

Networking Interview Questions

1. Can you explain the fundamental concept of how the internet works to someone with a non-technical background?
2. What is the role of protocols in Internet communication, and can you name a few essential protocols?
3. Differentiate between HTTP and HTTPS. Why is secure communication important on the Internet?
4. How do DNS (Domain Name System) and IP addresses work together to facilitate internet communication?
5. Explain the concept of REST (Representational State Transfer) in the context of web services.
6. What are the key principles of RESTful API design, and why are they important?
7. How does a client-server architecture function in the context of web development and APIs?
8. Can you provide examples of HTTP methods used in RESTful APIs and briefly explain their purposes?
9. What is the purpose of status codes in HTTP responses, and can you give examples of common status codes?
10. Explain the concept of statelessness in RESTful APIs and why it is considered a key principle.
11. Describe the basic structure of a GraphQL query and how it differs from traditional REST API requests.
12. How does GraphQL solve over-fetching and under-fetching issues commonly associated with REST APIs?
13. Can you explain the concept of a "schema" in the context of GraphQL and why it's important?
14. What are the advantages of using GraphQL over traditional REST APIs for certain types of applications?

15. How does batching work in GraphQL, and why is it beneficial for optimizing data fetching?
16. In the context of web development, how do you choose between using RESTful APIs and GraphQL based on specific project requirements?
17. What is the key difference between GET and POST requests in HTTP?
18. How does the PUT method differ from the POST method, and in what scenarios would you use each?
19. Explain the purpose of the DELETE HTTP method and provide an example use case.
20. Describe the PATCH method and when it is preferable over other HTTP methods.
21. How does the OPTIONS method contribute to web development, and when is it typically used?
22. Explain the significance of the "Content-Type" header in an HTTP request.
23. What is the purpose of the "User-Agent" header, and how might it be useful for web developers?
24. What is gRPC, and how does it differ from traditional REST APIs in terms of communication?
25. Explain the benefits of using Protocol Buffers (protobuf) in gRPC for data serialization.
26. What role do service definitions play in gRPC, and why are they significant?
27. How does gRPC support HTTP/2 and what advantages does this bring over HTTP/1.1?
28. Can you compare and contrast RESTful APIs and gRPC, highlighting the strengths and weaknesses of each?