

50 Full Stack Interviews Q/A



1. What is HTML?

- HTML (Hyper Text Markup Language) structures web content and elements on a webpage.

2. What is the DOM?

- The Document Object Model (DOM) is a programming interface for HTML and XML documents, representing the page so programs can change the document structure, style, and content.

3. What is CSS?

- CSS (Cascading Style Sheets) describes the presentation of a document written in HTML or XML.

4. Explain the box model in CSS.

- The box model includes margins, borders, padding, and the actual content, defining the space an element occupies.

5. What is Flexbox?

- Flexbox is a CSS layout model that allows items to align and distribute space within a container efficiently.

6. What are CSS preprocessors?

- CSS preprocessors like SASS and LESS extend CSS with variables, nested rules, and functions.

7. What is JavaScript?

- JavaScript is a programming language for creating dynamic web content, such as interactive forms and animations.

8. Explain event delegation.

- Event delegation involves attaching a single event listener to a parent element to manage events for multiple child elements.

9. What is AJAX?

- AJAX (Asynchronous JavaScript and XML) enables web pages to update asynchronously by exchanging data with a server behind the scenes.

10. What is React?

- React is a JavaScript library for building user interfaces, focusing on component-based architecture and state management.



11. What is a primary key?

- A primary key is a unique identifier for a record in a database table.

12. What is a foreign key?

- A foreign key is a field in a database table that creates a link between two tables.

13. What is ORM?

- ORM (Object-Relational Mapping) is a technique for converting data between incompatible type systems in object-oriented programming.

14. What is a microservice?

- Microservices are a software development technique where an application is composed of small, loosely coupled services.

15. What is Docker?

- Docker is a platform for developing, shipping, and running applications in containers.

16. What is a container?

- A container is a lightweight, portable, and self-sufficient environment that includes everything needed to run a piece of software.

17. What is Kubernetes?

- Kubernetes is an open-source platform for automating the deployment, scaling, and management of containerized applications.

18. What is load balancing?

- Load balancing distributes incoming network traffic across multiple servers to ensure no single server is overwhelmed.

19. What is a reverse proxy?

- A reverse proxy forwards client requests to backend servers and returns the server's response to the client.

20. Explain the concept of middleware.

- Middleware is software that sits between the client and server, handling requests and responses, often used for logging, authentication, etc.



21. What are single-file components in Vue.js?

- Single-file components encapsulate HTML, CSS, and JavaScript in a single vue file.

22. Explain the lifecycle hooks in Vue.js.

- Lifecycle hooks are methods that run at specific stages of a Vue component's lifecycle, such as created, mounted, and destroyed.

23. What is TypeScript?

- TypeScript is a superset of JavaScript that adds static types, enhancing code quality and developer productivity.

24. What are the benefits of using TypeScript?

- Benefits include improved code readability, early error detection, and better tooling support.

25. What is Webpack?

- Webpack is a module bundler for JavaScript applications, transforming and packaging code for deployment.

26. Explain lazy loading.

- Lazy loading delays loading of non-critical resources until they are needed, improving initial load time.

27. What are service workers?

- Service workers are scripts that run in the background, enabling offline capabilities and background syncing.

28. What is Progressive Web App (PWA)?

- PWAs are web applications that provide native app-like experiences, including offline access and push notifications.

29. What is responsive design?

- Responsive design ensures web content adapts to different screen sizes and orientations for optimal viewing on any device.

30. What is a media query

- Media queries are CSS techniques used to apply styles based on device characteristics, such as screen width..



31. What is SQL injection?

- SQL injection is a code injection technique that exploits vulnerabilities in an application's software by inserting malicious SQL statements.

32. What is XSS?

- Cross-Site Scripting (XSS) is a security vulnerability that allows attackers to inject malicious scripts into web pages viewed by other users.

33. What is CSRF?

- Cross-Site Request Forgery (CSRF) is an attack that forces a user to execute unwanted actions on a web application in which they're authenticated.

34. What is hashing?

- Hashing transforms input data into a fixed-size string of characters, which is typically a digest that uniquely identifies the input.

35. What is encryption?

- Encryption converts data into a coded form to prevent unauthorized access.

36. What is a RESTful API?

- A RESTful API adheres to REST principles and is used to interact with RESTful web services.

37. What is GraphQL?

- GraphQL is a query language for APIs and a runtime for executing those queries by using a type system you define for your data.

38. What is JSON?

- JSON (JavaScript Object Notation) is a lightweight data interchange format that's easy for humans to read and write and for machines to parse and generate.

39. What is RPC?

- RPC (Remote Procedure Call) allows a program to cause a procedure to execute on another address space, often on another physical machine.

40. What is gRPC?

- gRPC is a high-performance, open-source framework for making remote procedure calls (RPCs) across machines, with features like authentication, load balancing, and more.

