FINAL PROJECT (ASSIGNMENT 6)

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ODEAL DISCOGRAPHY

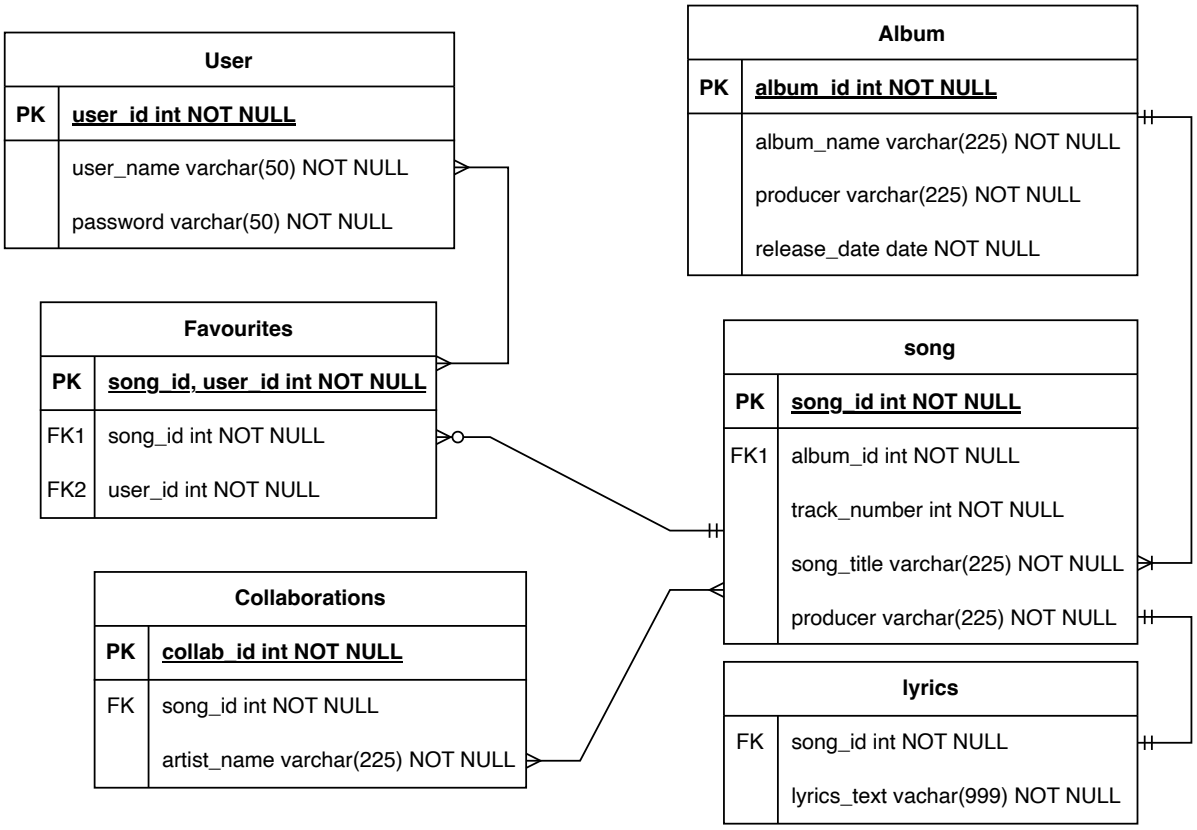
The Odeal Discography application is a web-based interface for accessing Odeal's music catalogue. The system uses an SQLite database to store essential information about Odeal's discography, including albums, songs, lyrics, collaborations, and user preferences such as favourite songs. It is intended to provide an easy and interactive way for users to explore Odeal's music, save their favourite tracks, and discover collaborations.

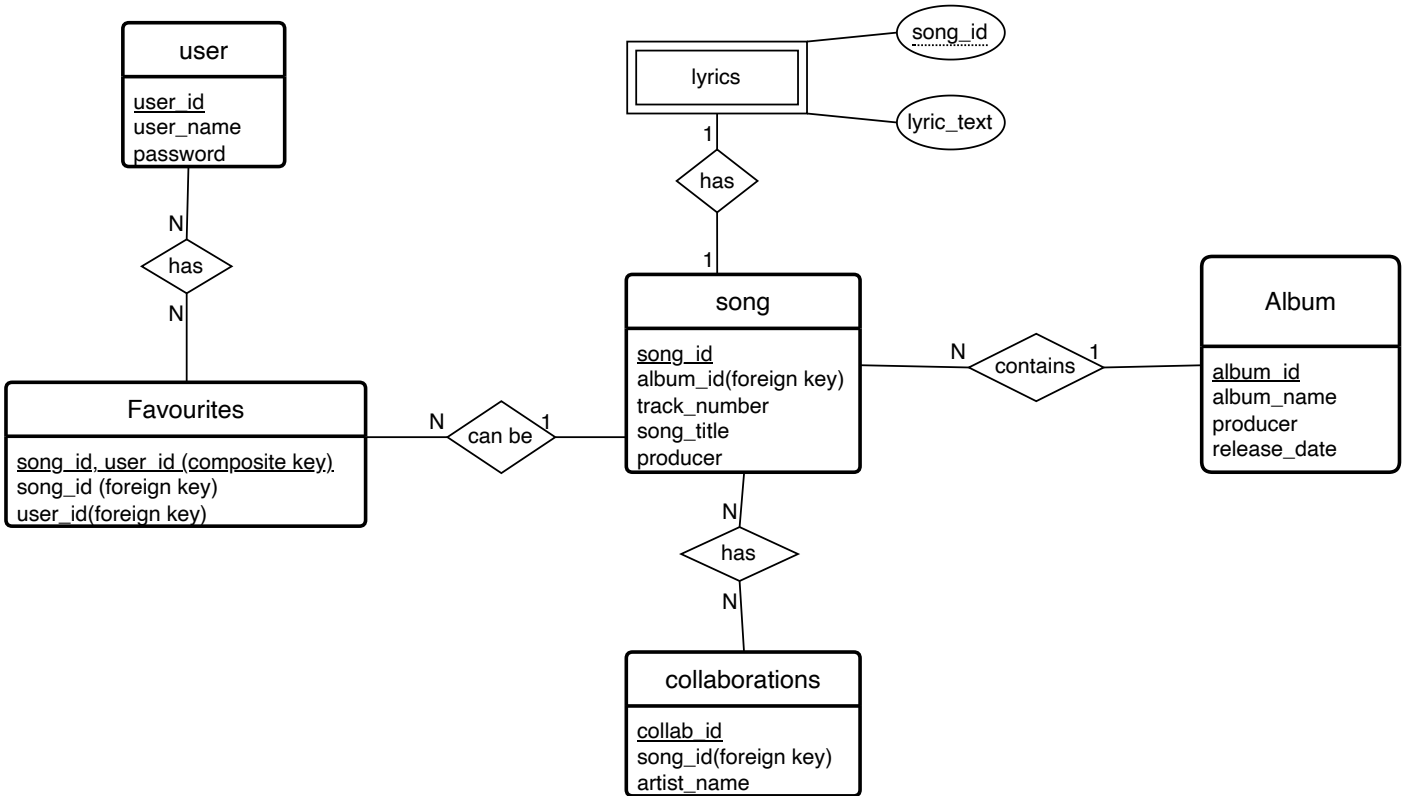
The web interface is built using Flask, a Python web framework, and follows a user-centric approach by including user authentication, personalised data access, and dynamic content rendering.

STRUCTURE

- **User**: This table stores user information, including user_id, user_name, and password. It is used for authentication, allowing users to log in and access their personal data.
- **Album:** Each album includes details, such as album_id, album_name, release_date, and producer. Each album is uniquely identified by album_id.
- **Song:** stores details about the song, such as song_id, song_title, duration, album_id, track_number, and producer. Each song is associated with an album through album_id**.**
- **Lyrics**: Stores the lyrics of songs, using song_id as a foreign key to relate each set of lyrics to a specific song.

- **Collaborations**: This section tracks collaborations with other artists. It contains collab_id, song_id, and artist_name. Each record links a song to an external artist involved in the collaboration. A song can have multiple collabs and a collab artist can have multiple songs with odeal.
- **Favourites**: Stores users' favourite songs, including favourite_id ,song_id, song_title, user_id, and an indication of whether it is currently marked as a favourite.


User
PK
user_id int NOT NULL
user_name varchar(50) NOT NULL
password varchar(50) NOT NULL
Album
PK
album_id int NOT NULL
album_name varchar(225) NOT NULL
producer varchar(225) NOT NULL
release_date date NOT NULL
Favourites
PK
song_id, user_id int NOT NULL
FK1
song_id int NOT NULL
FK2
user_id int NOT NULL
song
PK
song_id int NOT NULL
FK1
album_id int NOT NULL
track_number int NOT NULL
song_title varchar(225) NOT NULL
producer varchar(225) NOT NULL
Collaborations
PK
collab_id int NOT NULL
FK
song_id int NOT NULL
artist_name varchar(225) NOT NULL
lyrics
FK
song_id int NOT NULL
lyrics_text vachar(999) NOT NULL


user
user_id
user_name
password
N
has
N
Favourites
song_id, user_id (composite key)
song_id (foreign key)
user_id(foreign key)
N
can be
1
song
song_id
album_id(foreign key)
track_number
song_title
producer
N
has
N
collaborations
collab_id
song_id(foreign key)
artist_name
lyrics
song_id
lyric_text
1
has
1
N
contains
1
Album
album_id
album_name
producer
release_date