### Team number: 20

#### Member's Names:

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# Project Design

## **Explanation**

#### Entities:

- 1. User: 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.
- 6. Register: user will have to register for an account so that they can perform creating a playlist

#### Attributes:

- 1. User: Username, password, ID.
- 2. Song: <u>ID</u>, Title and Duration.
- 3. Artist: Name, Country, and <u>ID</u>.
- 4. Album: <u>ID</u>, Name and Year.
- 5. Playlist: <u>ID</u>, and Name.
- 6. Register: <u>ID</u>, first name, password, email, Lastname

#### Relationships:

- 1. Plays: The user with a user account can play music in the playlist
- 2. Plays(between user and song): The users can listen to many songs
- 3. Rating(between user and song): the users can leave the rating for many songs
- 4. Contains: The playlist will contain a number of songs, which can be none
- 5. Include: Song is included in a specific album
- 6. Create: An artist will create an album
- 7. Will: a user will register for an account to get some advance ability like making a playlist

#### Dependency:

- 1. A user with an account can play one playlist at a time
- 2. One Playlist can contain many songs and a song can be included in many playlists

- 3. A song can only be in one album but an album can have many songs
- 4. An album can only be created by one artist but an artist can create many albums