DWA_12 Knowledge Check

To complete this Knowledge Check, ensure you have worked through all the lessons in **Module** 12: Declarative Abstractions.

Please answer the following questions to prepare for your session with your coach. 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? Direct DOM mutations allow you to make changes to the HTML

- When using DOM, the changes you make to the code are direct and do not affect other components of the HTML visual. This is efficient and convenient for a developer.
- Some frameworks such as React, the main framework we will be focusing on, depend on DOM in order to work properly

- 2. What low-level noise do JavaScript frameworks abstract away?
 - JavaScript frameworks make simple the process of developing by handling low-level complexities.
 - They abstract away things like directly manipulating the DOM, managing event handling, implementing routing and navigation, and ensuring cross-browser compatibility.
 - By providing higher-level abstractions and standardized APIs, frameworks allow developers to focus on writing application logic and building robust applications without being stressed by the underlying implementation details.

3. What essence do JavaScript frameworks elevate?

- JavaScript frameworks provide an organized, streamlined approach to web application development that emphasizes modularity, reusability, maintainability, and efficiency. They provide preset patterns, abstractions, and tooling to

developers, allowing them to focus on core functionality while saving time and
effort and promoting code quality and best practices.

- 4. Very broadly speaking, how do most JS frameworks achieve abstraction?
 - by encapsulating complexity, providing higher-level abstractions, simplifying syntax, utilizing virtual representations, offering abstraction APIs, leveraging conventions, and integrating with a broader ecosystem

- 5. What is the most important part of learning a JS framework?
 - to provide a common structure so that developers don't have to redo it from scratch and can reuse the code provided. In this way, frameworks allow us to cut out much of the work and save a lot of time.