

MUSIC RECOMMENDATION SYSTEM (MAD-I PROJECT)

NAME - **YASHWANT RAJ**

ROLL NO. - **21f1001547**

Email - **21f1001547@ds.study.iitm.ac.in**

DESCRIPTION

I have approached the given problem statement in the following manner :

(I) I designed a suitable database structure to store the information about Users and Creators who register on the platform as well as the Admin, Songs, Albums and Playlists.

(II) I created the basic framework for the website which involved creating routes and functions required for fetching data from the database and displaying to the user using the website.

(III) I created templates for different pages and linked them with their respective routes in order to display the desired information to the user.

MODULES/TECHNOLOGIES USED

(I) FLASK - The entire web application is built upon the flask framework.

(II) Jinja Template - Jinja has been used in the templates for the web pages.

(III) Sqlite3 - Database created is of sqlite3 structure

(IV) CSS and Bootstrap - Basic styling has been done using CSS,Bootstrap.

(V) Flask - SQLAlchemy - It has been used for creating the relational database used in the app.

DATABASE DESIGN

Tables used in the Database: User, Album, Creator, Admin, Song, Playlist, Playlist_Songs

Many to One Relationship -

Used in the tables for Song and Album. Many Songs can belong to one album.

Used for Song and Playlist. Many songs can belong to one playlist.

ARCHITECTURE

The project folder consists of these main parts:

- (I) Instance folder : Database is generated and stored in the instance folder
- (II) Models folder : It contains user.py which contains the code for creating the database.
- (III) Templates folder : Templates folder consists of html files.
- (IV) app.py : It contains the routes for different templates.

FEATURES

Core Features:

- Admin login and User login – Separate form for Admin and User login
- Admin Dashboard - A dashboard for admin to view the creators and songs (including average rating on all songs and lyrics of songs) on the platform and also the option to delete them from the platform.
- User Home Page - An option to register as a creator is available to the user. Also the user can search for songs, read lyrics, create and add songs to its playlists. The user can also view its profile and check and/or delete the playlists already made.
- Creator Page - A user who has registered as a creator can upload the details of songs and accordingly create its albums.
- Registration Page - There is a separate registration page for new users.

How to run the application :

readme.md file contains the instructions on how to run the web application.

Link To The Project Presentation Video :

https://drive.google.com/file/d/10NQaVjlbT2mt52-YE7O6ytdOztZg3B3N/view?usp=drive_link