MUSIC RECOMMENDATION SYSTEM

OVERVIEW

- BUSINESS PROBLEM
- DATA UNDERSTANDING
- MODELING
- RESULTS
- RECOMMENDATIONS
- NEXT STEPS
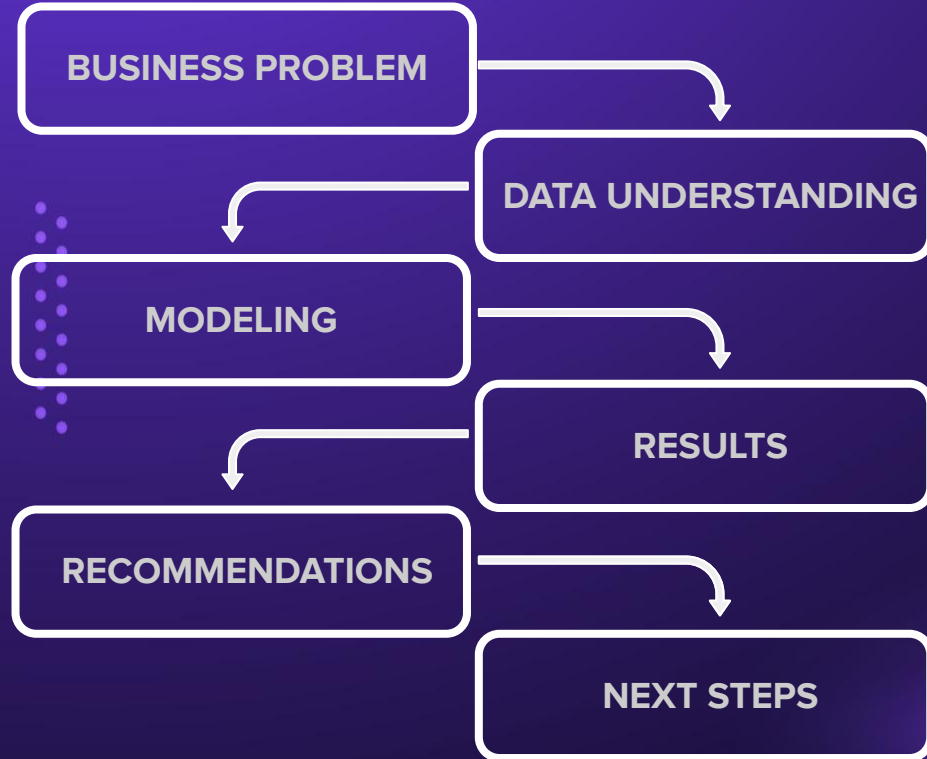
BUSINESS PROBLEM
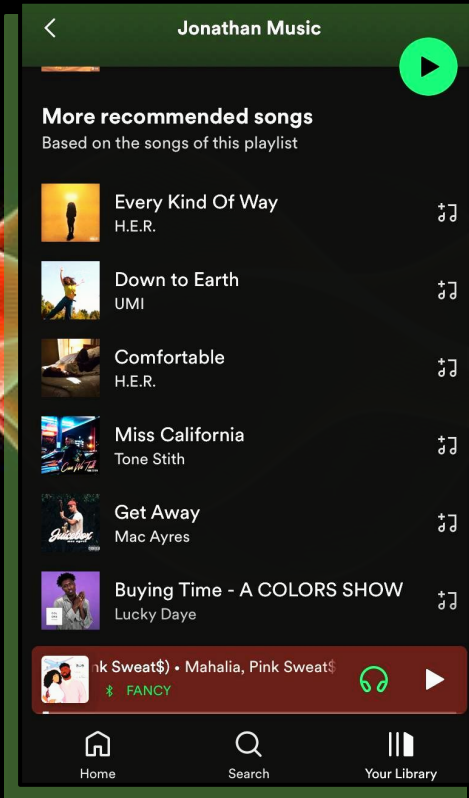
SPOTIFY wants to improve it's music recommendation system that is located under a user's saved playlist.
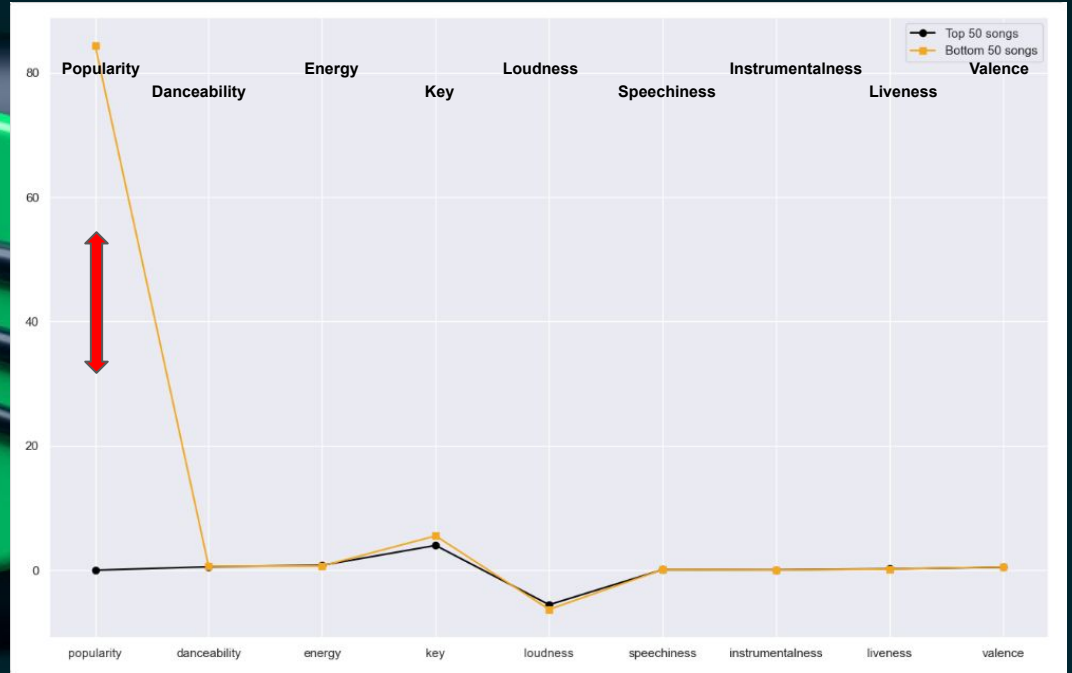
The goal is to take a song and recommend other songs based off of the music that they listen to.

This may save the user time in scrolling through the app and promote an additional way of engagement with the app.

DATA UNDERSTANDING

The dataset was from the spotify API and the Meek Music Mouse playlist.

The dataset contained:
6514 rows/songs
17 columns
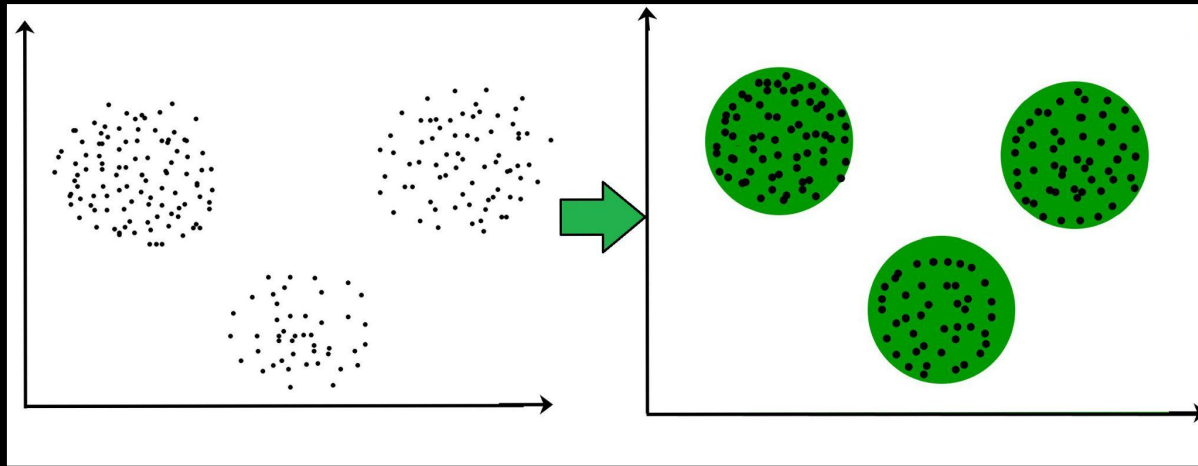
MODELING

CLUSTERING
(MiniBatchKMeans)

Image source:https://www.geeksforgeeks.org/clustering-in-machine-learning/

RESULTS

SCORES

**Silhouette Score
~0.06**

1 = Clusters are clearly defined
0 = Clusters are overlapping
-1 = Clusters are assigned incorrectly

RECOMMENDATIONS

- Quantify more defining characteristics of music such a beats per minute(BPM), color, harmony, melody, etc.

- Build a mood scale

- Include a numeric genre association metric

NEXT STEPS

- Congregate genre data to predict better clusters

- Gather follower data to recommend both popular and indie artists

- Capture lyric data to provide listeners with similar messaged music

THANK YOU!

📧 **jonathan.roman1213@gmail.com**

🐙 **@jonathanr1212**

in **linkedin.com/in/jonathan-roman1/**