61 Web Developer interview questions to ask candidates (with answers)

Questions

- 1. Can you explain the difference between HTML, CSS, and JavaScript?
- 2. What are semantic HTML elements, and why are they important?
- 3. How do you ensure that your web applications are accessible to users with disabilities?
- 4. What is the purpose of using a CSS preprocessor like SASS or LESS?
- 5. Can you describe the box model in CSS and its components?
- 6. What are the advantages of using responsive design?
- 7. How would you optimize a website's performance for faster load times?
- 8. What is the difference between client-side and server-side scripting?
- 9. Can you explain how AJAX works and where you might use it?
- 10. What are some common security concerns in web development, and how would you address them?
- 11. How do you manage version control in your projects?
- 12. What is the purpose of a content delivery network (CDN)?
- 13. Can you explain the concept of RESTful APIs?
- 14. What tools or methods do you use for debugging web applications?
- 15. How do you test your web applications across different browsers and devices?
- 16. How would you explain the concept of responsive design to a non-technical client?
- 17. What strategies do you use to optimize website loading speed?
- 18. How do you ensure cross-browser compatibility in your web development projects?
- 19. Can you explain the difference between 'px', 'em', and 'rem' units in CSS?
- 20. How would you handle a situation where a client insists on a design change that you believe will negatively impact user experience?
- 21. What's your approach to writing maintainable and scalable CSS?
- 22. How do you stay updated with the latest web development trends and technologies?
- 23. Can you explain the concept of Progressive Enhancement and how you might implement it in a project?
- 24. How would you implement a custom event system in JavaScript?
- 25. Can you explain the concept of closures in JavaScript and provide a practical example?
- 26. What are Web Workers, and in what scenarios would you use them?
- 27. How does the 'this' keyword work in JavaScript, and how does it differ in arrow functions?
- 28. Can you describe the differences between localStorage, sessionStorage, and cookies?
- 29. What is the Virtual DOM in React, and how does it improve performance?
- 30. How would you handle state management in a large-scale React application?
- 31. Can you explain the concept of CSS Grid and how it differs from Flexbox?
- 32. What are Service Workers, and how can they be used to create offline-capable web applications?
- 33. How would you implement lazy loading for images in a web application?
- 34. Can you describe the purpose and implementation of WebSockets?35. What are the key considerations when designing a RESTful API?
- 36. How would you approach debugging a web application that has a layout issue?
- 37. What strategies do you use to ensure your web applications are mobile-friendly?
- 38. Can you explain how you stay organized while working with large stylesheets?
- 39. How do you prioritize features during a web development project?
- 40. What role does SEO play in front-end development, and how do you address it?
- 41. How do you manage dependencies in your front-end projects?
- 42. Can you explain the concept of middleware in web development and provide an example of how it's used?
- 43. Describe how you would handle database migrations in a production environment.
- 44. What is the role of an ORM (Object-Relational Mapping) in back-end development, and what are some popular ORM tools you have used?
- 45. How would you implement authentication and authorization in a web application?
- 46. What strategies do you use for ensuring the scalability of a web application?

 47. Can you explain the difference between SQL and NoSQL databases, and in what
- scenarios you would use each?
- 48. Describe how you would approach optimizing database queries for performance.
 49. What are microservices, and what are the advantages and challenges of using them?
- 50. How do you handle error logging and monitoring in your applications?
- 51. What is caching, and how would you implement it to improve the speed of a web application?
- 52. Describe a situation where you had to implement a feature without clear requirements. How did you approach the task?
- 53. Can you give an example of a project where you had to work with a legacy codebase? What challenges did you face and how did you overcome them?
- 54. How would you handle a situation where your project deadline is tight, but a critical component isn't working as expected?
- 55. Tell me about a time when you had to collaborate with other developers on a large-scale project. What tools or methods did you use to ensure effective communication?
- 56. How have you handled a situation where you discovered a major bug at a late stage in

the development process?

complete a project. How did you manage it?

- 57. Describe a time when you had to learn a new technology or framework on-the-fly to
- 58. Can you share an experience where you had to prioritize different tasks under pressure? How did you decide what was most important?
- 59. Explain how you would manage a project's scope if a client requests additional features
- midway through development.

61. How do you handle feedback or criticism about your code from peers or supervisors?

60. What steps would you take if you encountered a security vulnerability in a live application?