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Spotify

MoodGrid™ Playlister

Problem Statement

- Curating playlists takes a lot of time and effort
- Spotify currently has no way of combining playlists based on mood

Business Value

- Spotify has over 450 million users and is the world's largest streaming service
- Spotify-curated playlists make up one-third of the total listening time, and another third is user-generated playlists

Brainstation

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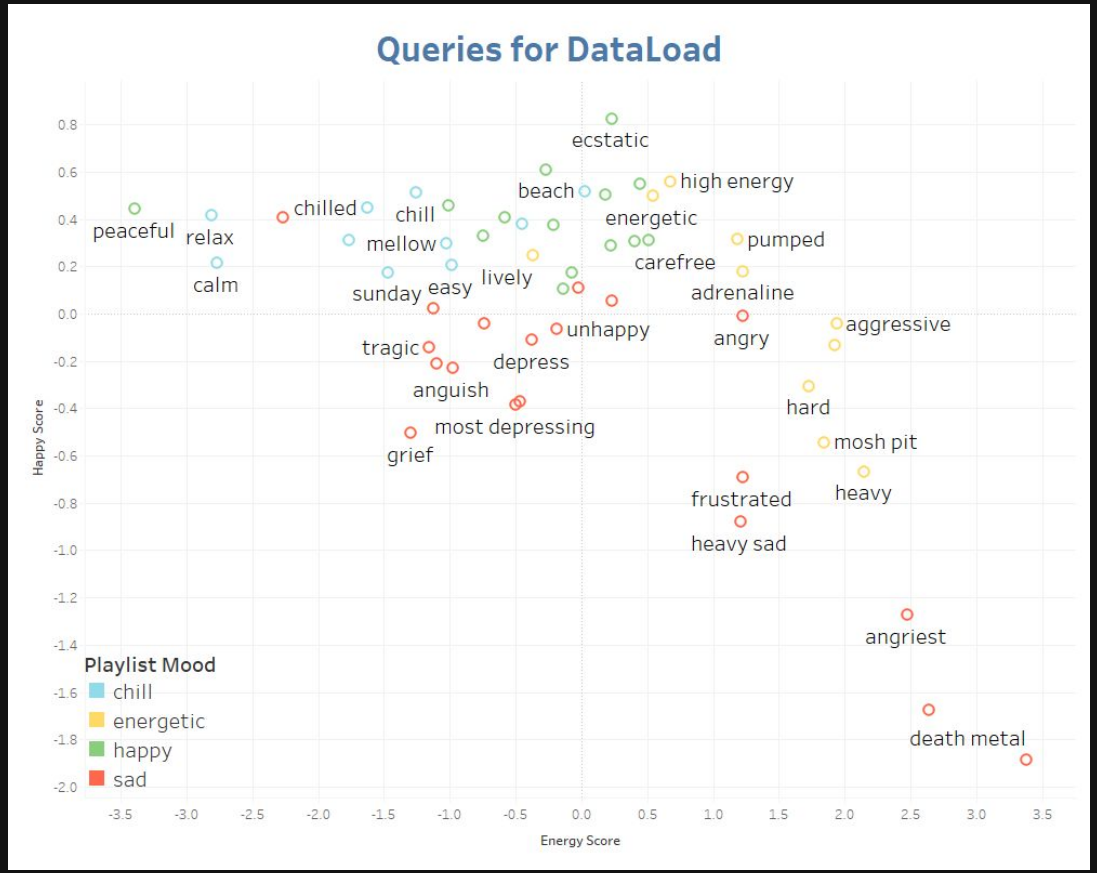
MoodGrid Demo

Play

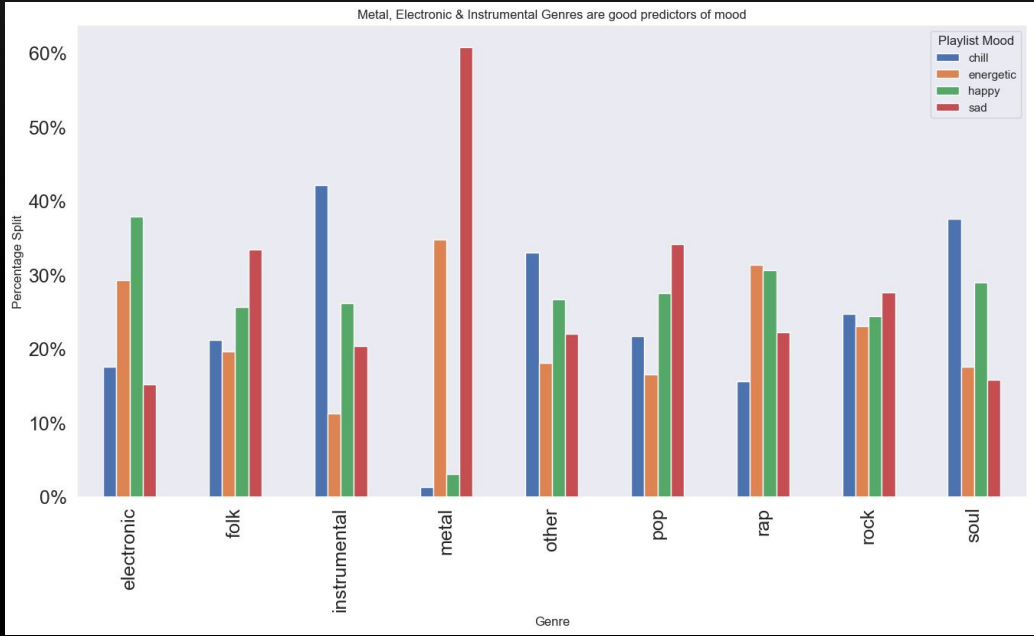
Follow

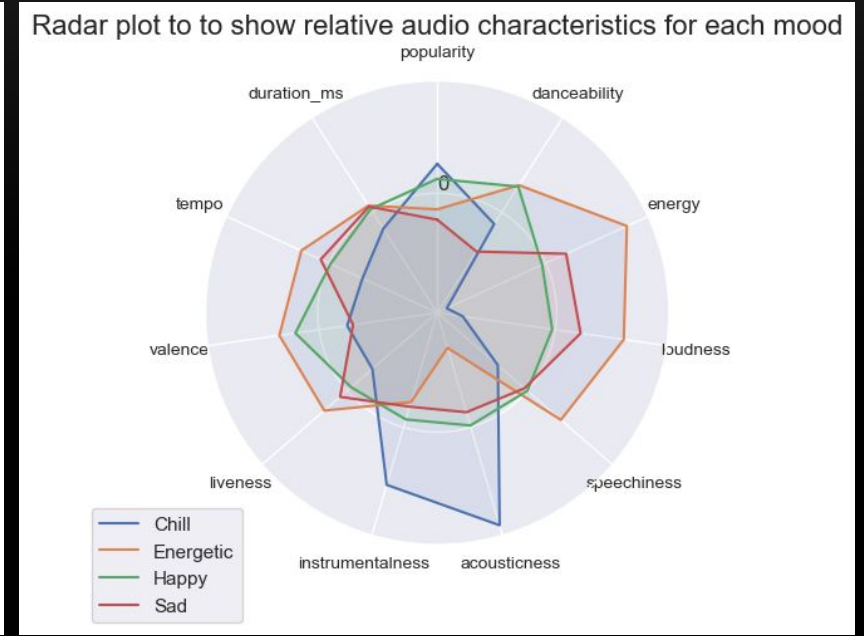
Data Download

- Python script to obtain data from Spotify's API
- Automated search for playlists using queries that fit one of four moods
- Energetic | Chill | Happy | Sad
- Script reads track info and audio features
- 1864 playlists
- 57,000 artists
- 160,000 songs

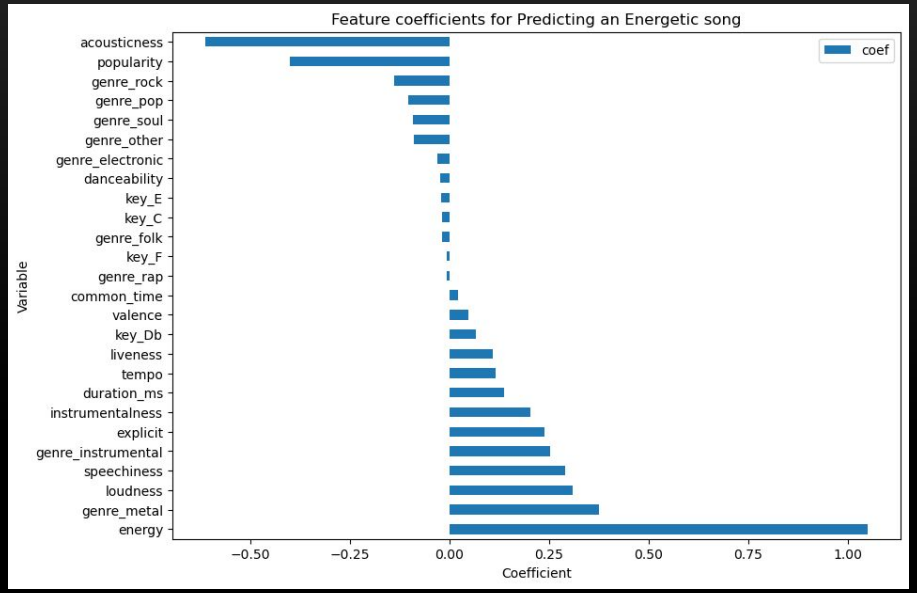


Exploratory Data Analysis





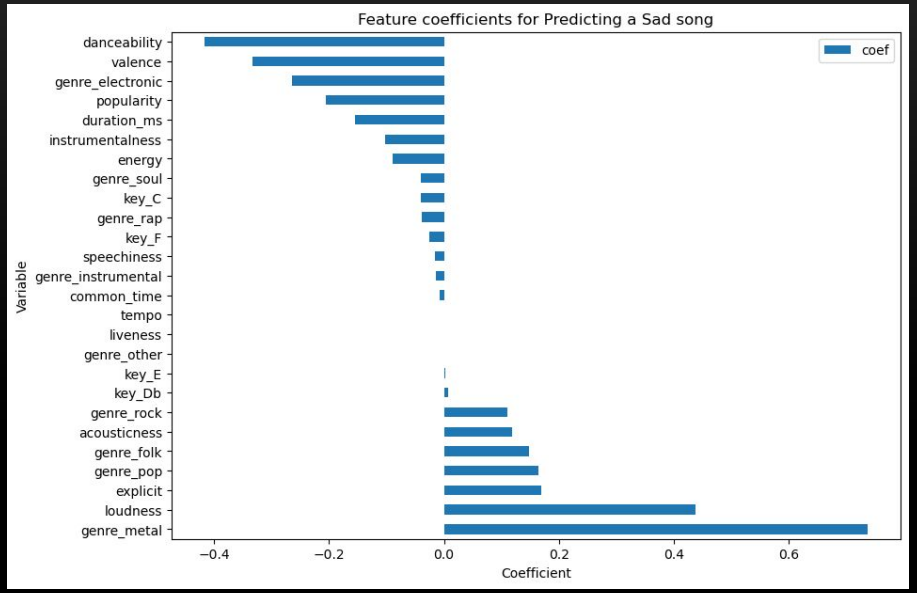
Logistic Regression



Energetic/Chill

Train score: 82%

Test score: 80%

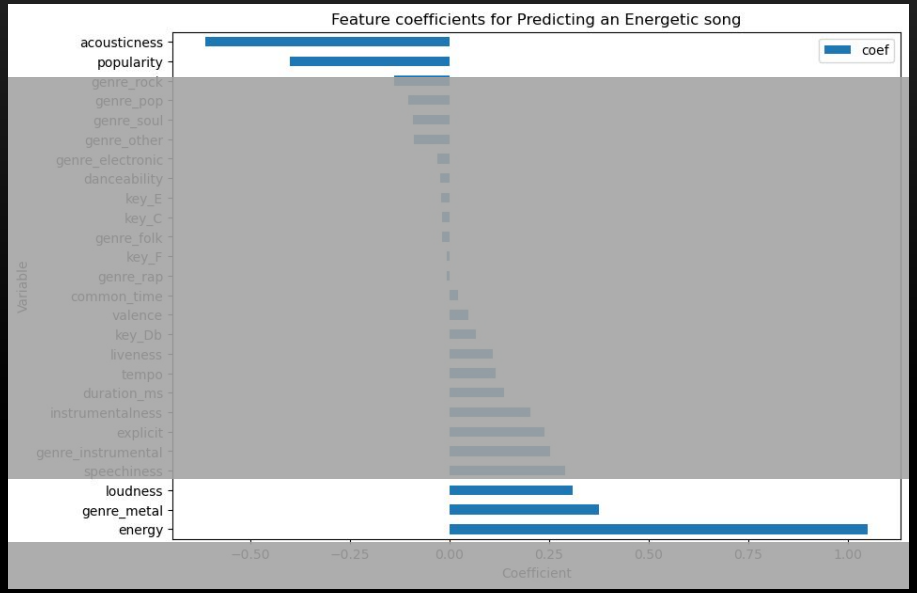


Sad / Happy

Train score: 69%

Test score: 68%

Logistic Regression



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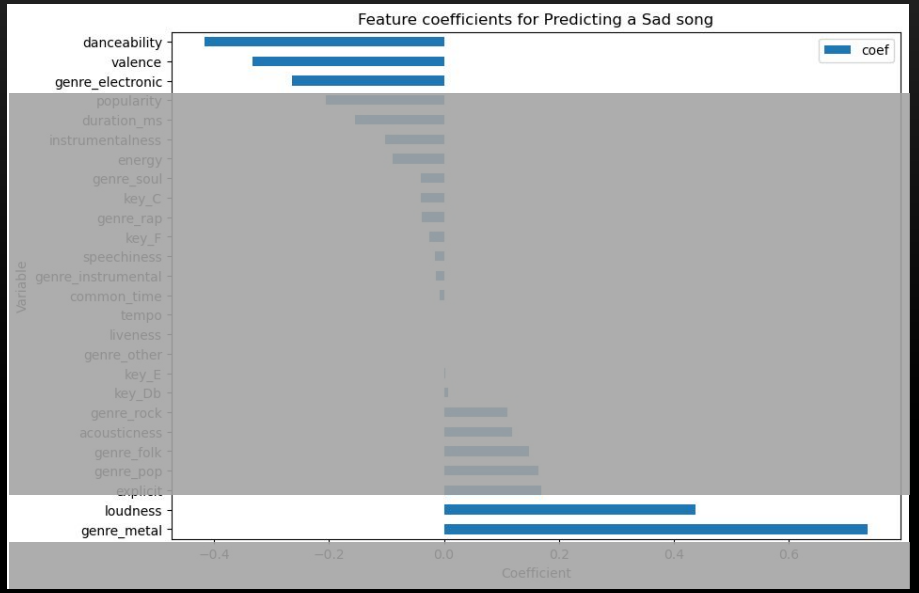

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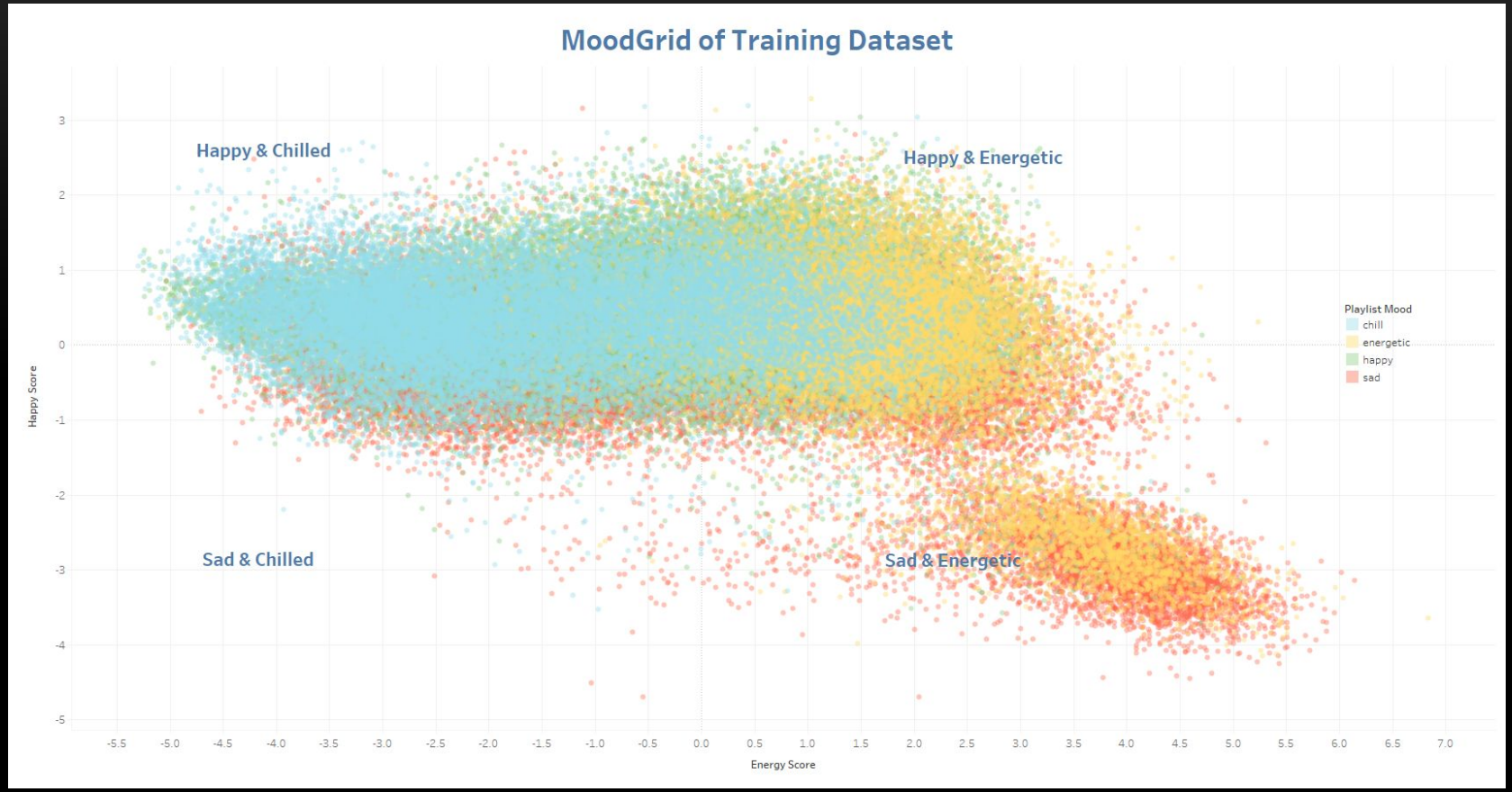
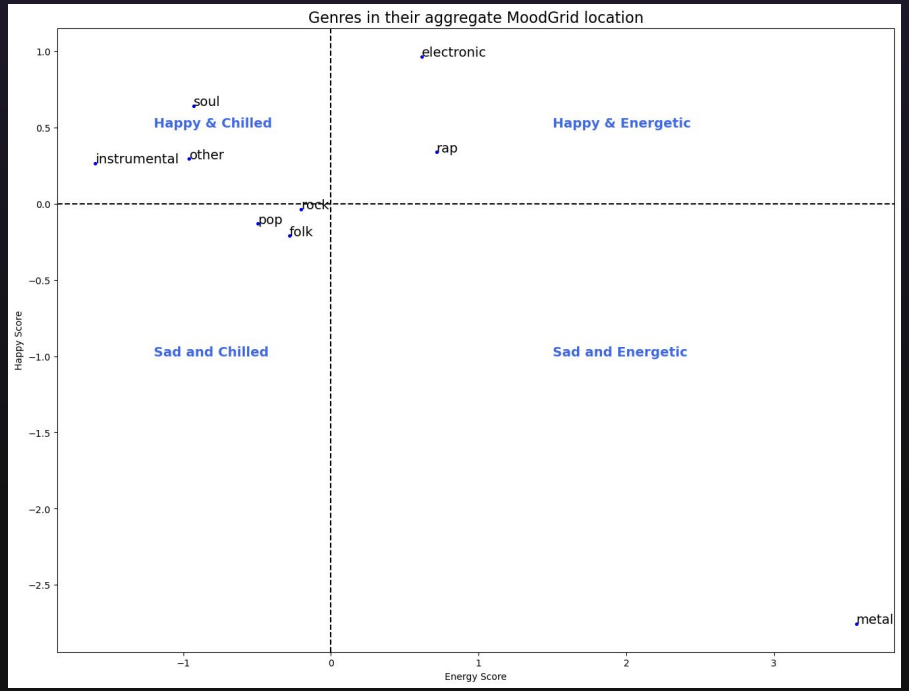
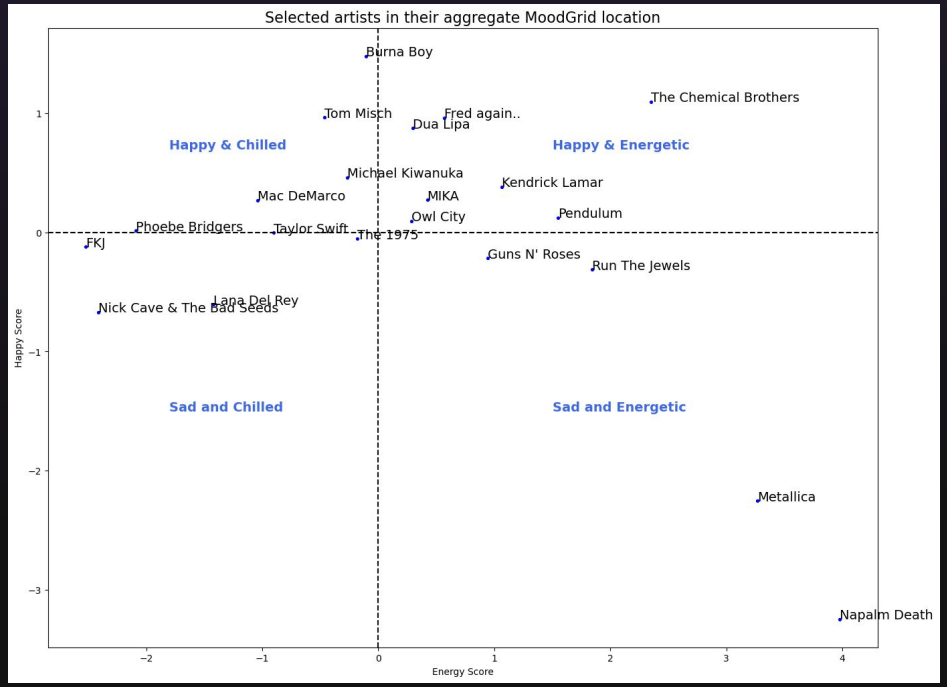


MoodGridding genres & artists





Conclusions and Further Work

- Energy/Chill easier to predict than the nuance of Happy/Sad
- NLP with web scraped lyrics to improve model prediction
- Expand dataset further to capture more variance and avoid model overconfidence

Thank You

Busta Rhymes, Q-Tip, Kanye West, Lil Wayne

0:23 -4:00