Molly Vierhile
Assignment 6

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PUI

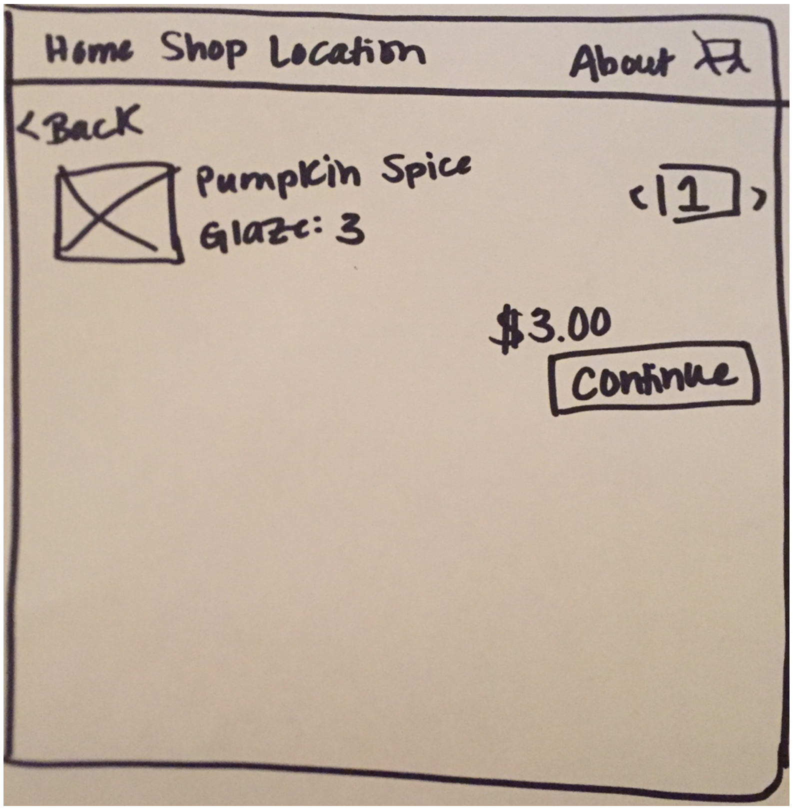
Link to project in GitHub: https://github.com/mollyvierhile/Bun-Bun-Bake-Shop

Link to Homework 5 (HTML/CSS) in GitHub: https://github.com/mollyvierhile/PUI-Homework-5/invitations

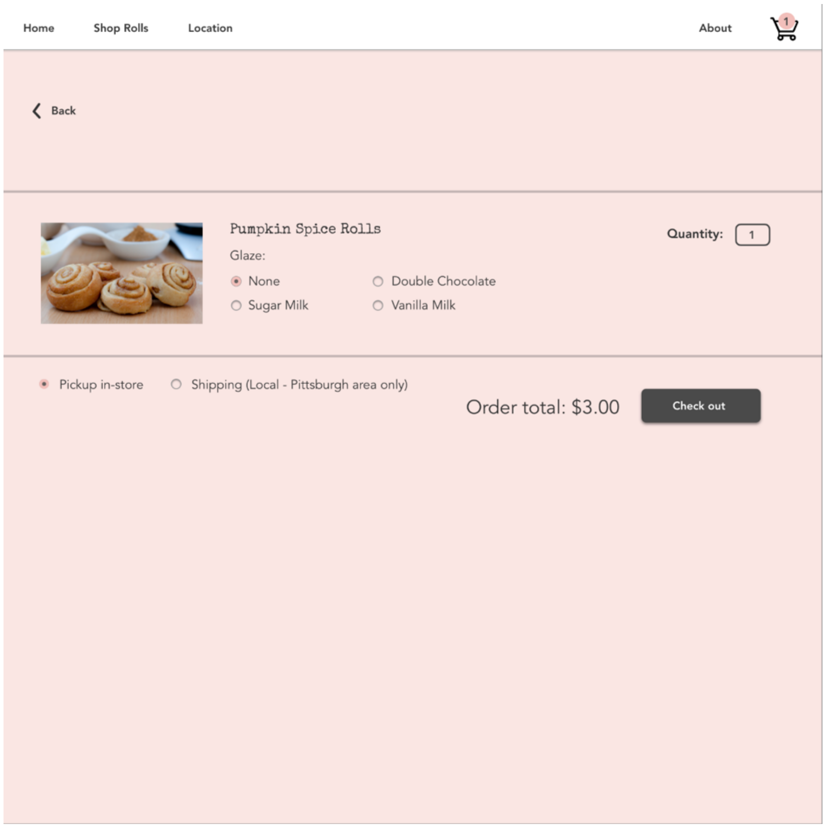
Invision prototype:
https://projects.invisionapp.com/d/main#/console/15373874/319554134/preview

Please note: I already created a shopping cart page and low-fidelity/high-fidelity prototypes for it in Assignments 2 and 3. You can see them in my Invision prototype at the link above. I did not code the HTML/CSS/Javascript for my cart page until this assignment. I think there was a bit of confusion around this on Piazza, so to stay safe, I prototyped another page for customers to enter credit card information, but I did not build it with HTML/CSS/Javascript. This additional page is within my Invision prototype linked above.

Low-Fidelity Cart Prototype:



High Fidelity Cart Prototype:



Pumpkin Spice Rolls

Glaze:

● None ○ Double Chocolate

○ Sugar Milk ○ Vanilla Milk

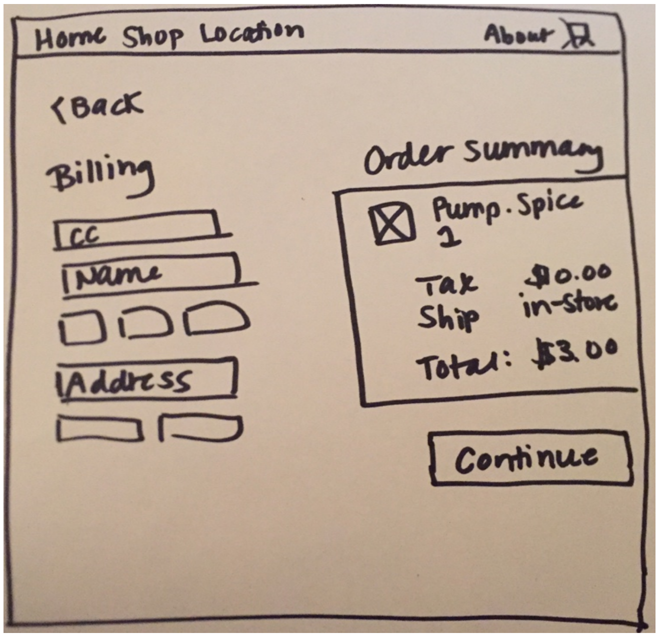
Quantity: 1

● Pickup in-store ○ Shipping (Local - Pittsburgh area only)

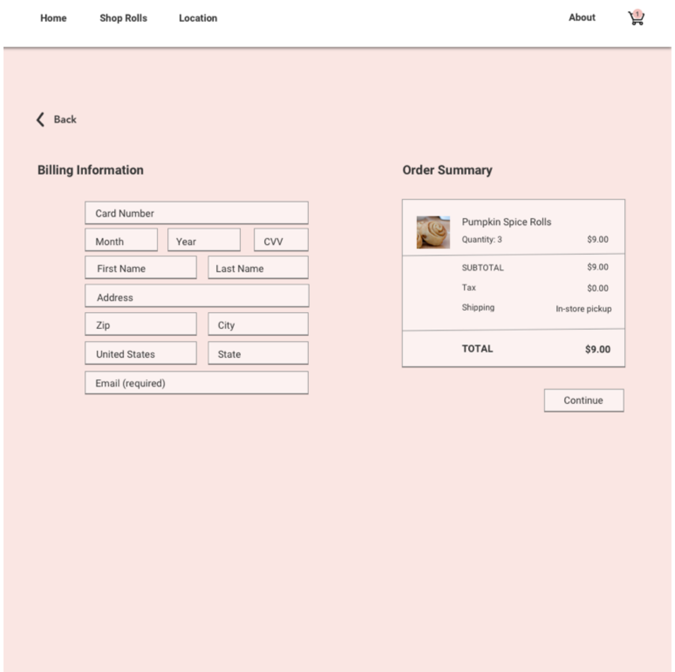
Order total: $3.00

This was the cart that I created during Assignment 3. I truly liked the design, however, it changed a bit once I tried implementing it. I decided that giving uses the option to manually change quantity in the cart was a bit bold for my limited knowledge in Javascript. I also removed the option for users to change glaze type in the cart for this same reason – I wanted to keep the Javascript simple and the cart clean and easy to use. It was also missing a delete button, which I learned from Gaby in the in-lab critique exercise. I incorporated these changes into my Javascript/HTML/CSS website.

Low-Fidelity Other Page (Billing/Credit Card Information):



High-Fidelity Other Page (Billing/Credit Card Information):



I created this high-fidelity mockup because TA Kristen posted in Piazza saying that if we designed a cart page in Assignment 3, we should design an additional, other page for this assignment, however, we do not need to built it out with JS/HTML/CSS. Therefore, I decided to make the next step in the checkout process: a billing/credit card entry page. I designed it in this way based on several ecommerce examples and my heuristic evaluations of how well their sites were working. I wanted to keep it as minimalistic as possible.

Reflection:

Adding JavaScript to my Bun Bun Bake Shop site was an incredibly challenging endeavor that took me roughly 60 hours over the course of 7 days to complete. Coming from a non-programming background, I have very minimal understanding of JavaScript. Although I faced several challenges throughout the process, 3 coding tasks were particularly tricky. These included:

1. Storing bun type, quantity, and glaze in local storage

   I was able to solve this by using the JSON.stringify function, which essentially stores item details as strings. I made drop down options into values which I coded into JS functions, allowing the user to make dynamic choices for a variety of different buns, icings, and quantities.
2. Displaying cart items in the cart in an organized manner

   I faced great challenges when trying to inject items from the cart into a predefined HTML table in my shoppingcart.html file. Moreover, I could not figure out how to display the string data in a pleasant manner. I ended up concatenating and injecting an HTML string into the Javascript code under totalItem. After much debugging, it worked – rendering an ordered list of cart items in a table.
3. Deleting items from the cart (this was the most challenging task)

   Deleting items from the cart proved to be the most challenging task of all, namely because I wanted to create an onclick function with a delete button, but due to my HTML injection, the entire table was sensitive to a user's click and deleted itself! I had to go into the DOM and figure out the "del" button's parent node, making that the target onclick. I also had to focus on scope for this part of the process and kept running into bugs because my code was not scoped properly.

I thought that YouTube tutorials, lab slides, and Stack Overflow would suffice for this assignment, but they did not. I particularly had to lean on software engineer friends in the SF Bay Area to ensure that I was moving in the right direction (naming variables and functions correctly) and to help me debug my code. This task was challenging, and my final product unfortunately did not perfectly match my Invision prototype. I tried to match them as best I could, but ultimately removed certain features (like directly inputting amount in the cart) to make coding functions and variables easier for myself.

Albeit frustrating and difficult, this homework assignment was a learning experience, and I know much more about Javascript now after having applied it to my site. I also gained much respect for programmers and software developers who face these issues on a daily basis.

Although my Bun Bun site does not match my prototype perfectly, it works – and coming from barely any coding background, I am incredibly proud of the work I did.