Generated Questions

Q: In a JavaScript-heavy web application, what is the primary benefit of using a Virtual DOM (a concept popularized by libraries like React) over directly manipulating the Real DOM?

Option A: Improved Security Against XSS Attacks

Option B: Enhanced Support for Older Browsers

Option C: Reduced Number of DOM Mutations, Improving Performance

Option D: Simplified Cross-Language Integration (e.g., with Java or Scala)

Answer: Reduced Number of DOM Mutations, Improving Performance

Q: When integrating a Scala backend with a JavaScript frontend in a web development project, what protocol or technology is commonly used for real-time communication between the client and server?

Option A: RESTful API

Option B: GraphQL API

Option C: WebSockets

Option D: Server-Sent Events (SSE)

Answer: WebSockets

Q: In JavaScript, what is the term for the process by which a function is able to remember and access its lexical scope even when the function is executing outside that lexical scope?

Option A: Hoisting

Option B: Closures

Option C: Callback

Option D: Async/Await

Answer: Closures

Q: A web developer is tasked with optimizing the load time of a JavaScript-heavy web application.

Which of the following strategies would likely yield the most significant improvement?

Option A: Minifying and Gzipping JavaScript Files

Option B: Implementing a Content Delivery Network (CDN)

Option C: Leveraging Browser Caching with Cache-Control Headers

Option D: All of the Above Equally

Answer: All of the Above Equally

Q: What is the primary purpose of using a package manager like npm (Node Package Manager) in JavaScript web development?

Option A: To Compile Scala Code into JavaScript

Option B: To Manage Dependencies and Simplify Project Setup

Option C: To Provide Real-Time Updates to Clients

Option D: To Securely Hash Passwords for User Authentication

Answer: To Manage Dependencies and Simplify Project Setup