

Spotifying Trends in Popular Music

Date:

2017/11/09

Group Members

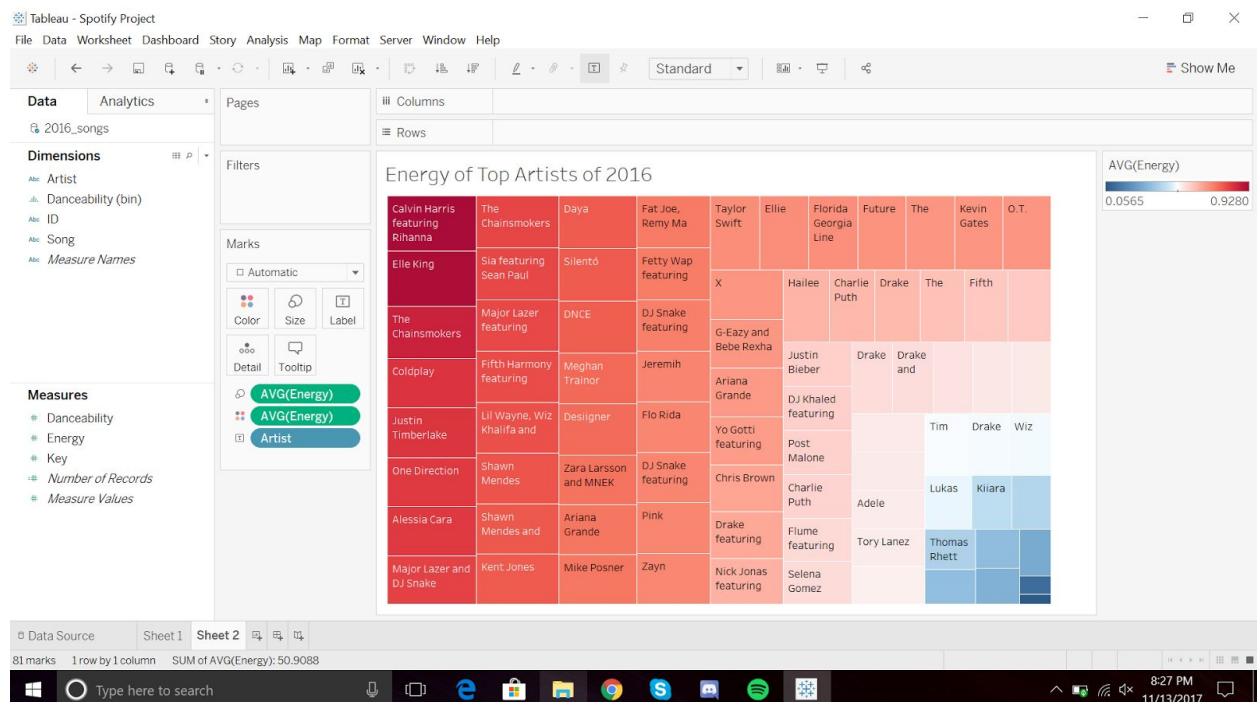
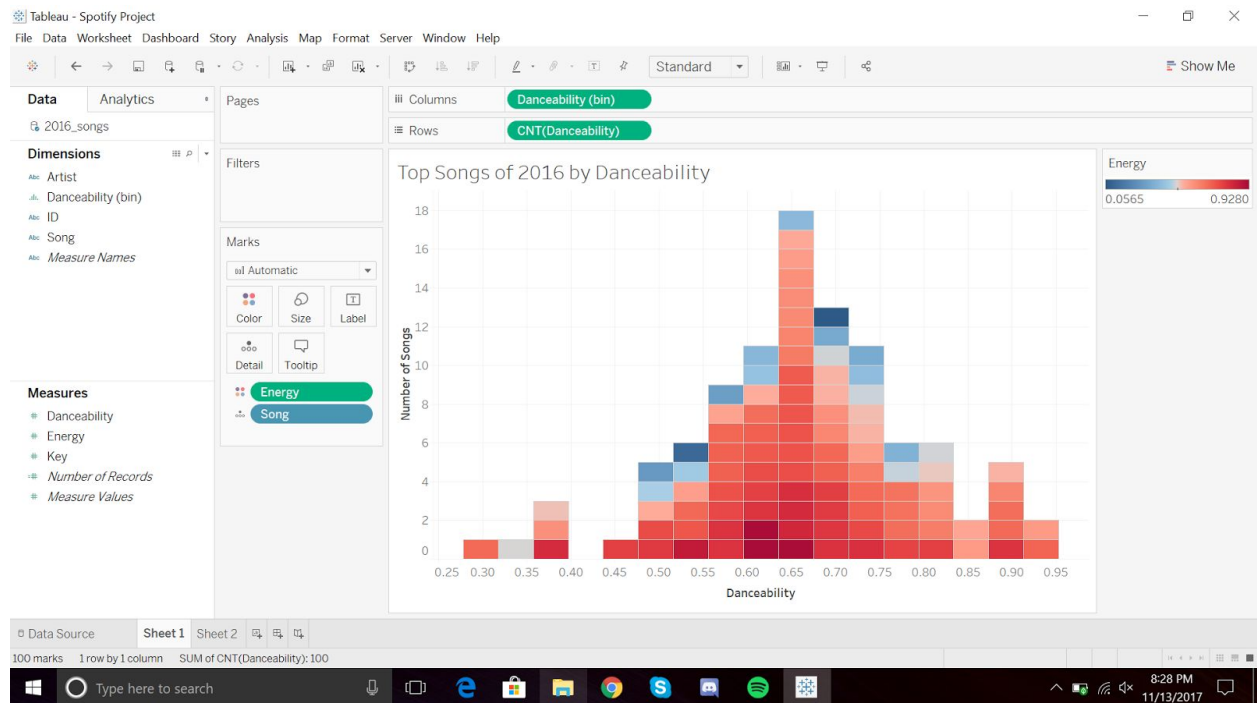
- Anastasia Vela
- Joshua Asuncion
- Kaiwen(Kevin) Pang
- Steve Hwang

A brief reminder of your project topic

Have you ever wondered what is common about top tracks every year? In this project, we will be using Spotify API to gather track features such as danceability, energy, acousticness, etc. (full list is available on <https://developer.spotify.com/web-api/get-several-audio-features/>) for Billboard top 100 songs from 2012 to 2016 ([data](#)). We want to create visualizations that show any interesting trend among top 100 tracks in each year and possible connection across years. In addition, we would like to make predictions on the characteristics of the “next popular song” if we will be confident enough and able to observe any popular trend.

Presently, some relevant work in this field is GitHub Spotipy where people utilize spotify API for interesting projects such as automatically creating playlists. In addition, the spotify company used their workflow manager software, luigi, to accurately predict 4 of the 6 grammy winners taking into account the user’s listening habits.

A simple sketch or mockup of a potential design -- from your project proposal



A task division among group members

An initial task division among group members

- Coding - Anastasia

- Visualization - Josh
- PPT Presentations - Kevin
- Report - Steve

The current status -- items completed, tasks remaining, challenges

Current status:

- Items completed
 - a. We successfully created a Github library ([link](#)) based on Spotipy Github library ([link](#)) and implemented on Jupyter Notebook to extract characteristics of tracks on an individual basis.
- Tasks remaining
 - a. Automation: we are currently working on defining a function consisting a for loop that will repeat the same code for all 500 songs and record data on a table.
- Challenge(s)
 - a. Some tracks have same names by different artists and/or different versions (ex. acoustic vs. ft. versions)
 - Our solution was to record a specific Spotify ID for each track and save the IDs by inserting an additional column. We used IDs instead of names to extract characteristics data using API.

A proposed timeline for completing the project

Task	Completion Date
Project proposal	October 17th
Test Facebook API to extract mutual friend data and search for libraries that help to visualize	October 20th
Continue to extract data	October 27th
Change project topic and write new proposal	November 3rd
Status update on the project and design for the system	November 7th
Finish collecting data	November 10th
Clean data; visualize using Python, R and Tableau; compile trends and visualizations;	November 17th
Start working on PPT; finalize and	November 24th

practice presentation and demos	
Project presentations and demos	November 28th
Work and finalize report	November 30th
Final report	December 5th