## 1. Basic JavaScript Interview Questions

- 1. What is JavaScript?
- 2. How is JavaScript different from Java?
- 3. What are the different data types in JavaScript?
- 4. What are var, let, and const?
- 5. What is hoisting in JavaScript?
- 6. What is the difference between == and ===?
- 7. What are truthy and falsy values in JavaScript?
- 8. What is the difference between null and undefined?
- 9. What are JavaScript comments, and how do you write them?
- 10. How do you declare a function in JavaScript?

## 2. JavaScript Data Structures & Operations

- 11. What is the difference between an array and an object?
- 12. How do you iterate over an array in JavaScript?
- 13. What is the difference between push() and pop()?
- 14. How do you remove duplicates from an array?
- 15. What are array methods like map(), filter(), and reduce()?
- 16. What is the difference between for Each() and map()?
- 17. What is the splice() method used for?
- 18. How do you convert an array to a string?
- 19. What is the difference between Object.keys() and Object.values()?
- 20. How do you check if a key exists in an object?

#### 3. Functions & Scope

- 21. What is function scope in JavaScript?
- 22. What is the difference between global, local, and block scope?
- 23. What is a higher-order function?
- 24. What are callback functions, and why are they used?
- 25. What is currying in JavaScript?

- 26. What is an IIFE (Immediately Invoked Function Expression)?
- 27. What is the difference between function declaration and function expression?
- 28. What are arrow functions, and how are they different from regular functions?
- 29. What is the difference between call(), apply(), and bind()?
- **30.** What is closure in JavaScript?

#### 4. Asynchronous JavaScript

- 31. What is the difference between synchronous and asynchronous programming?
- 32. What are callbacks, and how do they work?
- 33. What is callback hell, and how do you avoid it?
- 34. What are Promises, and how do they work?
- 35. What is the difference between .then() and .catch() in Promises?
- 36. What are async/await, and how do they work?
- 37. What happens if an async function doesn't return a Promise?
- 38. What is the difference between Promise.all() and Promise.race()?
- 39. What is event loop in JavaScript?
- 40. What is microtask queue vs. macrotask queue?

#### 5. Object-Oriented JavaScript

- 41. What is the difference between prototypal inheritance and classical inheritance?
- 42. What is a prototype in JavaScript?
- 43. What are constructor functions?
- 44. How do you create a class in JavaScript?
- 45. What is super keyword in JavaScript?
- 46. What is the difference between static and instance methods?
- 47. What is Object.create(), and how does it work?
- 48. What are getter and setter methods in JavaScript?
- 49. What is mixins, and how do they work?
- 50. What is the difference between Object.assign() and spread operator (...)?

## 6. DOM (Document Object Model) Manipulation

- 51. What is the DOM?
- 52. What is the difference between document.getElementById() and document.querySelector()?
- 53. How do you add an event listener in JavaScript?
- 54. What is event delegation?
- 55. What is the difference between innerHTML, textContent, and innerText?
- 56. How do you modify the attributes of an element using JavaScript?
- 57. What are createElement() and appendChild() used for?
- 58. How do you remove an element from the DOM?
- 59. What is event bubbling and event capturing?
- 60. What is preventDefault() and stopPropagation()?

## 7. Error Handling & Debugging

- 61. What is the try...catch statement used for?
- 62. What is finally block in JavaScript?
- 63. What are custom errors, and how do you create them?
- 64. What is the difference between throw and console.error()?
- 65. What are breakpoints, and how do they help in debugging?
- 66. What is debugger statement in JavaScript?
- 67. How can you catch an error in a Promise?
- 68. What is the onerror event in JavaScript?
- 69. What are linting tools, and why are they important?
- 70. What is console.table() used for?

#### 8. ES6+ Features

- 71. What is destructuring in JavaScript?
- 72. What are template literals, and why are they useful?
- 73. What is the difference between let, const, and var?
- 74. What are default parameters in functions?
- 75. What is the spread operator (...)?

- 76. What are modules, and how do you import/export in JavaScript?
- 77. What are symbol and weakMap in JavaScript?
- 78. What are optional chaining (?.) and nullish coalescing (??)?
- 79. What is BigInt, and when should you use it?
- 80. What is the difference between for...of and for...in?

### 9. JavaScript in the Browser

- 81. What is localStorage, sessionStorage, and cookies?
- 82. What is setTimeout() and setInterval()?
- 83. What is the navigator object in JavaScript?
- 84. How do you detect a user's browser type in JavaScript?
- 85. What is geolocation API?
- 86. How do you access the clipboard in JavaScript?
- 87. What are Web Workers, and when would you use them?
- 88. How does drag and drop API work in JavaScript?
- 89. What is the history object, and how does it work?
- 90. How do you perform AJAX requests in JavaScript?

### 10. Advanced JavaScript Concepts

- 91. What is functional programming, and how does JavaScript support it?
- 92. What are pure functions, and why are they important?
- 93. What is memoization, and how does it work?
- 94. What is debouncing and throttling?
- 95. What is Service Worker, and why is it used?
- 96. What is the difference between REST API and GraphQL?
- 97. How do you create a custom event in JavaScript?
- 98. What is a Proxy object, and how does it work?
- 99. What is dynamic import, and how is it useful?
- 100. What is the difference between deep copy and shallow copy?