PUI Final Project Write-Up
Good Things, Happy Things
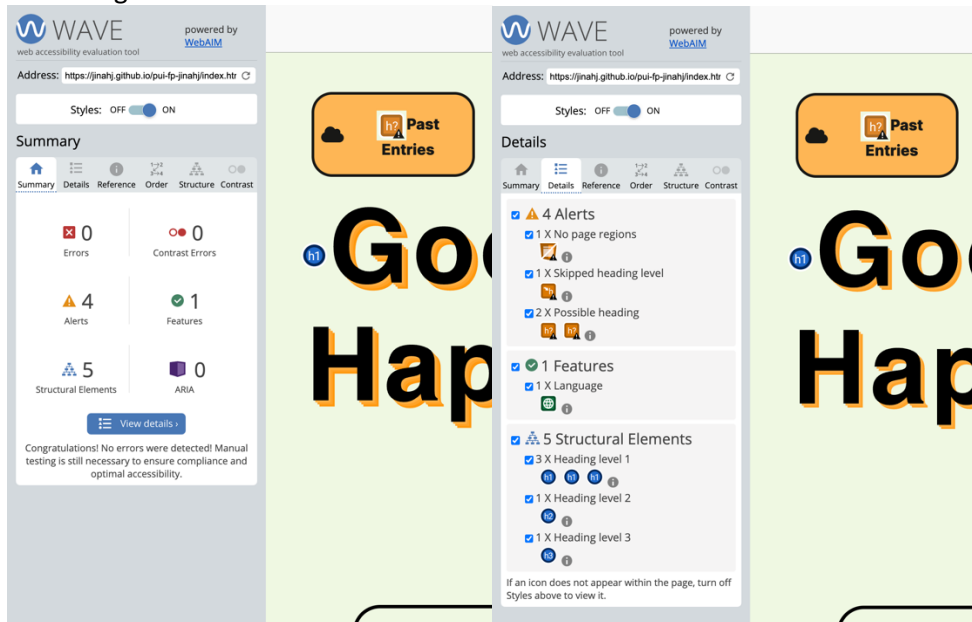
Part 0: Information on Deployed Website

Responsive Requirement
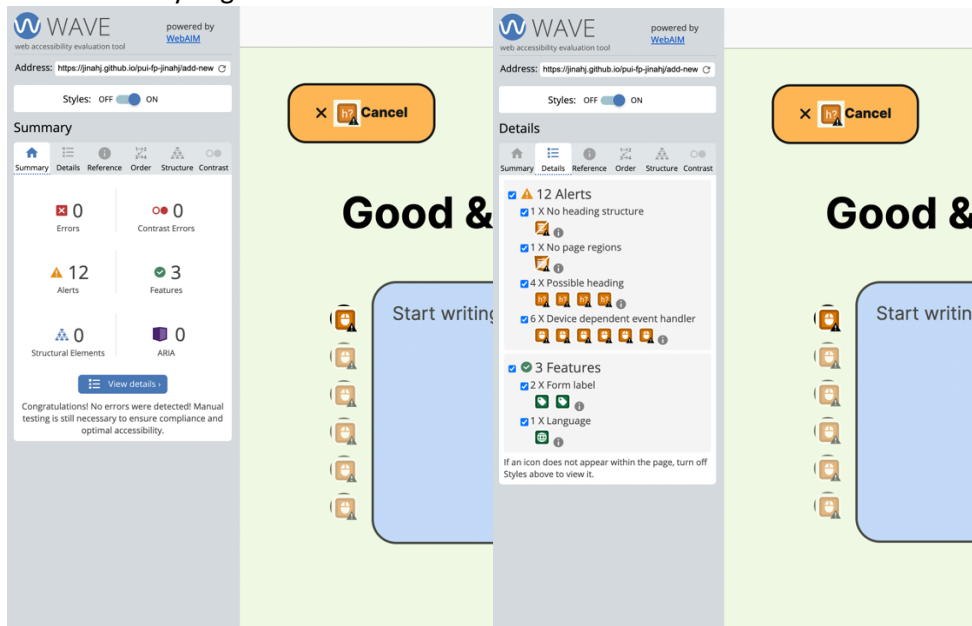
Test interface on *iPhone 12 Pro & iPad Air*

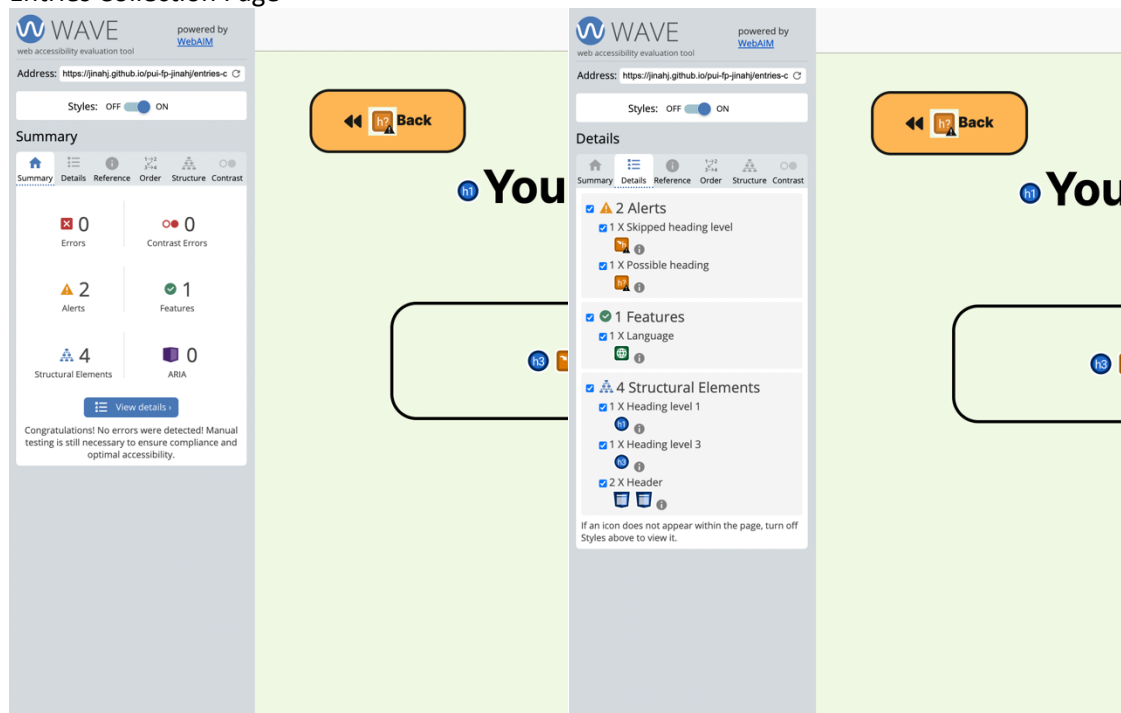### Accessibility Requirement (Screenshots)

Home Page

Add New Entry Page

Entries Collection Page

Part 1: Description

This website is an application inspired by the "happiness jar" which is a gratitude activity where you add a short note of an event that made you happy each day and you open a random entry in future dates to remind you of what had made you happy in the past. In order to replicate the happiness jar, the application takes entry inputs from the user, then saves each entry. When the user wants to read a past entry, the application returns a random entry (because in the happiness jar, all notes would be mixed and when the person pulls out an entry, it would be random). After the user reads the random entry, the entry is saved to a collection of opened entries, where each opened entry is represented by its keyword. The user can always look back to their opened entries by clicking on the keyword box.

The information conveyed on this website is fully through user input which includes entries, keywords, and colors selected for each entry—which adds to the interactivity of the website. Likewise, because the website takes an array of user inputs, thus personalized, it is interesting and engaging for the user. Furthermore, the website incorporates animations to improve the perception and liveliness of the user interaction, as well as adding affordances (cursors, hover effects, and button pushed, bouncing-back effects) to signify clickable elements. The target audience for this website could be everyone because the mechanism is simple and easy to use, starting from younger children to adults that enjoy simple interfaces. More specifically, it would target people who are interested in the happiness jar gratitude activity or those who are looking for a quicker and shorter way to journal.

Part 2: User Interaction
- Adding a new entry
    - From home page, click "New Entry"
    - Choose entry color by clicking on the color palette on the left
    - Write entry in the box with placeholder "Start writing here!"

- o Choose and type a keyword in the box with placeholder "Pick a keyword to display!"
- o Click "Submit"
- o *OR click "Cancel" to exit out of adding a new entry at anytime*
- Opening a random past entry
  - o From home page, click "Click To Open A Past Memory"
  - o Click "Close & Save To Memories" to exit out of the pop up and save this entry to your opened entries collection
- Accessing opened past entries
  - o From homepage, click "Past Entries"
  - o Click on any colored box (i.e., keyword box) to see a previously opened entry
  - o Click "Back" to return to home page

Part 3: External Tool Used
- Animations
- I chose to use animations because of two main reasons. First, I wanted to use animations to add a fun and enjoyable component to my user interface. Secondly, I wanted to explore the animation techniques we've discussed in class to make an interactive, fluid, and realistic user interface.
- My project uses animations in two pages, (1) in the "home page" to design the title text, creating a 3-D moving effect, and (2) in the "entries collection page" to display the entry when a keyword box is clicked on, using the solidity—arrivals and departures technique for smooth transitioning and affordance.
- The first component in the "home page" acts as an enjoyable and fun element of the user interface design. Furthermore, it helps to set the playful theme of my application. The second component in the "entries collection page" improves the perception and understanding for the user by generating a more realistic appearance of the pop up.

Part 4: Iteration on Prototype
In general, the basic layout and functionalities remained the same from the original design. There were some changes in displaying objects and visuals—some were improved in comparison to the original design, some had to be simplified due to time constraints and unexpected challenges. Some improvements included adding the animation to the pop up, dynamic design of the title, and strategically choosing color considering accessibility and adding color to make the application livelier. One simplification that was made was displaying the entries on the home page. Initially, I wanted to create a moving wave of entries represented by circles or squares that look like note paper that would settle at the bottom of the screen and would move when touched by the cursor. Upon planning and attempting this design, I realized that it would require extensive calculations using physics to generate realistic movement. Therefore, to ensure that the project would be completed in its entirety on time, I pivoted to a simpler approach—a design that resembles a rectangular gumball machine.

Part 5: Challenges
A major challenge that I faced was the gap between my estimate on the difficulty of the implementation versus that actual difficulty when I started to code my project. I realized that my project was extremely JavaScript heavy and more complex than expected specifically when dealing with local storage (and maintaining updated arrays when switching pages), keeping track of two different arrays and converting information between the two entries (these two arrays were unopened entries and open entries), and

populating pages with information associated with various objects. Overall, however, it was meaningful that I was able to delve deeper into JavaScript and overcome these challenges, especially given that our homeworks were not very JavaScript heavy.