Visualization of Top Artists By State

Background and Motivation. Discuss your motivations and reasons for choosing this project, especially any background or research interests that may have influenced your decision.

As musicians, we are interested in visualizing data dealing with various aspects of music (e.g., artists, genres, songs). Recently there was a map created by Paul Lamere that visualized the most popular artist for each state (see link: http://musicmachinery.files.wordpress.com/2014/02/fav_artist_map-4.png). Using this as our inspiration, we propose a data visualization that makes music information by state interactive.

Project Objectives. Provide the primary questions you are trying to answer with your visualization. What would you like to learn and accomplish? List the benefits.

The primary questions we are trying to answer are:

    - What kind of music is popular in each state? Which artists, songs, genres, and albums are most popular? How does the popularity change over time?

The possible benefits are:

    - We can observe the trends in music throughout the country over time. This might be helpful in marketing merchandise related to the music industry and serve helpful information for both singers and music labels to target their audience.

Data. From where and how are you collecting your data? If appropriate, provide a link to your data sources.

We will be using the Echo Nest API to collect array of music data and services. Echo Nest API provides not only the basic information about the songs such as artists and genres, but also more specific data such as images, news, and blog posts.

http://developer.echonest.com/

Data Processing. Do you expect to do substantial data cleanup? What quantities do you plan to derive from your data? How will data processing be implemented?

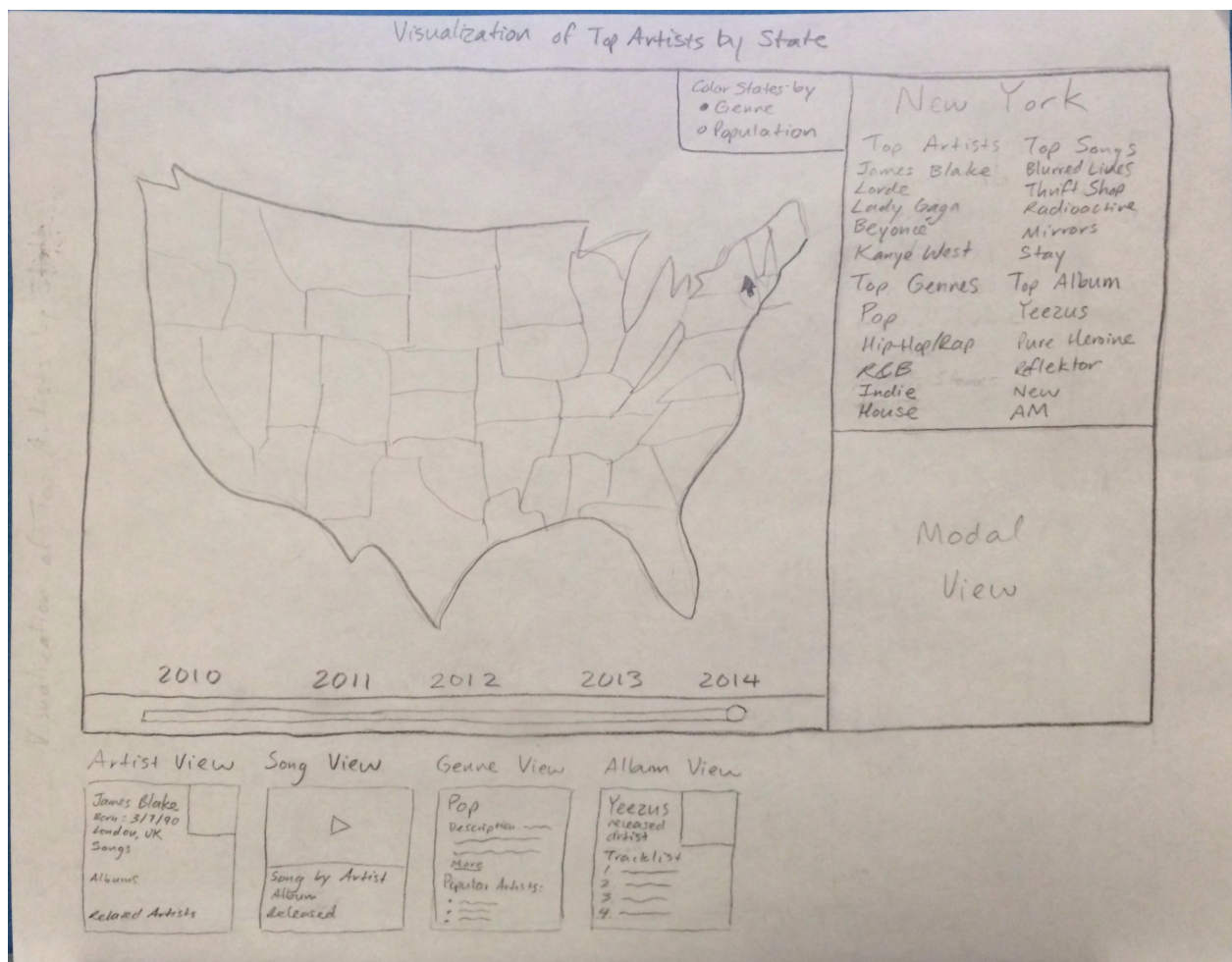We plan to scrape the following data using JavaScript and jQuery:

    -top five artists, songs, genres, and albums of each state in a given year

    -population of each state

    -embedded YouTube video for songs

    -biography from Wikipedia for genres

-cover art from Google Images or Wikipedia for albums

-profile pictures from Wikipedia for artists

Visualization. How will you display your data? Provide some general ideas that you have for the visualization design. Include sketches of your design.

We will display our data on both a map of the United States as well as a sidebar that contains detailed information about each state. When a user clicks on a state, the sidebar will update to include relevant information on that particular state. Furthermore, within the sidebar there is a modal view that will change depending on whether the user clicks on Top Artists, Top Songs, Top Genres, or Top Album. Each has its own specific layout optimized to best visualize the data. In addition, we will have a timeline slider to compare how musical tastes have changed over time as well as a toggle to choose how to color code the states (i.e., by genre or by population).

Must-Have Features. These are features without which you would consider your project to be a failure.

-click on state and provide sidebar information

-when user clicks on Top Artists, Top Songs, Top Genres, or Top Album, the appropriate view displays in the modal view

-timeline slider feature

Optional Features. Those features which you consider would be nice to have, but not critical.

-linking sidebar information to additional resources (e.g., artist name is a link to the artist's wikipedia page)

-color coding states

Project Schedule. Make sure that you plan your work so that you can avoid a big rush right before the final project deadline, and delegate different modules and responsibilities among your team members. Write this in terms of weekly deadlines.

Sat, April 5: map with at least one state clickable with sidebar information for Top Artist, Top Songs, Top Genres, Top Album; no modal views
Wed, April 9: at least three states with sidebar information with one modal view implemented
Thu, April 10: functional project prototype due
Mon, April 14–Fri, April 18: project review with TF
Sun, April 20: all states and all modal views
Sun, April 27: timeline slider feature, color coding states, linking sidebar information
Thu, May 1: project due