

# DWA\_07.4 Knowledge Check\_DWA7

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

1) createBookPreview Function:

This function abstracts the creation of book preview elements, encapsulating the HTML structure and data binding for book previews.

2) createGenreOptions and createAuthorOptions Functions:

These functions abstract the creation of genre and author select options, promoting modularity and reusability.

3) 'Event handlers'Object:

This object encapsulates event handlers, making the code more organized and maintainable.

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

1) Set theme Function:

While it correctly sets the theme based on user preferences, it also directly manipulates the DOM by accessing elements. This violates the Single Responsibility Principle.

2) Showmore Function:

This function handles creating and appending more book preview elements to the DOM, but it also increments the page variable. This violates the Single Responsibility Principle.

3) handleItemClick Function:

This function is responsible for handling item clicks and displaying book details but also directly manipulates the DOM. This violates the Single Responsibility Principle.

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

Set theme Function:

Apply the Single Responsibility Principle (SRP) by splitting the logic for determining the theme (e.g., based on user preferences) into a separate function or class. Then, create another function or class responsible for setting the theme based on the result of the theme determination logic.

Showmore Function:

Create a dedicated class or object that manages the page state (page variable) and handles pagination.

handleItemClick Function:

Create separate classes or objects for handling item clicks and displaying book details. The DOM manipulation should be encapsulated within these classes or objects. This separation adheres to SRP and improves code maintainability.

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