

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?

A performance boost, direct mutations are better than replacing HTML.
More efficient, instead of recreating the whole structure, you can update only the parts that need to target.
Event Handlers, when directly manipulating the DOM, event handlers attached to elements are preserved.

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

Imperative updating of the DOM, keeping track of what elements need to change
State Management, many frameworks have built-in libraries for managing application state, such as Redux for React or Vuex for Vue.js.
Component based Architecture, frameworks like React, Vue.js, and Angular promote a component based architecture.

3. What essence do JavaScript frameworks elevate?

Performance Optimization, many frameworks include performance optimization techniques such as virtual DOM (e.g., React).
Scalability, frameworks are designed to support the development of scalable web apps that can evolve over time.
Reusability, frameworks promote a modular and component based approach to building web apps.

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

They hide away the imperative DOM mutations

Data Binding, many frameworks have data binding mechanisms that automate the synchronization of data between the model (application state) and the view.

Event Handling Abstractions, frameworks often have abstractions for event handling, making it easier to attach event listeners to DOM elements.

Cross-Browser Compatibility, frameworks abstract away the differences in JavaScript implementations across various browsers, providing a consistent API for developers.

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

The most important part is understanding how it works and what it does, just by simply using it without understanding will not benefit you in the long run. When you run into a problem and you understand what the framework does, you will be able to fix the issue