COSC 3380 – Database Systems

Semester Term: Spring 2022

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Online Music Library

Project Concept/Pitch:

Online Music Library:

Coog Music is a web application built for UH musicians and students who want to post their songs and listen to music made by peer alumni. This application is a way to give space to local music artists to show their talent and reach a greater audience. Users of Coog Music are split into two groups: Listeners can search for songs, create playlists, and musician users can upload their songs, add them to albums, categorize them with metadata and listen to them as well.

Mini-World

-User account creation and authentication

-Front end playback

-Music uploading with data to be saved in the database

-Artists can assign songs to Albums

-Listener users can create, edit, and collaborate on playlists

User Table

       USER_ID (int, primary key)

   User_type; Musician or Listener (Boolean)

   Username (string, 32 char max)

   Password (hash)

   Date account created (date, YYYY-MM-DD)

Music Table

Song name (string 32 char max)

SONG_ID (int, primary key)

Album -> album table

Artist -> user table

Length (int, seconds)

Date added (date, YYYY-MM-DD)

Number of plays (integer)

Producer (string)

Writer (string)

Playlist Table

PLAYLIST_ID (int, primary key)

Playlist Name (string, 32 char max)

Songs in playlist -> music table

Playlist creator -> user table

Album Table

ALBUM_ID (int, primary key)

Title (string, 32 char max)

Artist -> user table

Release Date (date, YYYY-MM-DD)

Relationships:

1. A song must have a minimum of one primary artist. A song can have zero or many featured artists. An artist can publish zero or many songs. A featured artist can take part in zero or many songs.
2. A song can be part of zero or many albums. An album must have a minimum of two songs.
3. A playlist can have one or many songs. The music table will not hold any playlist information.
4. Playlists must be managed by a mandatory one person. A person can edit zero or many playlists.
5. A user can have zero or many albums. An album must have one or many creators.