

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

One of the main benefits of direct DOM mutation over replacing HTML is improved performance. When you directly manipulate the DOM (Document Object Model) instead of replacing entire sections of HTML, you avoid the need to re-render and re-layout the entire page. This can lead to a significant performance boost, especially for complex web applications with large and dynamic content.

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 the low-level noise of imperative updating of the DOM and keeping track of what elements need to change. They provide a more declarative approach to building web applications, allowing developers to focus on writing high-level code that describes the desired outcome, rather than the specific steps needed to achieve it. This makes it easier to manage complex UIs and improves code maintainability.

3. What essence do JavaScript frameworks elevate?

JavaScript frameworks elevate web development by providing a structured, efficient, and feature-rich environment for building modern web applications. They enhance productivity, code quality, and the overall development experience, allowing developers to create powerful and responsive web applications more easily.

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

JS frameworks achieve abstraction by introducing higher-level abstractions, encapsulating complex operations, and providing declarative interfaces for building web applications. This abstraction hides the imperative DOM mutations and other low-level details, making it easier for developers to focus on application logic and UI design.

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

The most important part of learning a JavaScript (JS) framework is to understand its core concepts and principles.