

# Project Name: Twitter Triumphs

The goal of our project is to correlate tweets made by Trump's government and stock market performance of various industries(Example: Impact of Trump's tweets on government shutdown on the airline industry). To do this kind of analysis, we need data from various sources.

## DATA SOURCES, WHY and HOW →

1. In order to assess the impact of Trump's tweets on the stock market, we are using the most widely used and diversified index in the United States, the S&P 500 Index. Yahoo Finance is the best place to obtain historical data(June 01, 2018 - Current). We are using 'Beautiful Soup' library to scrape index points, high, low, open, close, etc. of the S&P500 data.

*Source Link:*

<https://finance.yahoo.com/quote/%5EGSPC/history?period1=1527825600&period2=1549688400&interval=1d&filter=history&frequency=1d>

*Data Download Method:*

Web Scraping using 'BeautifulSoup' in python.

2. During November and December, there was government shutdown which affected lot of industries. In order to see the impact of Trump tweets on the airline industry during the shutdown, we are going to study the stock market variations from four different airline companies namely Southwest, JetBlue, American Airlines and Delta Airlines. NASDAQ is the best source to get historical data for stock market variations for the past 3 months. Hence, we are using the "Beautiful Soup" library to scrape necessary fields.

*Source Link:*

<https://www.nasdaq.com/symbol/jblu/historical>  
<https://www.nasdaq.com/symbol/aal/historical>  
<https://www.nasdaq.com/symbol/luv/historical>  
<https://www.nasdaq.com/symbol/dal/historical>

*Data Download Method:*

Web scraping using Beautiful Soup library in Python

3. Collecting tweets made by Trump and members of his government for definable time periods. The collected tweets along with their timestamps will then be used in conjunction with other data to draw insights.

*Source Link: twitter.com*

*Data Download Method:*

Twitter API download using Tweepy library

**Use of collected data →**

The plan is to use this data to understand how Trump's tweets affect the stock market over various time periods and create simple and easy to understand visualizations on it using python libraries such as matplotlib, bokeh etc. The data will be used for creating intra day, weekly and monthly insights.

**Merged file explanation→**

In our merged file we have aligned and consolidated our data to relate it to each tweet made by Donald Trump. We first consider the tweet and then find the S&P High, Low, Airline's performance for that day. If the tweet has been made on a weekend, we find the previous high/low value.