

Programming Usable Interfaces/ 05-630
Section A

Assignment 8

Link to GitHub Repo: <https://github.com/jlyu1209/Assignment-8>

Link to hosted website: <https://jlyu1209.github.io/Assignment-8/>

Part 1

The purpose of my website is to educate users about the importance of reducing waste and ways they can practice being green in their daily lives. While all audience can easily visit my website and learn about reducing waste, I expected target audience for my website to be young adults who are care about the environment and want to an overview of proper waste disposal. Through my informational website, I hope to convey (1) outstanding statistics on waste and its impact on earth, (2) the difference between reducing, recycling, and composting and how we can practice these ways of going green in our daily lives, and (3) how to properly dispose specific items. I've added a mini game at the end of the website where the audience are given items that we can easily find in our homes and have to guess whether the items can be recycled, trashed, or composted. The game will reveal the wrong and right answer with more facts about the disposal property of the item.

Part 2

- Navigation Bar
 - Interaction Type: Pointing
 - Click on the navigation menu ("STAT", "GO GREEN", "PRACTICE") and the page will scroll and take you to the section of the content that corresponds to these parts.
 - You can also click on the planet icon and the page will scroll up or take you to the "Reducing Waste" home page.
- Section divider downward arrows ("Learn More" or "Ways to Reduce Waste" or "Practice Makes Perfect")
 - Interaction Type: Pointing
 - Click on downward arrows and the page will scroll to the content following it (which is right below it)
- Statistics Carousel
 - Interaction Type: Pointing and Slider
 - The carousel with images and waste statistics automatically rotate on its own but the user can click the forward or backward arrow to control the carousel and move images with statistics forward or backwards.

- User can also click the slides close to the end of the images and jump to different statistics rather than moving incrementally forward or backward.
- “Learn More” Button next to “Recycle” or “Compost”
 - Interaction Type: Pointing
 - Click on the respective “Learn More” button and the page will redirect you to the United States Environmental Protection Agency’s website to learn more about recycling or composting.
- Trash or Recycle or Compost
 - Interaction Type: Pointing
 - Guess whether the items displayed should be trashed, recycled, or compost.
 - Click on the trash, recycle, or compost circle to reveal the right answer.
 - Click on the “Next item” button below the items to get to the next item label and image to replay the game and guess whether it should be trashed, recycled, or composted.

Part 3

1. Bootstrap

- ii. I choose to use Bootstrap because it had so many features that were very useful for this assignment. I was able to replicate the code and make edits to it to make the website responsive and interactive the way I envisioned. I also liked how Bootstrap had many tutorials and references to use as a guide since it was widely used.
- iii. I used Bootstrap to (1) make the webpage responsive (from 2 column to 1 column grid for “How can we go green in everyday life?”) and align the content and images where the image comes first, (2) use grid to align the content and images in a particular layout, (3) make a sticky navigation bar, and (4) use the carousel feature to display the waste statistics.
- iv. The Bootstrap adds more interactivity to my website where the user can control certain sections of it. Using Bootstrap also helped make the design of the website content more minimal and orderly.

2. Font Awesome

- ii. I choose to use Font Awesome to add high quality icons to give the website a bit more polished look.
- iii. I used the icons from Font Awesome to add to the circle of “Trash,” “Recycle,” and “Compost.” I also used the down arrow icon throughout my webpage to direct user to the next content.
- iv. The icons from Font-Awesome helps make the website more visually engaging for audience visiting.

Part 4

Compared to my HW 7 mock-up, I decided to make the waste statistics section of the website more interactive by adding the carousel. I thought that it would be more engaging than a simple list. Also, in this iteration, I have decided to make a next item button underneath the items in the mini-game so users can control which item they want to guess.

Part 5

My biggest challenge in implementing the website was the game section where I had to manually code using vanilla JavaScript. It was hard at first to figure out how to get the program to recognize the correct answer based on knowing what item it is. I was able to use array to store these values for each object and use conditional functions to grab the correct answer if it matched up with the user's input. I also had a bit of trouble making this section responsive since it did not use any bootstrap framework. I had to play around with the max-width media query in CSS to adjust the size of the containers. I also had a bit of a challenge finding out how to get the text to display first before images upon breakpoint from desktop to mobile.