

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

Control - you can target and update specific elements or attributes without affecting the rest of the page.

Libraries and frameworks - many javascript frameworks are built around direct DOM manipulation

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

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

Managing data synchronization between the application state and the user interface to be complex

They include built in optimizations for performance which reduces the number of DOM updates and boosts rendering speed

3. What essence do JavaScript frameworks elevate?

They enhance developer productivity by abstracting low-level tasks and promoting a declarative approach to building user interfaces

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

They hide away the imperative DOM mutations

Most JavaScript frameworks achieve abstraction through a combination of providing higher-level APIs, encapsulation common patterns and functionalities, and offering structured architectures that hide low-level complexities, making it easier for developers to build web applications

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 architecture as it forms the foundation for effectively using the framework to build web applications