MUSIC STREAMING APPLICATION

AUTHOR
Name : AKASH MAURYA
Roll No : 22f3003152
Email ID : 22f3003152@ds.study.iitm.ac.in

PROJECT DESCRIPTION
This project is a platform for listening to music, where users can register as a new user and login to a music app. Creators are another type of user who can create or delete songs. And here admin can check the no of user,creator,no of songs and much more.

TECHNOLOGIES USED
1. Flask - used for application code
2. Jinja2 templates and CSS for HTML generation and Styling
3. SQLite and SQLAlchemy for Data storage

ARCHITECTURE AND FEATURES
1. The project is organized using the Model-View-Controller (MVC) architecture, with the controllers handling logic and routing, templates for display and models for interacting with a database.
2. Features implemented include:
   a. New users can register and login and Existing users login (using Username and Password).
   b. User login After creating the new user , users are capable of logging
3. creator login The creator registration can be completed in SQL database. In the Creator dashboard the creator can Create, Read (View), and Delete songs.

DB SCHEMA DESIGN
The database has server models/labels created. The database is designed to store the user login,creator login,and song lists. The database has several tables created using sqlite3.
The schema includes: loginfor: stores the user's information like email and password. creator:stores the information of the creator like email,password. Songlist:stores a list of songs of different genres and new songs uploaded by the creator which contains song_id,song_name,image_path and file_path.

CHALLENGES FACED
The major challenge faced during the development of this project was implementing the user and admin login systems. It required careful planning and implementation to ensure that the login process was secure and robust. Another challenge was designing the database schema to support the various features of the platform while maintaining data integrity.

FUTURE IMPROVEMENTS
The project can be improved by adding more features such as payment integration, rating the song by users, and going to add editing features for creators to edit songs.Automatic lyrics converter. user profiles, better security and social media sharing. Additionally, the user interface can be improved to enhance user experience. Adding a new feature to the admin page for better control over the app.

CONCLUSION
In conclusion, this project was successful in creating a platform to listen to music, create new songs. The MVC architecture and use of Flask, Jinja2, and SQLAlchemy made the development process efficient and effective. The project can be improved in the future by adding more features and improving the user interface.

PROJECT DEMONSTRATION VIDEO LINK

1. YouTube link:
   https://youtu.be/74fu4nysenc
2. Google drive link:
   https://drive.google.com/file/d/1pEjMkeamdn5YcjYamFriJsq6nT6KY_Lc/view?usp=sharing