

Final Project Write-up

Part 1

The purpose of this project is to build an audio visualization tool to deliver the visual information that an audio file may include to users. By letting users personalize the visualization effects themselves, the tool is engaging and provides an interesting perspective for users to treat audio differently. The targeted audience of this tool is people who are not satisfied with the static cover/images when listening to music.

Part 2

1. Upload an audio file from local storage
2. Choose different effects by selecting the drop-down value
3. Click play button to play/pause button to stop
4. Use mouse to zoom in/out or adjust the perspective of view of what being shown in the canvas(mouse needs to be put inside the canvas)

Part 3

I choose the library three.js as the tool because it's great for displaying 3D content on the web. I first created the scene, camera, renderer, object and light, and then captured the frequency data of input audio file to make it connect with the what I have created to make animation update based on the data. In this way, it adds the real-time animation effect to my website and allows users to personalize the effects.


Part 4

The implementation was divided into several phases. First was to make the canvas and render effect work. Second was to have the user input of an audio file and display the animation. Third was to have the personalization feature. Last was to have the layout and style setting of the website.

Part 5

Learning the new library was a challenge and time constraint was another. I had to cut off some features such as playlist due to the time limits.

Wave check result



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web accessibility evaluation tool

Styles: OFF ☐ ON ☒

Summary

Summary

Details

Reference

Structure

Contrast

0

Errors

0

Contrast Errors

5

Alerts

4

Features

2

Structural Elements




0

ARIA

View details >

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

The following apply to the entire page:



h1

Hi There, Welcome To The Audio Visualiz

Upload an audio file

Choose File


No file chosen

h2

Personalized Effects

Background Choice

Select a background




Color Choice



Hex value


Color

Pattern Choice

Select a pattern







Code