



**Fall 2020**  
**CS 353 DATABASE SYSTEMS**  
**PROJECT PROPOSAL**

**Music Track**  
**Data Management System**

**Group 15**  
Abdullah Ayberk Görgün - 21201986  
Ege Moroğlu - 21401240  
Melisa Onaran - 21301232

<b>1. Description</b>	<b>2</b>
<b>2. Requirements</b>	<b>2</b>
<b>2.1 Functional Requirements</b>	<b>2</b>
2.1.1 Keeping Track of Attributes	2
2.1.2 Putting Songs and Albums	2
2.1.3 Purchase	2
2.1.4 Creating Playlists	2
2.1.5 Listening to Songs	2
2.1.6 Friends	3
2.1.7 Feedbacks	3
2.1.8 Group Playlists	3
<b>2.2 Nonfunctional Requirements</b>	<b>3</b>
2.2.1 Security	3
2.2.2 Interface	3
2.2.3 Performance	3
2.2.5 Accessibility	3
<b>3. Limitations</b>	<b>4</b>
<b>4. E/R Diagram</b>	<b>4</b>
<b>5. Website Address</b>	<b>4</b>

# 1. Description

This project is about a music platform where a user can play songs after making his/her purchase completed. For example, he/she can buy a specific song to play or an album. Users can play the songs separately by choosing one by one or in a playlist in a queue. A user can create unlimited playlists to categorize songs or to order however they like. Artists can use this platform too. They can put their songs or albums to the platform and determine its purchase prices. Users will have the opportunity to send friend requests to see activities and send a public feedback on a song or album after the purchase. After having friends, users can create group playlists as groups and each user can add or remove songs to the shared playlist but only can play the songs that he/she has.

## 2. Requirements

### 2.1 Functional Requirements

#### 2.1.1 Keeping Track of Attributes

Admins must keep track of users and artists to check if everything is proper. They also must keep track of songs, albums, genres and feedback to check if everything works as they are supposed to be. Admins have the full authority to take action as suspend users, deactivate or close accounts, etc.

#### 2.1.2 Putting Songs and Albums

Artists can put their songs individually or as an album to the platform and determine each price for users to buy.

#### 2.1.3 Purchase

A user can purchase songs or albums after they search the database.

#### 2.1.4 Creating Playlists

Users are able to create unlimited playlists containing the songs they have purchased and each song can be in multiple playlists.

#### 2.1.5 Listening to Songs

A user can play a song only after purchasing it. He/she can choose to play one song at a time or sequence of songs in an album or a playlist.

### **2.1.6 Friends**

A user can send friend requests to other users and see each other's activities when they are friends.

### **2.1.7 Feedbacks**

A user can leave a public feedback on songs or albums after buying them. All users can see the feedback and they can give another one an idea about the songs or albums for purchasing.

### **2.1.8 Group Playlists**

Users can create playlists after forming groups among friends. Each user in the group can add or remove songs to the group playlist but only can play the songs he/she has.

## **2.2 Nonfunctional Requirements**

### **2.2.1 Security**

A user spends money on this platform to buy and play a song while artists get money from the purchases so security is important to avoid problems. People must be verified before being a user or an artist on the platform.

### **2.2.2 Interface**

Interface should be user friendly for users to use the platform easily. Otherwise it would have a bad effect on people who encounter the platform the first time they leave or users may give up struggling with technical user interface development problems.

### **2.2.3 Performance**

This platform offers music and it is not a heavy work regarding either computer or the internet connection. Therefore, everything will be handled in time a human cannot perceive as a delay.

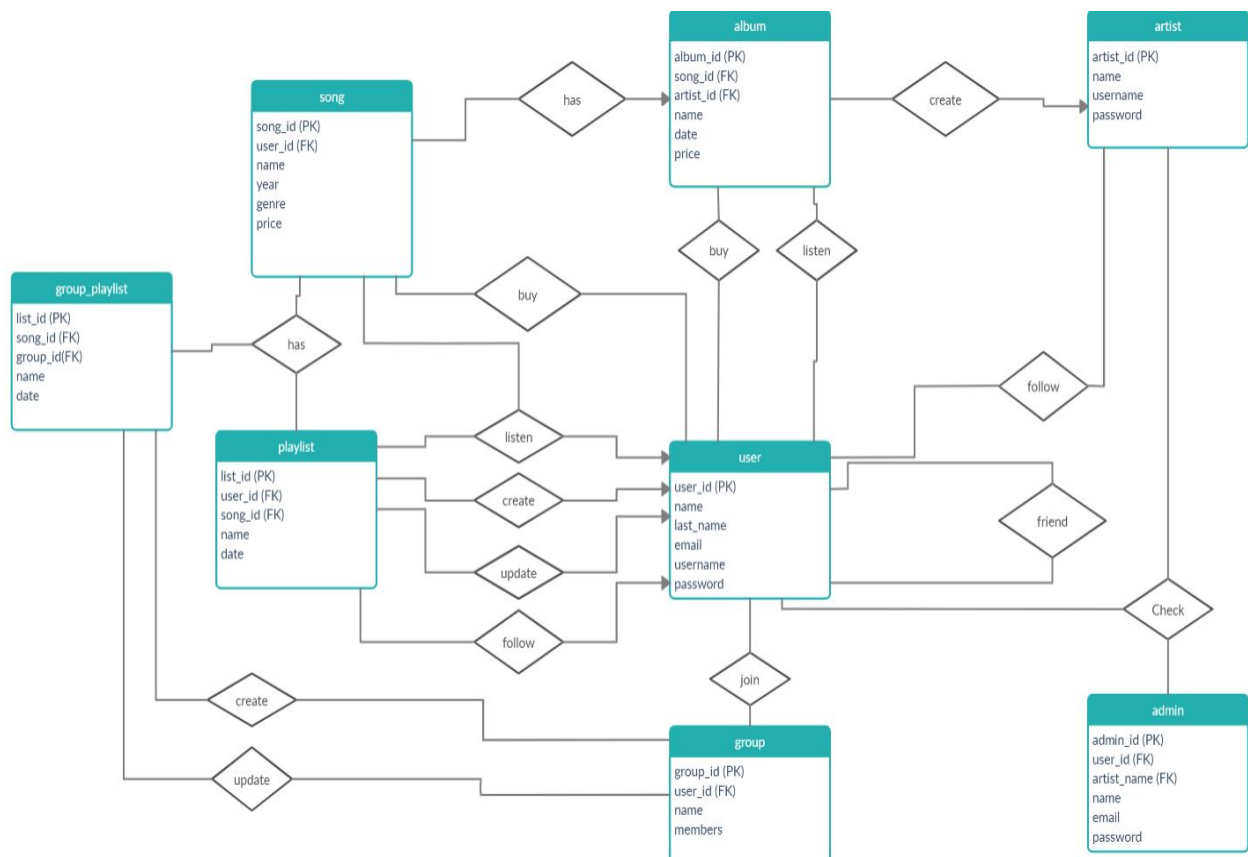
### **2.2.5 Accessibility**

This platform is a web application and a browser (preferably up to date) and an internet connection is enough to access.

### 3. Limitations

- Feedbacks have a character limit.
- Users can modify only their own playlists.
- Only an admin can deactivate an account other than the user.
- An artist cannot buy his/her own song that he put legally.
- A user can purchase a song only once and can be charged only once for the song.
- A user cannot be an admin and an admin cannot be a user.
- A song cannot be played for free.
- A song cannot be added to a playlist without its purchase being completed.

### 4. E/R Diagram



### 5. Website Address

[https://github.com/egemoroglu/Music\\_Track\\_Database\\_Management\\_System](https://github.com/egemoroglu/Music_Track_Database_Management_System)