### **PUI FP4 Write-up**

#### Part 1- Purpose of the website

The website offers people an entertaining way to learn how to make basic coffee drinks. Players can choose the type of drink they want to make and add the appropriate amount of ingredients based on the recipe. The target audience for this project could potentially be everyone, but it might be more educational and helpful for people who already have some interest in learning more about coffee making. At the current stage, the website's functionality and contents are relatively limited and simple. If the complexity of the game increases in future development, it could be used in barista training where the baristas no longer have to memorize all the recipes through plain text, they can enjoy the gamified version of the process on this website and learn the drinks in a more efficient way. In addition to the main game feature, the website also provides detailed recipes for users to make the drinks at home. This would be presented as static images with text instructions similar to the traditional recipe website. Coffee lovers would find this information helpful for recreating the drinks on their own.

Overall, the website offers a fun and interactive way for users to learn about coffee making and improve their skills. By providing a variety of recipes and educational information, the website can be a useful tool for anyone who is interested in coffee, from beginners to experienced baristas.

#### Part 2- How users interact with the website

Responsive size:

For mobile: 500pxFor tablet: 800pxFor desktop: >800px

#### 1. Pick a drink and view the recipe

- a. Users will first click on the icons under "Types of coffee" to pick the drink that they are interested in learning about. After clicking, the recipe for the drink will pop up underneath. This recipe will include information about the types (i.e. shots, water, milk, additional items like sauce and syrup) and amounts of ingredients needed to make the drink.
- b. **Reproduce the interaction**: click on the icons under "Types of coffee" under the home page, for example Americano
- 2. Add ingredients into the cup according to the recipe
  - a. Users will then select the corresponding ingredients using the "+" & "-" buttons to recreate the drink. Each time they hit the "+" & "-" buttons, they will see the animation of the cup filling up with what they just added.
  - b. **Reproduce the interaction:** read the recipe under Americano, click the "+" button under "Shots" 3 times to add 3 shots, then click the "+" button under "Water(oz)" 2 times to add 12oz water.

- 3. End the game when finished recreating the drink
  - a. Once the ingredients match with the ones on the recipe, the user will click the "Finish" button below the cup to indicate that they are done with the interaction. A pop-up window will appear to congratulate the user for what they made. If the combination of ingredients does not match any of the drinks, the pop-up window will prompt the users to try again.
  - b. **Reproduce the interaction:** now all ingredients needed for Americano are gathered in the previous steps, click the "Finish" button beneath the cup to check if the drink is made correctly
- 4. Restart the game to play another round
  - a. Users can click on the "Restart" button on the pop-up window to restart the game. If users want to restart the game anytime while playing, they will be able to do so by clicking on the "Restart" button below the cup.
  - b. **Reproduce the interaction:** click the "Restart Game" button on the pop-up window and the page should reload
- 5. Learn more about how to make the drinks at home
  - a. Users can read detailed recipes about how to make the drinks at home under the "Learn more" tab. The recipes will include information about tools and ingredients needed as well as step-by-step instructions. This page was created in a slideshow format that allows users to click through and view each type of drink (Americano, Latte, Flat White, and Mocha).
  - b. **Reproduce the interaction:** click the left and right buttons under the "Learn More" tab to walk through the different make-it-at-home recipes

# Part 3 - External tool usage Anime.js (JavaScript library)

I used this library to create animation for the website. Since my website primarily focuses on the gamification aspect, it would be interesting to include animation to make the experience more entertaining. This library was specifically used in creating the animation for adding ingredients. It was applied each time the users click on the "+" & "-" buttons on the right panel. It creates a bouncing effect that makes the interaction more vivid and entertaining.

Other animations like the navigation bar and button affordances are created using CSS.

### Part 4 - Prototype iteration

At the beginning of the iteration, I planned to build a separate recipe panel above the "Types of Coffee" section which will respond to the user's clicks on the drinks. However, as I started to code out the structure of the website, I realized that when the drinks are not selected, the recipe section could be confusing to the users since it would be empty. Therefore, I decided to place the recipe under each drink to make it closer to the interaction. This will better match the users' mental model. Another change made to the design was adding a "Finish" and a "Restart" button to

give users more control over the game. They can decide when to use either of the buttons based on their situation.

## Part 5 - Challenges

One big challenge was implementing the animation. Even though the code is already well documented online, it took me some time to adapt specific animations to my project. The animation for reducing ingredients is not working properly at this point, I will consider fixing it when I get more familiar with the animation.