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.

Certainly, I can provide answers to these questions:

- 1. What are the benefits of direct DOM mutations over replacing HTML?
- Performance boost: Direct DOM mutations are generally faster and more efficient than completely replacing HTML because they only modify the parts of the document that need to change. This leads to improved performance and responsiveness in web applications.
- 2. What low-level noise do JavaScript frameworks abstract away?
- JavaScript frameworks abstract away the imperative updating of the DOM and the need to manually keep track of what elements need to change. This abstraction simplifies the development process and makes it easier to manage complex web applications.
- 3. What essence do JavaScript frameworks elevate?
- JavaScript frameworks elevate the concept of declarative programming. Instead of specifying the exact steps to update the DOM, developers define the desired state of the UI, and the framework handles the details of how to achieve that state. This promotes a more structured and maintainable codebase.
- 4. Very broadly speaking, how do most JS frameworks achieve abstraction?
- Most JavaScript frameworks achieve abstraction by hiding away the imperative DOM mutations. They provide high-level APIs and components that allow developers to work with a simplified, declarative representation of the UI. Under the hood, the framework takes care of translating these declarations into the necessary DOM updates.

- 5. What is the most important part of learning a JS framework?
- The most important part of learning a JavaScript framework is understanding its core concepts and architecture. This includes grasping how the framework manages state, handles data binding, and organizes components. Once you have a solid understanding of these fundamentals, you'll be better equipped to effectively use the framework for building web applications.