

Student Details :

Name: Khalid Quadri

Roll number: 21f1006833

Email: 21f1006833@ds.study.iitm.ac.in

Project Description :

MelodyVerse - Elevate Your Musical Journey

MelodyVerse redefines your musical journey with a cutting-edge web app. Dive into a vast library spanning genres, create personalized playlists, explore albums seamlessly, and even showcase your talent by registering as an artist. Elevate your music experience with MelodyVerse.

Technologies Used :

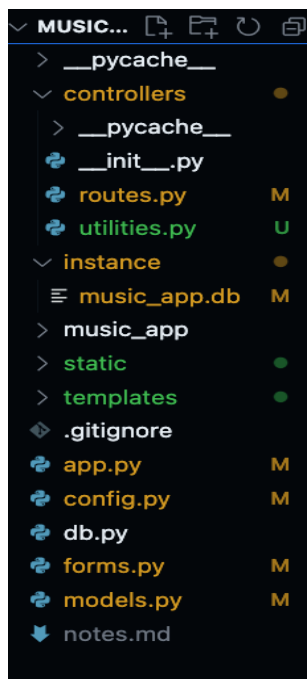
MelodyVerse employs a robust tech stack including HTML, CSS, Jinja, Bootstrap, Flask, Flask-Login, and Flask-SQLAlchemy. Python serves as the primary programming language, with Flask as the core framework for web development. Flask-Login handles user authentication and sessions, while Flask-SQLAlchemy acts as the ORM tool for seamless database interaction.

Database Schema :

The following link directs to the Database Schema of RUSTLE

[MelodyVerse Schema](#)

App Architecture :



Modular Structure: Controllers (routes) manage specific features in this Flask application.

Database Models: Defined in models.py to organize and structure data.

Forms: Forms.py utilizes wtf-forms to define forms used throughout the app.

Static Directory: Serves as a filesystem for media storage (e.g., audios).

Templates: Organize HTML using Jinja for rendering views.

Entry Points:

- ☐ app.py: The primary entry point to run the project.
- ☐ init.py: Configures the Flask app and initializes necessary extensions.

Features:

- ☐ Authentication and Authorization: Streamlined user registration and login with robust authentication protocols. Role-based access control for authorized access to distinct features based on user roles.
- ☐ Admin Management: Admin dashboard for monitoring user activities, content management, and issue resolution. Admins can review and approve artist registrations and content uploads. Blacklisting of creators and flagging songs/albums violating company policies.
- ☐ Creator (Song and Album Management): Intuitive interface for artists to effortlessly upload and manage songs, lyrics, and albums. Comprehensive tools for artists to edit and remove their uploaded content.
- ☐ Search Functionality: User-friendly search filters for discovering songs and albums.
- ☐ Home Page: Display of the latest 5 songs and albums to engage users and encourage exploration.
- ☐ User Interaction: Users can create playlists, listen to songs, search for songs and albums, and rate the songs.

Presentation Video:

[MelodyVerse App Demo Video](#)