# **MUSIC LIBRARY MANAGEMENT SYSTEM CASE STUDY**

In a music library management system, a user can listen to tracks/songs. A user can listen  
to many tracks and one track can also be listened to by many users. The system stores the  
user id (primary key), username, password, and user email. A track is identified by the track  
id, track name, track creation date, and duration. Users can make playlists.

One user can make many playlists, but one playlist can only be made by exactly one user. The playlist  
contains tracks. One playlist can contain many tracks and one track can be in many  
playlists. The system stores the playlist id, playlist name, and playlist created date. Artist  
composes track.

A track may be composed by many artists and one artist can compose many  
tracks. The system stores the artist id, artist name, and nationality of the artists who  
created at least one track.

An artist creates an Album. An album may be created by many artists and one artist can create many albums. Albums are identified by album id, album name, and album date created.

One artist has to create at least one track or an album.

Album has tracks. One album may contain many tracks and one track can only belong to one  
album.

Tracks belong to genres. One track can belong to multiple genres and for one genre  
there can be multiple tracks. Genre is specified by genre id, and genre name.