

# App Development 1 Project September 2023 Term

## **Author:**

Name: Hitesh S

Roll no.: 22f2000988

Mail id: [22f2000988@ds.study.iitm.ac.in](mailto:22f2000988@ds.study.iitm.ac.in)

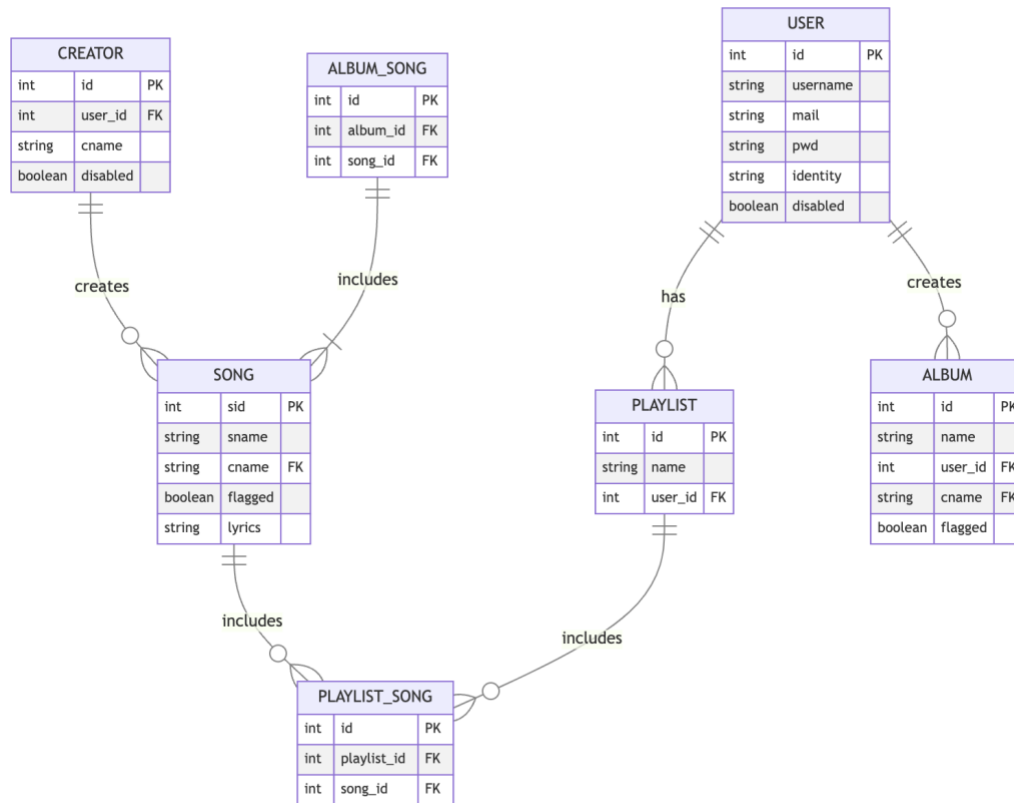
## **Project Description:**

The goal of the project is to develop a Music Streaming Application that allows users to play songs, read lyrics, create and modify playlists, as well as allow creators to upload songs and create albums.

## **Technologies Used:**

- **Flask:** Used for developing web applications using python, implemented on Werkzeug and Jinja2. Advantages of using Flask framework are: There is a built-in development server and a fast debugger.
- **SQLAlchemy:** The Python SQL toolkit and Object Relational Mapper that gives application developers the full power and flexibility of SQL. It provides a full suite of enterprise-level persistence patterns, designed for efficient and high-performing database access.
- Python 3.10
- SQLite3

## DB Schema:



## API Design:

GET operations have been implemented for Login, Playlists, Albums, Songs and Creators to retrieve data.

## Architecture and Design:

Firstly, the tables which are shown in the Schema and also the relationships among them are created and stored in `models.py` which is stored in the application folder. Then I have `config.py` which connects to the database path, and `database.py` which connects to the database itself. Finally, the routes for the application

itself are stored in controllers.py, and any music or image files uploaded are directly saved to the static folder.

**Video Link:** <https://youtu.be/FuowXOaHzDI>