PUI Assignment 6B
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Reflection

Challenges and bugs I encountered

When completing assignment 6B, one bug I encountered was cloning HTML nodes that could be populated by elements in the shopping cart. Although I ultimately couldn't overcome this bug with an elegant, programmatic solution, I tried to write a function that would create a new child that can be populated by an extant JavaScript function, then append this element to an earlier node. I included my progress on this problem at the bottom of my JavaScript page and commented out the code. I worked around this bug was by hardcoding HTML elements that could be populated. Therefore, my shopping cart can only display a fixed amount of items. Another bug that I encountered was a byproduct of the "delete" function. When the "Delete" element was pressed, the number next to the Basket would go to "0"; when the page was refreshed, however, it would increment to "1" even though there were not items in the basket. The reason this occurred is because my initial displayCart() function from assignment 6A would increment the basket count if the sessionStorage element had already been created but was less than 1. Since the user was deleting the number of items in basket count to less than one and the variable already existed, my code forced the basket to display that there was an item in it, even though there wasn't.The way that I overcame this was by having JavaScript count the number of elements in the localStorage list and display that. This way, I was getting rid of two elements (sessionStorage and localStorage) that were counting the same thing (the number of items in the cart).

Concepts that I learned in this assignment

1. sessionStorage
For assignment 6A, I used sessionStorage to count the number of times a user clicked the "Add To Cart" button, which would update the number beside the word "Basket". sessionStorage is useful for keeping information until a window is closed.

2. localStorage
For assignment 6B, I used localStorage to push elements across different pages. I appended items that a user selected into an array, pushed that array to localStorage, and retrieved that information on a separate page.

3. localStorage.setItem("", JSON.stringify())
Building from my learning of the localStorage concept, I learned that elements in localStorage must be stored as a string. This command uses JSON to stringify an element (in my case, an array) and name that element in localStorage.

4. JSON.parse(localStorage.getItem(""))
Building from concept 3, I used this function to recall elements from local storage. This command uses JSON to parse through localStorage string. In my case, I recalled an array, then populated my HTML with elements from that array.

5. Updating elements of the HTML DOM with JavaScript
Before this assignment, I had a vague grasp that HTML and CSS could create a static webpage, whereas JavaScript made a page interactive. However, I wasn't aware of the specific tasks one could complete with JavaScript, and I wasn't aware of how this was completed. However, after this assignment, I have a better understanding of how JavaScript is used to manipulate objects in the DOM by identifying these objects by class, ID, or some other identifying factor.