

# **CMSC 23900: Project Proposal 2**

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#### **Purpose**

The purpose of this dataset is the visually display the most popular songs by number of streams on Spotify as both a function of country and time. This will allow the viewer to receive a cultural idea of the popularity of songs in different countries and how the song evolves over time.

#### **Dataset**

We will use the dataset found here:

<https://www.kaggle.com/edumucelli/spotify-worldwide-daily-song-ranking>

This dataset consists of the top 200 songs in 53 different countries on everyday from the beginning of 2017 to early 2018. The data comes from [spotifycharts.com](http://spotifycharts.com) where they display these charts and allow you to download them by country and date.

#### **Preprocessing**

For preprocessing, we will shrink the dataset so it only contains the top 10 songs in each country on each data. This is because the dataset is extremely large (369 MB) and it is not feasible to load this whole dataset into javascript everytime we load the page. If we only keep the top 10 songs from each country on each date. We will be able to remove 95% of the rows and make the dataset much smaller.

#### **Visualization**

The visualization will consist of a map where each country where the most popular song in each country will be displayed over the geographical location of each country. You will be able to click on a country and see the top 10 songs listened in that country on a selected day. Also, there will be a slider at the bottom of the visualization where you can change the date that is being shown, so you can see how the top song in each country changes as time progresses. Finally, by clicking on each song, we will be able to listen it straight away from spotify as the dataset contains the spotify track url.

For the map, we will use mapbox as I feel like it provides the user with a map the is the easiest to use and is the most customizable. I also have experience with using the mapbox api for IOS.