

Music Streaming App

Frameworks to be used

- Flask for application code
- Jinja2 templates + Bootstrap for HTML generation and styling
- SQLite for data storage

Music Streaming App

- It is a multi-user app (one required admin and other users or creators)
- Used for streaming music/reading lyrics
- User can read lyrics, rate songs, create playlists
- Creators can add new songs/albums/lyrics
- Each Album may have
 - ID
 - Name
 - Genre
 - Artist etc.
- Each song will have
 - ID
 - Name
 - lyrics
 - Duration
 - Date created etc.
- Every album can have a number of songs
- System will automatically show the latest albums/songs added or based on certain rating

Terminology

- Albums, Playlists
- User, Creator, Admin
- Songs - lyrics

- Policies

Core Functionality

- Base requirements:
 - Admin's Dashboard
 - General User Profile
 - Creator Profile (General users registered as creators)
 - Song Management
 - Playlist Management
 - Search functionality for songs

Core - Admin and User Login

- Form for username and password for user
- Separate form for admin login
- Separate form for creator - general users can register as a creator
- You can either use a proper login framework, or just use a simple HTML form with username and password - we are not concerned with how secure the login or the app is
- Suitable model for user (Model that stores all the type of users and differentiates them correctly based on their role)

Core - General User functionalities

- View all the existing songs/Albums
- Read lyrics, create playlists of existing songs (one or more)

- Rate existing songs/song lyrics
- Register as a Creator

Core - Creator functionalities

- All the functionalities of a general user
- Create a new song/lyrics/album
 - Storage should handle multiple languages - usually UTF-8 encoding is sufficient for this
- Edit an existing song/lyrics/album
 - Change lyrics, artists name, song attributes, album name
- Remove an existing song/lyrics/album
- Assign a song to a particular album

Core - Admin functionalities

- Admin dashboard to monitor app statistics like total users/creators/albums
- Statistics on how songs are performing