### Hi Team Boat-Y!

## **Objective:**

Thanks for taking the time to read my user story. I am interested in the relationship between music and current/historical events, and I would like you to build a product that can link trends in music to what is going on in the world. My favorite example comes from 1970 which is the height of the Vietnam War and also the year that produced the most top albums on Rolling Stone's Top 500 Albums of All Time list— a surprising 26 albums on the list were released in 1970. This has led me to develop the 1970 Hypothesis, which states "Top albums are informed by more than the music itself, and can attribute their success to cultural factors as much as chart popularity."

#### Music

The tool I would like you access the music with is the Billboard API. For context, the Billboard charts tabulate the relative weekly popularity of singles or albums in the United States and elsewhere. There are also Year End charts. The charts may be dedicated to specific genres such as R&B, country rock, or they may cover all genres. The charts can be ranked according to sales, streams, or airplays

On January 4, 1936 Billboard magazine published its first music hit parade. The first music popularity chart was calculated in July 1940, so there is years of data for you to parse through and discover interesting trends.

I would like the product to track artists through the Billboard charts. For example, how has an artist risen through the charts? How long has an artist been at the top of the charts? Is there a shift in the genre of music that holds top places in the charts?

In addition to the top 100 Billboard holds other charts that may be useful in your analysis. Some of those charts are broken out by genre, mood, or how long an artist has been active (Emerging Artists); other charts categorize albums by type— streaming, digital, or vinyl, or sales volume. There are also greatest albums of all time lists that are specific to genres. I think these list would be useful to examine the

A chart provided by Billboard that may be useful or interesting to you is Billboard Twitter Real-Time; "Trending" produces and up to the minutes ranking of the fastest moving songs shared on twitter in the US, measured by the acceleration over the past hour, and "Emerging Artists" is a ranking of the most shared songs on Twitter in the US of artists who do not appear in the top 50

More general information can be found at <a href="https://en.wikipedia.org/wiki/Billboard\_charts">https://en.wikipedia.org/wiki/Billboard\_charts</a>. Documentation for the Billboard API can be found here: <a href="https://github.com/guoguo12/billboard-charts">https://github.com/guoguo12/billboard-charts</a>

#### **News**

On the news end of the product, The New York Times has a developers page that allows developers to search the NYT archive by month, for articles by date, top stories by section, or by times\_tags.

The tool can be found at: <a href="https://developer.nytimes.com/">https://developer.nytimes.com/</a>, and can be used with PHP, Ruby, or Java, and uses Lucene to conducted the search.

The API key: 535fdceed47f4e1fae877ce26a3457fd

The information is transferred as a JSON file, and and can be parsed by JSON Tags.

# Implementation

A NoSQL database would be useful to store songs and current/historical event tuples because the information is so heavily text based.

## Other Ideas

If the song-event link its too simple. It would be interesting to use the Billboard Twitter Real-Time data and news info from <a href="https://newsapi.org/">https://newsapi.org/</a>. This would allow us to live stream music and events and link the two pieces of information. <a href="newsapi.org">newsapi.org</a> is also a JSON store and provides a free plan to developers. It pulls news from a number of sources and may be a better representation of current events than just the New York Times.

#### **Cool Articles**

http://thedataface.com/2016/09/culture/genre-lifecycles https://cs1951a2016millionsong.wordpress.com/2016/05/14/final-report/ https://rohankshir.github.io/2016/02/28/topic-modeling-on-hiphop/

• If a user types an artists name then the artists above and below that artist are returned.