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?

▪ Direct DOM mutations allow you to manage state more easily.

▪ Direct DOM mutations can make your code more maintainable by reducing the amount of HTML you need to manage in your JavaScript code.

▪Direct DOM mutations are often faster than replacing the entire HTML content of an element.

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

▪ State management: Frameworks can abstract away the low-level details of state management, such as managing application state, handling asynchronous data loading, and providing a consistent API for accessing and updating state.
▪ DOM manipulation: Frameworks can abstract away the low-level details of DOM manipulation, such as creating and manipulating HTML elements, handling events, and updating the UI in response to user input. This can make it easier to write code that is more declarative and easier to understand.

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3. What essence do JavaScript frameworks elevate?

▪ Modularity: Frameworks encourage modular code by providing a clear separation of concerns between different parts of the application. This can help to make the code more maintainable and easier to understand.
▪ Abstraction: Frameworks provide high-level abstractions for common web development tasks, such as DOM manipulation, state management, and routing. This can help to reduce the amount of boilerplate code you need to write, and make it easier to focus on the high-level logic of your application.

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

Most JavaScript frameworks achieve abstraction by providing a layer of abstraction over the underlying systems like DOM and the browsers events.
The layer of abstraction is typically implemented using JavaScript code (React or Angular) that is executed in the browser. The framework code may be bundled and shipped to the browser as part of the application code, or it may be loaded dynamically from a content delivery network (CDN). The framework code typically includes a set of libraries and components that provide the building blocks for the application, as well as a set of conventions and guidelines for how to structure and organize the application code.

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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 is to understand the underlying principles and concepts that the framework is based on. This includes understanding the framework's core features and how they work, as well as the conventions and patterns that the framework uses to structure and organize application code.