## **Challenges & Bugs**

One of the preliminary (and really silly) mistakes I made was forgetting to include the JavaScript file at the top of my HTML page – I spent a lot of time trying to fix the functions and the body of my code – googled, tried our different variations – only to realize that it was because of the silly mistake I made! In the future, I will be sure to check the most "basic" elements of code (eg. Including relevant files) – these are things that are easy to check so that I don't waste time doing code tracing because of a silly error like this.

It took me some time to figure out how local storage worked. It was challenging trying to figure out how to store a user's choices and reflect them in the shopping cart and other relevant fields. I had to go back to my original code and add IDs to some elements so that I could reference and change them with localStorage.getItem. At face value, it wasn't clear to me that I had to initialize a variable (key) and values and I was confused as to what "item to get" with the localStorage.getItem function. However, after some Googling and looking at lab notes, I managed to figure it out. The concept of keys and values are definitely really helpful – I could store so much useful information about a user's choice (eg. Quantity, price, glazing) in a single key. This made it so much easier for me to reference the relevant fields and information when I had to reflect them in the shopping cart.

I also found that using the Console in Chrome was really helpful in debugging my code. Using the Console to check the values that were stored in local storage helped me pinpoint whether the right values were referenced and updated accordingly.

## **Programming Concepts**

- 1. It was really interesting to see how HTML, CSS and JavaScript had their own unique function and how they came together to create a functional and interactive website. We've learned about it in class, but I could understand the concept a lot better once I tried my hand at these three languages. HTML provides the general and basic structure of websites; CSS is used to modify the aesthetics and JavaScript controls the behavior of the elements in the website. Getting a good understanding and foundation of this general structure (and through trying it out myself) is really important if I want to build websites in the future.
- 2. The concept of local storage was something I've never encountered in other programming languages that I've worked with before. It was pretty cool seeing how the information could be stored and reaccessed even in a different page. I used this when I had to remember the user's choices in the specific product page and reflect their choices in the shopping cart. The concept of keys and values also proved really helpful. In storing relevant information.
- 3. Being able to tag elements to a unique ID was helpful and in almost all cases, necessary, especially when I had to change that value with whatever was stored in local storage. I didn't have to have IDs for every element previously (I could just rely on classes) when doing the HTML and CSS portions, but with JavaScript I needed IDs to reference specific elements.

- 4. Commenting code is really important! Because I did a portion of this assignment before spring break and a portion after, when I picked it up from where I left off after spring break, it took me a while to read through my code and understand what I was trying to do because I did not have comprehensive comments. I also accidentally changed some (right) code to an incorrect code because I misinterpreted what the line of code meant.
- 5. Getting familiar with HTML Event attributes and writing the relevant function codes In JavaScript was something new as well. I familiarized myself with the events available like onclick and onload and wrote corresponding functions in the JavaScript file so that HTML and JavaScript could work cohesively.