

# 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?

Memory utilization: By directly modifying the DOM, you can avoid unnecessary memory consumption. When you replace HTML, the old DOM elements are discarded, and new ones are created. This can lead to increased memory usage, especially if performed frequently. Direct DOM mutations, however, modify the existing elements, reducing memory overhead

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

Event handling: Handling browser events can be cumbersome and cross-browser compatibility issues may arise. Frameworks abstract away the differences in event handling mechanisms across different browsers and provide unified event handling interfaces. They simplify the process of attaching event listeners, capturing events, and handling event propagation, ensuring consistent behavior across various browsers.

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## 3. What essence do JavaScript frameworks elevate?

Developer productivity: Frameworks prioritize developer productivity by providing tools, abstractions, and conventions that streamline the development process. They offer features like automatic DOM updates, data binding, and prebuilt components that reduce boilerplate code and allow developers to focus on high-level functionality.

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

Routing systems: JavaScript frameworks commonly include routing systems that abstract away the low-level details of manipulating the browser's URL and handling navigation. They provide mechanisms for defining routes, mapping them to specific components or views, and managing the rendering of the appropriate content based on the URL. This abstraction simplifies client-side routing and navigation in single-page applications.

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

Practical Application and Hands-on Experience: Apply your knowledge by working on practical projects or examples using the framework. Building real-world applications helps solidify your understanding and exposes you to various scenarios and challenges that you may encounter while working with the framework. Hands-on experience allows you to explore different aspects of the framework and learn from practical problem-solving.