

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

Framework compatibility - As some Javascript frameworks and libraries are design to work efficiently with direct DOM manipulation, this approach can ensure better integration with specific frameworks and libraries resulting in improved development workflows and code maintainability.

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

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

Event handling complexity - Javascript frameworks abstract away the complexities of managing event listeners and their associated behaviors. High level constructs can be used by frameworks to handler events without needing to manage event propagation and delegation

3. What essence do JavaScript frameworks elevate?

Abstraction - Frameworks abstract low level complexities, allowing work at a higher level of abstraction. This allows focus on application logic and user experience without having to manage intricate details such as DOM manipulation, event handling and browser inconsistencies.

4. Very broadly speaking, how do most JS frameworks achieve abstraction?

They hide away the imperative DOM mutations

Some frameworks utilize a virtual DOM to abstract away direct manipulation of the real DOM. They create a virtual representation of the DOM in memory and efficiently update the actual DOM based on the changes made to this virtual representation. This approach minimizes unnecessary reflows and repaints, leading to better performance and a smoother user experience.

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

State management - Understanding how the framework manages application state and handles data flow. Learn about the different state management patterns, such as local component state, global state management, and state management libraries commonly used within the framework.