

# 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.

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

Performance boost - Directly modifying the DOM is generally more efficient than replacing large chunks of HTML.

Precision - Direct DOM manipulation offers more control over the elements.

Maintains state - Directly modifying elements allows you to preserve the state of certain elements (like input fields) and JavaScript event listeners attached to them.

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

Imperative updating of the DOM, keeping track of what elements need to change, handling differences in browser behaviors, JavaScript frameworks often provide abstractions for dealing with asynchronous operations, such as fetching data from a server, managing the state of an application, frameworks abstract event handling, providing a more declarative and component-specific way to respond to user actions, frameworks also encourage the use of components, which encapsulate functionality.

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## 3. What essence do JavaScript frameworks elevate?

Abstraction, modularity, productivity, performance optimization, scalability, interoperability and enhanced user experience.

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

They hide away the imperative DOM mutations, they provide developers with a higher-level interface for common tasks and interactions in web development. This interface shields developers from the complexity of direct DOM manipulation and other low-level API interactions.

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

The most important part of learning a JavaScript framework isn't mastering its syntax or memorizing its API; rather, it's understanding the core concepts and principles that makes up the framework.