

Final Project Write up

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Pages: <https://lea-ren.github.io/bubble-tea/>

GitHub Repo: <https://github.com/lea-ren/bubble-tea>

Part 1. Website Description

Purpose of the website

Bubble tea is gaining popularity on social media and gradually became a representative drink of Asia. However, for novices, the long list of choices can be frustrating. The goal is to increase the knowledge of bubble tea and gain skills on how to order the first bubble tea.

What is the purpose of your website?

Information to Convey

This website provides a visually appealing tutorial about bubble tea, including history, fun facts, an introduction to ingredients.

How is it interesting and engaging?

There are hand-drawn illustrations to engage the user. They also give users a sense of how the ingredients look like.

People can manipulate how bubble tea looks like by changing the base tea, toppings, and ice level. The interaction allows users to learn in a more engaging way with a low cognitive load.

Target audience

The general public is interested in bubble tea. The users tend to be from younger age groups with familiarity with social media or have friends who love bubble tea.

Part 2. User Interaction

The website is **globally responsive** to laptop and mobile sizes. Recommend to test is on **Laptop L (425*870)** and **Mobile L (1440*870)** with Chrome Dev Tool. Please refresh the page if you change the height.

- Shift pages
 - Type: direct manipulation
 - Scroll on whatever page
- Choose base drink
 - Type: direct manipulation
 - Click on any of the six images of base tea on the bottom left. You will see the bubble tea outcome on the right change accordingly.
- Scroll down to next page
- Explore topping
 - Type: direct manipulation

- Hover over the text with dotted underlines, there will be a tooltip showing the description of what the topping is.
- Scroll down to next page
- Choose toppings
 - Type: direct manipulation
 - Click the image of toppings, the topping will appear on the right side cup. There can be maximum of 5 toppings. The display follow FIFO (i.e. The 1st will be replaced with the 6th as an example)
- Scroll down to next page
- Choose ice level
 - Type: direct manipulation
 - Click the image of different ice level.
 - See the different volumes of ice when choosing regular ice, less ice, or some ice
 - See nothing when choosing no ice
 - See curved lines representing steam when choosing warm/hot

Part 3. External Tool

Scrollify

- Provide a quick and easy way to write animated scrolling animation. It allows me to customize the animation to my projects' needs.
- I implemented layers of scrolling. The bubble tea cup stays in the same spot while the text scroll with the page change. There are background image layers with delay of the scrolling animation.
- It makes the transition of pages and steps smoother. It also creates a vivid vibe with the colors of bubble tea and wavy lines.

JQuery

- Scrollify is implemented via JQuery.
- Use JQuery to render the scrolling animation

Easing.js

- Provide lots of easing transition animation.
- Use together with scrollify.js to make the transition more natural

Google Analytics

- Every website has this so I just gave it a try on mine too

Part 4. Prototype Iteration

For the initial design, user will go through the step by step ordering process and see the outcome at the last page. This is not interactive enough and there and against the rule of visibility.

The Base
Lorem ipsum dolor sit amet, consectetur adipiscing elit; sed do eiusmod tempor incididunt ut labore et dolore magna aliqua. Ut enim ad minim veniam, quis nostrud exercitation ullamco laboris nisi ut aliquip ex ea commodo consequat.

The Flavor
Lorem ipsum dolor sit amet, consectetur adipiscing elit; sed do eiusmod tempor incididunt ut labore et dolore magna aliqua. Ut enim ad minim veniam, quis nostrud exercitation ullamco laboris nisi ut aliquip ex ea commodo consequat.

The Texture
Lorem ipsum dolor sit amet, consectetur adipiscing elit; sed do eiusmod tempor incididunt ut labore et dolore magna aliqua. Ut enim ad minim veniam, quis nostrud exercitation ullamco laboris nisi ut aliquip ex ea commodo consequat.

The Milk
Lorem ipsum dolor sit amet, consectetur adipiscing elit; sed do eiusmod tempor incididunt ut labore et dolore magna aliqua. Ut enim ad minim veniam, quis nostrud exercitation ullamco laboris nisi ut aliquip ex ea commodo consequat.

Temperature & Sweetness
Lorem ipsum dolor sit amet, consectetur adipiscing elit; sed do eiusmod tempor incididunt ut labore et dolore magna aliqua. Ut enim ad minim veniam, quis nostrud exercitation ullamco laboris nisi ut aliquip ex ea commodo consequat.

The Straw
Lorem ipsum dolor sit amet, consectetur adipiscing elit; sed do eiusmod tempor incididunt ut labore et dolore magna aliqua.

The Bag
Lorem ipsum dolor sit amet, consectetur adipiscing elit; sed do eiusmod tempor incididunt ut labore et dolore magna aliqua.

Base Tea Topping Ice and Sweetness Straw and bags

Fresh Juice Fresh Juice Teas Milk Teas Milk Based Drinks Probiotics Pure Teas

The new design allows users to see how their choices influence the final outcome but the status of what step the user is at is not clear.

Base Tea

Base Tea Topping Ice and Sweetness Straw and bags

Fresh Juice Fresh Juice Teas Milk Teas Milk Based Drinks Probiotics Pure Teas

Choose your base tea



The new design indicates the system state (i.e. what step is the user at) with strong visual cues in the background.



Step 1. Base Drink

Pick toppings

In Taiwan, people have a taste for soft, satisfyingly chewy textures—something they describe as “Q”. The classic example is boba pearls, which are made from tapioca starch. However, there are so many other toppings that fit the bill! Mostly using local ingredients, Taiwanese tea makers have explored and expanded topping options to provide even more happy bounce to your drink.

Click the image to pick! ↗



Step 2. Topping

Step 3. Ice Level

Also iterated the design for mobile size.

Part 5. Challenges

- Complicated layers for both scrolling animation and bubble tea output display takes lots of work on adjusting the z-index to make everything display properly

- Display lots of choices of topping on mobile size screen take lots of time to design, iterate, and test with my friends.
- The texts on the left are relatively light-weight and the status change is not that obvious. The design of using background to indicate status takes time.
- Understanding how to use the Scrollify and Familiarizing with JQuery in a short time is also challenging.

Appendix

Accessibility: WAVE Screenshot

The image displays two side-by-side screenshots of the WAVE web accessibility evaluation tool. Both screenshots show the 'powered by WebAIM' logo at the top right.

Left Screenshot (Summary Page):

- Header: WAVE web accessibility evaluation tool
- Styles: OFF (button) ON (button)
- Section: Summary
- Buttons: Summary (selected), Details, Reference, Structure, Contrast
- Data:

Category	Value
Errors	0
Contrast Errors	0
Alerts	71
Features	37
Structural Elements	4
ARIA	0
- Text: Congratulations! No errors were detected! Manual testing is still necessary to ensure compliance and optimal accessibility.
- Buttons: View details >

Right Screenshot (Details Page):

- Header: WAVE web accessibility evaluation tool
- Styles: OFF (button) ON (button)
- Section: Details
- Buttons: Summary, Details (selected), Reference, Structure, Contrast
- Alerts: 71 Alerts (with a checkbox icon)
- Features:
 - 37 Features (with a checked checkbox icon)
 - 36 X Alternative text (with a checked checkbox icon)
 - 1 X Language (with a checked checkbox icon)
- Structural Elements:
 - 4 Structural Elements (with a checked checkbox icon)
 - 4 X Heading level 2 (with a checked checkbox icon)

Reference

[1] Julia Janicki and Daisy Chung. All the Ways to Make Bubble Tea, Taiwan's Pearl-fect Drink.

<https://taiwandatastories.com/bubble-tea-guide/>

[2] Juju Sprinkles. How To Order Your Boba Tea Drink Like a Taiwanese.

<http://jujusprinkles.com/2017-03-27-how-to-order-your-boba-tea-drink-like-a-taiwanese/>

[3] W3School. Tooltip tutorial. https://www.w3schools.com/css/css_tooltip.asp

[4] Luke Haas. Layered Scrolling Example.

<https://projects.lukehaas.me/scrollify/examples/layered-scrolling/>