

Assignment 6

Thursday, April 8, 2021 3:00 PM

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Programming Concepts

1. MVC
 - a. I had to come up with the "model" to represent the different items and their options with each of the properties.
 - b. The view was generally the HTML and CSS code
 - c. The controllers were things like the script for the cart
2. Event-Based Programming
 - a. I had to think in terms of the events that would be fired on the page, e.g. when the user changed an amount I would have to change the calculated total before it is added to a cart.
3. Map/Reduce
 - a. I had to use the Map/Reduce paradigm a few times in order to calculate things like how many donuts would fit into the different sized boxes and to count the number of units of each box.
4. Serialization/Deserialization
 - a. I had to serialize/deserialize the information to JSON in order to store it in localStorage
5. Persistence
 - a. I had to write the cart such that it would always reload and save to persistent storage, and take that storage as the one true source that needed to be updated/read from.

Bugs

Finding the right level for hover

- I had some difficulty trying to find the right level of element to assign a hover event to so that the descriptions would update as you interact with the form. I realized that I had to assign it to a higher level element instead of a more specific one.

Shifting to a proper model

- In 6a, I did not use a proper model and just used the IDs of elements to perform changes in the description/counts. This was insufficient and disjoint information that I could not use to transfer to the cart page, so I had to rewrite a proper model and refactor the code that would use this model information.

Empty cart on start

- When I deployed the website, it would not allow me to save to the cart, because it was unable to retrieve the previous cart information and would return undefined. This was not a problem in development because I had already saved something previously. I had to make the cart re-initialize from empty if there was no initial cart.