

50 Docker interview questions to ask your next candidate

Questions

1. Can you explain what Docker is and how it is used in a development environment?
2. What is the difference between a Docker image and a Docker container?
3. How do you create a Dockerfile and what is its purpose?
4. Can you describe the process of building and running a Docker container?
5. How do you manage data in Docker containers, and what are Docker volumes?
6. What are some common networking configurations in Docker?
7. How do you handle multi-container applications in Docker?
8. Can you explain Docker Compose and its use cases?
9. What steps would you take to optimize the performance of a Docker container?
10. How do you ensure the security of your Docker applications?
11. What is Docker Hub, and how do you use it?
12. Can you explain the concept of Docker orchestration and name a commonly used orchestration tool?
13. How do you handle environment-specific configurations in Docker?
14. What is a multi-stage build in Docker, and why would you use it?
15. Can you describe how you would monitor and log Docker containers in a production environment?
16. What is Docker Swarm, and how does it differ from Kubernetes?
17. How do you approach troubleshooting a failing Docker container?
18. Can you explain the role of a Docker registry in a CI/CD pipeline?
19. How do you use Dockerfile to manage dependencies for a specific application?
20. Can you explain how Docker handles resource allocation between containers?
21. Describe the process of tagging Docker images and why it is important.
22. How would you go about removing unused Docker images and containers to free up disk space?
23. What are some strategies you use to reduce the size of Docker images?
24. How do you handle updates to your Docker containers to ensure minimal downtime?
25. What is the purpose of the ENTRYPOINT instruction in a Dockerfile, and how does it differ from CMD?
26. Can you explain how you would configure Docker to run on different host systems?
27. Describe a scenario where you had to debug a Docker container and how you resolved the issue.
28. How do you use Docker Compose in a CI/CD pipeline?
29. What techniques do you use to secure sensitive information, such as environment variables, within Docker containers?
30. How do you approach scaling Docker containers in a production environment?
31. Can you explain the concept of Docker overlay networks and their use cases?
32. Describe how you would handle logging and monitoring for multiple Docker containers across different hosts.
33. How do you manage and distribute Docker secrets in a secure manner?
34. Can you explain the concept of containerization and its advantages?
35. How do you handle versions and dependencies in Docker containers?
36. What is the purpose of a Docker namespace, and how does it work?
37. How do you ensure that your containerized application is highly available?
38. How do you manage the lifecycle of a Docker container?
39. What is the role of Docker in a microservices architecture?
40. How would you monitor and maintain Docker containers in production?
41. What command would you use to view the running processes inside a Docker container?
42. How do you remove all stopped containers in one command?
43. Can you explain the purpose of the 'docker exec' command and provide an example of its usage?
44. What is the function of the 'docker logs' command, and how can it be useful for troubleshooting?
45. How do you copy files from a Docker container to the host machine?
46. Can you describe how to create a new Docker network and why it might be necessary?
47. What command do you use to inspect the details of a Docker image?
48. How do you start a container in interactive mode and attach it to your terminal?
49. What is the command to build a Docker image from a Dockerfile, and what options can you use with it?
50. How would you check the resource usage of all running Docker containers?