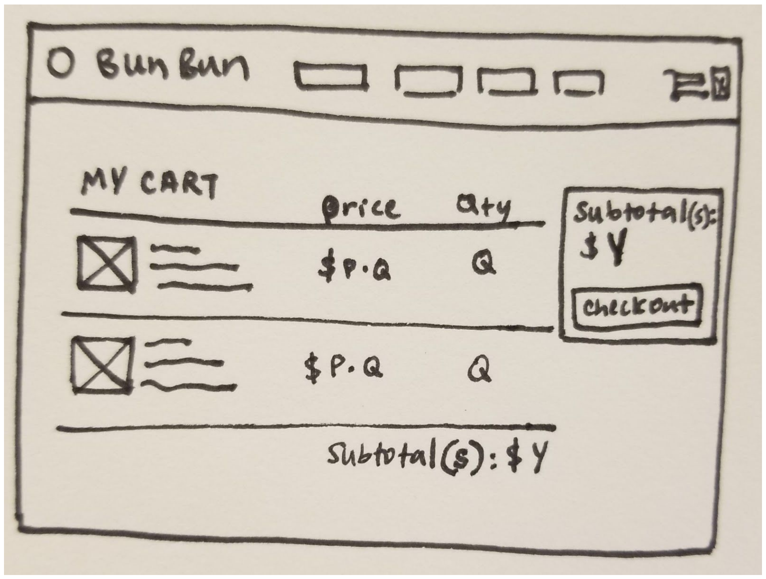
Nawon Choi PUI Assignment 6

Section A

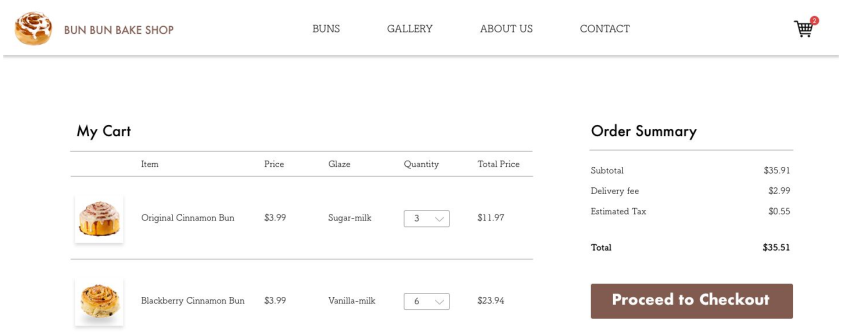
1a. Low-fidelity prototype:



My sketch for the shopping cart page has changed since its last iteration based on additional existing online shopping sites that I observed. I noticed that on Amazon.com, the shopping cart items table only has four columns. These four columns include the product photo, the product name and details, the price, and the quantity. I also realized through this observation that the "price" column displays the total price of the item, meaning the unit price multiplied by the quantity. I decided to include this detail into my prototype as well. Another design decision I made was to include the subtotal in two different places on the screen. One is displayed below the shopping cart items table, and another is shown in its own column on the right. I decided to follow Amazon's example by simplifying my table and reducing the number of details on what was previously the "order summary" section on the right in previous iterations. I felt that this would reduce the cognitive load on the user and result in an overall better user experience.

1b. High-fidelity prototype:

Previous iteration:



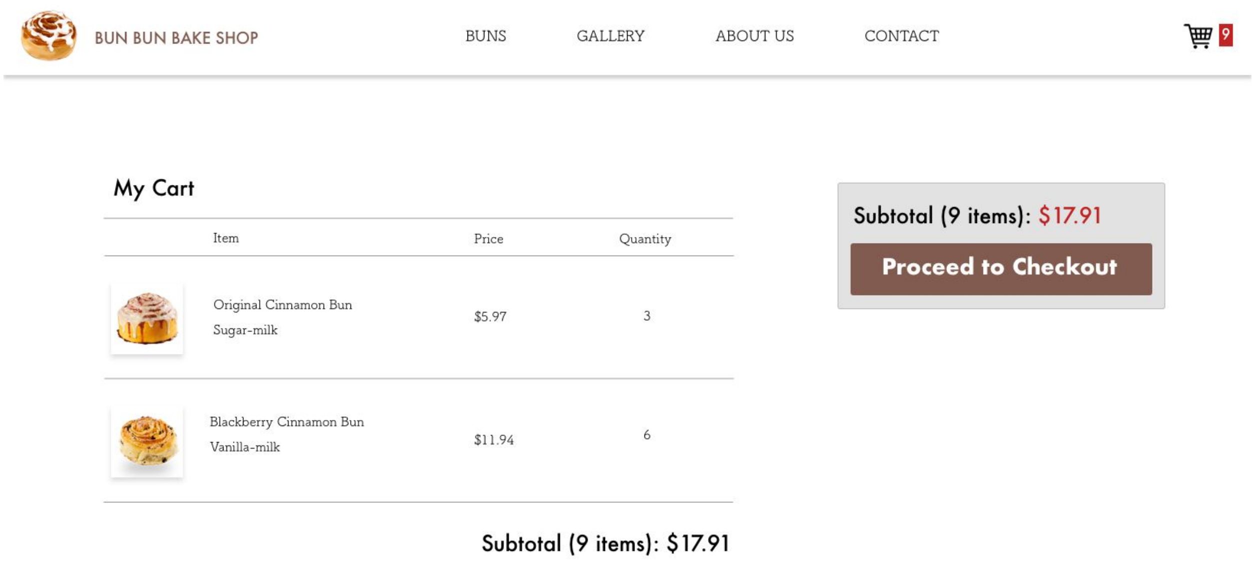
My Cart

	Item	Price	Glaze	Quantity	Total Price
	Original Cinnamon Bun	$3.99	Sugar-milk	3	$11.97
	Blackberry Cinnamon Bun	$3.99	Vanilla-milk	6	$23.94

Order Summary

Subtotal	$35.91
Delivery fee	$2.99
Estimated Tax	$0.55
Total	**$35.51**

Second iteration:



My Cart

	Item	Price	Quantity
	Original Cinnamon Bun Sugar-milk	$5.97	3
	Blackberry Cinnamon Bun Vanilla-milk	$11.94	6

Subtotal (9 items): $17.91

Subtotal (9 items): $17.91

For this second iteration of the shopping cart page mock-up, I decided to edit the "My Cart" table to reflect the changes that I made on the low-fidelity prototype. I also decided to change the way the cart icon in the upper right corner displayed the number of items in the cart. I put it off to the side in a rectangle, instead of a small circle in the corner of the cart. I did this so that it would be larger and easier to read, and would also draw users' attention with a larger block of red in the corner of the screen. I also decided to make the subtotal price text in the right column red, to focus users' attention on the price. The subtotal itself is bolded to place it higher in the visual hierarchy. Lastly, the item at the highest in visual hierarchy is the "Proceed to Checkout" button, which is the largest and boldest font, as this is the action path that I want users to take.

Writing should use appropriate style and clearly convey the writer's concepts.
Writing should demonstrate reflection on actual events and analyze these events to draw appropriate conclusions.

3. Challenges/Bugs encountered:

One bug that I faced was regarding item removal from the cart. I was facing a bug where I would click the "x", which removed the item from view in the cart, but when I refreshed the page, the item list would show the item that I had just removed, and instead remove the last item added from the view.

The biggest help in overcoming this bug were print statements. I was trying to execute this function by first retrieving the cart from local storage, then removing the item in the cart array by using the .splice method. I placed console.log() statements in between each line of code to show what was going on internally. By doing so, I was able to see that the error had to do with the line of code where I used the splice function. After observing the print logs, I saw that internally, it was the last item added that was always being removed, even if I had clicked on a different item in the list. I realized that I had correctly programmed the Controller to respond to the clicking of the "x" by removing the item from the View, but failed to correctly modify the Model to remove the selected item from the cart array. I realized that I was incorrectly using an additional method (.inArray()) within the .splice() method to find the index of the row. I fixed this bug by creating a new variable called currRow to find the index, then inserted this variable into .splice to remove the correct item from the array.

Another challenge I faced was adding an item to the cart when clicking the "Add to cart" button. I was unsure of how to identify which type of roll was being viewed on the detail page. I initially tried to solve this by somehow tracking the type of roll selected on the product list page, but this was complicated as the javascript would refresh every time a new page was loaded.

Instead, I fixed this bug by adding a “class” attribute named “roll” and an “id” attribute named the corresponding type of roll to the main product image of each detail page. Then when the user clicks “add to cart”, the javascript would collect the id name of the image and save it as the type of roll, which would then be added to the cart.

External Resources Used:

- W3schools.com
- jquery.com
- stackoverflow.com