

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?

One of the benefits of direct DOM mutations over replacing HTML is to preserve the existing state of the webpage, such as user input. Another benefit is performance, whereas replacing the HTML entirely is costly to performance, direct DOM mutations are much less performance heavy.

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

JavaScript frameworks remove the noise of interacting directly with the DOM, so any kind of DOM manipulation is handled by the framework. Another thing would be browser inconsistencies, where the framework handles which browsers it can run on and you do not need to worry as much. Frameworks give cross-browser abstractions and polyfills that work consistently across different browsers and even devices.

3. What essence do JavaScript frameworks elevate?

There are a few things that are elevated in JavaScript frameworks, one would be the component architecture, where a component is a self-contained piece of code that encapsulates functionality, data and presentation logic. Another essence that is elevated would be data binding, where the data and presentation layers of an application is synchronized, so when the data changes then the presentation layer will also update in conjunction.

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

In my understanding of the question, most JavaScript frameworks achieve abstraction via the separation of logic: such as the business and presentation logic. Also another thing would be how frameworks remove the need to directly interact with the DOM, and rather have built-in methods to interact with the DOM with the logic you supply.

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

The most important part of learning a JavaScript framework is understanding why things are done as they are and how the framework is achieving it, which will in the long run make you capable of understanding why things are not working as expected.