

# **Final project- Data Bases with Sql**

## **Group U**

### **Participant IDs:**

**537321, 537267**

### **Topic Description**

The topic we chose for the project is a music radio station.

Our inspiration came from the fact that we really like music and listen a lot to music on radio stations such as Galgalatz.

In the database we created, you can find information about shows, songs, artists, employees, presenters and songs that were played in real time.

The database provides essential information to the station managers and allows them to make smarter business decisions for the station.

### **List of Entities**

#### **Artists-**

Information about singers and bands in the list of the station like their stage name, and their origin country .

#### **Songs-**

Information about the songs in the playlist of the station like the song name, duration of the song, release date and so on.

#### **Albums-**

Information about albums like the album name, release date, number of songs and so on.

#### **Genres-**

A list of genres of songs including the genre id and the genre name.

### Employees-

Information about the employees that works in the radio station like their name, their job title, birth date and salary.

### Presenters-

A table that contain only the employees that are presenters on shows in the station and a short description about each of them.

### Shows-

Information about radio shows in the station like name of the show, start hour and end hour.

### Dailysongs-

The “fact” table in the database and the main one. Contains songs that played on real time on the radio and additional information like the date and time that the song played, in which show and what is the number of listeners for each song that played.

## **List of Relationships**

### 1 to 1-

- Presenters and employees – Each presenter is also an employee and can have only 1 match in the employees table.

### 1 to many-

- Artists and albums- An artists can have many albums and each album belongs to 1 artist.
- Songs and dailysongs- A song can be played multiple times during a day or a week in the dailysongs table but appears only 1 time in the songs table.
- shows and dailysongs- A show can appear in a given week many times on the radio in the dailysongs table but only 1 time in the shows table.

## Many to many-

- Songs and artists- A song can belong to more than 1 artist and an artist can have many songs.
- Songs and genres- A song can belong to multiple genres and for each genre there are many songs.
- Shows and presenters- Each show can have several presenters and each presenter can have several programs. It depends on the day of the week. For example, on Sunday, the one who presents the program "Country on the way" is Hadar Marks, but on Thursday it is Omer Gefen (like you can see in one of my views in the code).

## Self- reference-

- Artists and favorite artist- Each artist has a favorite artist from the same table.

## Entity Relationship Diagram



