05-430 PUI

Shopping Website

Hi-fi Prototype

(HW 6A & 6B)

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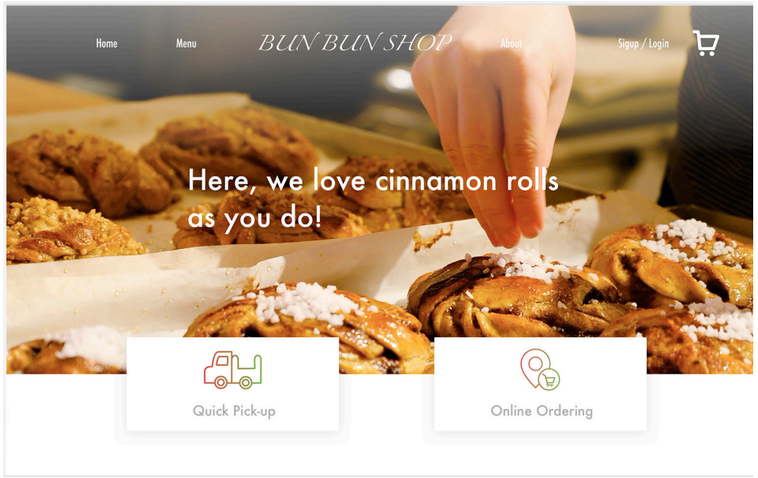
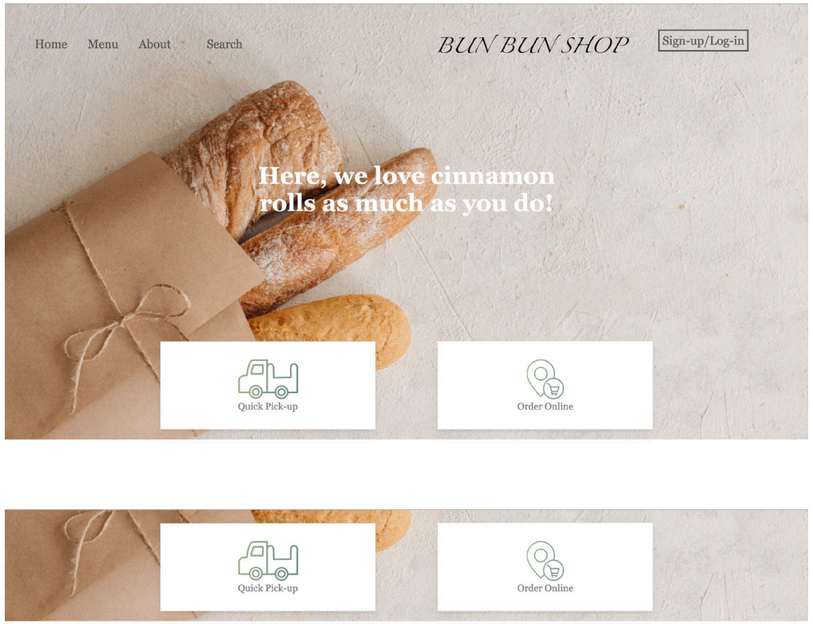
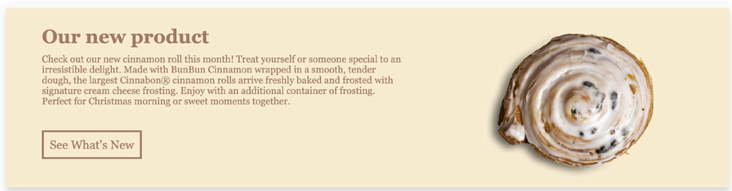
New Changes

1. Home Page







Last time show-and-tell was very helpful for me to make improvements to my website design after seeing other people's work.

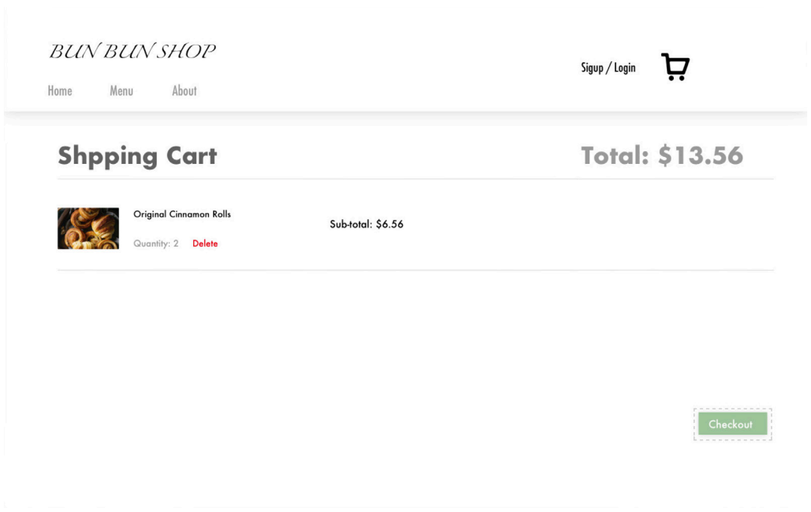
The first change I made to the homepage is the banner picture. My previous one was too vibrant in colors so that the users might find it hard to find the navigation bar on the top. In order to solve that, I found a picture with a more clean background, making the words pop up more.

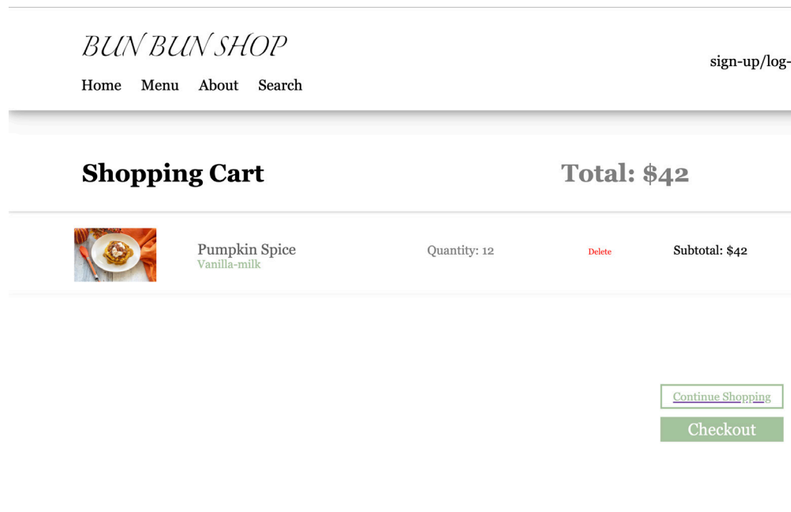
The second change I made to the homepage is adding more content to the page such as new product. In this way, this website will look more realistic and wholesome.

Apart from that, I also tried to use javascript to make changes to the style when the user interact with the page. For example, when the user mouseover one block, they can see the smooth changes of the drop shadow. Such minute changes not only can make it more visually appealing, but also bring enough feedback to the users after they interact with something on the page.

New Changes

2. Shopping Cart





The change I made to the shopping cart page is the button of "continue shopping". In my previous version, as there is no such button, the users have to click the menu on the top navigation bar in order to select another product. I found it was not intuitive and the users needed to move the mouse all the way to the top, which was also inefficient. In order to change that, I added a "continue shopping" button right above the "checkout". It was made obvious through the border and big font. The background of this button also makes it different enough from the "checkout" button so that the users will not make a mistake.

In addition, I also add another feature to this page. When the user click on the checkout, the items in the cart will disappear.

Reflection

During the whole process of programming, I encountered a lot of challenges. Although I spent a lot of time overcoming these challenges, I feel it is worth it not only in terms of improving my programming skills but also making me paying more attention to the usability of my design.

First of all, the output of getElementsBy... is confusing to me at first. For example, the output of getElementsByClassName is an array instead of a single element. In order to access to certain elements of that class name, I need to access certain index of that array. As I didn't realize that during the initial stage, I spent a lot of time debugging.

Second of all, as there are a lot of information need to be tracked, I need to constantly log the variables to the console to make sure everything is right. I need to check everytime I wrote several lines of code, which makes the whole programming process very slow. In addition, as there are a lot of conditional statements in my code, which makes annotating my code very essential. If I don't annotate certain part, I will probably forget the function of that part when I continue working on it tomorrow.

Last but not least, coding the website gives me another eye to look at my original design. A simple feature implemented in invision can take hundreds of lines of code to achieve the same effect. Through coding the website, I start to pay more attention to the details of my website and to realize the pitfalls of my original design. As a coder, I need to constantly go back and forth between pages to check whether it works in the desired way. During the process of switching between pages, I start to realize in what ways can the transition be intuitive and efficient. If it is hard for me to use it, it will probably be even harder for the users to use it.

Programming concepts

1. Model-View-Control model. I used localStorage as my model (database), the user input as the control, and a display function to display all of the information on the web page as the view. Every time the user makes some changes on the web page, I need to update the localStorage. Based on the updated localStorage, I will call the display function to update everything shown on the page again.

2. The data structure of the output of getElementsByClassName vs. getElementById. For example, when I use getElementsByClassName to get the items with the same class name of 'item_in_cart', I actually get an array. However, if I use getElementById, I will get a single element.

3. Use object constructors to create object with same properties. I use a object constructors to create objects of all of the items which store the quantity, name, glazing, price for each. It is easy to get access to certain properties of certain items later.

4. Local Storage. If something is stored in local storage by using JSON, it will be stored as a form of an object, which is easier to retrieve.

5. Javascript can create HTML element and put it into HTML files. For example, I use javascript to create a new div when the user add a new item to the cart through createElement. Then, I use append methods to add it to the HTML file.