Moodtune

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What is it?

For users who want recommendations based on their mood

A site that allows someone to input a mood and get recommended songs from Spotify

Basic Tools Used







- GitHub (VCS Repository, 5/5)
- Docker (Deployment, 3/5)
- VScode (IDE, 5/5)

Organization Methods





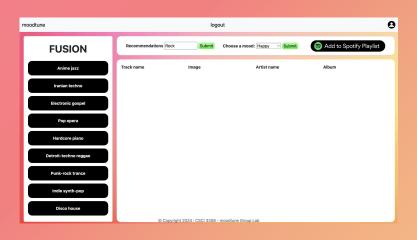




- Agile (Organizing Method, 5/5)
- Peer Programing (Team members,5/5)
- Scrum Meetings (TA, 5/5)
- Team Meetings/Organizing(Slack, 5/5)
- Figma (Wireframe, 5/5)

Front-end

- Handlebars (UI Tools, 5/5)
- CSS style (UI Tools, 4/5)
- HTML (UI Tools, 5/5)
- Bootstrap (UI Tools 5/5)



Back-end

- Javascript (JS, 5/5)
- Local Host (Deployment environment, 5/5)
- Framework (Express JS, 5/5)
- PostgresQL (DB, 4/5)

```
DROP TABLE IF EXISTS users;

CREATE TABLE users(
username VARCHAR(50) PRIMARY KEY,
password CHAR(60) NOT NULL

);

DROP TABLE IF EXISTS recommendations;

REATE TABLE recommendations(
id SERIAL PRIMARY KEY, -- Unique identifier
generationID INT, -- ID per group of 10 songs generated
track_name VARCHAR(255) NOT NULL,
artist_name VARCHAR(255) NOT NULL,
album_image_url VARCHAR(1000) NOT NULL,
track_url VARCHAR(1000) NOT NULL,
recommended_for VARCHAR(50), -- Foreign key referencing user ID
genreInput VARCHAR(255),
FOREIGN KEY (recommended_for) REFERENCES users(username) -- Link recommendations to users
);
```

Spotify API

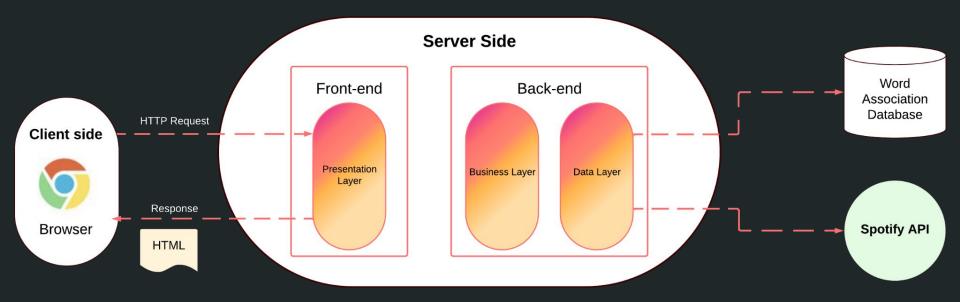
- Application Server/API route (fetch/JS, 4/5)
- External API (Spotify API, 4/5)
- API Testing (Postman 5/5)
- Recommendation Storage + Word
 Association Database (Postgres, 4/5)

```
1 curl --request GET \
2   --url
https://api.spotify.com/v1/recommendations/available-genre-
seeds \
3    --header 'Authorization: Bearer
1POdFZRZbvb...qqillRxMr2z'
```

• RESPONSE SAMPLE

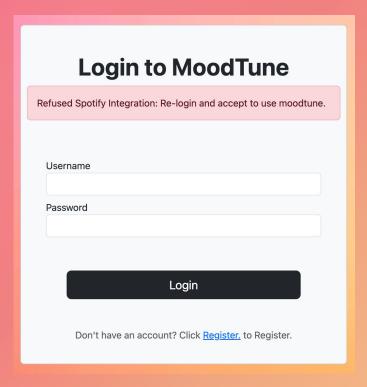
```
"genres": ["acoustic", "afrobeat", "alt-rock",
"alternative", "ambient", "anime", "black-metal", "bluegrass",
"blues", "bossanova", "brazil", "breakbeat", "british", "cantopop",
"chicago-house", "children", "chill", "classical", "club",
"comedy", "country", "dance", "dancehall", "death-metal", "deep-
house", "detroit-techno", "disco", "disney", "drum-and-bass",
"dub", "dubstep", "edm", "electro", "electronic", "emo", "folk",
"forro", "french", "funk", "garage", "german", "gospel", "goth",
"grindcore", "groove", "grunge", "guitar", "happy", "hard-rock",
"hardcore", "hardstyle", "heavy-metal", "hip-hop", "holidays",
"honky-tonk", "house", "idm", "indian", "indie", "indie-pop",
"industrial", "iranian", "j-dance", "j-idol", "j-pop", "j-rock",
"jazz", "k-pop", "kids", "latin", "latino", "malay", "mandopop",
"metal", "metal-misc", "metalcore", "minimal-techno", "movies",
"mpb", "new-age", "new-release", "opera", "pagode", "party",
"philippines-opm", "piano", "pop", "pop-film", "post-dubstep",
"power-pop", "progressive-house", "psych-rock", "punk", "punk-
rock", "r-n-b", "rainy-day", "reggae", "reggaeton", "road-trip",
"rock", "rock-n-roll", "rockabilly", "romance", "sad", "salsa",
"samba", "sertanejo", "show-tunes", "singer-songwriter", "ska",
"sleep", "songwriter", "soul", "soundtracks", "spanish", "study",
"summer", "swedish", "synth-pop", "tango", "techno", "trance",
"trip-hop", "turkish", "work-out", "world-music"]
```

Architecture Diagram



Challenges

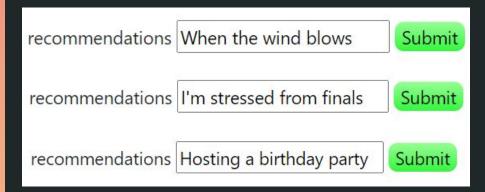
Login/Spotify credentials



- API routing
 - Routes to wrong pages in code (initially)
 - Using Spotify API
- Rate limited on APIs
 - Too much testing
- Docker Issues
 - Connecting the database
 - Having to compose down -volumes everytime a change was made to the database
- How to get recommendations based on mood

Future Scope/Enhancements

- Recommendations
 - Broader scope in searching
 - Situational recommendations
 - Blacklisting certain tracks (keywords)
 - Filter (songs already in user library and not)
 - Sub-questions for mood
- Expand Playlist (add songs to playlist)
- Sharing the User Profile
- Sort user's current (preferably shuffled) playlist based on genre
- Make weird combination playlists



Demo!

https://drive.google.com/file/d/15wvZlzVkPumTtBe-hot8NdCvNfTaxKSh/view?usp=sharing