

1-Explain event delegation. Event delegation is a technique that involves adding event listeners to a parent element instead of adding them to descendant elements. This allows the listener to fire whenever the event is triggered on the descendant elements due to event bubbling up the DOM. This has the benefits of reducing the number of event listeners and improving performance.

---

2-Explain the value of this in JavaScript. The value of this depends on how the function is called. In non-strict mode, this refers to the global object, while in strict mode, this is undefined. In a method, this refers to the object that the method belongs to. In an event listener, this refers to the element that triggered the event.

---

3-What is the difference between null and undefined in JavaScript? null is an explicit value that means "no value or no object," while undefined is a value that means a variable has been declared but has not yet been assigned a value.

---

4-What is a closure in JavaScript? A closure is a function that has access to the outer function's variables, even after the outer function has returned.

---

5-What is the difference between var, let, and const in JavaScript? var is function scoped and can be redeclared and updated, let is block scoped and can be updated but not redeclared, and const is block scoped and cannot be updated or redeclared.

---

6-What is a prototype in JavaScript? A prototype is an object that is shared between all instances of a constructor function. It contains shared properties and methods for the instances.

---

7-What are closures in JavaScript, and how are they useful? Explanation: Closures provide access to the outer function's variables, even after the outer function has returned.

---

8-What is strict mode in JavaScript, and how do you enable it? Explanation: Strict mode is a way to enforce stricter parsing and error handling rules in JavaScript code.

---

9-How can you optimize website performance? Expected answer: Strategies include minimizing file sizes, leveraging browser caching, reducing HTTP requests, and using techniques like minification and compression.

---

10-What is the box model in CSS? Expected answer: The box model describes the structure of elements in CSS, including content, padding, border, and margin.

---

11-What are media queries in CSS? Expected answer: Media queries allow developers to apply different CSS styles based on the characteristics of the device or screen, enabling responsive layouts.-

---

12-What is the purpose of version control systems in web development? Expected answer: Version control systems like Git enable tracking and managing changes to source code, facilitating collaboration, and providing a backup of the codebase.

---

13-What are the benefits of using a CSS preprocessor like Sass? Expected answer: Benefits include code reusability, modularity, easier maintenance, and the ability to use variables, mixins, and functions.

(Mohammad Baghban Rezaee)