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

Any change made does not affect the whole document or page, it just affects the portion where change occurred. This means all the elements and their properties (events, focus etc) would be still intact. This would not be the case with the HTML replacement approach since everything would have to be started afresh. The latter, would in this case negatively impact the performance.

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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

1. Manual DOM manipulation - by allowing developers to work with higher-level constructs.
2. Keeping the DOM in synch with the state of the application - frameworks with reactive data-binding automatically bind the user-interface elements to the underlying data. When the data changes the frameworks update relevant to the changes.
3. Locating which parts of the DOM that need to be changed - frameworks handle the changes so that we would not need to manually look for where we aught to make the changes for updates.
4. Component life-cycle management - frameworks normally provide component lifecycle management system.
5. Event delegation - frameworks typically handle event delegation making it easier to attach event listeners to components or elements at a higher level.

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3. What essence do JavaScript frameworks elevate?

   1. Productivity
   2. Declarative programming
   3. Software management
   4. Abstraction of complex operations.

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

They hide away the imperative DOM mutations

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

It is understanding the principles and concepts they operate from.