

Predict the song popularity and song recommendation system on Spotify dataset.

Problem statement formation:

The data set contains more than 170.000 songs collected from Spotify Web API, and also has data grouped by artist, year, or genre in the data section. I want to predict the song popularity and song recommendation system based on the song parameters/features.

Context

Spotify is a music player app and we want to create a recommendation system depending upon the playlist of the user.

Criteria for success

Find the popular song and then train and test it on the dataset, which when connected to the Spotify API, recommends the Spotify user to play the next popular song based on the results that we get and the ratings. Also, built a content based recommendation system that suggests artists in the user playlist. Also, after analyzing the current data, using features that play important role in determining the popularity of the song, I will be dividing them into different categories to determine the rating based on the other features.

Scope of solution space

The popularity estimation should be using the most relevant features so that this can be implemented in the API to get a better outcome of the next song being played in the user playlist.

Constraints

Time is a constraint for this project as the dataset has a lot of songs and it will be taking time and I need to complete this project within 2 weeks.

Stakeholders

Chief Data Scientist at Spotify, Data Engineer, Manager.

Data sources ratings and category

The dataset was selected from kaggle and has a usability ratings of 10.0.

Link- <https://www.kaggle.com/yamaerenay/spotify-dataset-19212020-160k-tracks>