Questions about project:

1. What database do you use?

We will use sqlite

1. Why don't you use databases like mongo db to work with data?

for our dataset it is enough, because we don’t need horizontal scaling and it not need to be flexible

1. What type of data will you store?

in our project we use 5 tables: users, music, manage\_users, top\_music, users\_music

manage\_users table will store data about actions of our users: log in, log out, adding songs in playlist and etc. other tables are clear.

1. describe your tables

users table:

* token primary key,
* name,
* surname,
* registration date,

music:

- id primary key

- acousticness (Ranges from 0 to 1)

- danceability (Ranges from 0 to 1)

- energy (Ranges from 0 to 1)

- duration\_ms (Integer typically ranging from 200k to 300k)

- instrumentalness (Ranges from 0 to 1)

- valence (Ranges from 0 to 1)

- popularity (Ranges from 0 to 100)

- tempo (Float typically ranging from 50 to 150)

- liveness (Ranges from 0 to 1)

- loudness (Float typically ranging from -60 to 0)

- speechiness (Ranges from 0 to 1)

- year (Ranges from 1921 to 2020)

- mode (0 = Minor, 1 = Major)

- explicit (0 = No explicit content, 1 = Explicit content)

- key (All keys on octave encoded as values ranging from 0 to 11, starting on C as 0, C# as 1 and so on…)

- artists (List of artists mentioned)

- release\_date (Date of release mostly in yyyy-mm-dd format, however precision of date may vary)

- name (Name of the song)

manage\_users:

primary key: username

old\_username

last\_in\_playlist

new\_sign\_in\_date

top\_music:

id: primary key

listen\_count

users music:

token: primary key

music\_id foreign key

1. Will these tables have relations and which of them will not?

tables with users will contact the music table by token and manage\_users will use triggers when the user logs in and logs out. top\_music will work with actions and with the music table by the name of the singer.

1. How do we track a user's action?

We use triggers from PL/SQL, when users add or do some actions with tracks and when they will contact an application.

1. How do we generate top music and make recommendations?

To use some top music, we use some parameters like how many people added it to the playlist, and sort. Music Recommendation will make by some algorithm with genre, albums or artists user listen, and give similar tracks

1. How much data do you have now?

The data file contains more than 175.000 songs collected from Spotify Web API, and also you can find data grouped by artist, year, or genre in the data section.

1. How do we get songs?

We collect the data from https://www.kaggle.com/yamaerenay/spotify-dataset-19212020-160k-tracks?select=data\_by\_artist.csv