Programming Usable Interfaces - Assignment 8

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[Link to Github Site](#)

Part 1

My website is an informative tool for owners of succulents. Users can choose which plant they currently own and then take a fun quiz that informs the user how to care for his or her succulent properly. Specifically, my website conveys how much water and sun each particular cactus type needs. The site is interesting and engaging because it conveys this information in a quiz format and it has a young, fun aesthetic. The cartoon succulents, along with the pastel color palette and playful nature of the interactions and animations, create an inviting and "cute" experience. As the user answers questions correctly, various animations appear that give a succulent graphic the appearance of growing in order to keep the user engaged. The target audience for this site is young plant owners who want to learn how to take care of their plants more effectively.

Part 2

Interaction 1: Starting the Experience
- This is a standard web page interaction. This interaction involves clicking the "Start" button on the homepage.
- When the user enters the website, he or she is taken to a landing page to start the experience plant-learning experience. Reproduce this interaction by clicking the Start button on the homepage. The user will be taken to the next phase of the website.

Interaction 2: Choosing a Plant
- This is a standard web page interaction. This interaction involves clicking and hovering on the Succulents by Type page.
- The user can choose which plant he or she would like to learn more about. Reproduce an interesting use case by navigating to the Succulents by Type page. Mouse over each plant to see how it expands, and click on a plant of your choice to be taken to the quiz page.

Interaction 3: Quiz
- This is a standard web page interaction. It involves clicking and hovering over the quiz questions.
- On the quiz page, choose an answer for question one. As you hover over the quiz questions, they will change color to provide feedback. If the chosen answer is incorrect, the question will shake and the answer will turn red. If the correct answer is selected, rain will appear and the cactus graphic will grow flowers. Navigate to the next question. This time if the correct answer is chosen, a sun will appear and the

cactus will grow more flowers. Navigate to the last question. If the correct answer is selected, the cactus will smile.

Interaction 4: Page Navigation
- This is a standard web page navigation. This interaction involves clicking the links in the navigation bar at the top of the page.
- Click any link in the navigation header of the webpage. Home will take the user back to the home page, Succulents by Type will take the user to the plant selection page, and the title of the webpage (Know Your Succulents) also takes the user back to the homepage.

Part 3

1. Animate CSS Library (see here)
- I chose to use this library because it has a variety of engaging animations that can be easily added to any HTML element simply by adding classes. This library was simple, yet effective.
- This library is included in my CSS folder in assets and is linked on each HTML page. I used this library to animate the cactus that drops in on my homepage and Succulents by Type page. I also used this tool to animate the quiz questions. When a wrong answer is selected, the entire question shakes.
- This library adds interactivity, engagement, and feedback to my website. The cactus that drops in makes the homepage and succulent types page more lively, and the question shake serves as a feedback to the user that the question answer was incorrect.

2. Bootstrap Template (see here)
- I chose this template because it allowed me to easily make my website responsive. Additionally, the Bootstrap template I chose included a responsive "card" setup that I was able to easily turn into my Succulents by Type page.
- I downloaded all files associated with a Bootstrap template (all included in the "bootstrap_files" folder) and used the files to format my website. Each page uses the predetermined rows, containers, and navigation in the Bootstrap template. Additionally, I used Bootstrap to implement all responsive elements for my website.
- Bootstrap adds a level of organization to my website that I otherwise would have struggled to implement, in addition to adding responsiveness.

3. P5 Javascript Library (see here)
- I chose to use this library because I wanted to add interactive animations in the quiz, and I was able to find interesting P5 animations online that fit my website's purpose.
- I downloaded the P5 library, placed it in my JS folder under Assets, and linked the library from each individual plant page. I used P5 to create the raining animation that takes place when the first question of each quiz is answered correctly.
- This animation adds a level of playfulness and engagement to my website and makes the flower growing animation I implemented through CSS more lively.

Part 4

My website changed significantly from my homework seven mockup. Specifically, I decided to have an individual page for each plant listed, instead of the pop-up box I had originally planned. I also created a quiz for each plant, along with an animated cactus graphic that grows as you progress through the quiz, two elements that were not included at all in my initial mockup.

Part 5

Utilizing the libraries was a challenging part of the assignment, as up until now, I have been creating most of my code from scratch. Learning to work within and edit the framework of a predetermined template or library required some trial and error, and I often struggled to override already existing CSS. I specifically struggled the most with P5, as I found the canvas difficult to place and manipulate.

Additional Sources

- CodeAcademy
  https://www.codecademy.com/
- Succulents & Sunshine
  https://www.succulentsandsunshine.com/
- Stack Overflow
  https://stackoverflow.com/
- W3Schools
  https://www.w3schools.com/css/css3_animations.asp
- Unsplash (all photos)
  https://unsplash.com/