

# 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?

Performance boost

- The document's real in-memory representation at any given time is called the DOM. As a result, updating the DOM updates the content in the browser in real time, while editing the HTML requires you to refresh the page.

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

Imperative updating of the DOM, keeping track of what elements need to change

- Manipulation of the DOM: High-level APIs provided by frameworks take away the difficulties involved in directly modifying the DOM. This makes it easier to add, edit, or remove webpage elements, freeing developers to concentrate on the intended modifications rather than becoming bogged down in minute details.
- Event handling: To facilitate the management of user interactions such as mouse clicks, keyboard presses, or touch events, frameworks offer convenient APIs. They make it easier for developers to design dynamic, responsive online applications by abstracting away the complexities of event registration, delegation, and propagation.

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## 3. What essence do JavaScript frameworks elevate?

- Enhanced productivity: By offering pre-written code and reusable libraries, frameworks can help developers work more efficiently. By doing this, developers

may free up a tonne of time and energy to work on more imaginative and difficult parts of the process.

- Better code quality: By offering a standardised coding style and set of rules, frameworks can aid in the improvement of code quality. This can facilitate debugging and make code easier to maintain.
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#### 4. Very broadly speaking, how do most JS frameworks achieve abstraction?

They hide away the imperative DOM mutations

- By using interfaces and abstract classes, frameworks are able to conceal the specifics of how some classes and components are implemented, leaving only the user's core functionality visible.
  - By using modules, frameworks are able to abstract away the specifics of a feature's implementation and arrange code into reusable pieces.
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#### 5. What is the most important part of learning a JS framework?

- Understanding the basic ideas and tenets around which a JavaScript framework is constructed is crucial when understanding the framework.
- Understand the architecture and design patterns of the framework.