

Assignment 5 – Web HTML and CSS Prototypes

Link to website: <https://mlu4.github.io/homework5/>

Link to source code: <https://github.com/mlu4/homework5>

Heuristic Evaluation

Bug #1

Using Nielsen's Heuristics to evaluate the previous iteration of my design, I found flaws in my prototype that violated certain UI guidelines. If the user navigates to the product details page for any of the items, there is a note under the "Add to Cart" button that indicates whether delivery is available to the user's location. The user has the ability to change their delivery location from the link next to this text; however, the user is presented with a locator in the navigation bar that allows them to change their current location as well. This redundancy fails to adhere to Nielsen's consistency and standards heuristic, since the two features look different but serve the same functionality, which may cause confusion for users. Users might think that they need to reset their delivery location whenever they are on the product detail page. To resolve this issue for my web prototype, I omitted the option to change their location on the details page and kept the locator in the navigation bar as the only place the user can set their location.

Bug #2

The second bug I caught in my interactive prototype using Nielsen's Heuristics is present on the "checkout" page, violating the match between system and the real world heuristic. I originally had input fields to prompt the user to add their delivery address information during checkout. However, there was no way for the customer to enter their payment information, which is a critical component of the online ordering process. This causes a mismatch between the system and the real world process of ordering. To fix this problem, I added input fields for the customer's payment information as well.

Bug #3

The third bug I caught in my previous design violated Nielsen's recognition rather than recall and error prevention heuristics. On the "checkout" page, the customer should be able to see the details of their purchase during the last step of the ordering process without having to remember which items are in their cart. This would alleviate the user's memory load and also minimize the chance of making a purchase error. I addressed this UI bug by showing the customer's cart details on the checkout page along with their delivery and payment information.

Bug #4

Another bug violating the error prevention heuristic on the “checkout” page pertains to the requirement of input fields. In order to place an order, users must fill out their personal information along with their shipping/payment details. However, none of these input fields have an indication as to whether or not they are required; therefore, some users may choose not to disclose information or miss an input field that is necessary for placing the order. I solved this problem in my web prototype by adding red asterisks next to required labels, capitalizing on users’ familiarity with the color and symbol as an indication of “mandatory” from their encounters with other online forms.

Bug #5

The last design change I made as a result of my heuristic evaluation was motivated by Nielsen’s recognition vs. recall heuristic on the “product detail” page. On many competitive online purchasing platforms, the product detail page for a particular item will display similar products below the item details. This allows customers to easily browse or add more items to their cart without having to navigate back to the product browsing page or remember what other products are offered. To fix this problem, I implemented a section after the product details to display the other cinnamon bun flavors the bakery sells.

Challenges

One of the biggest challenges I encountered throughout this process was translating the layout of my elements from Figma to HTML and maintaining a proper hierarchical structure. The process of implementing a web prototype required a significant amount of thought to be put into nesting the components in a way that achieved the hierarchy of content I originally designed. To create this hierarchy, I found it easiest to use divs to arrange different sections of my content and group tags together. Instead of using the absolute positioning units provided by Figma to format these divs, I chose to utilize flexbox and grid layouts. Flexbox and grid allowed me to easily change the flow direction of elements, align elements with one another and with respect to the page, and control the spacing between elements. These layout models allowed for better flow between my elements, as well as across different pages of my website.

Another obstacle I frequently encountered while creating my web prototype was applying different styling to elements of the same tag. Since CSS selectors control the style for every element with that selector, this posed a problem, for example, when I wanted one button to look different from another. In order to combat this issue, I used different class and id names to enable unique styling and formatting for specific elements. However, since I used many divs with different classes and ids to better organize my content, targeting the correct element after being nested within multiple divs and classes/ids was another challenge. Often, I would use the parent container of an element as the CSS selector but noticed it was not specific enough to locate the particular element I intended to style. It took many attempts to determine the right CSS combinators needed to narrow down the specificity of my selectors.

Brand Identity

As a local store, I intended for the design of Bun Bun Bake Shop's website to evoke feelings of comfort and familiarity through the use of color, typography, and graphics. I chose a calming pastel green as a common accent color throughout the website, contrasting with a dark brown color that I used primarily for text. The use of green, in particular, stems from color psychology theories that people associate green with "natural" and "healthy." Although cinnamon buns are not necessarily considered healthy, this color pattern could persuade health-conscious customers to feel more inclined to make a purchase.

I took advantage of typography to help foster my client's brand identity by sticking with clean and simple typefaces throughout the website. Only three fonts are used in the main section of the website—Oswald, Roboto, and Bitter—with Oswald used for large, important headings, Roboto for smaller headings, and Bitter for body text. I based these font decisions on the sentiments that these typefaces convey according to font psychology. Thick sans-serif fonts tend to create a friendly, inviting feel, while thin serif fonts give off a classical and elegant impression. This perception is what I would like customers to associate with a local bakery like Bun Bun Bake Shop through their website.

I also leveraged imagery to shape the brand identity of my client. On every page of the website, I included photos of Bun Bun Bake Shop's products to build a relationship with customers and gain their trust. High quality photos of products will lead customers to believe that the products themselves are high quality as well. Furthermore, the images are all relatively neutral in color, as I deliberately chose ones that complement the overall color scheme of the website to maintain consistency and visual appeal.