PUI HW5 Write-up

By Rich Zhu

Low & High-Fidelity Prototypes

a. Low-Fidelity Prototype

The low-fidelity and high-fidelity prototype of the cart page is included in the "Shopping Cart Page" folder in the "assignment_5" folder. The new cart page displays the items selected with more detailed info, that includes the product name, shape, quantity, color, and price. The reason why the information is more precise is because such info is required when the user adds items to the cart. Furthermore, I added the delete button next to the item in the cart page so that users can delete items in the cart and gain more freedom of control. Above the checkout button, I list the subtotal of all the items so that users will have a clear understanding of the total price before purchasing.

b. High-Fidelity Prototype

The high-fidelity prototype is created by modifying the original sketch document directly. My mockup changed so that it corresponds to my new sketch. Items are listed in the order the user added them to the cart. The item image is on the left with a detailed product info on the right. The delete button is also on the right and the subtotal and checkout button is on the bottom-right corner. The navigation bar and other elements remain consistent.

Web Prototypes w/JavaScript

a. (i) The page updates when the user clicks on the color radio button and the image will change depending on the color the user chooses. However, the image will not change when selecting different shapes because it is hard to find pillows of various shapes and the same functionality can be achieved similarly through changing based on color.
(ii) Users can add items to cart by clicking the "Add to cart" button and the items will be added, and the user will be redirected to the cart page automatically. Furthermore, on the top right corner, the number of items in the cart is updated.
(iii) Users can delete items from the cart by clicking on the "Delete" button in the cart page.

b. All files from assignment 4 is imported and hw5 is built on top of hw4.

c. The new html file is "cart.html".

d. Each page is rendered without error and I checked it on the HTML validator. Furthermore, code is indented based on structure and commented appropriately.

e. CSS file is also well-formatted, validated, and has necessary comments.

f. Interactions should work without error and no errors are reported in the Google Chrome console. The code is also indented appropriately and comments are provided so that reader can understand how the features are implemented.

Reflection:

a. Challenges and Bugs Encountered

I have encountered a variety of bugs in the process and learning how to debug really improves my skills and understanding of JavaScript. I had troubles finding documents through jQuery, casting strings to Int and performing string concatenation, injecting html into the original document through JavaScript, finding the right data structure for keep

tracking of items and storing items in the cart, connecting JavaScript with HTML, and many more. There were also cases where items were not updated correctly, and certain pieces of code were not executed.

b. Overcoming Challenges

I overcame the challenges mostly through Google, looking at JavaScript documentation, and using console.log() to print the current status of the program to see if the code performed the way I expected it to. Every time that I implemented a new feature, I would test it and also make sure that I fully understood how the code accomplished that feature. Using Google Inspector for debugging was extremely effective and browsing information on Stack overflow and seeing how other people tackle similar problems were incredibly helpful.