DWA_12 Knowledge Check

To complete this Knowledge Check, ensure you have worked through all the lessons in **Module** 12: Declarative Abstractions.

To prepare for your session with your coach, please answer the following questions. Then download this document as a PDF and include it in the repository with your code.

1. What are the benefits of direct DOM mutations over replacing HTML?

Performance boost

Direct DOM mutations are typically more efficient than replacing HTML. When you update the DOM directly, the browser doesn't need to reparse and rebuild the entire DOM structure. Instead, it only modifies the parts of the DOM that have changed. This can result in better performance, especially when dealing with complex or large web pages.

2. What low-level noise do JavaScript frameworks abstract away?

Imperative updating of the DOM, keeping track of what elements need to change

JavaScript frameworks abstract away DOM manipulation and event handling, making it easier for developers to focus on application logic. These frameworks handle tasks like updating the Document Object Model (DOM). By abstracting these low-level noise, JavaScript frameworks simplify the development process, improve productivity, and enable developers to build complex and interactive web applications more effectively.

3. What essence do JavaScript frameworks elevate? JavaScript frameworks elevate various aspects of web development, from developer productivity and code maintainability to scalability and performance. They provide a foundation for building robust, efficient, and maintainable web applications

4. Very broadly speaking, how do most JS frameworks achieve abstraction? They hide away the imperative DOM mutations

They typically introduce their own abstractions for handling the Document Object Model (DOM), routing, state management, and data binding. By doing so, they shield developers from direct manipulation of the DOM, enabling them to work with components or declarative UI structures.

5. What is the most important part of learning a JS framework?

The most important part of learning a JavaScript framework is understanding its core concepts and principles. This includes comprehending how the framework handles the DOM, state management, routing, data binding, and component-based architecture.