Working Title

Music's Top Words

One Sentence Summary

Lyrical analysis of popular songs since 1964, such as linking words to time periods, showing the rise and fall of vocabulary, and creating word clouds for decades.

Summary of the dataset we are using

From 1965 - 2015, this dataset compiles the top 100 year-end billboard songs from each year, along with their lyrics. The data was scraped from wikipedia.com and a few lyric sites like metrolyrics.com. The dataset was originally created and uploaded to Github by Kaylin Pavlik and again published to Kaggle by RakanNimer. The dataset includes 5100 entries, each including the name of the song, the artist, the lyrics of the song, the year in which the song made the billboard top-100 list, as well as the rank (1-100) that the song earned in the year-end Billboard top-100 list, lastly, the entries also include a number corresponding to the website from which the song lyrics were scraped.

Audience and Goals

User Constituencies

This website is for anyone who finds it interesting. More than anything, it is a cool website for people to play around with and learn things. Here are some intended constituencies: Music Lovers, like someone who is looking for what songs from certain decades have in common, but generally just want interesting facts about music; Language Lovers, like someone who is interested in how certain words or profanity have risen or fallen in use throughout the years, or which words closely match with a certain time frame; Aspiring Artists, like someone who wants to see which words popular songs have in common in hopes of creating a popular song themselves; Casual internet browsers, who enjoy seeing cool websites, learning interesting relationships and facts.

Users may not know exactly which words or time periods they are looking for, but they might. They are looking for an easily navigable website which presents options for customized search, or presents interesting data for casual viewers. This website should be welcoming to anyone who knows how to use the internet, with visuals, clean designs, and a non-complicated system.

Personas

See Personas file

User Stories

See UserStories file

Website Requirements

Functional:

- The website will provide a search function where you enter a specific word and see it's trend / usage over time
- The website will give you the ability to enter a specific time frame and see information about it's popular words.
- The website will provide different visualizations of the data and results from the user's search.
- Easily recognizable button to create a word cloud for each time period.
- The website will give the user the ability to display additional information about the given word/year from the results page.

Non Functional:

- The website should use a vocabulary understandable by a 12 year old. Further, any text should be simple, clear, and have an express purpose so as to reduce reading time.
- A user should be able to efficiently go from reading the data to coming up with a fun fact to deliver in real life, so as to impress the musically inclined around them. In other words, the data must be easily readable.
- The flow of the website should be obvious, a user should not have to learn to use the website beyond an initial introductory sentence on the home page.
- Requests on the data should return quickly, no matter how many songs the request has to pull. Those searching for niche requests such as "Armadillo" should have the same experience as those searching for "the".

Team Collaboration Plan

Roles:

- Jack will likely work on backend process involving data structures, algorithms, and the like.
- Will is going to take point on SQL queries and other direct operations on the database

- Zev will likely work on website functionality and layout as well as backend data analysis.

We will be meeting on Tuesdays at 1:30PM to work on the project, and will be creating a slack channel to coordinate outside of our meetings.