



MyTerrarium

CS35L Project - Discussion 1E




Cyrus Asasi, Ryan Oh, Angela Tan, Ryan Chaiyakul, Helen Feng






Overview



MyTerrarium is a web application that allows students to merge their spotify playlists with user uploaded background noises to create their perfect auditory studying environment.

Designed with studying in mind, the minimalist UI and colorful graphics provide a pleasant background with minimal distractions.

If the user becomes bored, a personalized statistics page displays their personal listening habits.





Key Features



Recommendations

Fetches 10 recommendations as a playlist embed

Playback

Individual control of all songs and files

Statistics

Get recently played songs, favorite songs, and favorite artists

Spotify Embed

Play recommendations or playlists linked to Spotify account

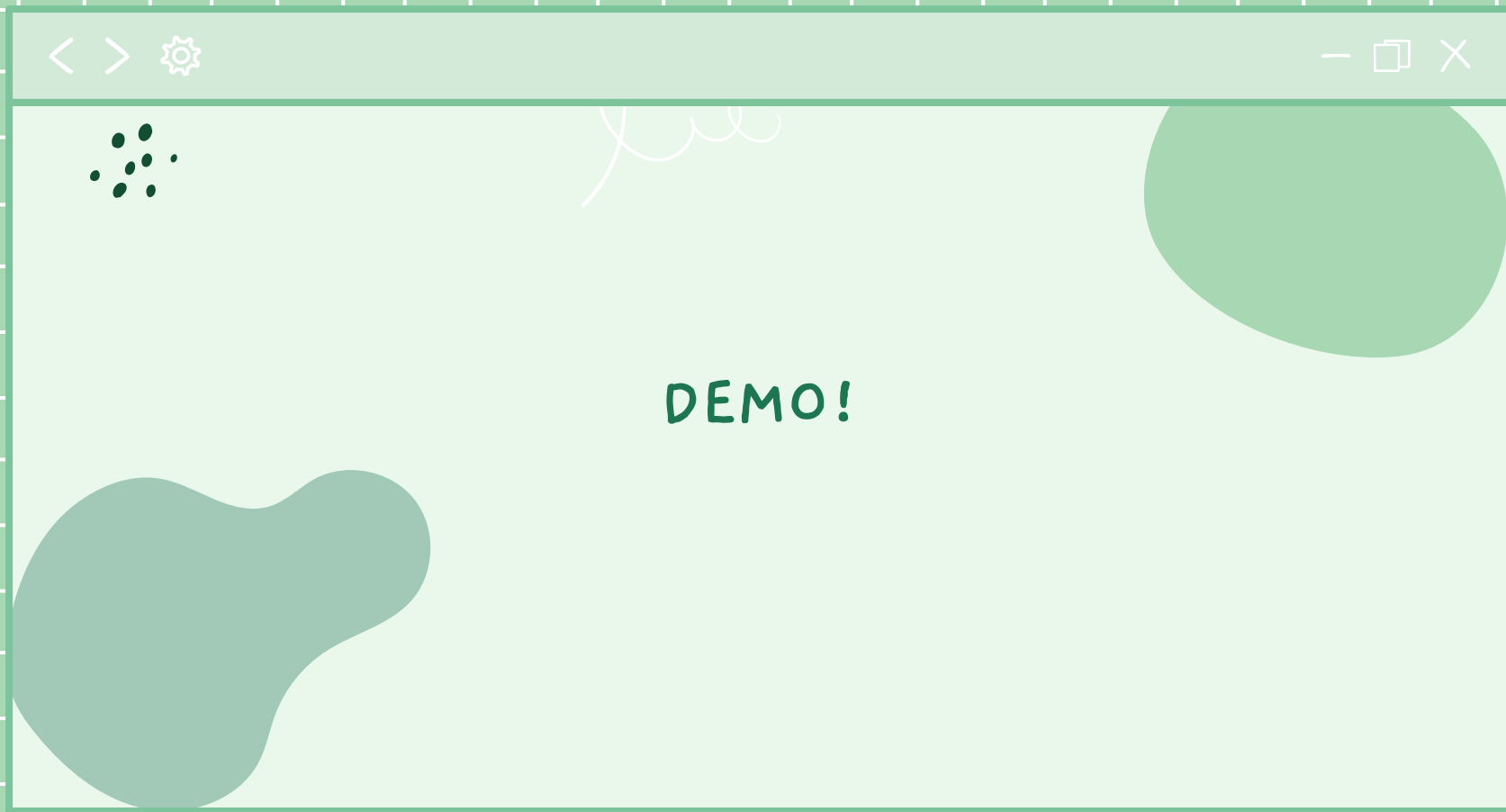
Upload

Upload form to add new files to the backend

Search

Search the backend for files to be added to playlist







Dynamic Data



Users are able to interact by

- Uploading mp3 files with metadata
- Searching for uploaded files with metadata tags
- Selecting mp3 files into their personal playlist
- Playing mp3 files from their personal playlist

Spotify authentication unlocks features



Persistent Storage

Store spotify authentication information and uploaded audio files in the backend

```
cs351=# \d
```

List of relations			
Schema	Name	Type	Owner
public	audio_files	table	postgres
public	spotify_auth	table	postgres

(2 rows)

```
cs351=#
```

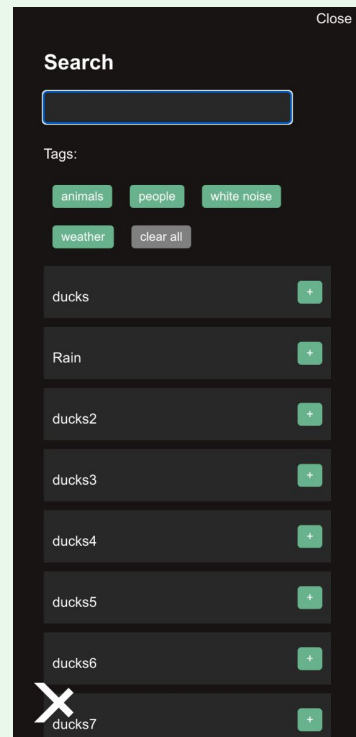
```
cs351=#
```



Searching



Users can search for a specific song using tags or the title. When uploading, the user is given the option to assign a certain tag to the audio file, such as “Animals”, “People”, “Whitenoise”, “Weather”, and etc. When searching for the audio, the user can search for it using these tags.





Additional Feature 1: Stats



Retrieves recently played, favorite artists, and favorite tracks (Hyperlinked to the actual songs).

Recently Played

Favorite Artists

Favorite Tracks

Recently Played

Life

Golden Chords

Piano Sonata No. 2 in B-Flat Minor, O...

When You Fall (Feat. Chai)

Sad Song

less of you

Freilach








When You Fall (Feat. Chai)

When You Fall (Feat. Chai)

< Additional Feature 2: Recently Liked Tracks

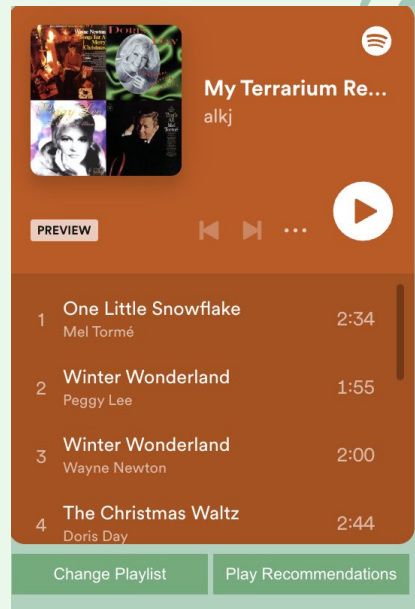


Retrieves recently liked tracks

Liked Tracks					Sort by track order 
#	Cover	Track	Artist	Duration	
1		Fantasies and Impromptus: I. Fantasy	Donald Martino Randall Hodgkinson	5:17	
2		Rabbana	Mohammadreza Shajarian Moazzenzadeh Ardabili	4:27	
3		Noites Cariocas	Jacob Do Bandolim	3:02	
4		Ain't No Mountain High Enough	Marvin Gaye Tammi Terrell	2:32	
5		Be My Baby	The Ronettes	2:41	
6		I Want To Hold Your Hand - Remastered 2015	The Beatles	2:26	
7		Foxey Lady	Jimi Hendrix	3:19	
8		So Good At Being in Trouble	Unknown Mortal Orchestra	3:50	
9		Verbatim	Mother Mother	2:48	

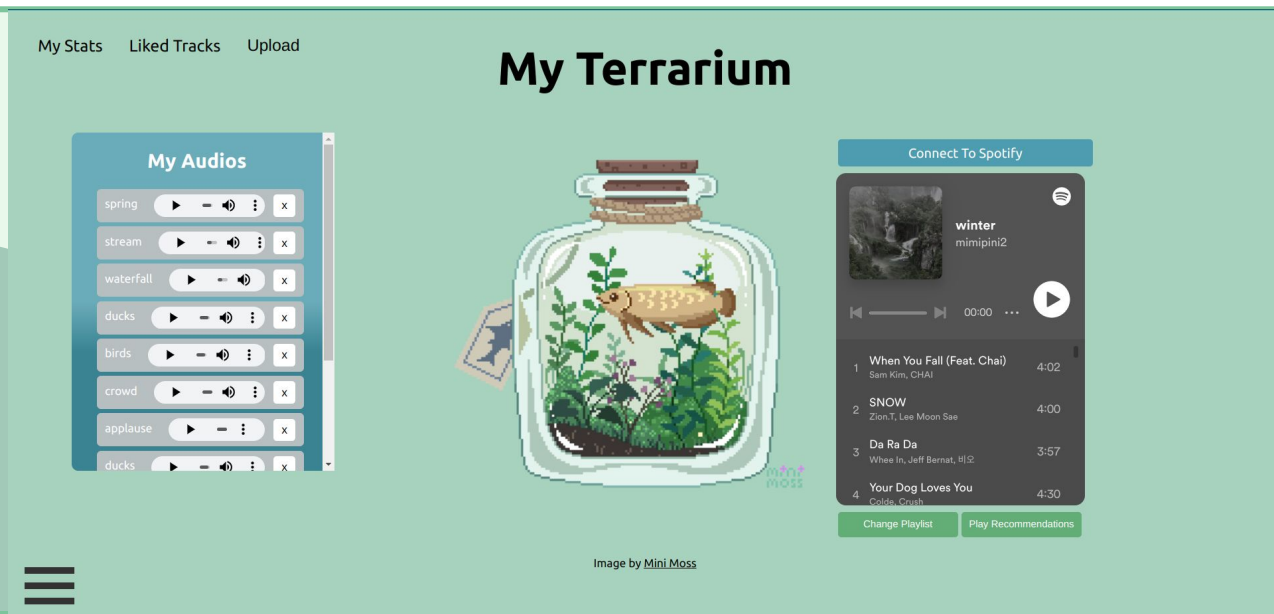
< Additional Feature 3: Song recommendation

Replaces the currently selected playlist with a playlist of recommendations from Spotify.



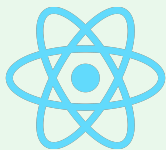
< > ⚙️ Additional Feature 4: Audio Layering — □ ×

Spotify and playlist files can be independently controlled.





Built with



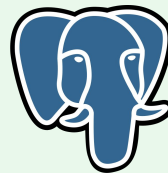
React

Frontend



Quart

Backend



PostgreSQL

Database (Also
JSON alternative)



Thanks for listening!

