DWA_07.4 Knowledge Check_DWA7

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1. Which were the three best abstractions, and why?

- createBookPreview: This function encapsulates the logic for creating a book preview element based on the book object. It abstracts away the details of the HTML structure and provides a clear interface for generating book previews.

- optionsFragment: This function generates the HTML options for a select element based on a given object of items. It creates the default option and iterates over the items to create individual option elements. This abstraction helps in generating consistent and reusable select options.

- setThemeBasedOnColorScheme: This function determines the user's color scheme preference and sets the appropriate theme for the website. It abstracts away the implementation details of checking the color scheme and setting CSS variables.

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2. Which were the three worst abstractions, and why?

- Search Functionality: The search functionality implemented in the code could be simplified and abstracted into separate functions. Breaking down the search logic into smaller, reusable functions can improve code readability and maintainability.
- Show more books button: The show more books button code is scattered all over and also is not reusable and it is going to be difficult to maintain it if the code base gets bigger. By the way, it is already difficult to maintain or look for it at the moment because it's hard finding it as it is scattered all over.

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3. How can The three worst abstractions be improved via SOLID principles.

- The search functionality: I can remove the filter functionality from the search function and create a new filter function outside of the search function and just call it. This way if I want to use only the filter functionality then I can access it.
- Show more books button: I can turn the show more button code into a function so that I can be able to maintain it easily and also be able to reuse it.

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