

This project uses supervised learning on Spotify song data to predict popularity of a song. The dataset used in this project consists of 160,000 songs from 1921 to 2020 from Spotify. Columns included are numeric audio characteristics such as acousticness, danceability, energy, speechiness, key type etc. The objective of this project is to predict whether a song will be popular or not and recommend similar songs to users based on these attributes.

Three things I like about the proposal:

1. It is an interesting topic and have wide applications on learnings on audio datasets. This topic can be monetized in song writing and production. More extensively, this can be studied in interpreting the patterns of people's audio preferences
2. I like the example on Taylor Swift's song being the most popular among other songs in the album. It can be an interesting approach to compare songs from the same album because they share a lot of other similar factors (such as singer, theme, date of release etc.) so we could focus on audio parameters.
3. The dataset chosen is good to learn because it includes both numeric audio attributes and ordinal attributes.

Three things that need more works from my perspective:

1. Since songs in this dataset are from 1921 to 2020 and collected by Spotify, song popularity column may not be able to represent the real popularity because when certain songs were published, smartphones, earphones and music apps were not invented at all.
2. Another issue with popularity is that it is an ambiguous attribute. Some songs were famous years ago and are no longer famous. In this case, we cannot learn people's taste for now based on old song data.
3. Some songs are popular because of singers, bands, production companies or promotion. It may not be related to the numeric audio characteristics and some information are missing (such as how the songs were promoted and distributed) to give accurate predictions on popularity.