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?

Changing the DOM will update your document in actual time, when using HTML you need to reload the page in order for your changes updates.

Integration of external libraries: When you use direct DOM mutations, it becomes easier to integrate these libraries into your code. These libraries are specifically designed to work directly with the dom.
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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

listeners to handle events without having to worry about compatibility issues across different browsers.

DOM manipulation: JavaScript frameworks simplify manipulating the DOM by hiding the complex details.

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3. What essence do JavaScript frameworks elevate?

Node.js, Vue.js, Angular.js, Ember.js, and React are some of the examples of JS frameworks or runtime environments which can be used to build mobile apps, manipulate text, load content from web servers rather than browsers.

Out of the above mentioned React and Angular are the more outstanding ones and are mostly dedicated to front end development.

Frameworks elevate several essential aspects of web development allowing developers to create the below skills in your work.

Productivity
Organization
Abstraction
Performance
Maintainability
Reusability

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

Prototypes and closures are mostly used to achieve abstraction, which helps to define the core of the context of an application.

JS frameworks achieve abstraction by simplifying tasks and hiding the implementation details using higher-level APIs, conventions and patterns. They encourage modularization through encapsulation which allows developers to concentrate on component functionality without being concerned about internal workings.

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

Understanding the JS fundamentals, methods, concepts and principals. Learning JS frameworks is an ongoing journey that involves continuous practice, project-building and experimentation. It's better to have a solid basic understanding of the basic concepts of Javascript. By focusing on understanding the core concepts, you will develop the skills to adapt and effectively work with the framework and allow you to solve real-world problems and apply your knowledge in practical scenarios.