

CSC 395 Spring 2017
Project Proposal
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Due: April 17th

Purpose Our visualization will be a display of stock data for a company overlaid with data relating to how often that company is mentioned in social media, or searched for on the internet. We plan to let users look over various time frames, and highlight when either the stock price or mentions increase quickly. Possibly also look at popularity in different locations and look at news data for that company in specified a time frame.

Hopefully users will be able to understand better the relationship between stocks and social media. Potentially they be able to understand which precedes the other, and in what types of situations will one come before the other. When social media comes first, what effect does it have? Looking at location data, we predict that where it is trending won't matter in terms of how it will effect the stock price.

We predict that when stock plummet that social media will subsequently will increase, and that when stock price drastically increases, social media mentions will also increase.

The amount of data involved in this question makes understanding what is going on harder without a visualization. By providing a visualization with which someone can examine multiple data sets simultaneously we will be able to get a better sense for where to direct future questions, and what the general predictions we can draw are.

Design Our visualization will include a plot with an x-axis of time and two y-axes. One y-axis will be stock values, and the other will be the social media metric from 0 to 100. Using this plot we will graph changes in stock prices over time and changes in the social media metric.

To the left of this we will have a checklist of different keyword and stock combinations to choose from.

Just beneath the plot, we will have a slider which controls the time period to display data in. Below that, we will include a world map, where darker shaded areas signify places where the selected keyword is historically more talked about in the country.

Techniques We will be using Google trends data, and Yahoo's past stock data. We also will investigate using reddit, facebook twitter and new york times data, but we currently only have access to the Google trends, and Yahoo data.