

CS360 Data Visualization Project Proposal

The World's Taste in Music

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Repository: <https://github.com/YiQingK/music-data>

Website: <https://yiqingk.github.io/music-data/>

Background and Motivation:

This project is motivated by the different music interests my flat mates and I have. I wanted to look into how music trends or preferences might differ between countries.

Project Objectives:

- Show that Spotify is the top streaming site and should be the base of this project
- Identify overall top streamed songs/artist
- Identify top streamed songs/artist for certain countries
- Display difference in rank of artists in different countries

Data:

Data from Spotify Charts to be used for data regarding the streaming service. It can be downloaded in the form of a csv file. Data to compare Spotify and other streaming services will be attained from sites like Statista/MIDiA Research.

Data Processing:

Data will be processed manually and saved in a csv file.

Visualization Design:

See end of document

Must-Have Features:

- Line graph to show growth of user of Spotify vs Apple Music
- Display global top streamed songs using a horizontal lollipop graph
- Display top artist/songs using map and tooltip
- Display difference in rank of artists using bump graph with tooltip to highlight a single artist

Optional Features:

- Graphs showing user demographics using histograms (And possibly draw connections between them)
- Time over change of an artist or song's popularity using slope graph or using slider and line graph
 - Possible change (circles timeline to show change over time of stream numbers)
- Show different time periods/weeks of charts using a slider/drop down for map
- Show different artist trend using drop down menu

Project Schedule:

Date	Task
March 11	Initial proposal
March 18	Research on sources of data that can be used
March 23	Revised/Final proposal Submission
March 25	Finish Data Collection
March 27	Finish Data Processing
April 1 – April 6	Basic graphs for must-have features <ul style="list-style-type: none">- Must-have features excluding tooltip- Single artist for bump graph- Top artist/song printed on graph
April 6	Alpha Release
April 7-13	Complete/Work on any feedback from Alpha Release More in depth/detailed graphs of must-have features Add tooltips to must-have features Fix bugs
April 14 - 20	Optional features
April 20	Beta Release
April 21-28	Work on any feedback from Beta Release
April 28	Attend Office Hour to get feedback
April 29- May 9	Work on any feedback from previous week
May 9	Final Project Presentation

Related Work:

Bello, P., Garcia, D. Cultural Divergence in popular music: the increasing diversity of music consumption on Spotify across countries. Humanit Soc Sci Commun 8, 182 (2021). <https://doi.org/10.1057/s41599-021-00855-1>

Jovanovska, Lidija & Mishkovski, Igor & Mirchev, Miroslav. (2019). The Geographic Flow Of Music On Spotify.
https://www.researchgate.net/publication/337144688_The_Geographic_Flow_Of_Music_On_Spotify

Teal, S. (2019). How to visualize Spotify music trends in Tableau. Retrieved 21 March 2022, from <https://www.tableau.com/about/blog/2019/7/how-visualize-spotify-music-trends-tableau>

Richter, F. (June 30, 2020). Spotify Keeps Apple Music at Arm's Length [Digital image]. Retrieved March 22, 2022, from <https://www.statista.com/chart/8399/spotify-apple-music-paid-subscribers/>

Creative Visualizations - The 5 Most Creative Music Visualizations. (2018). Retrieved 22 March 2022, from <https://datalion.com/the-five-most-creative-music-visualizations/>