

# 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

DOM mutations allow you to make pinpoint changes to the DOM. Instead of replacing the entire HTML of an element, you can update only the parts that have changed. This can be much faster than replacing the entire HTML, as it avoids the overhead of parsing and creating new DOM nodes.

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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

One of the main low-level details that JavaScript frameworks abstract away is the imperative updating of the DOM.

Without a framework, developers have to manually keep track of what elements need to change and update them one by one using the DOM API. This can be tedious and error-prone, as it requires developers to write a lot of boilerplate code to manipulate the DOM.

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## 3. What essence do JavaScript frameworks elevate?

They allow developers to build complex web applications quickly and easily by providing pre-built components and functionality that would otherwise have to be built from scratch. Frameworks also tend to enforce best practices and conventions, which helps ensure that applications are built in a consistent and maintainable way. So overall, I'd say JavaScript frameworks elevate developer productivity and code quality

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4. Very broadly speaking, how do most JS frameworks achieve abstraction?  
They hide away the imperative DOM mutations

One of the key ways that JavaScript frameworks achieve abstraction is by hiding away the imperative DOM (Document Object Model) mutations. The DOM is the tree structure that represents the HTML document, and it can be quite complex and verbose to work with directly. By abstracting away the DOM, frameworks allow developers to focus on building their applications without having to worry about all the details of the DOM. This makes development much simpler and faster

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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 understanding the problems that frameworks solve and how they can make development easier and more efficient. Frameworks provide developers with pre-written code that can be used as a foundation for building web applications, saving time and reducing the likelihood of errors