

One challenge I had while designing and programming my pillow website was indicating and storing the selection of a distinct color and material for a pillow. Originally, my function could only tell what the user last clicked, which could be either a color OR a material. So, when I stored the user's value in my cart, it only saved one or the other. I modified my function so that it differentiated between my materials with a "matbutton" class and my colors with a "colbutton" class, and stored information from both.

Another challenge I came across was "reading" each item and its information (color, material, and quantity) from my cart and displaying them neatly through html. I was perplexed at first, but a TA introduced me to innerhtml, where I can include html code in my javascript function. By using innerhtml, I can loop through each of the items in my cart, read relevant information, add the item to my array, and display its information identically on my shopping cart page.

In this assignment, I was able to learn and apply several different programming concepts.

- 1) **Objects** -- Each pillow that I added to my cart was an object, with three distinct properties - color, material, and quantity. This is crucial for being able to tell what type of pillow the user is adding to their cart- do they want a "Rainy Day" color, or a "Duck Down" material?
- 2) **Arrays** -- Since the user is often adding more than just one pillow into their cart, it is important for me to have an array, or a list of objects. By using an array for the pillows that I add to my cart, I can also loop through and find which objects and their properties to display or remove.
- 3) **innerHTML** -- By using ids for my paragraphs and divs, I was able to change the content of my html page in my javascript file. I used innerHTML to display the pillows and their properties (color, material, and quantity) in my cartArray, as well as the subtotal and total price of the pillows in the carts, since they are dependent on the cartArray length.
- 4) **Event target** -- The event target made it much easier for my website to know what properties to store for each pillow selection and to know which pillow in my array the user wants to remove. By logging the value of a click event, I was able to pass the information onto the color and material variables, which then get stored in my cart, and I was able to remove the correct pillow from my cart.
- 5) **Parent Node** -- Lastly, I learned how to apply and use parent nodes and childs. Since my items are nested in different divs in html, I need to be able to sort through their divs and remove the correct section from my cart. I used parent

nodes to find the right div where the item I wanted to remove rested, and I used the removeChild function to remove the correct one.