AUTHOR

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About Me – I love digging into data and machine learning. When I'm not exploring insights, you'll find me enjoying football, grooving to music, and diving into captivating books. I also find fascination in space exploration and rockets.

DESCRIPTION

In this project we need to build a multi-user music streaming application (one required admin and other users or creators). Used for streaming music/reading lyrics. Users can play, read lyrics, and create playlists. Creators can add new songs, albums, lyrics. Creators and users should have the CRUD functionality for the songs/albums/playlists.

TECHNOLOGIES USED

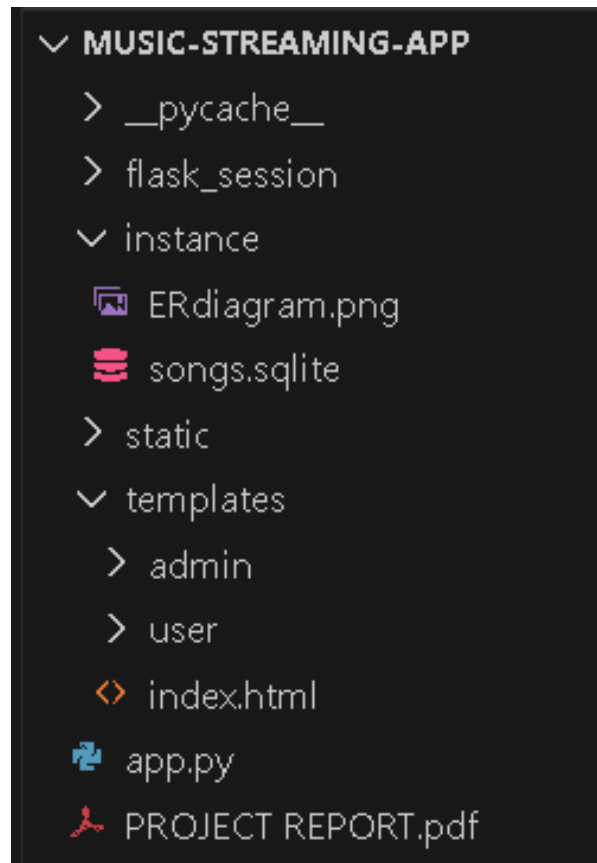Here are the technologies I used in the project:

Python, HTML/CSS/JS, Jinja Templating, Bootstrap, Flask, SQLite, Flask-SQLAlchemy, Flask-Bcrypt, Flask-Session, io.

Python is a general-purpose programming language that can be used for many applications. Flask is the main framework used for the webapp.

SQLite is a relational database management system (RDBMS) that is contained in a C programming library. It is an open-source SQL database that stores data in a text file on a device.

Jinja2 is a templating engine for Python developers. It's used to create HTML, XML, or other markup formats that are returned to the user via an HTTP request.

ARCHITECTURE

app.py file contains the main code.

"static" folder contains all the CSS files and images.

"templates" folder contains all the HTML files.

"instance" folder contains the database file "songs.sqlite" and the ER Diagram corresponding to that.
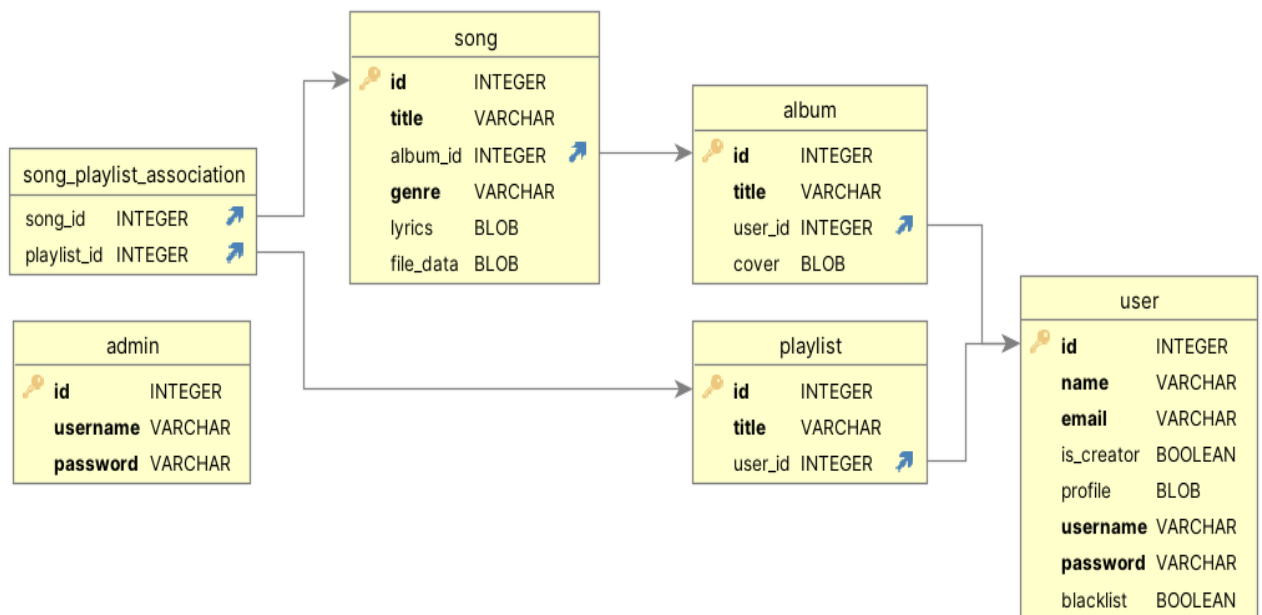
Admin ID: admin

Admin Password: admin@123

DB SCHEMA DESIGN

TABLE NAME	COLUMNS	DETAILS	CONSTRAINTS
USER	Id	Id of the user	Integer, Primary Key
	Name	Name of the User	String, Not Nullable
	Email	Email ID of the user	String, Not Nullable
	Is_creator	Is user creator or not	Boolean, Default = False
	Profile	Profile Picture of user	LargeBinary, Nullable
	Albums	Albums created by user	Foreign Key, Album
	Playlists	Playlists created by user	Foreign Key, Playlist
	Username	Username of the user's account	String, Not Nullable
	Password	Password of the user's account	String, Not Nullable
	Blacklist	Is the user blacklisted by admin	Boolean, default = False
ADMIN	Id	Id of the admin	Integer, Primary Key
	Username	Username of the admin account	String, Not Nullable
	Password	Password of the admin account	String, Not Nullable
ALBUM	Id	Id of the album	Integer, Primary Key
	Title	Title of the album	String, Not Nullable
	User_id	User ID of the Creator	Foreign Key, User
	Cover	Cover Picture of the album	LargeBinary
PLAYLIST	Id	Id of the playlist	Integer, Primary Key
	Title	Title of Playlist	String, Not Nullable
	User_id	User Id of the user	Foreign Key, User
SONG	Id	Id of the song	Integer, Primary Key
	Title	Name of the song	String, Not Nullable

	Album_id	Song Album	Foreign Key, Album
	Genre	Song genre	String, Not Nullable
	Lyrics	Song Lyrics	LargeBinary
	File_data	Audio File	LargeBinary

ER DIAGRAM

Here is the video link:

https://drive.google.com/file/d/1NYqYx4zFS9lFADnrQlGV0OWeCtH1syDw/view?usp=sharing