Final Project

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Part 1 - Project Description

The purpose of my website is to provide an easy way of finding some of the top covers of a user's favorite song. With my website, an individual is able to type in any musical artist and song name that they want to listen to a cover of. If there are YouTube videos available, there are four cards that get populated with the thumbnail, the song name, the creator's name, and a link to the full video on YouTube. It is interesting and engaging because it is personalized to the user's preferences, since they can type in whatever they want. Additionally, they can also keep track of the covers they liked via the "liked songs" tab, so they also have the opportunity to curate a list of their favorite covers that they can refer back to.

The website caters to a diverse audience – essentially anyone that is passionate about music. It creates a platform where users can connect with their favorite songs in innovative ways by listening to well-known covers but also covers by emerging and aspiring artists, creating a space for musical discovery and supporting the growth of the music community. Whether users seek a fresh take on familiar tunes or want to discover hidden gems from rising talents, the website offers the chance for music enthusiasts to explore and enjoy covers of songs

Part 2 - Website Interactions

1. User types information into form
    a. Click the song form field and type in a song
    b. Click the artist form field and type in an artist
2. Animation on cards entering
    a. Click the generate button, the populated cards are automatically animated when they populate on the screen
3. Liking a song
    a. Click the like button on a song card
4. Accessing liked songs + animation
    a. Click on the “Liked Songs” tab in the navigation bar
    b. Liked songs are stored there, automatically animated when the page loads
5. Remove from Liked Songs
    a. Click on the remove button
6. Regenerating songs (different set of songs with same search criteria)
    a. Scroll to the bottom of the results page and click the regenerate button
7. Conducting another search
    a. Two ways
        i. From results page, scroll to the bottom and click restart
        ii. Click “Search Covers” in the navigation bar

Part 3 - External Tools

1. YouTube Data API
    a. I chose to use this API because the YouTube platform has the most covers uploaded compared to other platforms, like Spotify or Apple Music. Since the purpose of my website was to search for covers and retrieve them, it made sense to leverage YouTube data to do so.
    b. I called the API when the “Generate” button in the form was submitted, pulling in the input from the form fields and the word cover to conduct a YouTube search of videos that met that criteria and create the corresponding data that I could reference in order to populate the cards.
    c. It provides functionality to my website – without the API I would have no data to be able to populate the cards so there would be no interactivity in terms of the form submission corresponding with the results cards.
2. Animate.css Library
    a. I chose to use this Library to add some animations because it was easy to integrate with my current page structure (required minimal effort) and still add some extra interactivity to my website.
    b. I used it to add animations to my results cards (so that they enter the screen from either side), as well as to populate the liked songs cards (they enter from the top of the screen).
    c. It provides extra interactivity for the website’s users, making it more exciting and engaging to use.

3. jQuery
    a. I chose to use this Library because it made the data pulling process easier.
    b. I used it to access the JSON data from the YouTube API call
    c. It allows me to access the data to populate the results cards after the user has entered a search.

Part 4 - Iterations From Prototypes

I decided I wanted to give my website a lighter feel rather than a darker/moodier feel from my last set of wireframes, so I made the hues of the background gradient lighter and also added an orange color to the gradient at the very bottom to bring more life into it. Additionally, in terms of the home page layout, I opted for a two column structure with the image on the left and the website title and form entries on the right rather than my original plan, which was to have the website banner at the top and all the form fields underneath. This was because my original idea was to provide music recommendations based on preferences from four categories, and those four form fields required more space. However, when I pivoted to the idea of a website to find music covers specifically, that required fewer form fields (only artist and song name), the original design looked too sparse, which is why I pivoted to the new design.

Part 5 - Challenges

The main challenge I experienced was getting the YouTube Data API setup. I originally started by trying to follow the YouTube API documentation that is provided to conduct the search, but it wasn’t working because that documentation also required users to sign in and the OAuth 2.0 Authorization was getting in the way and making things more complicated. Eventually, after lots of research I chose to just use the search URL (that is common between all searches on YouTube) rather than all their provided documentation, my API key, and the search terms, and then leverage the jQuery getJSON method to pull in the data.

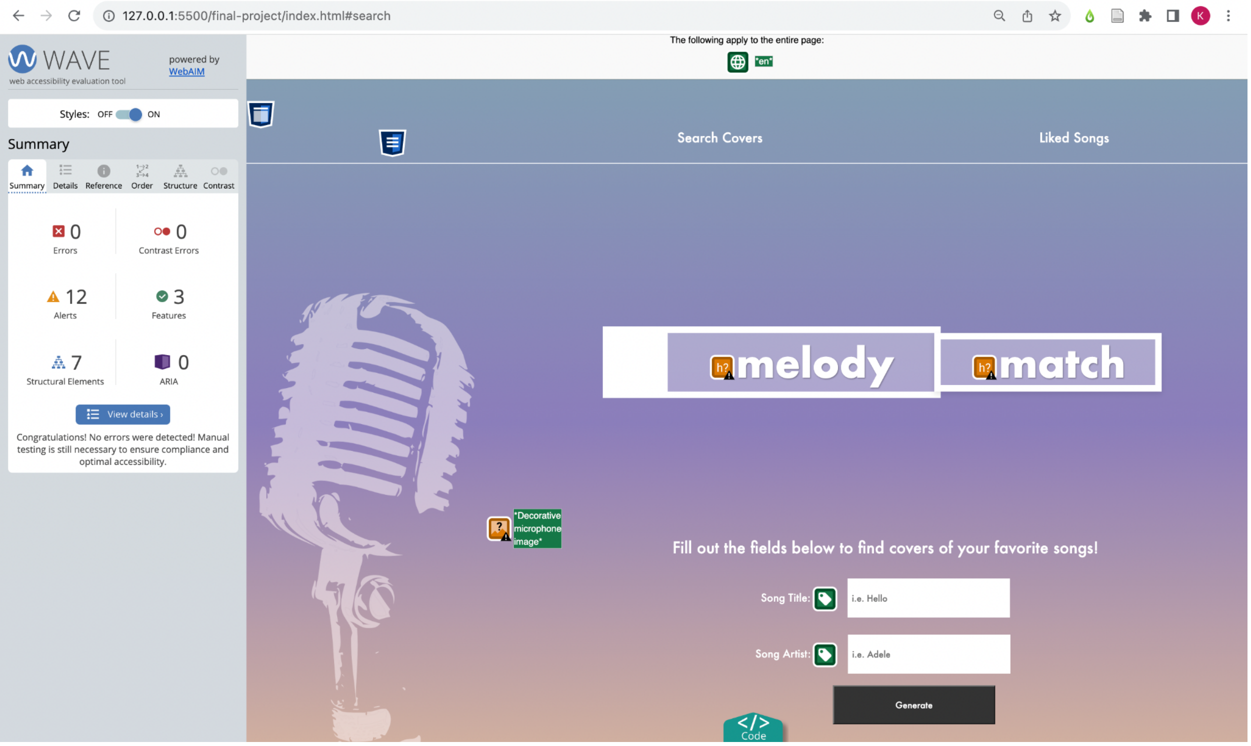
Another challenge I experienced was fine tuning the visual display of items on the screen in CSS. Since I was working on the project over a long period of time, I forgot what CSS attributes were already provided in the parent layers, so there ended up being a lot of repetition, especially in terms of setting display: flex, which ended up messing with what I wanted my page to look like especially towards the end. It took a lot of time to go into the file, figure out what exactly was causing the issues, and then clean some of it up.

Appendix A - Optimal Viewing Dimensions

Desktop: Screen Width = 1400px
Mobile: Screen Width = 650px

Appendix B - Accessibility Screenshots

Search Covers Page:

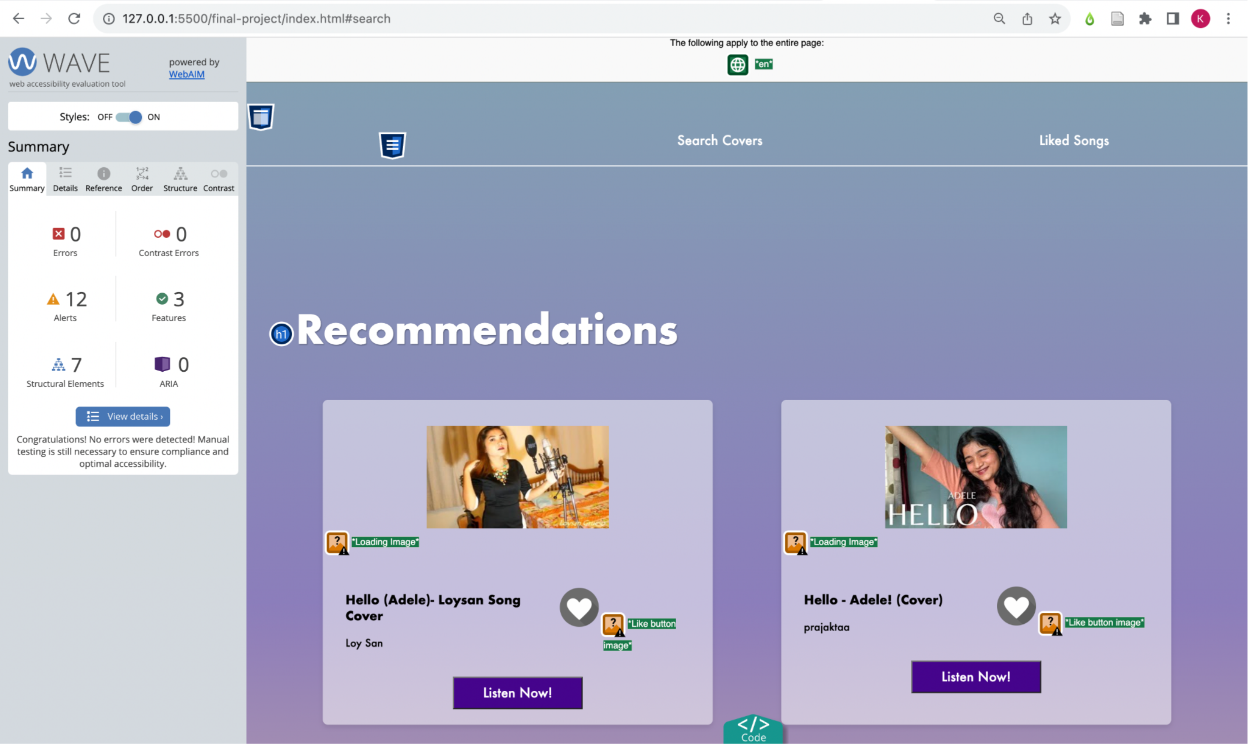


Congratulations! No errors were detected! Manual testing is still necessary to ensure compliance and optimal accessibility.

Fill out the fields below to find covers of your favorite songs!

Results Page:

Kavya Iyer



127.0.0.1:5500/final-project/index.html#search

The following apply to the entire page:

"en"

Styles: OFF ON

Summary

0 Errors	0 Contrast Errors
12 Alerts	3 Features
7 Structural Elements	0 ARIA

Congratulations! No errors were detected! Manual testing is still necessary to ensure compliance and optimal accessibility.

Recommendations

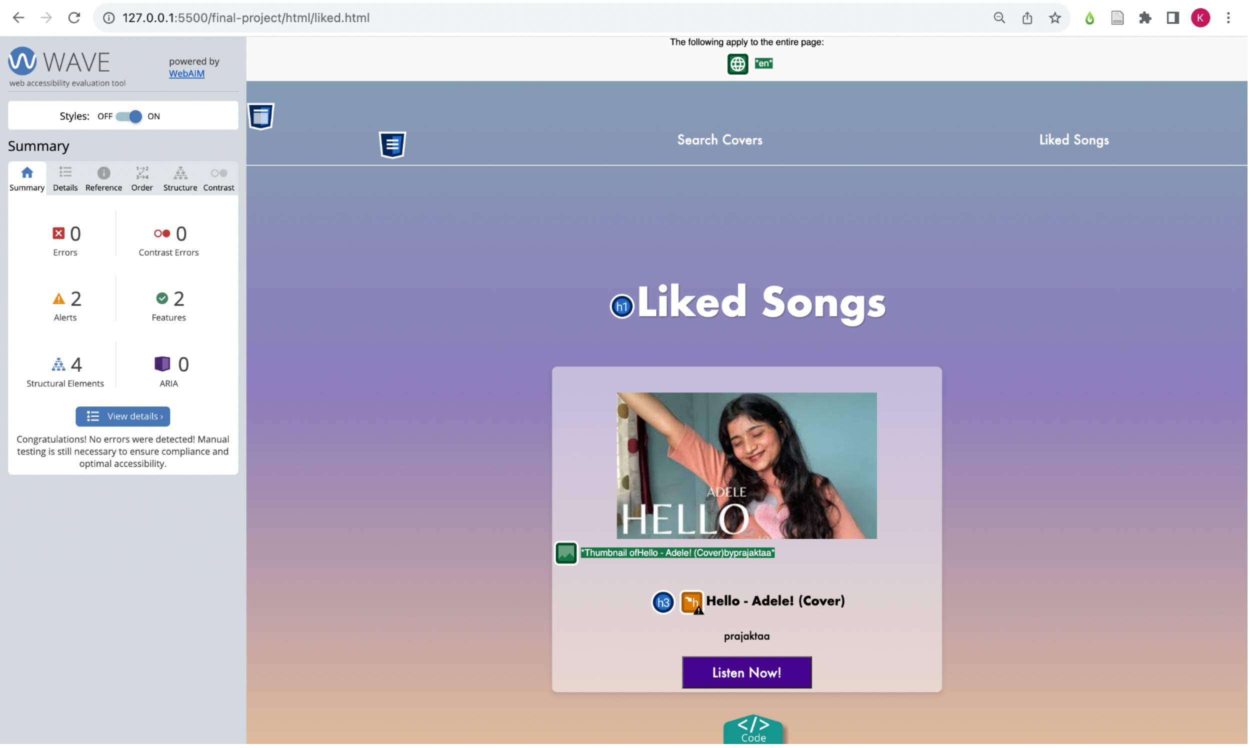
Hello (Adele)- Loysan Song Cover

Loy San

Hello - Adele! (Cover)

prajaktaa

Liked Songs Page:



127.0.0.1:5500/final-project/html/liked.html

The following apply to the entire page:

"en"

Styles: OFF ON

Summary

0 Errors	0 Contrast Errors
2 Alerts	2 Features
4 Structural Elements	0 ARIA

Congratulations! No errors were detected! Manual testing is still necessary to ensure compliance and optimal accessibility.

Liked Songs

"Thumbnail ofHello - Adele! (Cover)byprajaktaa"

Hello - Adele! (Cover)

prajaktaa