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?

- Efficiency is important; these only update the specific elements and attributes that require changes, this method avoids the need to recreate the whole html structure.
- Compatibility works consistently across different browsers; this ensures a good user experience.

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

- State Management: Frameworks abstract away the complexities of managing and synchronizing application state. They provide mechanisms to store and update data within the application, ensuring that changes are propagated consistently across different components or views.

- Event Handling: Frameworks simplify event handling by providing a unified and consistent approach. Instead of manually attaching event listeners to elements, frameworks often offer declarative syntax or built-in mechanisms to handle events, making it easier to manage user interactions.

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3. What essence do JavaScript frameworks elevate?

Abstraction: Frameworks abstract away low-level details and provide higher-level abstractions, allowing developers to work at a more conceptual level. This means focusing on the overall structure and behavior of the application rather than getting caught up in the nitty-gritty implementation details.

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

Most JavaScript frameworks achieve abstraction by providing a set of tools, patterns, and APIs that encapsulate common functionality and simplify complex tasks. Here are some broad ways in which JS frameworks achieve abstraction.
Declarative Syntax: Frameworks often use declarative syntax, where developers describe what they want the application to look like or how it should behave, without explicitly specifying how to achieve it. This approach allows the framework to handle the underlying implementation details, abstracting away the complexities from the developers.

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

Data Binding and State Management: Familiarize yourself with the framework's approach to data binding and state management. Learn how to establish data relationships, update state, and propagate changes throughout the application. Understanding these concepts is crucial for building dynamic and reactive applications.