

Project Specification

Project Description:

The Music Library Management System is designed to help music fans and collectors organize, manage, and explore music collections. The system will allow users to store information about Artists, Albums, Songs, and Genres. There will be 2 roles for this project: a normal and an admin user. The functionality is based on that, which will be detailed.

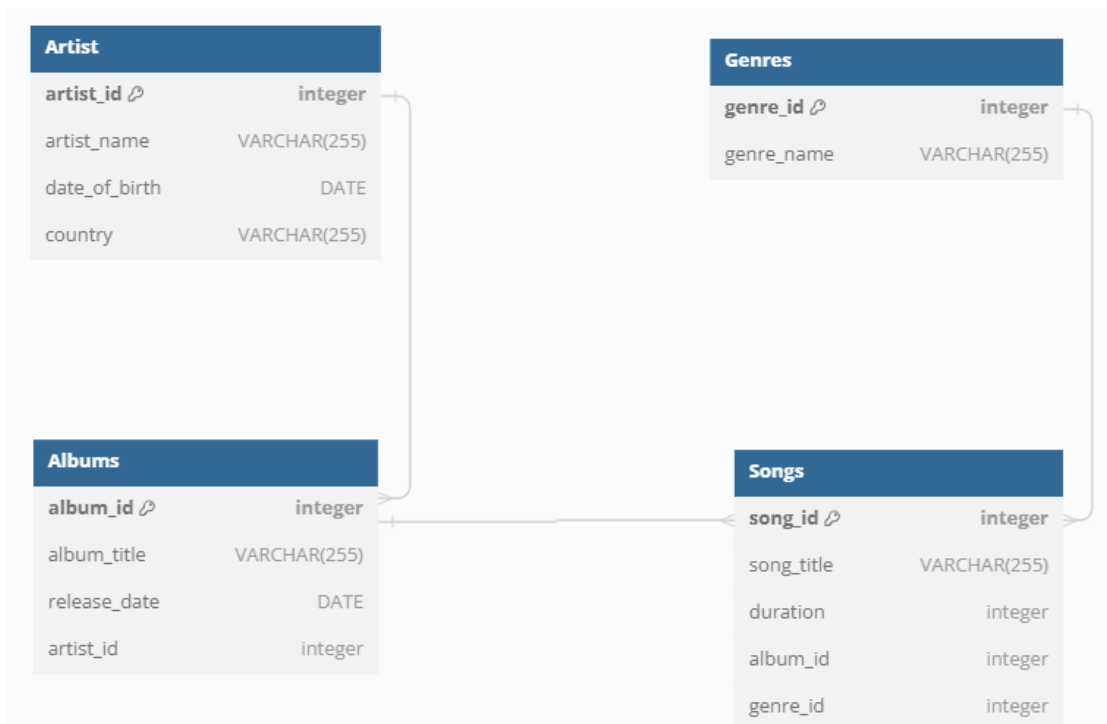
Normal Users

- Normal Users can search for specific artists, albums, songs, or genres based on keywords. (They can reach all the tables)
- They are allowed to view detailed information

Admin Users

- Admin users can add new elements into all the tables
- They can edit, delete and update existing information

Diagram of the Data



Tables

The provided diagram displays the structure of the Albums, Songs, Artist, and Genres tables, with highlighted primary keys and observable connections between them:

Albums and Artist

The relationship between Artists and Albums is a one-to-many (1:N), indicating that each artist can have multiple albums, but each album belongs to only one artist. This will be established by the `artist_id` (foreign key) in the Albums table, which references the `artist_id` (primary key) in the Artists table.

Albums and Songs

The next relationship between Albums and Songs is also a one-to-many (1:N). The foreign key is the `album_id` (in the Songs table) making connection with the `album_id` in the Albums table.

Genres and Songs

The last relationship is made between Genres and Songs (1:N). Each genre can encompass multiple songs. The `genre_id` foreign key in the Songs table references the `genre_id` primary key in the Genres table.