## Team number: 20

### Member's Names:

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# Project Design

# **Explanation**

#### **Entities**:

- 1. User Account: holders that listen to music (everyone can have an account).
- 2. Song: Media that users can listen to.
- 3. Artist: Content creators for our music platform.
- 4. Album: A collection of songs from artists.
- 5. Playlist: User selected collection of music.

#### Attributes:

- 1. User: Username, Age, Country, <u>ID</u>, and Email.
- 2. Song: <u>ID</u>, Title and Duration.
- 3. Artist: Name, Country, and ID.
- 4. Album: <u>ID</u>, Title and Year.
- 5. Playlist: <u>ID</u>, and Name.

#### Relationships:

- 1. Plays: The user with a user account can play music in the playlist
- 2. Make: The user with a user account can also make one or more new playlist
- 3. Contains: The playlist will contain a number of songs, which can be none
- 4. Include: Song is included in a specific album
- 5. Create: An artist will create an album

#### Attribute of Relationship:

- 1. Song\_id: each song in the album has a specific id
- 2. Album id: an album created by the artist will be assigned a specific id
- 3. Artist name: the album will also have the name of the artist

#### Dependency:

1. A user with an account can may one playlist at a time

- 2. A user with an account can make 0 to many playlists
- 3. One Playlist can contain many songs and a song can be included in many playlists
- 4. A song can only be in one album but an album can have many songs
- 5. An album can only be created by one artist but an artist can create many albums

