

CS360 Data Visualization Alpha Release Report

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:

Done?	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- 5 artist across few weeks 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/>

Alpha Release

Overview of project:

This project plans to show difference in music trends and preferences between different country. Comparing Apple Music and Spotify's user count, we see that Spotify has significantly more users will be a better source of data. We then look into data such as top 10 songs of a week and ranking of top 5 artist across several weeks

Features that have been completed:

- Basic Line Chart of user numbers between Apple Music and Spotify
- Basic Lollipop Chart of top 10 songs
- Basic World Map
- Basic Bump Chart of 5 singers across 5 weeks

Upcoming immediate milestones:

7-13 April: To work on finishing up must-have features which includes interactions for charts as well as working on any feedback given.

Roadblocks (if any):

Discovering how to plot a world map and connect it with data from a csv file.

Color changes when testing on a plain html file vs template html used for website.

Visualizations

Can be found on <https://yiqingk.github.io/music-data/>



