Assignment 8 – Implementing an Informational Tool – Write-Up

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Link to live version of the site hosted on GitHub pages:

- https://okafor3.github.io/homework_8/Home.html?

Link to the repository where the code is hosted:

- https://github.com/okafor3/homework_8

Link to Figma Mockups:

- https://www.figma.com/file/iAWrTI69fmJrmTnxAIiVlA/PUI-Informational-Tool?node-id=0%3A1

Part 1: Describe your website (no more than 300 words). Include the following:

i. What is the purpose of your website?
ii. What information do you convey with your website?
iii. How is it interesting and engaging?
iv. Who is the target audience?

I chose to design an information tool that teaches people about color blindness. Color blindness is the partial or total inability to distinguish one or more chromatic colors. We learned about color blindness during our 'Properties of People' unit in class, and I was interested in delving further into the topic. The website explains what color blindness is and provides information on the three main types of color blindness: red-green, blue-yellow, and complete color blindness.

Additionally, users can interact with different color blocks to see what colors look like through the eyes of people with normal vision vs. the eyes of people with a form of color blindness. To elaborate, the page will initially show the user color blocks through normal vision. If the user clicks on the 'Color Blind' button, these blocks will dynamically change to show how that same color is viewed by a color blind person.

The site will also use modals to inform the user of a 'Fun Fact'. I chose facts that were especially interesting and unique, to keep site visitors engaged. For example, one interesting fact I learned and shared on the site is that "Babies are born color blind. As they grow, their color vision improves and is typically fully developed by the age of 6 months."

The target audience is people with normal vision who are curious to learn about color blindness and what things look like through the lens of a color blind person. The site is organized in a way that is kid-friendly but is intended to be for all age groups.

Part 2: Describe how a user would interact with your website. For each item in your list, say:

i. The interaction type you implemented
ii. How I should reproduce it (i.e., click on X on page Y, or scroll on page X, etc.)

- View Information on a Form of Color Blindness:
  - Click on the one of the following titles: 'Red-Green Color Blindness', 'Complete Color Blindness', or 'Blue Yellow Color Blindness' to read about that form of color blindness
- View a Fun Fact:
  - One each information page, click on the 'Fun Fact' button
  - A pop-up (modal) will appear displaying a fun fact; each page has a unique fun fact
- Interact with Color Blocks:
  - Click on the 'Normal' circular button to view a color through the eyes of someone with normal vision
  - Click on the 'Color Blind' circular button to view that same color through the eyes of someone who is color blind

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Part 3: Describe what external tool you used (JavaScript Library, Web API, animations, or other). Following the bulleted list format below, reply to each of the prompts.

- Name of tool: Bootstrap
- Why I chose to use it: I chose to use Bootstrap because I believed it would be the most effective tool in helping me make my website responsive. Specifically, it is built on responsive 12-column grids, which I felt would help me structure my site in the best way. Bootstrap always offered several ways for me to make my pop-up (modal).
- How I used it: I used Bootstrap's grid system to lay out and align my site's content. I also used Bootstrap to create my pop-up (modal). This pop-up displayed different fun facts to the user

- What it adds to my website: My use of Bootstrap adds structure to my site and makes it more visually appealing. It makes my website responsive, so that when I open it on a different device (for example, a mobile phone), the text and features of the site are not cut off or skewed.

- Name of tool: CSS Animations
- Why I chose to use it: I chose to use CSS animations because it allowed me to animate HTML elements without having to use JavaScript. There were a lot of quick and easy animations available, and I liked that I was given so many options to choose from.
- How I used it: Specifically, I used transitions to change the background color of my blocks, over a certain duration of time. The color blocks change depending on if the 'normal' or 'color blind' button has been clicked. I chose a duration that made the color transition smooth, instead of choppy.
- What it adds to my website: The use of CSS animations added a fun and interactive piece to my website. Users will be fascinated to see how certain colors are viewed through the eyes of a color blind person. They can continue to switch the colors back and forth to see the key differences.

Part 4: Describe how you iterated on your HW7 mockups, if at all, including any changes you made to your original design while you were implementing your website. (2-4 sentences max)

I made a few minor changes on my design when implementing my website. For example, I added an extra color block so that users would have an more examples of what colors look like in a normal vs. color blind view. I also added short descriptions on each color block (eg: "← Click the buttons and watch me change!") to give users a better understanding of the purpose of the blocks and buttons.

Part 5: What challenges did you experience in implementing your website? (2-4 sentences max)

I originally built out my site uses flex boxes, and it was not completely responsive. To make my website responsive, I used Bootstrap grids. I initially found it very difficult to reorganize my site, and several of my elements were not aligning the way I wanted them to. I attended office hours and watched online tutorials to help.

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