

Student Details :

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Project Description :

Rustle - Your Ultimate Music Streaming Experience

Rustle is a state-of-the-art music streaming app that is designed to provide users with a seamless and immersive listening experience. With Rustle, users can enjoy a vast library of songs, create custom playlists, access albums, and even have the opportunity to register as an artist to showcase their own musical talents.

Technologies Used :

HTML, CSS, Jinja, Bootstrap, Flask, Flask-Login, Flask-SQLAlchemy, Flask-Bcrypt, Flask-WTF, Matplotlib's pyplot

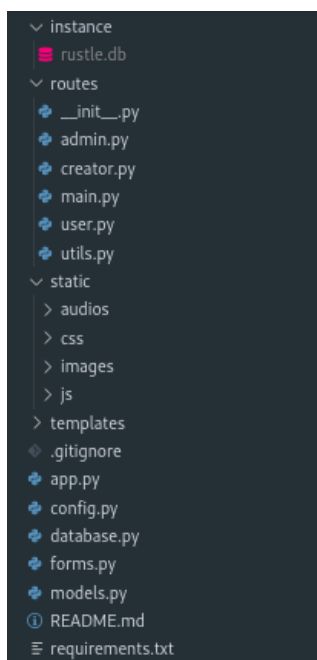
- Python is the core programming language used to write this app.
- Flask is the core framework to build the website.
- Flask-Login is used for managing user login and their session.
- Flask-SQLAlchemy is an ORM tool used to interact with the database.
- Matplotlib is used to draw graphs and plots for the admin and creator dashboards.

Database Schema :

The following link directs to the Database Schema of RUSTLE

[Rustle Schema](#)

App Architecture :



- This Flask application follows a modular structure with controllers(routes) handling specific features.
- Database models are defined in models.py.
- Forms used in the app are defined in forms.py which has been made using wtf-forms
- The static directory includes images, styling and serves as a filesystem to store media (audios in this case), while templates organize HTML for rendering views using Jinja.
- The app.py file serves as the entry point to run the project while __init__.py serves as the main entry point, configuring the Flask app and initializing necessary extensions.

Features :

1. Authentication and Authorization

- Seamless user registration and login process with secure authentication protocols.
- Role-based access control to ensure authorized access to different features based on user roles.

2. Admin Management

- Robust admin dashboard for monitoring user activity, managing content, and resolving issues.
- Ability for admins to review and approve artist registrations and content uploads.
- Blacklisting of creators
- Flagging of Songs and Albums which violates company policies

3. Creator (Song and Album Management)

- Intuitive interface for artists to upload and manage their songs, lyrics, and albums effortlessly.
- Comprehensive tools for artists to edit and remove their uploaded content.

4. Search Functionality

- Search filters for users to discover songs and albums.

5. Home Page

- Latest 5 songs and albums displayed to engage users and encourage exploration.

6. Users

- Users can create playlists, listen to songs, search for songs and albums and rate the songs.

Presentation Video :

[Link to App Demo Video](#)