Schema

User(userID, username, password, firstName, lastName, danceabilityPref, accousticnessPref, energyPref, loudnessPref, modePref, tempoPref, valencePref, recommendationSource)

- This table holds the user's login information and the user's preferences in music. The preferences variables are used by Spotify to rate songs.

AuthToken(token, userID, timeStamp)

- This table holds the authorization tokens needed to access the Spotify API for the user's music data.
    - Foreign Key userID references User

Playlist(playlistID, userID, name, numberSongs, pictureURL)

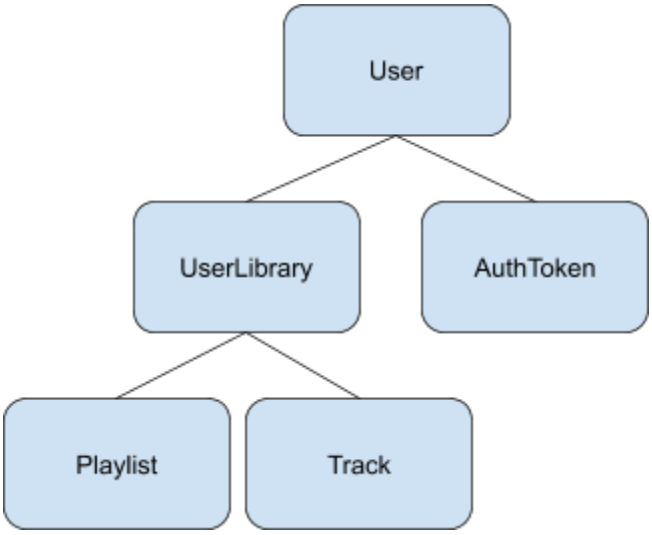
- This table holds all of the user's playlists, along with the information of the playlist such as: its name, number of songs, and a picture URL given in the Spotify API

Track(trackID, trackName, artist, album, length, danceability, accousticness, energy, loudness, mode, tempo, valence)

- This table holds the specific information for each track. It holds the trackID, the name of the track, the artist on the track, album that the track is from, the length of the track, and the rankings of its sound that Spotify has given it (danceability, acousticness, energy...)

UserLibrary(userID, trackID, playlistID)

- This table holds all of the user's songs, along with their trackID and what playlists they are in. A track could be listed multiple times in this table to account for if it is in different playlists.
    - Foreign Key userID references User
    - Foreign Key trackID references Track
    - Foreign Key playlistID references Playlist



This schema is normalized because all the information could be unnormalized and accessed from the User table. The User table gives access to the UserLibrary table and the AuthToken Table through the userID. The UserLibrary table then holds all of the tracks and gives access to each track's individual information in the Track table through the trackID. Lastly, it gives access to the Playlist table through the playlistID.