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

I believe that when you replace the HTML every time something new is added like an element or updating an element, that can usually cause issues when it come to loading(time consuming), so on a smaller scale it may not be noticeable but if you are working on a larger project or website and the thing that may change is a checkbox then for updating that, the whole HTML is changed in order to accommodate for that change. Where with DOM mutation you can just simply update something mutates part of the HTML

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

It can abstract away , let's say event listeners - anything that is really used in order to change the state of the DOM or it can be, form submissions. Frameworks can be used to account and create abstraction for that.

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3. What essence do JavaScript frameworks elevate?

JavaScripts frameworks elevate a kind of simplification of the problem under consideration. It defines the structure of the application and the general mechanism of its operation and provides a set of general-purpose components and libraries to perform specific tasks.
JavaScript frameworks can help you transform an amorphous blob of code into a bonafide development project.

The framework is distinguished from libraries or standard user applications by inversion of control. It means that the flow of which is imposed by the framework and not by the user. It is the framework that calls and uses code in a specific way and enables a coding of highly responsive applications.

It also gives the programmer the ability to extend the individual components of the framework, if they want to grow them with the necessary additional functions. Some of the JavaScript frameworks follow the model-view-controller paradigm, designed to improve code quality and maintainability.

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

Broadly speaking, I think since JS frameworks are tools that help developers with working with JavaScript, and it is technically an abstraction written in JS.

There are various types of frameworks, and they achieve abstraction in quite different ways Like
React; it stores the applications entire DOM in memory, after a state change, looks for differences between the virtual and real DOMs and updates changes.

Some JS frameworks, they hide away the imperative DOM mutations

AngularJS - An open-source platform supporting the creation and development of web applications on one page. And **AngularJS(2) -** increases code readability, ease of conversion and gives the application structure a manageable structure.

There are many frameworks that could be listed like the ones above that achieve abstraction in many interesting ways.

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

Having learned about the JS framework, I think there is no single best JavaScript framework as they all have their own unique uses and benefits. So many people may have opinions that will vary and be different. However, with React it has several features and can help make amazing UIs in a short span of time. Therefore, it is the most popular framework. I can say that it is important to choose the right framework to choose the right framework for your Web application.