others to design, develop and program applications or software successfully. Application developers spend much of their time sitting at a desk.

Work Schedules

The work environment for an application developer depends on the employer and whether the developer is self-employed or works full-time for a single organisation.

How to Become a Mobile App Developer

Some employers have entry-level positions for people who have basic programming skills but no university degree. Entry-level employees are sometimes able to transition into higher paying positions if they prove proficiency at handling software development.

Some form of experience is typically necessary. Students who wish to gain experience can take advantage of various internship opportunities which allow new developers to gain real-world experience with programming languages and deadlines.

Education

There are routes into mobile development for both graduates and school leavers.

The job is typically open to graduates in computer science, computer programming or software related degrees.

There are also apprenticeships available in mobile app development, many of which involve on-the-job training for qualifications.

Work Experience in a Related Occupation

Mobile application developers need to have at least 3 years of experience working with system design, programming, and data structuring. They often have experience programming in C++, Java, or Swift.

Licenses, Certifications, and Registrations

Certifications prove your skills and look impressive on your resume.

- Mobile Development Institute Certified Developer
- IBM Certified Mobile Application Developer
- Google Associate Android Developer
- ATC Android Certified Application Developer
- Microsoft Certified Solutions Developer (MCSD): App Builder

Advancement

Some mobile application developers advance in their career and become technical architects or software developer managers.

Important Qualities

Technical skills: Application developers need to have high-level programming skills and know different types of coding languages to succeed in their roles.

Analytical skills: App developers should be able to interpret user needs and apply this to the mobile application products they create.

Problem-solving skills: Closely related to being able to interpret user needs is being able to take that information and find new solutions to answer it. Application developers should be able to see what their users are experiencing and determine how they can solve the problem or optimize the experience.

Creativity: Developers are often given a list of client requirements for each project. Using this framework, application developers need to be able to think creatively to find a solution.

Attention to detail: Application developers need to be able to catch potential problems in functionality during development, testing and launch.

Patience: Developing and testing software can take time. Developers must be able to stay positive while trying various iterations of the same solution.

Communication skills: Application developers need to be able to communicate concisely and effectively with their teams. They must also be able to convey highly technical information to non-technical individuals so it's easy to understand. In addition, application developers need to have strong written communication skills to create documents, manuals and release notes related to the application or software.

PAY (EXPECTED AVERAGE SALARY)

According to the information we gathered on payscale.com, a mobile app developer salary is an average of \$72K per year. Further, the highest-paid app developer takes approximately \$110K annually.

Ziprecruiter reports that the annual salary for entry-level mobile app developers ranges from \$28k – \$140k. Salaries vary depending on experience level in android and ios, type of app developed, level of education, and the software development company job openings.

Indeed.com reports the national average salary for a mobile applications developer is \$123,816 per year, the average ios developer salary is \$127,524, and the average salaries for android app development are \$126,129.

Job Outlook

The projected employment for software developers is 22%. That's much faster than the 4% average for all occupations. The high job outlook is the result of an increased need for new applications for tablets and smartphones.

Employment

The mobile device market is growing at breakneck speeds. This expansion is fueling record demand for mobile application developers. As smartphones, tablets and wearables continue to change the way we communicate, do business and access entertainment, the demand for new apps will continue to rise as devices become more capable and an increasing number of traditional businesses go mobile. The rapid growth of the mobile space is creating a host of employment opportunities for both corporate and freelance application developers.

According to IT hiring managers and recruiters, the demand for talented mobile application developers still far exceeds the supply. Some of the most popular industries hiring mobile app

developers include health care, video game studios, marketing firms that aim to build branded apps for clients, media firms that recognize mobile as a powerful content distribution channel, government agencies and financial institutions that want to bring their core services to mobile users, software development companies and real estate agencies.

INTERVIEW QUESTIONS

How would your colleagues describe you?

Asking this will give you a better idea of how they view themselves in the eyes of others and should reveal clues on their ability to work within a team environment.

Are they known as the quiet one, the goofball, the communicator, the workaholic, or something else?

What motivates you to work?

Do you like working with a team or working alone?

This really depends on what opening the job seekers are applying for. Is it a desk job that only requires them to be by themselves self or is it work that demands coordination and communication with others?

If you analyze that the applicants are people that are flexible, willing to do multi-tasking, and wouldn't be bothered if at times they work alone or with a team, these could be the best professionals to hire.

Reveal something about yourself not on your resume

Sometimes there are quirks about prospective employees that you simply can't see on a resume.

Questions about company culture

Questions about company culture will help the interviewer determine if your values align with the prospective employer. When asking these questions, you can also highlight your compatibility with workplace culture. Asking questions about company culture can also show

the interviewer that you have an interest in getting to know others and becoming part of a community.

- How does this company promote its core values?
- What team-building activities does your team participate in?
- In what ways does this company support its employees?
- Does this company have any workplace traditions?
- What changes have you seen in this company while you have worked here?
- What are the characteristics of a person who would succeed in this company's environment?
- How does the team I would be working on support the company's goals?

Questions about the position

Asking questions about the position will not only show the interviewer that you have put thought and effort into your application but will also give you valuable details about the job. Gauging the expectations of the employer can help you understand what they are looking for in an applicant. These questions can help you understand the scope of the position and possibilities for growth.

- What traits would help me be successful in this position?
- How often would I collaborate with others in this position?
- Are there opportunities for this position to change or expand?
- Who are the main people that I would regularly interact with?
- What tasks would I complete on an average day?
- What did the person who previously held this position do well?
- What changes would you like to see in how this job is done?

Questions about performance

Showing an interest in how job performance is evaluated demonstrates to the employer that you have plans to grow at the company. Employers often look for candidates who will remain at their company for as long as possible to avoid turnover costs. Ask questions about performance to assure employers of your ability to meet and exceed expectations.

• How often will my manager be available to discuss my performance?

- Can you describe the formal performance review process for this position?
- How and how often can I expect to receive feedback on my work?
- How can I get support in setting goals and expectations?
- What should I hope to accomplish in my first 90 days if I am hired for this position?
- How does this company or team celebrate success?
- How do you evaluate the success of your employees?

Questions about training

Ask questions about the training process to learn about opportunities for advancement and signal to the interviewer that you are an ambitious candidate. This kind of question signals to the hiring team that you are forward-thinking regarding your career. Learning about the training procedures of a possible new employer can prepare you to adjust quickly to your new environment and stand out as an employee.

- Can you describe the training process for this position?
- How have successful employees advanced in this company?
- Does this company offer frequent opportunities for promotion or on-the-job training?
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- How will working in this position grow my skills?
- Does your company offer continued training for interested employees?

Questions about development

Asking questions about professional development shows the interviewer that you are not only interested in the position you are applying for, but want to grow within the company. Employees who bring new skills and education to their company are often desirable candidates. Asking a question about professional development opportunities can also teach you about how the company can support your own goals.

- Does this company send employees to conferences?
- What organisations does this company work with to grow the skills of its employees?
- Does this company organize any volunteer opportunities?
- Does the company offer any incentives for learning new skills?
- How does this company stay competitive in its field?
- Does the company ever sponsor the continued education of its employees?

Questions about the team

By asking questions about the people you could be working with, you can determine if you would thrive as part of their team. The personalities, strengths and weaknesses of the team can influence your ability to succeed in the workplace. These questions show the interviewer that you are committed to teamwork and cooperation.

- How would you describe your team's dynamic?
- What can you tell me about the people I will be working with?
- Who will I report to directly and how would you describe their management style?
- What would you consider to be your team's greatest success?
- Which other departments does this team collaborate with?
- How does your team manage conflicts?
- What are this department's greatest strengths and weaknesses?
- What is the turnover like for this department?

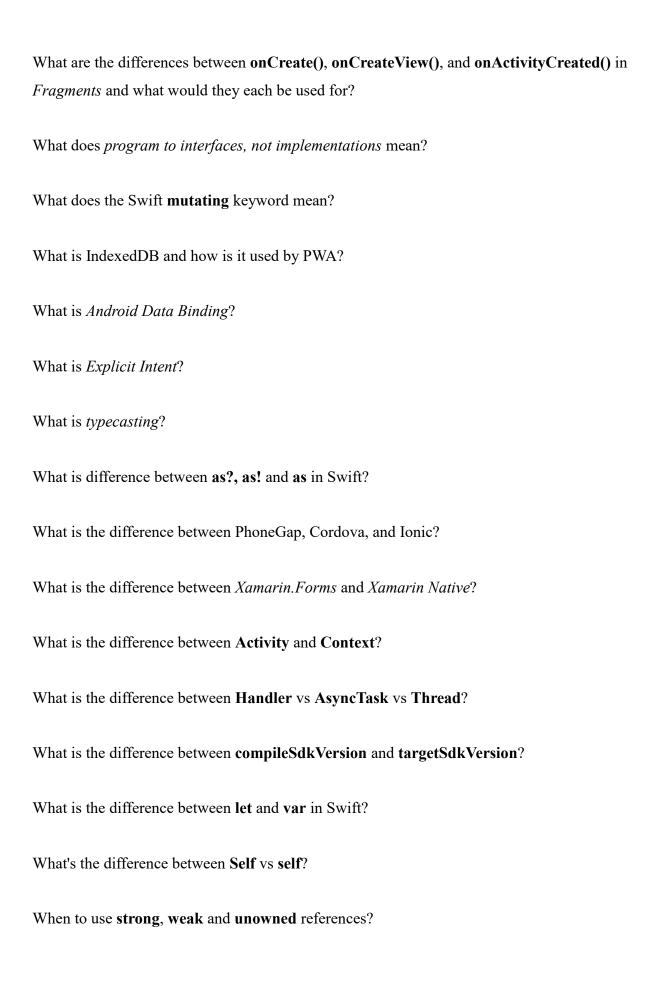
Questions about hiring

In order to set reasonable expectations about when the hiring team will make a decision, ask questions about the hiring process. Understanding their timeline and process for onboarding a new employee allows you to make plans for your future. Additionally, the interviewer might indicate the success of your interview by their mood and enthusiasm when answering questions about hiring.

- What are the next steps in the hiring process?
- Who can I contact with any questions?
- If I were hired for this position, when would I be able to start?
- When can I expect to hear your decision about my application?
- Do you have any concerns about my qualifications?
- What have other applicants?
- Can you describe the onboarding process?

Interview Questions about **SPECIFIC SKILLS**, **FEATURES** of the position?

List some benefits of using React Native for building mobile apps?
What are the advantages of hybrid apps over native apps?
What is Ionic Framework?
What is Xamarin?
What is <i>Singleton</i> pattern?
What is a progressive web app?
Explain briefly all the Android application components
Explain the build process in Android
How to persist data in an Android app?
What are the advantages of native apps over hybrid apps?
What is <i>Builder</i> pattern?
What is an Intent in Android?
What is hybrid app development?
What is the difference between <i>Upcast</i> and <i>Downcast</i> in Swift?
What are some disadvantages of PWA?
What are some possible security issues with Ionic apps?



Are there any differences between **Protocol** in Swift vs **Interface** in Java?

Provide an example of code with a *memory leak*

Platform design Java developer Quality assurance analyst
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Job description

The Platform designers tackle complex problems and help users feel more confident using various platforms. Platform designers are involved end-to-end in the design process including creation of design concepts, developing interactive prototypes, devising and conducting experiments, and delivering applications that create measured value for the users. Platform designers are strategic problem solvers who demonstrate sound design decisions and never do something "because it looks good".

Platform designers work with the developers, business analysts and platform strategists to ensure that the new features and improvements to applications

Job description

A Java developer is responsible for developing applications and software using the programming language Java. A Java developer is a specialized type of programmer who may collaborate with web developers and software engineers to integrate Java into business applications, software, and websites.

Duties

Java developers are responsible for many tasks throughout the development lifecycle of applications, from concept and design right through to testing – similar to other high-level programming languages. Here are some other responsibilities they may have:

Job description

The Quality Assurance (QA) Analyst will conduct testing on software, websites, and other technical products to identify and resolve bugs, defects, and other potential issues

A quality assurance analyst is someone who ensures an organization's software is working properly. After the software developers build a program, quality assurance analysts test it.

Software programs often
freeze, don't work properly on
certain operating systems, or
may be missing key features.
Quality assurance analysts
stop problems before they
begin by working in a testing
environment even before
software is released to the
public. This reduces any
frustration and wasted time,

are of high quality and add the expected value. Platform designers keep the perspective of the end-user in mind when designing. They participate in sprint planning and product forums to ensure that the scheduled tasks and goals of the applications are in line with corporate priorities and deadlines.

Design, implement, and maintain java application phases and ultimately benefits the entire organization.

To take part in software and architectural development activities

A quality assurance analyst may also be employed in a manufacturing plant, suggesting ways to improve overall quality. When a substandard product is detected, the analyst will reject it, take notes, and make recommendations so as to make sure it does not happen again. Regardless of setting, these analysts need to be highly detail-oriented, have excellent communication skills, be able to explain changes to products and procedures, and provide feedback.

Conduct software analysis, programming, testing, and debugging

Tackle complex technical problems and work to help users feel more confident using the applications.

Duties

issues

Identifying production and

non-production application

Manage the end-to-end design process including creation of design concepts, developing interactive prototypes, devising and conducting

experiments and delivering

applications.

Transforming requirements into stipulations

Develop, test, implement and maintain application software

Recommend changes to improve established java application processes

Duties

Reviews design specifications to understand the scope, requirements, and function of the software product.

Develop and maintain a design Develop technical designs for system for various application development Identifies appropriate applications. Develop application code for parameters, functions, and java programs data to test and validate; parameters may include Work with the Digital general function, validity of Platforms Manager and Digital What you'll bring: results, accuracy, reliability, Platforms Strategist to help and compliance with industry manage platforms in existing standards. portfolios. Possess strong problemsolving skills and the ability to work under pressure and to Conducts testing to ensure Take a data-driven, empirical meet multiple deadlines products perform according to approach to platform design. user requirements and within established guidelines. Exposure to Agile Help identify platform needs Methodologies (ideally from potential and/or existing Kanban or Scrum), Jira and Identifies, logs, and recreates users and help drive the Confluence error codes, bugs, and defects. formulation of hypotheses. Proficiency in Java and Java When a product does not Engage in customer discovery enterprise technologies such as perform within specifications, by contacting potential and/or Spring Boot, Spring reports defects to existing users to seek Framework, Spring Security, programmers while validation or rejection of JMS, Hibernate, ORM, identifying and recommending hypotheses. Tomcat solutions, improvements, and updates. Work with developers to help Experience in frontend web push rapid iteration on existing technologies such as HTML, platforms. JavaScript, CSS, Angular 6+, What you'll bring: Achieve performance targets. Redux patterns

Collaborate and communicate effectively with team members and all other teams.	Cognisant on REST and messaging services like Rabbit MQ	Bachelors degree in related field preferred.
Responsively and effectively handle issues.	An understanding of build automation tools (such as Maven), Git, CI, and bug tracking	Three years of related experience required.
Look for ways to improve customer experience. Promote and model TuGo culture, values, and brand	Extensive experience with databases (ideally PostgreSQL)	Extensive knowledge of software and database testing including designing and manipulating test data, validating stored jobs, and
promise. Continuously build	Proficiency in Linux Work Environment	error replication. Excellent organizational skills and attention to detail.
professional and technical expertise.	Usually the Java developer would be working as part of a creative team that are working	Ability to create test plans and cases from specifications or
Other duties as required. What you'll bring:	together towards producing a final aim.	verbal communications.
Degree in Graphic Design, HCI, Visual Communication or UX Design	As a junior you would be working within the team on one or two individual tasks. As a senior team developer you would be expecting to communicate, distribute and	Excellent interpersonal skills with the ability to serve as a liaison with developers, project managers, and customer support.

3+ years of experience as a designer;

Demonstrated ability to pull together a cross-functional team and lead a productive ideation session

Experience turning static wireframes and designs into interactive flows using various prototyping tools such as Invision and Experience Design

Experience testing designs through usability testing

A passion for building design and pattern libraries, understanding how design systems are built and know when to follow, and when to break, established interaction patterns utilizing tools like Zeplin

Experience with HTML, CSS and front-end frameworks

see the targets and times frames for the specific tasks as met.

You should be able to work under pressure to keep up with time frames and targets.

Work Schedules

Usually considered an office working hour job, However many companies are going for a more flexible schedule. At times there could be the possibility of working from home instead of the office and also with flexible hours depending on the project at hand and company policy.

Pay

The average Java developer gross salary is around €49000 per year.²

Strong analytical and problem-solving skills.

Proficient with Microsoft Office Suite or related software.

Work Environment

Quality assurance analysts work in a typical office environment and may be required to work overtime during evenings and weekends in order to meet certain deadlines. Some quality assurance analysts are able to work remotely, however most are required to be present in the office. They need to be comfortable working with others as they will be working in teams for the majority of the day.

Quality assurance analysts
with experience or an
academic background in the

² https://www.salaryexpert.com/salary/job/java-developer/malta/valletta

	Job Outlook & Employment	field in which they specialize
Descionate shout design and		may have stronger-than-
Passionate about design and		average job prospects.
sharing knowledge	Java is continuously growing.	
	Since its introduction in 1995,	
Experience leading customer	it has remained a steady and	
research and other open-ended	vibrant programming language	
research inquiries	for reasons besides its	
Toscuron inquiries	robustness and comprehensive	Work Schedules
	platform. There are new	
Experience designing in both	releases about every three to	
Android and iOS app	twelve months. Java Virtual	
	Machine programming	Usually working hours would
	languages keep increasing	be around office hours.
Experience tracking and	(e.g., Kotlin). The demand for	Although it is becoming more
interpreting metrics to support	Java developers remains high	trending, a working schedule
design decisions	on the job market as they are	that revolves around project
	said to be the most employable	based hours. When this
	software professionals out	happens companies may opt to
Experience working in an agile	there.	have flexible working hours
environment is an asset		for their employees and
		working from home too.
	Interview Questions about	
Excellent written and verbal	specific skills related to the	
English communication skills	position?	
		Pay
Strong team player and	What are the features of Java	The estimated salary for a QA
positive contributor	Programming Language?	Analyst is €23,000 per year
	Tropiuming Dunguago.	,, p y
Proficient in Adobe Creative	What is the immentance of the	Job Outlook & Employment
Cloud and able to learn	What is the importance of the	Job Outlook & Employment
applications quickly	main() method in Java?	
· ·		

Well-developed analytical, problem-solving, and decisionmaking skills What is the difference between path and classpath variables?

Prolonged periods of sitting at a desk and working on a computer.

A strong customer experience focus

Is Java Pass By or Pass By Reference?

This is the type of job that is considered important and thus always in demand.

A passion for continuous learning and professional achievement What is the final Keyword in Java?

When there is a fault in a system it may cause costly repercussions if not also damage reputations and trust to company developers and clients offering services.

A passion for travel

The quality assurance analyst through his work ensures the company that they are investing in long- term profit, better products, makes clear expectations and assure a good business reputation.

Work Environment

Interview Questions about specific skills related to the position?

Usually most of the work is done in an office environment however it depends pretty much on the company's protocols at times one can work from home. At times there are occasions where the platform designer meets the client. This could be done both at the company's premises or at the client's.

What is a bug?

	Г	Г
Work Schedules	What are the access modifiers	What is the difference
	in Java?	between severity and priority?
Usually working hours would	What is a static import?	
be around office hours.		What is the difference
Although it is becoming more	What is Enum in Java?	between Assert and Verify
trending, a working schedule	What is Composition in Java?	commands in test automation?
that revolves around project	r in a see production	
based hours. When this	What is the Java Reflection	
happens companies may opt to	API?	What is the difference
have flexible working hours	What is the marker interface?	between Quality Assurance,
for their employees and	what is the marker interface:	Quality Control and testing
working from home too.	What is the difference	
	between the user thread and	What is the QA testing life
	daemon thread?	cycle?
PAY	What is CountDown I stall in	Cycle:
	What is CountDownLatch in	What is a test plan?
	Java?	
The average salary of a junior	What is the Compare and	What would you include in an
web designer is about €28,000	Swap (CAS) algorithm?	automation test plan?
euros - €40,000 euros per		automation test plan.
year.	What is the volatile keyword	
1	in Java?	
Job Outlook & Employment	What is the Java timer class?	What is a Use case?
Francisco de La Propinsión	How to schedule a task to run	What is a Osc case:
	after the specific interval?	
So far platform designers,		
especially skilled ones, are	How to write a custom	What is a Test Strategy?
always in demand. Although	exception in Java?	man is a rest strategy:
there has been much	What is OutOfMemoryError in	
automation during the years,	Java?	What do you think are some
big enterprises would still need		advantages of manual testing?

specialised designs and What is the difference Can we have an empty catch original custom made designs. between functional and block? nonfunctional testing? Whether you decide to work as What happens when an a freelance designer or within exception is thrown by the a company there will be main method? various challenging What is a regression test? opportunities to have platforms What is the JDBC API and designed more user friendly, when do we use it? dynamic and that can be part What do you think is the most What are the different types of of bigger systems as well. important test metric, and JDBC drivers? It is considered a job that will why? always offer outlets whether What is JDBC ResultSet? the designer is keen in What is "dirty read" in JDBC? investing for a career of Which isolation level prevents creating or maintaining other What is bug leakage and bug dirty reading? platforms. release? What is a 2 phase commit? What is data driven testing? **Interview Questions about** specific skills related to the position? Mention the different types of software testing? Describe your creative process How do you get unstuck creatively?

¹ https://tminta.com/blog/getting-started-as-a-web-designer-in-malta-all-you-need-to-know/

	What is Agile testing and
To what degree in the past,	what is the importance of
have you been involved in the	Agile testing?
conceptual or strategy phase?	
What are the goals of this	
project and your thought	What are the five common
process behind the solution?	solutions for software
	development problems?
Tell us about a time when a	
client disliked your work?	
The distinct your work.	
** 1	
How do you stay organized	
when provided with multiple	
design assets, files and ideas?	
What kind of questions do you	
ask before beginning a design	
project?	
Which piece of information is	
of utmost value?	
of acmost value:	
Tell us about a time when you	
had to balance multiple	
competing priorities?	

Tell us about a project which	
has been your greatest	
achievement?	
What kind of rules, culture or	
structure need to exist to foster	
team collaboration?	
What are the qualities you look	
for in a manager?	
Give me different examples of	
different tools you would use	
to create different platforms	
What is your design process?	
What do you specifically need	
from the clients to start a	
project ?	
Con you show a most full of	
Can you show a portfolio of	
your previous works or	
collaborations?	
Which content management	
system do you prefer to use	
and why?	
· · · · · · · · · · · · · · · · · · ·	
L	

What precautions will you take		
to enhance SEO from the first		
design stages of the platform?		
What are the main differences		
between and e-commerce site		
and a brochure website?		
and a dischare weesher.		
What security measures will		
you be taking care of at design		
stage?		
Generic questions to be asked	in all positions more related to	teamwork and
understanding responsibilities	_	·····
.	.	
How would your colleagues des	cribe you?	
What motivates you to work?		
what monvaies you to work!		
Do you like working with a team or working alone?		
Reveal something about yourself not on your resume		

Questions about company culture

	How does this company promote its core values?
	What team-building activities does your team participate in?
	In what ways does this company support its employees?
	Does this company have any workplace traditions?
	What changes have you seen in this company while you have worked here?
	What are the characteristics of a person who would succeed in this company's
envi	ronment?
	How does the team I would be working on support the company's goals?
Que	stions about the position
	What traits would help me be successful in this position?
	How often would I collaborate with others in this position?
	Are there opportunities for this position to change or expand?
	Who are the main people that I would regularly interact with?
	What tasks would I complete on an average day?
	What did the person who previously held this position do well?
	What changes would you like to see in how this job is done?
Que	stions about performance
	How often will my manager be available to discuss my performance?
	Can you describe the formal performance review process for this position?
	How and how often can I expect to receive feedback on my work?
	How can I get support in setting goals and expectations?
	What should I hope to accomplish in my first 90 days if I am hired for this position?
	How does this company or team celebrate success?
	How do you evaluate the success of your employees?

Que	stions about training
	Can you describe the training process for this position?
	How have successful employees advanced in this company?
	Does this company offer frequent opportunities for promotion or on-the-job training?
	Will I have opportunities to shadow my coworkers and learn about other roles?
	How will working in this position grow my skills?
	Does your company offer continued training for interested employees?
Que	stions about development
	Does this company send employees to conferences?
	What organizations does this company work with to grow the skills of its employees?
	Does this company organize any volunteer opportunities?
	Does the company offer any incentives for learning new skills?
	How does this company stay competitive in its field?
	Does the company ever sponsor the continued education of its employees?
Que	stions about the team
	How would you describe your team's dynamic?
	What can you tell me about the people I will be working with?
	Who will I report to directly and how would you describe their management style?
	What would you consider to be your team's greatest success?
	Which other departments does this team collaborate with?
	How does your team manage conflicts?
	What are this department's greatest strengths and weaknesses?
	What is the turnover like for this department?
Que	stions about hiring
	What are the next steps in the hiring process?
	Who can I contact with any questions?
	If I were hired for this position, when would I be able to start?
	When can I expect to hear your decision about my application?

	Do you have any concerns about my qualifications?
	What have other applicants
П	Can you describe the onboarding process?

Information Security

Job Description

Information security analysts plan and carry out security measures to protect an organization's computer networks and systems.

Duties

Information security analysts typically do the following:

- *Monitor their organization's networks for security breaches and investigate when one occurs
- *Use and maintain software, such as firewalls and data encryption programs, to protect sensitive information
- *Check for vulnerabilities in computer and network systems
- *Research the latest information technology (IT) security trends
- *Prepare reports that document general metrics, attempted attacks, and security breaches
- *Develop security standards and best practices for their organization
- *Recommend security enhancements to management or senior IT staff
- *Help computer users when they need to install or learn about new security products and procedures

Information security analysts are heavily involved with creating their organization's disaster recovery plan, a procedure that IT employees follow in case of emergency. These plans allow for the continued operation of an organization's IT department. The recovery plan includes preventive measures such as regularly copying and transferring data to an offsite location. It also involves plans to restore proper IT functioning after a disaster. Analysts continually test the steps in their recovery plans.

Information security analysts must stay up to date on IT security and on the latest methods attackers are using to infiltrate computer systems. Analysts need to research new security technology to decide what will most effectively protect their organization

Work Environment

Information security analysts held about 141,200 jobs in 2020. The largest employers of information security analysts were as follows:

Computer systems design and related services	26%
Finance and insurance	18
Information	10
Management of companies and enterprises	9
Administrative and support services	5

Many information security analysts work with other members of an information technology department, such as <u>network administrators</u> or <u>computer systems analysts</u>.

Work Schedules

Most information security analysts work full time, and some work more than 40 hours per week. Information security analysts sometimes have to be on call outside of normal business hours in case of an emergency.

Job Outlook

Employment of information security analysts is projected to grow 33 percent from 2020 to 2030, much faster than the average for all occupations.

About 16,300 openings for information security analysts are projected each year, on average, over the decade. Many of those openings are expected to result from the need to replace workers who transfer to different occupations or exit the labor force, such as to retire.

Employment

Demand for information security analysts is expected to be very high. Cyberattacks have grown in frequency, and analysts will be needed to come up with innovative solutions to prevent hackers from stealing critical information or creating problems for computer networks.

The increasing adoption of cloud services by small and medium-sized businesses and a rise in cybersecurity threats will create demand for information security analysts throughout the decade.

Banks and financial institutions, as well as other types of corporations, will need to increase their information security capabilities in the face of growing cybersecurity threats. In addition, as the healthcare industry expands its use of electronic medical records, ensuring patients' privacy and protecting personal data are essential. More information security analysts are likely to be needed to create the safeguards that will protect personal information and satisfy patients' concerns.

PAY (EXPECTED AVERAGE SALARY)

The median annual wage for information security analysts was \$102,600 in May 2021. The median wage is the wage at which half the workers in an occupation earned more than that amount and half earned less. The lowest 10 percent earned less than \$61,520, and the highest 10 percent earned more than \$165,920.

In May 2021, the median annual wages for information security analysts in the top industries in which they worked were as follows:

Information	\$128,970
Finance and insurance	104,790
Management of companies and enterprises	101,350
Computer systems design and related services	101,170
Administrative and support services	95,270

Most information security analysts work full time, and some work more than 40 hours per week. Information security analysts sometimes have to be on call outside of normal business hours in case of an emergency.

Questions about hiring

- 1 What is Cryptography?
- 2 What is the difference between Symmetric and Asymmetric encryption?
- 3 What is the difference between IDS and IPS?
- 4 Explain CIA triad.
- 5 How is Encryption different from Hashing?
- 6 What is a Firewall and why is it used?
- 7 What is the difference between VA(Vulnerability Assessment) and PT(Penetration Testing)?
- 8 What is a three-way handshake?
- 9 What are the response codes that can be received from a Web Application?
- 10 What is traceroute? Why is it used?

Interview Questions about SPECIFIC SKILLS, FEATURES of the position?

- 1. What is Cryptography?
- 2. What is the difference between Symmetric and Asymmetric encryption?
- 3. What is the difference between IDS and IPS?
- 4. Explain the CIA trio.
- 5. How is encryption different from Hashing?
- 6. What is Firewall and why is it used?
- 7. What is the difference between VA(Vulnerability Assessment) and PT(Penetration Testing)?
- 8. What is a triple handshake?
- 9. What are the response codes available from a Web Application?
- 10. What is traceroute? Why is it used?
- 11. What is the difference between HIDS and NIDS?

12. What are the steps to set up a firewall?
13. Explain SSL Encryption
14. What steps will you take to secure a server?
15. Disclose Data Leak
16. What are some of the Common Cyber Attacks?
17. What is Brute Force Attack? How can you prevent this?
18. What is Port Scanning?
19. What are the different layers of the OSI model?
20. What is a VPN?
21. What do you understand by Risk, Vulnerability and Threat in a network?
22. How can identity theft be prevented?
23. What are black hat, white hat and gray hat hackers?
24. How often should you do patch management?
25. How do you reset a password protected BIOS configuration?
26. Explain MITM attack and how to prevent it?
27. Explain DDOS attack and how to prevent it?
28. Explain the XSS attack and how to prevent it.
29. What is ARP and how does it work?
30. What is port blocking in LAN?
31. Which protocols enter the TCP/IP internet layer?

32. What is a botnet?
33. What are salty hashes?
34. Explain SSL and TLS
35. What is data protection in transit vs. data protection at rest?
36. What is 2FA and how can it be applied to public websites?
37. What is Cognitive Cyber Security?
38. What is the difference between VPN and VLAN?
39. Explain Phishing and how to prevent it.
40. Explain SQL Injection and how to prevent it?
41. Here's a situation- You receive the following email from the help desk:
Dear XYZ Email user,
We are deleting all inactive email accounts to make room for more users. To prevent your account from being deleted, you must submit:
• Name (first and last):
• Email Login:
• Password:
• Date of birth:
• Alternative
If we do not receive the above information from you by the end of the week, your email account will be terminated.
42. What do you do if you are a user?

DATA TRACKING

What is the Data tracking:

Data tracking is the process of sekecting specific metrics and events to track. Then colleting the data, you can apply your insights to impove business performance, customer experience, and more.

Job Duties

Data analyst responsibilities include conducting full lifecycle analysis to include requirements, activities and design. Data analysts will develop analysis and reporting capabilities. They will also monitor performance and quality control plans to identify improvements

Data Tracking responsibilities include:

- Interpreting data, analyzing results using statistical techniques
- Developing and implementing data analyses, data collection systems and other strategies that optimize statistical efficiency and quality.
- Acquiring data from primary or secondary data sources and maintaining databases
- Filter and "clean" data by reviewing computer reports, printouts, and performance indicators to locate and correct code problems
- Work with management to prioritize business and information needs
- Locate and define new process improvement opportunitie.

Requirements and skills:

- Proven working experience as a Data Analyst or Business Data Analyst
- <u>Technical expertise</u> regarding data models, database design development, data mining and segmentation techniques

- Strong knowledge of and experience with reporting packages (Business Objects etc), databases (SQL etc), programming (XML, Javascript, or ETL frameworks)
- Knowledge of statistics and experience using statistical packages for analyzing datasets (Excel, SPSS, SAS etc)
- Strong <u>analytical skills</u> with the ability to collect, organize, analyze, and disseminate significant amounts of information with attention to detail and accuracy
- Adept at queries, report writing and presenting findings
- BS in Mathematics, Economics, Computer Science, Information Management or Statistics

What makes a good Data tracking?

A good data analyst is extremely detail-oriented and can explain large amounts of information in a simple, organized manner. They should have strong math skills and business acumen, interpret data, and be curious.

Who does a Data Tracking work with?

Who a data works with depends on the industry and vertical in which they work. They can work with COOs, VPs, directors, and managers in some cases.

Working environments:

Working environments are generally offices within the company.

Salary ranges:

Although they vary according to their experience and location, they receive an average of 7.000 Euro per month.

What is Data Tracking?

Data tracking is the process of gathering, identifying, and categorizing individual data points in the data pipeline so that they can be used in the data processing.

The methods that businesses use to organize their data, as well as the ethical structure that they use to protect user privacy and security, are all part of data tracking.

The word "data tracking" refers to the hardware and software that, when combined, allows you to know exactly where something is at any given time.

Through data tracking, you can measure temperature, moisture, and a variety of other variables depending on the application.

How Do You Keep Track of Data?

If you've ever worked on a big data analysis project, you know how difficult it is to keep track of everything.

Every data analysis project is different, and there are always a variety of good ways to organize your data.

Here are a few tactics that I used in a recent project to keep track of data and I think you might find useful.

They didn't necessarily make the project easy, but they kept it from being overwhelming.

Questions about the team

- Could you introduce your team a little bit?
- Could you tell us about the hierarchical order of your team?

- Who are your team's business partners?
- What was your biggest project so far?
- Do you plan to progress more locally with your team or do you plan to develop an international project?
- What is your manager's way of managing your team?
- In the face of a problem, do you have a chaos plan?
- Do you organize workshops for the training of your team?
- Do you take the necessary holidays?
- What is your profit margin?

Questions when hiring?

- How does the recruitment process work?
- Could you tell us how the trial process progressed?
- What kind of expectations do you have from me psychologically?
- Are you worried about my technical knowledge?
- How long does my recruitment process take?

Question about company culture?

- Does your company have certain rules?
- How did you determine these rules?
- What do you need to do to get promoted in your company?
- Do you have a tradition of your own in your company?
- What kind of cultural activities did you do in your company?

Questions about the position

- What qualifications are suitable for this position?
- What kind of business partners does this position have?
- What does the position need to develop and update?
- Are there other people working in this position?
- What kind of successful works have people who worked in this position before me?
- What differences do you demand from me this time?

Questions about the performance

- How often do you hold meetings to assess your performance?
- How often can I get the return of my work?
- What opportunities do you provide as support?
- How do you measure your own success?
- Do you celebrate your success?

Questions about training

- What kind of training is required for this position?
- Could you tell us about the training process within the company?
- Do we have the opportunity to watch their work and work to learn about other roles?
- Do you receive trainings to increase your social skills, not just technically?

Questions about development

- What does development mean for your company?
- Do you create a separate budget for your development?
- Do you organize panels, symposiums and participate in the development of your employees?
- Do you encourage your company employees to cultural and sports activities and organize them within the company?

 Is cyber security awareness explained within the company for the security of your company?

Interview Questions about SPECIFIC SKILLS, FEATURES of the position?

- What does development mean for your company?
- Do you create a separate budget for your development?
- Do you organize panels, symposiums and participate in the development of your employees?
- Do you encourage your company employees to cultural and sports activities and organize them within the company?
- Is cyber security awareness explained within the company for the security of your company? What are data models, database design development, data mining and segmentation techniques?
- Tell us what you know about reporting packages (Business Objects etc.), databases (SQL etc.), programming (XML, Javascript or ETL frameworks)?
- What is your statistical knowledge of using statistical packages to analyze datasets?
- How well do you know programs such as Excel, SPSS, SAS etc.?
- Do you have the skills to collect, organise, analyze and disseminate a significant amount of information with attention to detail and accuracy?
- How proficient are you at questioning, writing reports, and presenting findings?
- What is your competency in areas such as Mathematics, Economics, Computer Science, Information Management?
- Can you tell us about the last project you worked on?
- What is the event you call your greatest achievement?

- Can you give an example of a problem you cannot tolerate?
- What should a good working environment be like for you?
- What do you think are the negative and positive aspects of the company?
- What roadmap will you follow to advance in your position?
- What can you add to this company?
- If you criticize yourself, what do you think are the aspects that are suitable for this position and the aspects that are not?

Data Management

Job Description

A Data Manager, or Data Management Specialist, develops data-oriented systems to meet an organization's or research team's needs. Their duties include developing systems, procedures and policies for data management in an organization, assisting colleagues in performing data-related tasks, and networking with clients.

Data management typically do the following:

- Identifying, alerting, diagnosing, and resolving faults in the database system or underlying infrastructure
- Allocating database memory and storage resources
- Making changes in the database design
- Optimizing responses to database queries for faster application performance
- Designing data archiving solutions,
- Ensure data privacy and security
- Leading database management such as IBM DB2 Microsoft SQL Server MySQL and finally working in good standing,
- Analyzing and reporting corporate data to shape business decision,

Work Environment

Data managers work in an office environment. Data managers are working hybrid somedays in Office somedays in home.

Work Schedules

Working hours are usually 37 to 40 hours on weekdays, Monday through Friday and may include regular social hours. You may need to work nights and weekends (during low usage periods) when maintenance and development work needs to be done.

How to Become a Database manager?

To become a database manager, it is necessary to graduate from universities such as Computer Science, Computer Information Systems, Database Management, Computer Engineering.

They should know algorithm. They should learn SQL SERVER. They should learn C#,

Python as computer language in the same time.

Education

Although a data manager learns the basics of their occupation during their education, the majority of their training occurs on the job. Entry-level jobs in database management and design are ideal for data managers to gain relevant experience in the field.

During school, students should complete at least one internship in a field of their choice. Undergoing an internship can allow students to gain hands-on experience in the data and information technology field. Also, they can build valuable business connections that could help them find employment once they graduate.

Data managers can maintain current knowledge of their industry by attending conferences or webinars. During these events, they learn about industry trends, the latest releases for different programs and platforms and how to use new technology. They also meet with fellow professionals who can share expert knowledge in different specializations.

Work Experience in a Related Occupation

Candidates are often required to have at least three years of working experience in data management, data analysis, or other data administration functions including collection and distribution. They must have experience deciphering and organizing large amounts of data. Hiring managers might prefer candidates with additional experience working with modern databases and IT technologies. You may also prefer candidates who have experience dealing with private and sensitive information, depending on your organization's needs

Licenses, Certifications, and Registrations

There are many different types of databases that businesses use. Depending on the specialization, DBAs can earn certifications that show they have extensive knowledge of a particular database.

These certifications include:

IBM Certified Database Administrator certificate: This certificate indicates that you can browse an IBM database server. In order to obtain this certificate, candidates must pass two knowledge and skills exams.

Microsoft SQL Server Database certification: This is an entry-level Microsoft certification for basic DBA skills. After earning your Microsoft SQL Server Database certification, you can pursue various Pre-Level Microsoft Solutions certifications.

Oracle Certified Professional certification: Oracle offers many certifications based on server versions. To earn any Oracle certification, you must pass an online exam to demonstrate your understanding of this release version.

Advancement

Some data managers ranks junior, senior, king.

Important Qualities

Looking at and Analyzing Data: The ability to use data effectively to improve your programs, including looking at lists and summaries, looking for patterns, analyzing results, and making presentations to others. Includes familiarity with the data available to you; knowledge of the

goals of your program; understanding the needs of your clients/audiences; and willingness to explore creative approaches to using data.

Navigating Database Software: Knowing how to use database software to find records, sort, review, edit, print, and other functions. Knowing how to use built-in forms and reports in a database. Exploring the software and learning various functions and features. Writing queries and reports using available tools; copying data into Excel or other formats for further analysis.

Data Integrity: Understanding definitions, program guidelines, and sources of data.

Developing clear channels of communication: Reviewing data and working with colleagues to make sure that data is accurate. Being aware of potential weaknesses in the data when analyzing and using the data.

Managing Accounts and Files: Keeping track of online accounts and helping others to keep track of their accounts, usernames and passwords. Knowing how to organize files and folders on your computer or network. Knowing how to copy, move, upload or download files and photos; understanding how to use email to send attachments.

Database Design and Planning: Understanding database design concepts, including "relational database design" concepts (table structure; one-to-many relationships). Understanding the benefits and limits of various types of databases, including PC and online databases. Ability to participate in short-term and long-term planning about database projects and to decide how to efficiently store and analyze various types of data.

PAY (EXPECTED AVERAGE SALARY)

The estimated total pay for a Data Management is \$72,920 per year in the United States. This number represents the median, which is the midpoint of the ranges from our proprietary Total Pay Estimate model and based on salaries collected from our users. The estimated base pay is \$58,753 per year. The estimated total pay for a Data Management as monthly salary base is 4580½ average salary is 11190½ ceiling is 22790½ in Turkey.

Job Outlook

Employment of database administrators and architects is projected to grow 8 percent from 2020 to 2030, about as fast as the average for all occupations. About 13,900 openings for database administrators and architects are projected each year, on average, over the decade. Many of those openings are expected to result from the need to replace workers who transfer to different occupations or exit the labor force, such as to retire.

Employment

Opportunities can arise in any organization that uses computerized databases, including organizations in the public, private and third sectors. IT companies use database administrators to run their own systems and work on client projects. Opportunities also exist in small and medium enterprises (SMEs). Even relatively small companies hold a lot of information about their members, customers, and suppliers, and this data is crucial in order to compete with others in the industry. Businesses use information held in databases to target new customers and launch new products and services. The role is highly specialized and the number of vacancies has been increasing in recent years. Direct entry into graduate roles will likely be with very large organizations.

INTERVIEW QUESTIONS

How would your colleagues describe you?

Asking this will give you a better idea of how they view themselves in the eyes of others and should reveal clues on their ability to work within a team environment.

Are they known as the quiet one, the goofball, the communicator, the workaholic, or something else?

What motivates you to work?

Do you like working with a team or working alone?

Tell me about the most fun you have had on the job?

Reveal something about yourself not on your resume

Questions about company culture

- 1. What makes you proud to work at this company?
- 2. How does the organization support your professional development and career growth?
- 3. Is risk-taking encouraged, and what happens when people fail?
- 4. What role do company values play in hiring and performance reviews?
- 5. What's one thing you would change about the company if you could?
- 6. Do you know anyone that works with our company?
- 7. The change in the business industry now requires you to have a new set of skills you have to learn, how do you react to that?
- 8. Describe your work ethic?
- 9. What is your ideal working environment?

Questions about the position

- 1 What challenges are you looking for in this data manager position?
- 2 Can you describe the hardest data system plan you've ever worked on?
- 3 Can you share an effective approach to operating with a large amount of data?
- 4 Can you describe an effective data management plan?
- 5 Describe Your Daily Routine As A Data Management Manager?
- 6 What Kind Of Strategies And Mindset Is Required For This Role?
- 7 What Is The Biggest Challenge You Foresee In This Job?
- 8 What Keeps You Motivated At Work?

Questions about performance

- 1 How often will my manager be available to discuss my performance?
- 2 Can you describe the formal performance review process for this position?

- 3 How and how often can I expect to receive feedback on my work?
- 4 How can I get support in setting goals and expectations?
- 5 What should I hope to accomplish in my first 90 days if I am hired for this position?
- 6 How does this company or team celebrate success?
- 7 How do you evaluate the success of your employees?

Questions about training

Can you describe the training process for this position?

- How have successful employees advanced in this company?
- Does this company offer frequent opportunities for promotion or on-the-job training?
- Will I have opportunities to shadow my coworkers and learn about other roles?
- How will working in this position grow my skills?
- Does your company offer continued training for interested employees?

Questions about development

Does this company send employees to conferences?

- What organizations does this company work with to grow the skills of its employees?
- Does this company organize any volunteer opportunities?
- Does the company offer any incentives for learning new skills?
- How does this company stay competitive in its field?
- Does the company ever sponsor the continued education of its employees?

Questions about the team

- 1 How would you describe your team's dynamic?
- 2 What can you tell me about the people I will be working with?

- 3 Who will I report to directly and how would you describe their management style?
- 4 What would you consider to be your team's greatest success?
- 5 Which other departments does this team collaborate with?
- 6 How does your team manage conflicts?
- 7 What are this department's greatest strengths and weaknesses?
- 8 What is the turnover like for this department?

Questions about hiring

- 1 What are the next steps in the hiring process?
- 2 Who can I contact with any questions?
- 3 If I were hired for this position, when would I be able to start?
- 4 When can I expect to hear your decision about my application?
- 5 Do you have any concerns about my qualifications?
- 6 What have other applicants
- 7 Can you describe the onboarding process?
- 8 What were your practices for backing up and storing media for your previous employer?
- 9 What development and implementation procedures do you follow for new data systems?
- 10 How did you manage proper data sharing practices for your previous employer?
- 11 As a data manager, you recommend new technological changes. How do you arrive at your recommendations?
- 12 Why is a disaster recovery plan vital for all companies using data systems?
- 13 What are the first steps you would take in the event of a security breach within your company database?

Interview Questions about SPECIFIC SKILLS, FEATURES of the position?

- 1 Tell us about a suggestion you have made that has benefited an organization you've worked for?
- 2 Where do you see your career in five years As Data Manager?
- 3 What have you done to improve your skills over the past year As Data Manager?
- 4 What are your greatest professional strengths As Data Manager?
- 5 What five words would be describe you as Data Manager?
- 6 What are you looking for in a new position As Data Manager?
- 7 How has university prepared you for this job role?
- 8 What is it about this position As Data Manager that attracts you the most?
- 9 What is your perception of taking on risk?
- 10 What are three positive things your last boss would say about you?
- 11 What is the most important lesson / skill you've learned from university?

DESKTOP SUPPORT SPECIALIST

JOB DESCRIPTION

A Desktop Support Specialist is generally hired by a company to oversee and maintain their computer hardware and software systems. Their skills assist the company in resolving technical issues concerning customer's accounts or company software infrastructure. A Desktop Support Specialist will also support computer software integration by diagnosing and troubleshooting common problems. Employees holding this job title generally begin in IT or IT Assistant roles.

DUTIES

Computer network support specialists typically do the following:

Test and evaluate existing network systems,

Perform regular maintenance to ensure that networks operate correctly,

Troubleshoot local area networks (LANs), wide area networks (WANs), and Internet systems.

Computer network support specialists, also called *technical support specialists*, analyze, troubleshoot, and evaluate computer network problems. They play an important role in the routine maintenance of their organization's networks, such as performing file backups on the network. Maintenance can be performed daily, weekly, or monthly and is important to an organization's disaster recovery efforts. Solving an information technology (IT) problem promptly is important because organizations depend on their network systems. Network support specialists may assist computer users through phone, email, or in-person visits. They often work under network and computer systems administrators, who handle more complex tasks.

Computer user support specialists typically do the following:

- Pay attention to customers' descriptions of their computer problems,
- Ask customers questions to properly diagnose the problem,
- Walk customers through the recommended problem-solving steps,
- Set up or repair computer equipment and related devices,
- Train users to work with new computer hardware or software, such as printers, word-processing software, and email,
- Provide other team members and managers in the organization with information about what gives customers the most trouble and about other concerns customers have.

Computer user support specialists, also called *help-desk technicians*, usually provide technical help to non-IT computer users. They respond to phone and email requests for help. They can usually help users remotely, but they also may make site visits so that they can solve a problem in person.

Help-desk technicians may solve a range of problems that vary with the industry and the particular firm. Some technicians work for large software companies or for support service firms and must give instructions to business customers on how to use business-specific

programs such as an electronic health records program used in hospitals or physicians' offices. Sometimes they work with other technicians to resolve problems.

Other help-desk technicians work in call centers, answering simpler questions from nonbusiness customers. They may walk customers through basic steps in reestablishing an Internet connection or troubleshooting household IT products such as Wi-Fi routers.

WORK ENVIRONMENT

Desktop support specialists typically provide services to off-site clients. They may do this over the phone by offering support in a call center setting. This work may require long hours, most often at a desk working on a computer.

Support specialists work on a team with others, striving to meet customer satisfaction goals and identifying the best ways to keep calls brief but productive. Desktop support specialists also work closely with others in IT-related positioning within the company. They may handle paperwork, on-site technical support and other tasks for IT supervisors and managers. Some desktop support specialists also provide on-site support to clients by traveling to their office locations and handling installations and updates in person. In these situations, the specialist must travel for a portion of the job. Installing systems in person may require lifting, bending, reaching and walking.

WORK SCHEDULES

Most computer support specialists work full time. Because computer support services may need to be available 24 hours a day, some specialists work nights or weekends.

HOW TO BECOME A DESKTOP SUPPORT SPECIALIST

The following steps can equip you for a career in this area.

1. Earn a bachelor's degree

A Bachelor's Degree in Computer Science is preferred, though related technical areas are acceptable. Consider completing coursework in a variety of technical systems to diversify your knowledge.

2. Gain a professional certification

Acquire technical certifications from vendors and other certifying agencies. Seek advanced certification in the programs that you most want to work with. This step may better help you secure employment, advance your career or increase your earning potential.

3. Gain experience with operating systems

Desktop support specialists should have practical experience working with Windows, Linux and other systems. You can gain this knowledge through your degree program, in a related job or through volunteer opportunities managing technical systems and databases for non-profits.

4. Show your customer service skills

Work in a ticketing based support system is preferable for those interested in becoming a desktop support specialist. However, any demonstrated experience with customer service is beneficial as it highlights your ability to communicate well with customers and handle problem-solving under pressure.

5. Prepare your resume

Draft a resume that highlights your technical expertise and customer support skills. List all technical certifications you've earned. Consider using the language used in the job description to better align your qualifications with the expectations of your prospective employers.

6. Seek technical support positions

Search for jobs for desktop support specialists in your intended area and at companies you're interested in working for. Other titles to consider include desktop support technician and IT desktop support.

EDUCATION

Education requirements for computer support specialists vary. Computer user support specialist jobs require some computer knowledge, but not necessarily a postsecondary degree. Applicants who have taken some computer-related classes may be qualified for these jobs. For computer network support specialists, many employers accept applicants with an associate's degree, although some prefer applicants to have a bachelor's degree.

Large software companies that provide support to business users who buy their products or services often require applicants to have a bachelor's degree. Positions that are more technical are likely to require a degree in a field such as computer science, engineering, or information science, but for others, the applicant's field of study is less important.

To keep up with changes in technology, many computer support specialists continue their education throughout their careers.

WORK EXPERIENCE IN A RELATED OCCUPATION

A bachelor's degree in Computer Science or closely related degree is required for the position. Additionally, some companies also require certification in industry-specific networks or operating systems. Individuals with a strong customer service background and a positive outlook on problem-solving tend to excel in the position of a Desktop Support Specialist.

LICENCES AND CERTIFITICATES

Certification programs are generally offered by vendors or from vendor-neutral certification providers. Certification validates the knowledge of and best practices required by computer support specialists. Companies may require their computer support specialists to hold certifications in the products the companies use.

ADVANCEMENT

Many computer support specialists advance to other information technology positions, such as network and computer systems administrators and software developers. Some become managers in the computer support services department. Some organizations provide paths for support specialists to move into other parts of the organization, such as sales.

IMPORTANT QUALİTİES

Customer-service skills: Computer support specialists must be patient and sympathetic. They often help people who are frustrated with the software or hardware they are trying to use.

Listening skills:Support workers must be able to understand the problems that their customers are describing and know when to ask questions to clarify the situation.

Problem-solving skills:Support workers must identify both simple and complex computer problems, analyze them, and solve them.

Speaking skills: Support workers must describe the solutions to computer problems in a way that a nontechnical person can understand.

Writing skills: Strong writing skills are useful for preparing instructions and email responses for employees and customers, as well as for real-time web chat interactions.

PAY (EXPECTED AVERAGE SALARY)

Desktop support specialists typically work full time, but their hours may vary. Customer support is available 24/7 for many products, so some desktop support specialists may work evenings, overnight, on weekends and through the holidays.

Detailed salary data is not available for desktop support specialists, but similar job titles provide an idea of what these professionals can expect to make:

Desktop support technicians: \$20.78 per hour

Help desk analysts: \$18.37 per hour

Technical support specialists: \$15.68 per hour

Total salaries range from \$7.25 to \$46.80 per hour.

JOB OUTLOOK

Overall employment of computer support specialists is projected to grow 9 percent from 2020 to 2030, about as fast as the average for all occupations.

About 70,400 openings for computer support specialists are projected each year, on average, over the decade. Many of those openings are expected to result from the need to replace workers who transfer to different occupations or exit the labor force, such as to retire.

EMPLOYMENT

More support services will be needed as organizations upgrade their computer equipment and software. Computer support staff will be needed to respond to the installation and repair requirements of increasingly complex computer equipment and software. However, a rise in cloud computing could increase the productivity of computer support specialists, slowing their growth at many firms. Smaller businesses that do not have information technology (IT) departments will contract services from IT consulting firms and increase the demand for computer support specialists in those firms.

Employment growth also may come from demand for IT support services from healthcare industries. As this field continues to increase its use of IT, support services will be crucial to keep everything running properly.

Employment projections data for Computer Support Specialists, 2020-30

Occupational Title	Employment, 2020	Projected Employment, 2030	Change, 2020-30	
			Percen t	Numeri c
Computer support specialists	844,600	916,800	9	72,200
Computer network support specialists	189,800	204,000	7	14,200
Computer user support specialists	654,800	712,800	9	58,000

INTERVIEW QUESTIONS

-Tell me about yourself

In all industries and professions, you are likely to be just given the floor to speak about yourself, with desktop support being no exception. Hiring managers typically ask this question to learn several things about you, giving you the opportunity to highlight your relevant qualifications and experience in the role.

-Why did you choose a career in desktop support?

This question can provide a deeper insight into what motivates you as an applicant. The hiring manager wants to know whether you are driven by the attractive compensation plan of the company or desire to help solve problems.

-Why are you interested in our company?

This question shows your commitment to that specific employer. Demonstrate to the recruiter you understand the vision and mission of the company and want to help it achieve its objectives.

-What is your troubleshooting process?

This is another common IT desktop support interview question because your job involves helping untrained computer users solve their technical problems.

-How do you start the OS in safe mode?

This technical question allows you to show your knowledge of Windows operating systems. You will typically give a verbal answer to this question, but your interviewer may ask you to demonstrate it or write the steps on paper. Make sure your answer comprises a step-by-step explanation of getting the job done. If there is more than one way of starting in safe mode, list each method and outline the steps.

-Was there a time you could not resolve a technical problem yourself? How did you manage the situation?

Good candidates know their limitations, and it shows their ability to work with others. If you are asked this question, try to give an honest answer. There will likely be times when your own troubleshooting won't address a problem correctly and an internet search won't suffice. An experienced co-worker may be the best option for solving the issue on time so that the user can access their system.

-Which is more important between technical knowledge and interpersonal skills? Besides technical expertise, part of being a successful employee is getting along well with others. To provide a satisfactory answer to this question, describe the importance of both types of skills and how they help you deliver the best performance on the job.

Health It Specialist

Job Description

Using computer and software engineering in the field of health and medical sciences; supports the collection, analysis, processing, storage of health data and information, and providing flexibility and speed in the application of patients' treatment processes. Accordingly, it feeds flexible health management policies and strategies with real health data and information in decision support processes. Thus, the health informatics specialist works on information technology-oriented issues such as the design of clinical decision support systems and software development.

Duties

- Interviewing healthcare providers and patients, observing healthcare delivery procedures, and collecting electronic healthcare data
- Analyzing and interpreting data and identifying areas for improvement
- Developing health information systems that support the collection, sharing,
 standardization and integration of medical data
- Collaborate to improve standards of care, policies and procedures
- To train health personnel on health information system dissemination and management.
- Provide technical support, optimize network security and protect databases
- Documentation processes, data storage and preparation of reports

Work Environment

They work in hospitals and offices. Health informatics specialists can also work in clinical and non-clinical settings and maybe employed by hospitals, group practices, surgical centers, consulting firms, private companies or government agencies.

Work Schedules

İşin durumuna göre değişebilmekte; yarı veya tam zamanlı olarak çalışabilirler.

How to Became a Health IT Specialist?

You can practice this profession by gaining experience in the field of health and computer programming, or by taking postgraduate / associate degree education, after training in computer, electrical-electronics, industrial, biomedical engineering branches. In addition to programming, this field expects you to be familiar with medical terminology, electronic health information, health literature and treatment-diagnostic methods, if not as much as a doctor.

Education

Bachelor's degree in computer engineering, programming, software engineering; you can became a health IT specialist, preferably by getting a master's degree in health, medicine. In the last two years of your undergraduate education, you can improve yourself by taking elective courses and certificates related to this field.

Work Experience in a Related Occupation

They are expected to have a master's degree in health management, an associate degree in health and statistical data management knowledge. For those who have a license in the field of information technology, knowledge on health is required.

Licences, Certified

Medical informatics, database, data analysis and medical laboratory automations etc. although it varies according to the institution where they will work, basically have these licences. Specifically they are expected to have CAHIMS (Certified Associate in Healthcare Information and Management Systems), CPHIMS (Certified Professional in Healthcare Information and Management Systems) and RHIT (Registered Health Information Technician).

Advancement

They can be a team leader, department manager or general manager in their company by getting a master's degree in management and business administration.

Important Qualities

Tracking, storing and accessing patient records

- Developing and implementing new methods of managing patient data
- Analyzing health data for insights related to policy development
- Managing an securing exsting health information databases
- Collaborating between regulatory and IT departments
- Consulting with upper leadership on data-driven strategies

In summary; should be open to self-development, prone to teamwork, project and data management, strategic planning and strong communication skills.

Pay (Salary)

Experienced health informatics professionals earn over 60.000\$ per year (2020-US). While it is 6000 TL for beginners in public institutions, it varies between 4250-6500 TL in the private sector (2021-Turkey).

Job Outlook

In our country, a staff of health informatics specialists has not been formed in state institutions yet. Those working in this field work as informatics specialists, computer technicians, information processing personnel and computer engineers. There are no departments in universities. For these reasons, an employment gap is expected in the next 5-10 years. In the United States, employment is expected to grow by 9%. Assuming that there are currently 1534 hospitals in Turkey, the minimum opening is expected to be around 1500-2000 people. There is a great interest in the department in the private sector. It is a sector with a high potential for employment as they develop software and hardware with high added value.

Employment Opportunities

Health and Medical Informatics offers a wide variety of employment opportunities. Public and private sector employers and academic institutions need this field all the time. Software development / support information technology companies, IT management and quality management departments of hospitals and health providers, clinic managers, health insurance, nursing services management, city health offices and many other health institutions are some institutions that provide employment in this field. In addition, various projects supported by international financial firms also require experts in this field. Governmental social security agencies are also potential employers of health informatics professionals.

Specific Interview Questions

Ouestions

- 1-Have you heard of the Scrum technique?
- 2-Tell me about a business problem that requires a complex solution and how you worked with your team to solve it.
- 3-What is a new software or technology you have been working with recently, how did you learn it?
- 4-What do you do when a project you're working on seems to miss ten deadlines?
- 5-Inform the stakeholders you work with outside of IT, internal customers, and how your work supports the overall business goals.
- 6-Report a time when you explained a technical process or concept to someone without a technical background.
- 7-Can you tell me about a project that you volunteer or support?
- 8-Can you give an example of a difficult colleague relationship? How did you handle it?
- 9-Can you tell me about a product that you delivered to me and that you are proud of?
- 10-What tools and strategies do you use to organize and prioritize your work to best meet team goals, expectations and outputs?
- 11-Can you classify the data medically?
- 12-Can you tell us your basic information about the diseases?
- 13- What is your knowledge about CR device software?
- 14-How can we maintain the X-ray device?

- 15- What is the Pacs system?
- 16- What do you do when you encounter a device problem?
- 17- What is the calibration label?
- 18- What is the difference between X-ray and ultrasound in terms of image processing?
- 19- What should be the safe penetration distance?
- 20- Can you list the Web API development steps in Java?
- 21- Do you know the .NetCore language?
- 22- What is your knowledge about clean code?
- 23- Did you use DTO in your web API project?
- 24- What is your knowledge about HBYS/HBS/HKS?
- 25- What do you know about the operation of the intensive care communication system?
- 26- Can you analyze the data of a patient?

IT Analysts

Job Description

IT Analyst has to recognize the areas for improvement within IT infrastructures. They have to participate in team meetings actively and give intelligent inputs to improve efficiency. The professional will design new systems with the help of modeling, information engineering, and cost-based accounting processes. IT Analyst will design, examine and deploy IT systems to further business objectives.

The professional will handle the implementation process and take care of the programmers. They ensure that the vendors will stay within the deadline and budget. It is the duty of the IT Analyst to resolve and debug IT systems and make sure error-free functionality and end-user satisfaction. They offer guidance to the help desk staff during transitional processes. The professionals should always be available to provide technical support via telephone and email for internal end users. IT Analyst takes care of multiple tasks and will inform progress at regular intervals.

IT analysts Responsibilities

Communicate with stakeholders to understand their requirements

Develop and analyze functional specifications

Design efficient IT systems to meet business and technology needs

Coordinate developers to build and implement technology solutions

Integrate multiple systems and reconcile needs of different teams

Gather feedback from end users about system performance

Plan and oversee projects (e.g. upgrades, hardware/software installations)

Provide advice and technical training

Keep abreast of technology trends and developments

IT Analysts Requirements and skills

Proven experience as an IT Analyst, IT Consultant or similar role

Experience in project management

Knowledge of databases, system security and troubleshooting

Understanding of business practices

Excellent communication skills

Analytical mindset

Problem-solving aptitude

BSc/BA in Computer Science, Engineering or a related field

IT Analysts Work Schedules

Work Environment Computer systems analysts work in comfortable office and laboratories, and some many telecommunicate or work remotely. They generally work 40 hours weeks during regular business hours, but sometimes work nights and weekends to meet deadlines.

How to Become a IT Analysts?

According to the U.S. Bureau of Labor Statistics, a bachelor's degree in programs such as computer science or information technology is the only educational requirement for a Business Systems Analyst.

Licenses, Certifications, and Registrations importance for IT Analysts

Companies consider everything in people's CVs when hiring. Certificates are issued by independent organizations and have an important place in the recruitment process.

IT analysts Advancement

Experience is essential to progress. Some IT Anlaysts try to rise to gain a place in their company.

IT Analysts Important Qualities

1-) Analytical mindset

should have the ability to audit systems in a way that is for the benefit and needs of the company.

2-) Excellent communication skills

The communication skills of IT Analysts should be at a very high level, as they will constantly get help from their colleagues while inspecting the systems. People who are open to teamwork are the priority criteria for this job description.

3-) Understanding of business practices

To be able to analyze systems and applications, the company needs to be familiar with the applications it uses. So analysts should have experience with applications.

4-) Problem-solving aptitude

Having the ability to solve the problems that arise after analyzing the system is a great criterion because it needs to fix these problems with updates after performing system analysis.

IT Analysts Expected Average Salary

The average salary for a it analyst is \$73,589 per year in the United States and \$4,000 cash bonus per year.

IT Analysts Interwiew Questions

Tell us what online resources do you use to help you do your job?

Most IT workers turn to websites such as StackExchange or Github when they need help with something. Serious professionals will have their own selection of websites, online communities, social media feeds and other resources specific to their interests. The answer to this question will give you an indication of how engaged the candidate is with the broader IT world.

Tell us how do you manage your work-life balance?

With on-call duties and multiple pressing deadlines, some tech workers struggle with the always-on, workaholic culture of this field. While you want dedicated team members, you should also seek employees who know how to relax and take care of themselves. Burnout is a very real problem in IT, and top performers have good strategies in place to prevent that. As a follow up to their answer, you could talk about how your company supports a healthy work-life balance — something that can be very tempting for candidates with multiple offers.

Tell us what makes you unique from others?

The answer to this question will test your experience, skills, and individuality. "I am technically sound and can make a strong relationship with the customer. With this unique combination, I can use my knowledge and information to build a user-friendly environment".

Tell me which model is better than Waterfall model and Spiral Model?

Selecting the life cycle model for a project is based on its type, scope, and limitations. It is solely dependent on the culture of the organization, their terms, and conditions, policies, a process of developing the system etc.

Tell us how do you keep your technology skills current?

Tech professionals work hard to keep their knowledge base current, and they do that by reading blogs and forums, taking online courses, joining hackathons and plugging away at personal IT projects. This interview question can help you gauge the candidate's enthusiasm for the profession, as well as open up a conversation about professional development.

Can you tell us what are your favorite and least favorite technology products, and why? In addition to learning whether prospective employees like the hardware, operating system and software your company uses, this question helps you evaluate enthusiasm and knowledge. Do candidates become animated when discussing the advantages and disadvantages of certain tools? Do they admire solid engineering, sleek design, intuitive user experience or another aspect of good technology?

Tell us as a Business Analyst what is your role in an organization?

The main role of a Business Analyst is to find out the needs of an organization, finding out their problems, even predicting the future issues to an extent and suggesting the suitable solutions for the same and drive through the organization's achievements.

Business Analyst role varies from organization to organization, project to project and even from domain to domain.

BA in a project can play the role of a Business Planner, System Analyst, Data Analyst, Organization Analyst, Application Designer, Subject Area Expert, Technical Architect etc Core skills of a BA are a good grip on system engineering concepts, leadership qualities, technical knowledge, writing and verbal communications.

BA's job may vary as per the employer's requirement like some are limited to IT projects, even few of them extend their responsibilities to areas such as finance, marketing, accounting etc.

Please explain how can you say that a requirement is good or perfect?

The features and standards of a good requirement can be pointed out using a rule called SMART rule.

Specific – The description of a requirement should be perfect and specific enough to understand it.

Measurable – There are various parameters through which the requirement's success can be measured.

Attainable – Resources should be able to achieve success with the requirement.

Relevant – States that what results are realistically achieved.

Timely – Requirements of a project should be revealed in time.

Tell us when can a BA say that the requirements are done?

Requirements are considered as complete when they satisfy the below criteria

- i) Requirements should be aligned with the objectives of a business. It means that the views of business stakeholders should align with the needs to be built for the Project.
- ii) All the possible views and ideas of key stakeholders are to be extracted
- iii) A quality of the requirements should meet/satisfy the organization's set of criteria's through which the quality of the requirements is tested.
- iv) One can say that the requirements are complete when they could be done with in the possible available resources.v) All the stakeholders of the project should be in consent with the gathered requirements.

Explain me what qualities do you think are most important in a developer [or another relevant position]?

A question like this can reveal how the interviewee feels about the position and what they think they would bring to it. Some people may focus on IT certifications and technical abilities, while others may talk more about problem solving, attention to detail, communication and other general job skills. Look for candidates who give a nice balance of both.

Please explain me about a time when things didn't go the way you wanted at work, such as a project that failed or being passed over for a promotion?

Everyone deals with professional setbacks at some point in their career. What you want to know is how people handled — and what they learned from — those situations. The best employees are resilient, using setbacks as a springboard toward positive changes. So listen to not only the problem they mention, but also what they did after the disappointment.

Explain me how will you be able to handle the changes to requirements?

This is a logical question asked in an interview. As a BA, first I'll get signed a document by the user which states that after a point of time no changes to the requirements are accepted.

In few cases, if the changes to the requirements are accepted then as a BA,

- i) Firstly I'll note down the changes made to the requirements and will prioritize them.
- ii) Will also go through those changes and find out the impact of them on the project.
- iii) Will calculate the cost, timeline, and resources required to cover the impact of change requirements in the project.
- iv) And will make sure that whether those changes affect or create gaps to functional design documents, testing or coding.

Please explain Risk and an issue?

'Risk' is nothing but a problem or something that can be predicted earlier so that some improvement plans are used to handle them. Whereas an 'Issue' means the risk that had happened or occurred.

The role of a BA is not to solve the issue instead should suggest some plans to control the loss/damage caused. And this should be marked as a precautionary measure for other projects.

Example: On some roads, there are few caution boards stating that "Road under repair, take diversion". This is called as Risk.

If we travel through the same route which is under repair, then there caused some damage to the vehicle. This is called as an issue.

Explain me how can you handle and manage the difficult stakeholders?

Dealing with difficult stakeholders is a major task for a BA. There are many ways to handle such situations, few important points to be noted among them are listed below.

- i) Identify that difficult stakeholder among the group of stakeholders, listen and concentrate on their point of view with patience. Be polite to them and do not close off the conversation immediately with such people.
- ii) Generally, a stakeholder will be difficult because they are not comfortable with few things in the project. So listen to them and answer such difficult stakeholders in a diplomatic way.
- ▶ iii) Find out a way to meet them personally and have a one on one discussion. By this, you can show your commitment towards them.
- iv) Try to find out and resolve their motivations like are they worried about the budget of the project or Curious about the project whether it is turning exactly as per their vision etc.
- v) Continuously engage such difficult stakeholders and make them understand that their contribution is much value for the project.
- -□Basic Information Technology Analyst Job Interview Questions:
- **■** How would you manage frequent changes in user requirements?
- **■** How do you persuade a doubtful manager to get on board with your suggestions?
- ► How would you reconcile different opinions on the deployment date of a new program?
- **■** What SAP software applications have you used?
- **■** What is a DHCP server?
- **■** Walk me through the process of analyzing an existing system.
- How do you explain user scenarios in a technical document?
- **▶** What's the difference between technical and functional requirements? How do you gather

each?

- **■** How do you perform a software audit on a PC or Mac?
- Do you have experience designing a new system with limited resources? If so, how did you do it?
- Describe a time when you worked with a team to tackle a tough project. What was your role?
- Describe a time when you had to deliver a presentation. How did you explain technical details to a non-technical audience?
- Have you ever implemented a cost-reducing system? What was it and how did you come up with the suggestion?

Why do you want to work for us as Information Technology Analyst?

Individuals who truly want the job will have done their research and be able to talk about your company's values, products and services, and approach to technology. If they can't articulate at least a few reasons your company would be a good match for their skills and ambitions, then they haven't done their due diligence to properly prepared for the interview — an interview red flag for hiring managers.

Do you know what does INVEST means? (teknik bilgi)

INVEST means Independent, Negotiable, Valuable, Estimable, Sized Appropriately, Testable. With this INVEST process, the project managers and technical teams are able to deliver the good quality of the product and can provide quality service.

Explain me the difference between Fish model and V model? (teknik bilgi)

Fish model consumes more time in dealing with requirements when compared to V model. Even Fish model is a bit expensive than V model. Generally, a Fish model is preferred when there are no uncertainties in the requirements.

Do you know what is meant by Benchmarking? (teknik bilgi)

The process of measuring the quality of policies, programs, products, rules and other measures of an organization against the standard measures or against the other companies is termed as Benchmarking. This is used to the measure the performance of a company to compete in the industry.

The main purpose of benchmarking is to find out the areas of improvement in a company and to analyze how the neighbor companies are achieving their goals

Tell us the tools that are helpful for business analysis? (teknik bilgi)

The process performed by a BA is termed as Business Analysis. The tools used by a BA are Rational tools, Microsoft Excel, Microsoft Word, Power Point, MS Project, ERP systems.

What is a flowchart? Why it is important?

A Flowchart shows the complete flow of the system through symbols and diagrams. It is important as it makes the system easy to understand for developers as well as nontechnical stakeholders.

Same or different questions....

Tell me how you organize, plan, and prioritize your work.

Share an effective method you have used to prevent violations of computer security procedures.

Share an experience you had in dealing with a difficult person and how you handled the situation.

Share an experience in which you successfully shared a difficult piece of information. (Make sure that the candidate has open lines of communication.)

Share an experience when you applied new technology or information in your job. How did it help your company?

Give me an example of when you thought outside of the box. How did it help your employer?

Tell me about an experience in which you analyzed information and evaluated results to choose the best solution to a problem.

Would you consider analyzing data or information a strength? How so?

In your experience, what is the key to ensuring your company was compliant with all laws, regulations and standards that were applicable to your area of responsibility?

In your experience, what is the key to ensuring your company was compliant with all laws, regulations and standards that were applicable to your area of responsibility?

Tell me about the last time you monitored or reviewed information and detected a problem.

How did you respond?

Share an example of a time you had to gather information from multiple sources. How did you determine which information was relevant?

Name a time when you identified strengths and weaknesses of alternative solutions to problems. What was the impact?

Name a time when your advice to management led to an improvement in your company or otherwise helped your employer.

Provide an example when your ethics were tested.

What are some long-range objectives that you developed in your last job? What did you do to achieve them?

Provide a time when you were able to identify a complex problem, evaluate the options, and implement a solution. How did the solution benefit your employer?

What is the most challenging part of budgeting for you?

Provide a time when you dealt calmly and effectively with a high-stress situation.

Share a time when you willingly took on additional responsibilities or challenges. How did you successfully meet all of the demands of these responsibilities? (Make sure the candidate is a self-starter and can demonstrate some initiative.)

Describe an effective method you have used to encrypt data transmissions and erect firewalls. (teknik)

Please share an experience in which you presented to a group. What was the situation and how did it go?

Provide an example of a time when you successfully organized a diverse group of people to accomplish a task.

Share an experience in which your attention to detail and thoroughness had an impact on your last company.

Provide an example of when you were persistent in the face of obstacles.

How would you rate your writing skills? (Ask for an example that demonstrates great writing skills.)

Provide an example of a time when you were able to demonstrate excellent listening skills. What was the situation and outcome?

Name a time when your patience was tested. How did you keep your emotions in check?

Provide a time when you worked in a rapidly evolving workplace. How did you deal with the change? (Make sure the candidate is flexible.)

Provide a successful method you have used to monitor the use of data files and regulate access to safeguard information in computer files.

How do you determine when to update virus protection systems?

Share an experience in which your understanding of a current or upcoming problem helped your company to respond to the problem.

What have you found to be the best way to monitor the performance of your work and/or the work of others? Share a time when you had to take corrective action.

Share an experience in which your willingness to lead or offer an opinion helped your company.

Share an example of when you established and accomplished a goal that was personally challenging. What helped you succeed?

Share an experience in which you successfully modified computer security files.

Share an experience in which your ability to consider the costs or benefits of a potential action helped you choose the most appropriate action.

Describe an effective method you have used to ensure functioning of data processing activities and security measures.

Share an effective method you have used to ensure system security and improve server and network efficiency. How do you promote security awareness?

Provide a time when you successfully explained a difficult issue to a user.

Describe an experience in which you identified the educational needs of your students and successfully developed a way to teach/train them.

What is the state of your documentation records? What is one thing you would like to improve?

IT Consultation

JOB DESCRIPTION

IT consultants are great communicators and have excellent organisational skills as well as a sound knowledge and understanding of IT systems

Your role as an IT consultant is to work in partnership with clients, advising them how to use information technology in order to meet their business objectives or overcome problems. You'll work to improve the structure and efficiency of IT systems in various organisations. You'll provide strategic guidance to clients about technology and IT infrastructures and will enable major business processes through enhancements to IT. You may be called upon to provide guidance and technical expertise during other processes as well, such as selection and procurement and user training and feedback.

IT consultants can generally be categorized into three specialties:

Project management

- Maintenance and repair
- Security

DUTIES

As an IT consultant you'll need to:

work with clients to determine requirements and define the scope of a project

plan timescales and the resources needed

clarify a client's system specifications, understand their work practices and the nature of their business

travel to customer sites

liaise with staff at all levels of a client organisation

define software, hardware and network requirements

analyse IT requirements within companies and give independent and objective advice on the use of IT

develop agreed solutions and implement new systems

present solutions in written or oral reports

help clients with change-management activities

purchase systems where appropriate

design, test, install and monitor new systems

prepare documentation and present progress reports to customers

organise training for users and other consultants

be involved in sales and support, and where appropriate, maintain contact with client organisations

identify potential clients and build and maintain contacts.

Analyzing a company's IT system and infrastructure.

Diagnosing IT system problems, inefficiencies, and weaknesses.

Planning a timeline for completion of projects.

Understanding a client's business needs.

Implementing a technological solution to meet business needs.

Analyzing and determining security threats.

Providing advice on technology best practices.

Collaborating with the technical in-house team to ensure familiarity with technology.

Training staff to use the new IT system.

Monitoring the success of IT solutions.

Producing detailed reports on the efficacy of the technology.

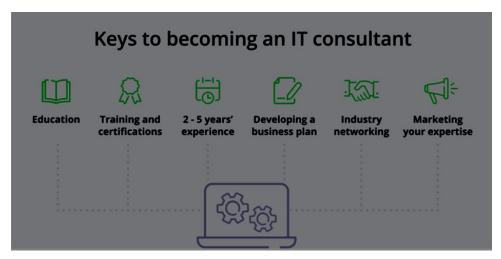
WORK SCHEDULES

Although you'll generally work 9am to 5pm, the nature of the industry means that extra hours are often required to meet deadlines. You'll also spend a lot of time travelling to client sites, mirroring the client's working hours.

Part-time work is unlikely, but career breaks are possible as work is project-based. While many IT professionals are independent contractors, it's best to gain some experience and contacts in the industry by working for an employer before going down this route.

Self-employment is possible, where you can manage your own workload and hours.

HOW TO BECOME AN IT CONSULTATION



EDUCATION

Both graduates and school leavers can become IT consultants, though most junior roles are advertised at graduates. Any degree is acceptable for entry into the profession, but some employers require a relevant subject such as computer science, software engineering, electronic engineering, IT, business studies or maths. Any previous experience gained through summer internships and industrial placements is beneficial.

WORK EXPERIENCE IN ARELATED OCCUPATION

Finding IT-related holiday work or an industrial placement or internship may lead directly to graduate employment. As a first- or second-year undergraduate, you can apply for internships in the industry. Work experience gained in a commercial environment helps demonstrate your commercial awareness, client management skills and ability to understand and communicate the business benefits of IT.

Competition for vacancies is high, so it's a good idea to start making applications for jobs to larger firms in the autumn term of your final year. Graduate places fill quickly and competition gets stronger as time passes.

Find out more about the different kinds of work experience and internships that are available.

LICENSES, CERTIFICATIONS AND REGISTRATIONS



IMPORTANT QUALITIES

- Degree in computer science, information systems, or related field.
- MBA is advantageous.
- Proficiency with database languages.
- Excellent written and verbal communication.
- Good interpersonal skills.
- Creative problem-solving skills.
- Analytical mindset.
- Good time management and organizational skills.
- leadership ability
- communication and interpersonal skills
- teamwork skills

- a logical approach to problem solving and analysing
- the ability to learn quickly
- confident decision making
- presentation skills
- excellent customer service skills
- good organisational skills to prioritise heavy workloads
- the ability to communicate technical information to non-IT clients and colleagues
- flexibility and adaptability
- Time management skills.
- Meticulous approach to work
- Attention to detail
- Capable of meeting high standards
- Good problem-solving skills
- Analytical and technical skills
- Effective time management skills to meet deadlines
- The ability to work under pressure
- The ability to multi-task
- Interpersonal and communication skills when dealing with clients

PAY (EXPECTED AVERAGE SALARY)

- As a graduate IT consultant you can expect to earn £20,000 to £30,000.
- With significant experience, you can earn in the region of £32,000 to £40,000.

 At a more senior level, if you've identified a specialist area, salaries range from £40,000 to £80,000. The exact salary depends on the demand for your specific expertise.

Salary is dependent on location, size and type of employer and is usually performance-related. Contract work is possible and daily rates range from £150 to £550+ a day, depending on your experience and your area of expertise.

Income figures are intended as a guide only.

JOB OUTLOOK

IT business consultants are employed to provide solutions and planning advice on an organization's data, communication or software systems. It is critical for these professionals to have experience in the worlds of business and IT management, often on top of a bachelor's degree in a related field. Job growth is expected to be much faster than average in the coming decade.

INTERVIEW QUESTIONS

Questions about hiring

What would you include in a computer system analyst document?

What, in your opinion, is the most important quality of an IT consultant?

What is the process of sub-netting?

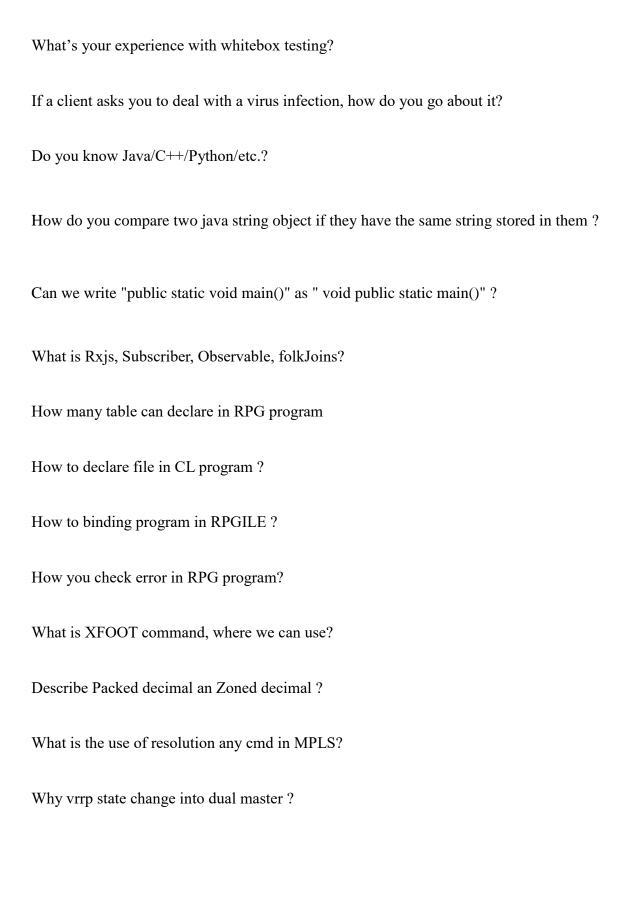
Describe a time when you made a mistake in your duties. How did you remedy the situation?

Interview Questions about SPECIFIC SKILLS, FEATURES of the position?

In your opinion, why do companies like ours seek help from outside consultants?

Can you explain the process of sub-netting and what the benefits would be?

Do you feel it is necessary to adapt to a company's culture when working on a project? If so, why?



Network Administrator

JOB DESCRIPTION

The Network Administrator's role is to ensure the stable operation of the computer networks. This includes planning, developing, installing, configuring, maintaining, supporting, and optimizing all network hardware, software, and communication links. The person will also analyze and resolve end user hardware and software computer problems in a timely and accurate fashion, and provide end user training where required.

Duties

Network Administrator typically do the following:

- Network design and production.
- Working on network products, services, protocols and studies to support network purchasing and development.
- Installs and maintains network file servers and network system systems; ensures that copies of all copies are routinely distinguished from one point of view and one point in one place; system requests.
- Provides secondary training technical support on Internet access system operations.
- Diagnoses and appropriate hardware supplies or equipment related to network delivery.
- Installs, installs, and maintains multi-user software to be accessed from file servers.
- Manage and maintain end user accounts, routes and routing.
- Installs, installs, and maintains network cables and other network equipment such as hubs, switches, and UPS.
- Supervises the installation, configuration, and maintenance of the networked end-user hardware, software, and peripherals.
- On security, manages antivirus and intrusion systems and security solutions.
- To cooperate closely with System Analyst and Chief Information Technology Technician to purchase the management of computer labs, prepare software for each semester and/or special trainings.
- Orders necessary software, hardware and other materials for corporate computer network, personal and computer labs.

- Works with System and Enterprise Services in planning, installing and documenting network topology and Virtual Desktop Infrastructure (VDI).
- Assists System Administrator with heater of VOIP phone system.

Work Environment

Network administrators, like other computer professionals, work in an office environment. Network and computer systems administrators work with the physical computer networks of a variety of organizations and therefore are employed in many industries.

Work Schedules

Most put in forty hours or more of work per week. Much of the job is performed alone, but the administrator must also work with users who are not comfortable with the system or who are experiencing difficulties. Configuring a network can require long hours of work over a short period of time. Maintaining the network can alternate between routine tasks such as installing and updating programs and the more interesting but hectic work of troubleshooting and fixing network problems. If a network crashes, the administrator must work as quickly as possible, regardless of the hour, to solve the problem and restore the network to operation. For a large network, the task of updating and maintenance can require late hours and work.

How to Become a Computer Network Architect

Most employers require network and computer systems administrators to have a bachelor's degree in a field related to computer or information science. Others may require only a postsecondary certificate or an associate's degree.

Education

Although some employers require a postsecondary certificate or an associate's degree, most require network and computer systems administrators to have a bachelor's degree in a related field, such as computer and information technology. There are degree programs that focus on computer network and system administration. However, because administrators work with computer hardware and equipment, a degree in computer engineering or electrical engineering usually is acceptable as well. Programs in these fields frequently include classes in computer programming, networking, or systems design. Because network technology is constantly changing, administrators need to keep up with the latest developments. Many continue to take

courses throughout their careers and attend information technology (IT) conferences to keep up with the latest technology. Some businesses require that administrators have a master's degree.

Work Experience in a Related Occupation

If you pursue an associate degree, you could become an entry-level network administrator within a few years, whereas a bachelor's degree typically takes 3-5 years. It's also wise to think about earning internship experience. Entry-level network administrator positions are available, but more advanced and senior-level roles require additional years of experience and sometimes more education. Certifications are also valuable and may help you secure a position more quickly.

Licenses, Certifications, and Registrations

Companies generally require their network and computer systems administrators to be certified in the products they use. Certification programs usually are offered directly from vendors or from vendor-neutral certification providers. Certification validates the knowledge and the use of best practices that are required of network and computer systems administrators. Microsoft and Cisco offer some of the most common certification.

Advancement

Network administrators can advance to become computer network architects. They can also advance to managerial jobs in information technology (IT) departments, such as computer and information systems managers.

Important Qualities

- A commitment to keep learning. Technology is always changing, which means that to be successful in this career, you need to be open to continuous education. Your degree from FTC is the right place to start, but future employers want to know that you will be willing to take additional courses, to read up on evolving technologies and take part in professional development opportunities. The need to keep learning and growing is what makes a career in network administration so exciting, so embrace it.
- 2 Specialized technical skills. Your future employer wants to see that you have certain specialized skills right from the start, in addition to being willing to learn more over time.

With the network administration degree from FTC, you can prove you have those skills. Not only does this program teach you all the basics of network design, administration and configuration, it also provides you with the skills needed to work with a variety of network hardware and wireless technology.

- 3 Problem-solving skills. Network administrators are often proactive in their work. They set up and maintain networks with the goal of avoiding problems, but they also have to troubleshoot. A big part of working in this field is solving technology problems. Employers want to know that you can think critically and apply what you have learned about networks to solving problems as they arise. At FTC, we emphasize problem solving and make sure you have the skills and the practice to be good at technical troubleshooting.
- 4 Being self-motivated. The work of a network administrator and related fields is highly independent. To be able to work on your own and take charge of your daily responsibilities without a lot of oversight is liberating and empowering, but it also requires self-motivation. You won't always have someone looking over your shoulder, telling you what to do next. Employers want to see that you can be self-motivated and get your work done without being shadowed.

PAY (EXPECTED AVERAGE SALARY)

The median pay for network and computer administrators is \$83,510, according to the Bureau of Labor Statistics, with the highest 10% earning more than \$132,520.

CIO lists a salary range of \$76,250 to \$129,500, and ITCareerFinder also provides annual network administrator salaries by state, with the five top being:

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Maryland — $108,190
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District of Columbia — \$99,920

New Jersey — \$99,070

California — \$97,810

New York — \$94,940

Turkey-

AVERAGE SALARY (Monthly) 9.220 ₺

MINIMUM (Monthly) 5.880 ₺

HIGHEST (Monthly) 13,740 ₺

(https://onlinedegrees.sandiego.edu/network-administrator-career-salary-guide/)

Job Outlook

Employment of network and computer systems administrators is projected to grow 5 percent

from 2020 to 2030, slower than the average for all occupations.

Despite limited employment growth, about 24,900 openings for network and computer

systems administrators are projected each year, on average, over the decade. Most of those

openings are expected to result from the need to replace workers who transfer to different

occupations or exit the labor force, such as to retire.

Employment

For those who can live with computers, a job is unthinkable without them. This means that the

network administrators has a wide range of jobs. Due to the privilege of computer networks,

those who want to be a user on a network in all businesses, large or small, from their business

areas.

Demand for information technology (IT) workers should continue to grow as firms invest in

newer, faster technology and mobile networks. Employment growth also is expected as the

use of IT in healthcare increases. However, an increase in cloud computing could raise the

productivity of network administrators, slowing their employment growth across many

industries.

INTERVIEW QUESTIONS

How would your colleagues describe you?

Are there any skills or tasks you need to improve on?

What motivates you to work?

What are your hobbies outside of work?

What is your greatest strength?

What is your greatest weakness?

Do you like working with a team or working alone?

Questions about company culture

- How does this company promote its core values?
- What team-building activities does your team participate in?
- In what ways does this company support its employees?
- Does this company have any workplace traditions?
- What are the characteristics of a person who would succeed in this company's environment?
- How does the team I would be working on support the company's goals?
- Why do you want to work for our company as a network administrator?
- What process would you follow to scale one of our company's key networks?
- What specific objectives are you trying to achieve?

Questions about the position

- What traits would help me be successful in this position?
- How often would I collaborate with others in this position?
- Are there opportunities for this position to change or expand?
- Who are the main people that I would regularly interact with?
- What tasks would I complete on an average day?
- What did the person who previously held this position do well?
- What changes would you like to see in how this job is done?
- How has your previous network administration position prepared you for this job?
- Have you ever worked as a network administrator before?
- What types of networks do you have the most experience working with?
- What monitoring approaches and tools do you prefer using?
- Are you familiar with workgroups?
- Are you familiar with domains?
- What has been your most challenging network administration experience?
- What network administrator task do you enjoy the most?
- Have you received any certifications for network administration?

• What training have you received in network administration?

Questions about performance

- How often will my manager be available to discuss my performance?
- Can you describe the formal performance review process for this position?
- How and how often can I expect to receive feedback on my work?
- How can I get support in setting goals and expectations?
- What should I hope to accomplish in my first 90 days if I am hired for this position?
- How does this company or team celebrate success?
- How do you evaluate the success of your employees?
- How has your previous network administration position prepared you for this job?
- What has been your most challenging network administration experience?
- Have you received any certifications or training in network administration?
- What is the difference between local, global and universal groups?
- What is an intrusion detection system?
- What monitoring approaches and tools do you prefer using?
- Imagine you had to convince our organization's C-suite to migrate an existing infrastructure to the cloud. How would you go about it?
- Describe a cross-functional project you've worked on. What was your role?
- How do you keep up with changes in the tech industry?
- Are you empowering employees with continued performance support within the flow of work?

Questions about training

- Can you describe the training process for this position?
- How have successful employees advanced in this company?
- Does this company offer frequent opportunities for promotion or on-the-job training?
- Will I have opportunities to shadow my coworkers and learn about other roles?
- How will working in this position grow my skills?
- Does your company offer continued training for interested employees?

- Does our workplace training make you want to learn more skills?
- Is there enough training around providing a better experience for our customers?
- Is the training both relevant and specific to the employee's daily tasks
- Have you made learning both engaging and collaborative?

Questions about development

Does this company send employees to conferences?

- What organizations does this company work with to grow the skills of its employees?
- Does this company organize any volunteer opportunities?
- Does the company offer any incentives for learning new skills?
- How does this company stay competitive in its field?
- Does the company ever sponsor the continued education of its employees?

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Questions about hiring

In order to set reasonable expectations about when the hiring team will make a decision, ask questions about the hiring process. Understanding their timeline and process for onboarding a new employee allows you to make plans for your future. Additionally, the interviewer might indicate the success of your interview by their mood and enthusiasm when answering questions about hiring.

What are the next steps in the hiring process?

- Who can I contact with any questions?
- If I were hired for this position, when would I be able to start?
- When can I expect to hear your decision about my application?
- Do you have any concerns about my qualifications?
- What have other applicants
- Can you describe the onboarding process?
- Why Should We Choose You Over Other Candidates?
- Have You Worked as a Network Administrator Before?
- Why Did You Become a Network Administrator?
- What Is the Main Role of a Network Administrator?

Interview Questions about SPECIFIC SKILLS, FEATURES of the position?

- What is the difference between a hub and a switch?
- What is HTTP and what port does it use?
- What is HTTPS and what port does it use?
- What is FTP and what port does it use?
- What is SSH and what port does it use?
- What is DHCP?
- What is TCP?
- What is UDP?
- What is ICMP?
- What are IP Classes?
- What is DNS?
- What is IPX?
- What is Bonjour?
- What is Appletalk?
- What is a Firewall?
- What is a Proxy Server?
- What are Services?
- What is a subnet mask?
- What are 127.0.0.1 and localhost?
- What is the difference between a workgroup and a domain?
- How does Tracert work and what protocol does it use?
- What is Two-Factor Authentication?
- What is an IDS?
- What are the main differences between Windows Home, Windows Pro and Windows Server?
- What is the difference between if config and ipconfig?
- What are the differences between PowerShell, Command Prompt and Bash?
- What is root?
- What is telnet?

- What are sticky ports?
- Why would you add local users when on a domain machine?
- What is ARP?
- What is EFS?
- What is Boot to LAN?
- What are terminal services?
- What are shadow copies?
- Why would you use external media such as tapes or hard disks for backups?
- What is the difference between RDP and KVM?
- What is the difference between a print server and a network attached printer?
- What is /etc/passwd?
- What is port forwarding?
- Why would you virtualize systems?
- Why would you create logon scripts?
- What is the difference between Single Mode and Multimode Fiber?
- What does it mean when you receive an NTFS Error: 5?
- What are 755 and 644 Unix/Linux Permissions?
- Why is it easier to maintain permissions via groups instead of individually?
- What is the difference between a Forest, a Tree, and a Domain?
- What are the differences between Local, Global and Universal Groups?
- What are Strong Password Requirements?
- What is SNMP?

Software Engineering

Job Description

The business environment relies heavily on software for many functions - from automated traffic control systems to complex manufacturing processes, and Software Engineers are pivotal in the development of software that provides real solutions. A Software Engineer needs to address the entire software development lifecycle - to analyse the needs, and then design, test and develop software in order to meet those needs.

Software Engineer duties and responsibilities of the job

Software Engineers document this process through the use of diagrams and flowcharts, developing computer instructions through the use of algorithms. Given the breadth of the role, a Software Engineer must have a thorough understanding of computer systems, in order to recognise any hardware limitations that could impact software design. A typical Software Engineer job description includes:

Improving system quality by identifying issues and common patterns, and developing standard operating procedures

- Enhancing applications by identifying opportunities for improvement, making recommendations and designing and implementing systems
- Maintaining and improving existing codebases and peer review code changes
- Liaising with colleagues to implement technical designs
- Investigating and using new technologies where relevant
- Providing written knowledge transfer material

Work Environment

Computer software engineers usually work in cozy offices or laboratories with computers. Engineers employed with consulting firms or software vendors often travel long distances to meet with clients.

Work Schedules

Software engineers usually work 40 hour weeks, but nearly 17 percent work 50 hours or more a week.

How To Become a Software Engineer

1. Enroll in a software development program

The first step to becoming a software engineer is to enroll in a software development degree program. You don't need to have a background in technology to pursue this degree path –

most software development programs begin with foundational courses to help you learn common coding languages and basic programming skills, followed by more advanced courses to prepare you for entry-level roles in software development.

However, a background in IT can give you a head start in some of the course material. For example, current IT support specialists looking to transition from a help desk role into software development may pick up foundational IT topics easier than someone starting from scratch.

A bachelor's degree is a requirement for most full-time software engineer positions. However, some students may choose to start out with an associate degree in software development. This path allows you to pursue entry-level information technology roles and gain experience as you work towards your bachelor's degree.

2. Gain internship experience

Internships allow you to get hands-on experience in your field and put your skills and knowledge from class into practice. They are also great resume-builders and can be instrumental in helping you land your first job after college. Many aspiring software developers will complete an internship to position themselves for competitive entry-level software development jobs.

Working at a few different internships throughout your college career can also help you discover the types of companies you would like to work for after graduation. Software engineers can work in a variety of industries and business settings – such as healthcare, banking and marketing – so it's important to explore which environment best suits your personal career interests.

3. Choose your specialty

Software engineers will typically specialize in computer applications software or computer systems software. Applications software includes word processors, games and other computer applications that allow users to perform a specific task. Computer systems software includes the computer operating systems, such as file management tools, system utilities and debuggers. The user does not typically interact with computer systems software.

A bachelor's degree software development program will prepare you for roles in either specialty and your internship experiences can help you determine which path you are most interested in pursuing. Both specialties require creativity, as well as advanced problem-solving and critical thinking skills.

4. Pursue industry certifications

A software development degree program will also prepare you to sit for industry certifications, such as the Oracle Certified Java Programmer or the Microsoft Certified Solutions Developer, which are valuable differentiators for entry-level candidates. Pursuing these certifications can help you advance your software development career and allow you to pursue roles with additional responsibility and specialization.

5. Continue your education

With experience, software engineers can advance to information technology project managers who oversee the software development process. A master's degree may be required for advanced roles. Software engineers can pursue an MBA in Technology Management to develop the leadership and management skills necessary to advance their careers

Software Enginner's Education

Most employers prefer or require software engineers to hold at least a bachelor's degree in a relevant discipline like software engineering, computer science, information technology, or computer and information systems.

Licenses, Certifications, and Registrations

Companies consider everything in people's CVs when hiring. Certificates are issued by independent organizations and have an important place in the recruitment process.

Software Engeener's Advancement

Experience is essential to progress. Some Software Engineer's try to rise to gain a place in their company.

Software Enginner's Important Quelities

Computer Programming and Coding

Anandkumar says this is one of the fundamental soft engineering skills. "Computer programming focuses on algorithms, which have become a part of our daily lives," she says. There are a number of computer programming languages, and job requirements can vary depending on the position you're applying for. Coding bootcamp website Coding Dojo says the five of the most in-demand programming languages are:

Java

9 Python

10 C#/.Net

11 Mean

12 Ruby

The good news is these skills can be acquired through online courses or tutorials that teach programming languages, says Christine Julien, software engineering professor at the University of Texas at Austin. That may explain why the coding school industry continues to grow rapidly..

Software Development

Software development entails being able to analyze users' needs and then design, test, and develop software to meet those needs. College students can gain experience in this area by taking relevant coursework and completing an internship at a software company. Software engineer skills can also be honed by working with real systems and among other high-caliber software engineers, Julien says.

Software developer jobs are projected to increase by a whopping 22% over the next decade, the Bureau of Labor Statistics reports. One driving force behind this rapid job growth is the advent of new applications on smartphones and tablets. Also, more computer systems are being built into consumer electronics.

Object-Oriented Design (OOD)

"For the last 30 years, there has been a very strong push toward programming using objectoriented design," says David Garlan, professor of computer science at Carnegie Mellon
University and co-author of *Software Architecture: Perspectives on an Emerging Discipline*.
This approach involves the process of planning a system of interacting objects for the purpose of solving a software problem.

Object-oriented design encompasses four key principles:

Abstraction

- Encapsulation
- Inheritance
- Polymorphism

If these sound like foreign concepts to you, don't worry—online courses through platforms like Coursera and Udemy can equip you with basic knowledge of OOD principles.

Software Testing and Debugging

Although many new artificial intelligence (AI) programs are focusing on automating software testing and debugging, job seekers still need these skills, Anandkumar says.

Indeed, testing and debugging account for a large share of the time and cost of a software project, Julien says. "They're also skills that become a little more like art than generating lines of code," she says. Software testing and debugging require you to think analytically about how a system is put together.

There are software testing and debugging classes online, but "these skills are more craft that require honing through experience," says Julien. Translation: Testing and debugging software is generally learned on the job.

Problem Solving and Logical Thinking

"These are skills that absolutely differentiate great software engineers from good ones," says Julien. Software problems can arise from even the smallest of errors, and programmers spend a high percentage of their time debugging rather than writing code. Therefore, being able to

not only pinpoint software issues but also use deductive reasoning to solve problems is crucial to many software engineering jobs.

Written and Verbal Communication

Generally, software engineers don't work in a vacuum—many interact with co-workers or clients. Hence, communication skills are top of mind for industry employers.

"One of the important characteristics of a good software engineer is the ability to explain something technical or complex to a layperson," says Garlan. "You don't want someone who is going to say, 'I fixed the problem. Don't ask me how I did it though.' You should always be able to clearly articulate what you do." Communication will also serve you well when a customer has a problem with your company's software.

One of the best ways to improve your written and verbal communication skills while on the job is to shadow a more experienced software engineer who works with clients or customers directly.

Teamwork

Interpersonal skills are crucial for software engineers since they often work in teams. As a result, "having respect for others, having the ability to listen, having the ability to accept criticism, having the ability to empathize...those are all important skills," Garlan says.

As far as learning *how* to become a better team player, "some [teamwork] skills can be taught, but others have to be learned over time on the job," Garlan says.

Software Enginner's Average Salary

Most common benefits. The average salary for a software engineer is \$93,963 per year in the United States and \$4,700 cash bonus per year. 35.9k salaries reported, updated at June 27, 2022

Software Engineer's Job Outlook

The job outlook for Software Engineers and developers is 24 percent growth—much faster than the national average for jobs, according to the U.S. Bureau of Labor Statistics. Because

of the highly technical skillset and the shortage of qualified engineers, the pay rate for software careers is high.

Software Engineer's Employement

Software engineering, which is one of the modern jobs, has become a profession that is popular all over the world. The engineering department, which has opened thousands of job openings around the world, has 3,000 government-sponsored jobs inTurkey. In the private sector, this number is increasing even more.

How would your colleagues describes you?

- 1-Honest
- 2- Solution-oriented
- 3- Can work as a team
- 4- Social
- 5- Team Leader

What motivates you to work in Software Engineering?

1. Creating something

As developers, we are constructing new things every day. Each line of code is another building block. We're watching our product evolve with each feature. In a way, we're not engineers, we're builders. There's something very satisfying about creating something new.

2. Learning new Stuff and Evolving

For better or worst, programming involves endless learning. Every day you get to work with a new framework, see some new code, learn a new API, etc. This process of self-improvement is very gratifying. Every day you're a bit smarter than the day before. Comparing this to a video game, you're gaining experience points and levels with each new thing you learn.

3. Making a Work of Art

While some programmers like to get things done as quickly as possible, others like to think of their code as a beautiful creation. That variable was named exactly right. And that class was so nicely decoupled from that other class. And those tests cover my code base perfectly. It goes on. One can look at his own code for hours, admiring the beauty.

4. Challenges

Unlike some other professions, there's always a new challenge in software engineering. We are constantly thrown into the water, having to learn to swim all over again. You might have to create a huge application in a short time. Or maybe to develop an impossible algorithm. Or solve a bug where you don't even know how to begin.

It can be difficult to face challenges so often, but it's also interesting. The bigger the challenge, the more interesting it is. And it's also very rewarding when you get over the challenge.

5. Getting Things Done

As software developers, we're constantly building or fixing stuff. We might be adding new features or solving bugs, but every single day, we're making progress. Whenever we mark tasks as done, we get a healthy rewarding dose of dopamine flowing through our body.

If you're anything like me, then you're addicted to completing tasks. The harder the task, the better it feels to finish. This continuous process of getting things done is very motivating.

6. Improving Self Worth in your Company or the Market

As you learn more on your company's domain and on your specific technology, you're gradually improving your value. It might be as an authority figure in your company. Someone that everybody turns to for advice. That guy who knows everything and every junior developer seems to admire.

Or it might be your overall worth as an engineer. As you add to your knowledge and experience, fantasies and delusions of grandeur might manifest. Next time you'll be looking for a job, great opportunities will come, companies will offer enormous amounts of money and recruiters will throw themselves at your feet. That's a nice thought to come to work with.

7. Being in a position of influence

Sometimes, we find ourselves in positions of influence in the company. It usually happens for seniors, tech leads, and team leaders. You will find yourself in important meetings where you can steer the company's fate in one direction or the other.

8. Belief in your Product

Once in a while, you get to work in a company whose product you truly believe in. Maybe this product will save the world from poverty. Or maybe it will just become wildly successful, making you obscenely rich. Whatever the case, believing in your products provides a sense of purpose, which is very motivating. I imagine many engineers are willing to suffer low compensation and perks to work for such a product.

9. The Money

Depending on where you live in the world, software engineers are usually very well paid. Some places like silicon valley pay incredible amounts of money to senior engineers. Nobody ever objected to more money and this alone is a very motivating factor.

10. Fear of Getting Fired

Generally, software development is a very comfortable job market. That is, comfortable for the developer. Good engineers are fought over and courted. Mediocre engineers find jobs pretty easily. In some fields, perhaps cyber and node.js, it's enough to have some experience and a pulse to get hired.

That being said, you might be hanging to your job for whatever reason. Maybe your location has few programming jobs, or you just like working there. Adding to that a real possibility that you might get fired can get you to work harder.

Another option is that some people just don't like to work. They prefer spending their time on Facebook, drinking coffee, sleeping in Google's sleeping pods or reading blog posts (like this one *hint*). In fact, the only reason they ever do anything is the fear of getting fired.

11. Being Respected by your Fellow Team Members and Manager

Programmers have a very special culture. We tend to judge everyone by their ability to program. This somewhat implies that a good programmer believes he is smarter than most lawyers and doctors. I'll let you complete that thought trail yourself.

An interesting phenomenon is that most programmers think they are better than average. StackOverflow's survey of 2019 found that almost 70% of developers think they are above average, while less than 10% believe they are below average. This is statistically unlikely.

So it seems very important for us to be regarded as excellent developers. The wish to be respected in your team and organization can drive you to write faster, better code.

12. Working with awesome People

Every now and again you get to work in a place with amazing people. You become friends, a magical atmosphere sets in, etc. When that happens, coming to work becomes a joy. You might spend an extra hour at work, or take the job more seriously

-Specific Job Related Interview Questions--

How would you outline what computer software is and describe it to someone in non-technical words?

- Which technical skills are required to program efficiently?
- Which non-technical (soft) skills are required to program efficiently?
- Which programming language do you prefer when writing programming algorithms?
- Can you name the essential stages of the software development process?
- What are the main categories with which you can classify software?
- What would be your definition of debugging in software development?

- How are computer programs and computer software different?
- How would you define software re-engineering?
- What are the essentials of reviewing code?
- How would you outline what computer software is and describe it to someone in non-technical words?
- Which technical skills are required to program efficiently?
- Explain some of the SDLC models
- · Can you explain what verification is in software development?
- Can you explain what validation is in software development?
- Define the elements you should consider in the System Model Construction.
- What are the main tools you use to monitor the software's requirements?
- How are stubs different from mocks?
- Which SDLC model would you say is superior to others?
- How would you describe what software scope means?
- How would you find out how big a software product is?
- How would you define function points?
- Can you describe what is meant by the decomposition estimation technique?
- Can you describe what is meant by the empirical estimation technique?
- Can you outline and briefly mention configuration management?
- Which approaches do you use for configuration management?
- Can you outline what is meant by functional requirements?
- Can you outline what is meant by non-functional requirements?
- Describe modularization.
- How is Pseudo Code different from structured English?
- Outline structured design and what it means.
- Can you describe functional programming?
- Define what CASE means.
- Outline the key differences between threads and processes.
- Have you ever made a mistake when programming?
- Have you ever encountered a problem when programming?

- Name a side project you've been passionate about.
- What do you understand about "Agile" development? Why is it crucial?
- Have you ever had to explain software programming to non-technical stakeholders?
 What was your approach?
- Can you talk me through a time when you used a design pattern in a project?
- Can you talk about a time when team collaboration was required to solve a challenging problem?
- Can you talk about a time when you didn't see eye-to-eye with a team member? How did you resolve the problem?
- Describe the critical principles that you follow as a software developer.
- Have you ever had to adapt to a new situation as a software engineer?
- Can you talk about a time when you suggested and implemented an approach to enhance a project?
- Can you give some insight into your creativity with software engineering and explain a situation in which you used a unique solution for a complicated problem?
- Can you describe a time when you were just on time for a deadline but struggled to meet it? How would you carry out the project differently now?
- Has there been a circumstance in which you missed a deadline? What strategy would you use to complete the task now?
- Describe some methods you use to stay organized.
- · Can you talk about a time when you had to plan for a software engineering project?

References

Bing Sun Yuechuan Wei, Chao Li. Related-key impossible di □erential crypt □ analysis on crypton and crypton v1.0. 2011 IEEE, 2011. 4.2

Boxcryptor. Homepage. On-line: https://www.boxcryptor.com/.

Cam Pedersen and David Dahl. Crypton: Zero-knowledge application frame □ work. September 2014. Project homepage: https://crypton.io. 4.

Dan C. Tofan. Information security standards. Journal of Mobile, Embedded and Distributed Systems, vol. III, no. 3, 2011. 3.1.2, 3.1.3, 3.1.

Demartini, C.G.; Benussi, L.; Gatteschi, V.; Renga, F. Education and digital transformation: The âAIJriconnessioniâ Ă T project. IEEE Access 2020, 8, 186233–186256. [CrossRef]

Hanus, B.; Wu, Y.A. Impact of usersâA Z security awareness on desktop security behavior: A protection motivation theory 'perspective. Inf. Syst. Manag. 2016, 33, 2–16. [CrossRef]

Ken Beer and Ryan Holland. Encrypting data at rest. Technical report, Amazon Web Services, November 2014. (document), 4.2, 4.3.4, C.6

L. Buttyán Lám, Sz. Szebeni. Invitation-oriented tgdh: Key management for dynamic groups in an asynchronous communication model. Interna □tional Workshop on Security in Cloud Computing (CloudSec), Pittsburgh, PA, September 2012. 4.2

Levy, Y.; Gafni, R. Introducing the concept of cybersecurity footprint. Inf. Comput. Secur. 2021, 29, 724–736. [CrossRef]

Logan, P. Y., and Clarkson, A. Teaching students to hack: curriculum issues in information security. In SIGCSE '05: Proceedings of the 36th SIGCSE technical symposium on Computer science education (New York, NY, USA, 2005), ACM, pp. 157–161.

Matthew Campagna. Aws key management service cryptographic details. Technical report, Amazon Web Services, November 2014. 4.2

Navaridas-Nalda, F.; Clavel-San Emeterio, M.; Fernández-Ortiz, R.; Arias-Oliva, M. The strategic influence of school principal leadership in the digital transformation of schools. Comput. Hum. Behav. 2020, 112, 106481. [CrossRef]

Nortoninternetsecurity.cc. Data loss prevention | norton internet se □ curity. Online: http://www.nortoninternetsecurity.cc/2011/03/data-loss □ prevention.html, 2011. Retrieved 13.12.2014. 4

Slusky, L.; Partow-Navid, P. Students information security practices and awareness. J. Inf. Priv. Secur. 2012, 8, 3–26. [CrossRef]

Smith, S., and Marchesini, J. The Craft of System Security. Addison-Wesley, 2008.