

**Background and Motivation:** The 2016 election was an election markedly influenced by popular culture, in ways that perhaps no election before has been. The eventual winner of the 2016 election was a former reality TV star, and all throughout the election the lines between political culture and popular culture were eroded in new ways. Our group seeks to analyze this phenomenon of popular culture shaping political sentiment through the lens of rap music. We wanted to see how the 2016 election was shaped by rap artists. Using data from FiveThirtyEight along with data from Spotify and election data we are seeking to examine how rap is shaping American political consciousness.

**Project Objectives:**

- 1) Explore trends in the sentiment of candidate mentions in rap music
- 2) Explore trends in the volume of candidate mentions in rap music
- 3) Explore how artist popularity could change their electoral influence

**Data:** Most of the data that we will be using for this project is available from FiveThirtyEight's publicly available datasets. They have already compiled a database of rap lyrics that mention presidential candidates in the 2016 election. Each instance in the database contains a rap lyric, the artist, the date this song was released, a song theme (categorized as personal, political, money, hotel, or The Apprentice), a sentiment of the song towards the candidate and the given lyric. We got artist and song popularity using the Last.FM API. In addition to this we scraped the Genius music lyric website to find the accurate artist of each song so that we could find their popularity on Last.FM.

FiveThirtyEight Data:

<https://github.com/fivethirtyeight/data/tree/master/hip-hop-candidate-lyrics>

**Design Evolution:**

We considered doing a ThemeRiver to track artist popularity over time, but instead decided to do a stacked bar chart because the data was structured as candidate mentions in discrete years, rather than months and days, so a bar chart portrayed this discrete nature of our data better.

We also considered doing a dendrogram that started at candidates at the root node and branched out into sentiment and then specific songs, but decided that a tree graph was a more succinct way to represent this data, and would be less cluttered in a visual interface. In addition to this a tree graph encodes information through color and size to describe sentiment and song popularity that would be hard to do using a dendrogram.