Assignment 6 – Adding Functionality to a Website with JavaScript
05-430 – Programming Usable Interfaces
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Reflection

Programming Bugs & Challenges

One of the first issues I had with my website prototype was its inconsistent layout. I am much more used to programming with libraries such as Bootstrap that takes care of the layout of the grid system for me. Without Bootstrap, a lot of the elements on my page were positioned relatively with customized margins and paddings. When the window size changes, the elements would go everywhere since they are not positioned according to the grid. To make my website more consistent and responsive, I implemented a simple grid system myself and went back to change all my previous code to fit the new method. This helped me tremendously when it came to format my pages, thus allowing users to see the content and options better.

Using LocalStorage was another big challenge for me. I kept forgetting to use JSON parser to parse the objects stored, which made it hard for me to retrieve the values from the storage. Moreover, I had trouble templating the items in the shopping cart page. It was easy to simply duplicate or add items to the page, but I had trouble customizing the user selected options and images based on these selections. To overcome this issue, I manually changed the ids of most of the customizable fields based on a common object name in the storage. I was then able to change these images and texts before I insert the template into the page.

Lastly, calculating and updating prices was a huge challenge for me. I wanted to make the shopping cart page as accurate and user friendly as possible, and one of the must haves to make this happen was to update prices based on quantities. This was hard since I had to simultaneously update individual item price, as well as the subtotal of the entire shopping cart. Initially, every templated item had the same id for the price elements so I couldn’t update them individually. Eventually I overcomer this issue by looping through a class to find the subtotal of every item price and change individual ids before inserting them into the document to allow for individual pricing changes.

Design Changes

Bakeries are warm and cozy places for people to find delicious and hand-crafted food for themselves and families. I aim to provide this warm and feel-like-home kind of feeling to the visitors to the Bun Bun Bake Shop. To do this, I used warm highlight colors in contrast with the minimalistic, black-and-white overall design of the site, to bring out the home feel of the bakery.

My original design was implanted based on a grid system, but I wasn't able to divide the page with horizontal or vertical lines since the elements were not really positioned on a grid. After implanting a simple grid system, I was able to add some horizontal and vertical dividers to make the page more consistent and easier for the user to find the section that they are looking for, especially on the shopping for producs page. I also customized some buttons with distinct colors to help users identify the system state. I used green for In Stock and red for Delete, for example. I used white background and black texts for most of the descriptions on the website, while using colored fonts to highlight actionable items and links, including yellow, light blue, and grass green.

I also tried to implement an aesthetic and minimalistic design. The site does not have any distracting information in order to keep the core functionalities straight to the point. The top navigation bar provides the users direct access to what they are looking for and the side filter on the products page provides real-time filtering for the users. Moreover, I included as many hand-picked photos of specific offerings to give the customers the best online shopping experience possible. As the user select different options, the images and texts on the product detail page changes accordingly, as well as the shopping cart page. This way, users should be able to look at the pictures and find what they are looking for without having to read line by line of the item descriptions.