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?

Faster: By selectively updating the relevant portions of the webpage rather than starting over, it speeds up loading time. This results in a smoother, faster response from the website.

Precise changes: You have the option of making very precise adjustments to various webpage elements. You can modify attributes, styles, text, or even rearrange elements. You now have more control over how the page functions and appears.

Maintains Function: If you change the HTML, you risk losing any data or interactions that had previously taken place on the website. You can maintain these interactions and keep everything operating normally by using direct DOM mutations.

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

State management: Frameworks assist in maintaining the application's data and ensuring that it syncs, allowing developers to manage and change the data with ease and without feeling overburdened.

3. What essence do JavaScript frameworks elevate?

JavaScript frameworks elevate several essential aspects in web development including cross-browser compatibility. JavaScript frameworks often handle cross-browser compatibility issues by abstracting away browser-specific quirks and providing polyfills for missing features. This simplifies development and reduces the need for manual browser testing and fixes.

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

Most JavaScript frameworks achieve abstraction by providing a layer of tools, libraries, and APIs that simplify and hide the complexity of lower-level operations.

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

The most important part of learning a JavaScript framework, such as React, Angular, or Vue.js, is gaining a solid understanding of the core concepts and principles on which the framework is built. This conceptual understanding is crucial because it helps one to grasp the fundamental ideas and architecture of the framework. It also enables you to effectively solve problems and make informed decisions when working with the framework.