

*** The big buttons on the home page and some other hover-related behaviors on the site are not fully functional yet. They will be fully functional in the future by using js events. **For now please use the nav bar to navigate the site. Thanks!**

Link to code:

<https://github.com/JennyShuyuLiu/JennyShuyuLiu>

Link to the live page:

https://jennyshuyuliu.github.io/JennyShuyuLiu/homework_5/

Identifying and Fixing User Interface Bugs

1. Added a progress bar to the checkout process funnel.

(not visible through code yet; will be implemented after building the cart function)

In the original design, when the users are checking out, they have no idea where they are in the process. They are not informed whether there is more step after they fill out the shipment information ("Are there any more steps after this? Or am I almost finished? "). The new progress bar **helps with documentation**. It lists the concrete steps of the whole checkout process funnel and precisely indicates where the users are in the process.

↑ new progress bar marked by red box

2. Removed links to subpages (shop, news, map) from the hamburger menu and placed them directly in the navbar.



↑ original design



↑ improved version

Heuristic #7 mentioned the **efficiency of use**. When I examined my site, I noticed there is no need for a hamburger menu. Users need to do extra clicks to navigate the subpages. These extra clicks lowered the efficiency of completing tasks. So in the new version, I placed the links directly in the navbar. And this change also resonates with the 'above the fold' design pattern. When users see the current navbar design, they'll have a better mental model of the structure of the whole site. While in the old design, there are risks

that users miss those information and links hidden inside the hamburger menu.

3. use a hover-activated pop-up box to clarify the difference between 'quantity and 'box of'.

(For now, I placed the icon on the page, but the hover effect is not there yet. Will be implemented by js events in the future.)

When I let a few of my classmates try my interactive prototype, many had difficulty differentiating these two terms. They seem to be referring to the same information ("how many rolls do I want?"). But in fact, these two are different. Users may **make similarity errors** when entering values. To **prevent slips**, I added a hover-activated pop-up box to the pages where ①users choose features and add products to the cart and ②when checkout for their cart. This way, when feeling confused by the terms, customers can simply hover over the grey question mark icon and get a short explanation regarding the difference between 'quantity' and ' box of.'



4. Removed the images that are purely for decoration.

Heuristic #8 stressed the **ascetics and minimalist design**. Originally on the home page, there were images of pastries that had no function but to decorate. These elements are removed in the current design.



5.Changed the styling of the 'clear button' (on browse page, under filter function).

To better maintain **consistency and standards (heuristic#4)**, I changed the look of the *clear* button to match with other buttons on the site. This way, users are more likely to be aware that this is a clickable button.

Challenges Encountered

Challenge#1: Centering the text in big buttons.

There are quite a few big buttons displaying featured images and patterns on both the homepage and the shop(browse) page. Not only are there images, but also texts are sitting on top of that. At first, I had trouble centering my text in the middle of the image buttons. (not using the *button* widgets from HTML. I used *divs* due to the level of customizing I wanted to achieve. But I'll refer to them as buttons here to make the writing clearer.)

I read through the tutorials, studied the examples on w3schools, and figured out I could use the *position* property to implement my design. I set the *position* of the *div* that holds the text to be *absolute* and declared its *top* and *left* value. At the same time, the text contained in the *div* is set to *center* (both horizontally and vertically).

Link to resource I looked at: https://www.w3schools.com/css/css_positioning.asp

Challenge#2: Implementing the hover status.

This is still about the big buttons mentioned above. When the mouse hovers on the big buttons, the text changes from displaying the title to displaying a short blurb introducing the product or the page that the user is heading toward.

To achieve such effect, I gave the divs two different classes: 1)menu-hover-display and 2)menu-hover-hidden. When the mouse is placed at the corresponding area (inside the buttons), the *display* property of class 2 will be updated to *none*, while class 1's value for the *display* property will be set to *block*.

Resolving a bug#1: adjustment of elements.

In the footer, there is a text input box and a 'subscribe button.' Initially, there is a bug where the *position* value for both the input box and the button is set to be the same, yet they didn't horizontally align with one another properly. I added *vertical-align: middle*, hence resolving the bug.

Resource I looked at: <https://developer.mozilla.org/en-US/docs/Web/CSS/vertical-align>

Identity & Design

My client is a small bakery. I will be explaining my design choices that determine the look and feel of the site through color, scale, and shapes used in the elements of the website.

Color

Since the client is a baking business, I applied warm colors to the site. Cool colors would be dis-appetizing (1). The site is selling cinnamon rolls, which are usually pretty sweet, high on calories, and generally considered appealing to the younger population. Research showed that “sweet preference in children and adolescents was higher than in adults.”(2) Hence, I chose to **pair pastel colors with bright pink to create a joyful, welcoming tone that is especially appealing to the younger**

population. These deliberate color choices are likely to help to attract more potential customers and advance sales.

Scale and Shape

As discussed above, the expected primary users of the site are expected to be the younger generation. Text-heavy and compacted sites shall not appear attractive to them. Hence, I intentionally **made the buttons and texts larger than the standard practice and spaced the elements out to create a style that is both easy to the eyes and easy to use.** For instance, on the home page, I made the whole text box a big button for the buttons linking to News, Shops, and Map. Such design resonates with Fitt's law. Since the buttons are larger, the speed for accessing the button would be high, while the effort needed for mico-adjusting the cursor is relatively low. Apple once also used a similar design on their site (3).

Buttons and text boxes on the site have rounded corners to match users' mental image of cinnamon rolls or delighting objects in general. Note that when users reach the checkout process funnel, the roundness of visual elements is intentionally toned down, and we have the ordinary sharp-corner boxes again. At this stage, the main goal of the users is to enter the relatively complicated address info. Users' main concern is making mistakes while entering information. If the visual style remains strong, it may distract users' attention from performing the main task. Using conventionally formatted text boxes allowed users to concentrate on entering the informing, hence reducing the chances of making mistakes.

Work Cited:

- (1) Color Psychology in Food Marketing: <https://awgsaleservices.com/2016/04/21/color-psychology-in-food-marketing/>
- (2) Flavour preferences in youth versus adults: <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5127592/>
- (3) PUI F21 Lecture 10 - Properties of People, p81: <https://canvas.cmu.edu/courses/25022/files/folder/lectures?preview=6997026>