Music Streaming Application: Application Development 2 Project

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Demonstration Video:

Music_streaming_app_video.mp4

Database:

Database used: SQLite

Tables: User, Song, Role, Roles User, Album, Album Song, Flag, Rating, Playlist

- User: id, username, email id, password, active, fs_uiquifier, roles, song, last_login
- Song: id,song name, artist, song_path, creator_id, paly_count, flag_count, ratings, flags
- Role: id, name, description
- Album: id, album name, songs, creator id, creator
- Flag: id, song_id,user_id
- Rating: id, song id, user id, ratings
- Playlist: id, playlist name, user id, user, songs

Authentication:

For authentication, I vue.js for frontend and Flask Security token based authentication for backend

- User and Creator Registration
- User/Creator Login
- Admin Login

First time users can register themselves as a user or a creator. Once the users register themselves, they'll be redirected to the User Login page.

Client side validation as well as backend validation has been implemented for user/creator login.

Homepage:

If the logged in user is a normal user or a creator, they'll be redirected to the homepage of the application where all the available music titles will be shown. There are 3 broad section of the page:

- Navbar(Logout, Logged in status)
- Songs section
- Albums section

All the available songs and albums will be displayed(fully functional) in these sections(dynamically generated).

Search Feature:

The user will be able to search for a particular song/an album. The result will be displayed in the proper section(either All Songs/Albums), with a filter for rating option.

Creators Page:

The registered creators can upload a song with proper name and details. I've implemented it in such a way that it'll automatically take the creator's name as the Singer Name to avoid any future copyright issues. The creator will also be able to create albums, in the designated page, they'll be shown all the songs that were uploaded on their name(again to ensure no one can claim rights to other's songs) and they can create albums.

Admins Dashboard:

A quick snapshot of the statistics like:

- Song Play count
- User count
- Singer Names

will be shown and the admin will have two options to:

- Flag song
- Remove songs/albums