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Hello everyone I am Aditya Shanker Srivastava and I am from Lucknow, Uttar Pradesh. Write now I am a student and perusing BS in Data Science and Applications from IIT Madras. I did my intermediate with Physics, Chemistry, Mathematics from St. Xavier's Convent School, Lucknow in 2022.

The objective of this project is to develop a music streaming application using flask for API development and VueJS for the user interface.

FEATURES:-

User Authentication: Secure login and registration for users.

Search and Browse: Search for songs by song name, genre.

Admin Dashboard: Centralized dashboard for admin to manage users and songs.

Song Management: Add, edit, and delete songs with details such as title, genre, and lyrics.

Song Playlists and Albums: Users Create a playlist and album and upload a song by registering as a creator.

Notifications: Automated email notifications for users .

ARCHITECTURE:-

Frontend: The user interface is built using HTML, CSS, Bootstrap, JavaScript, and Vue.js framework for interactive and responsive design.

Backend: The backend logic is implemented in Python using Flask framework to handle routing and business logic, Flask-SQLAlchemy for database operations.

API: A hybrid of restful and graphql APIs have been used. Flask for restful API and Ariadne for Graphql APIs.

Database: SQLite is used to store song details, user information and system configurations. Reddis has been used for caching and as a broker for celery.

Authentication: JWT (JSON Web Token) is used for user authentication and session management.

Email Integration: SMTP protocol is used for sending email notifications to users. Gmail services have been used for the same.

TECHNOLOGIES :-

Frontend: HTML, CSS, Bootstrap, JavaScript, Vue.js

Backend: Python, Flask framework

Database: SQLite and Reddis

Authentication: JWT (JSON Web Tokens)

Email Integration: SMTP protocol

IMLEMENTATION:-

User Management: Registration, login, profile and role-based access control (user, creator).

Song Management: CRUD interface for admin who can create, update and delete songs.

Email Notifications: Automated email notifications for users with a monthly progress report in HTML or PDF (email), the monthly activity report is meant for a creator and the activity report consist of songs & albums created, ratings received on songs/albums etc

Admin Dashboard: Admin dashboard to monitor app statistics like total users/creators/albums, statistics on how songs are performing.

VIDEO LINK -
https://drive.google.com/file/d/1hPBky4USjmjMFO_OVbhz2VUGczSKNmEL/view?usp=sharing