Predict Tesla Stock Price Via Twitter and Historic Data

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A regression model will be created to predict changes in TSLA stock price based off of historical data and tweets. Historical data will include Tesla, but also other electric car companies, other energy companies, and battery companies. Tweets from Elon Musk, Tesla, and others who tweet about Tesla will also help build the model. Data will be divided into training, validation, and test sets.

Data Sources:

* Historical Stock data
  + <https://finance.yahoo.com/>
  + This will be sole source for stock data
* Twitter Data
  + Twitter API
    - Needs preprocessing since only need what the user says and when
    - Key words from these tweets will be evaluated with the following data sets.
* Sentiment Analysis
  + https://www.cs.uic.edu/~liub/FBS/sentiment-analysis.html

Project Timeline

* Feb 11
  + Proposal Submitted
* Feb 25
  + List of stocks besides Tesla to build model will be chosen.
* March 18
  + Twitter data will be selected, and tweets will be classified as positive or negative off of key words.
* March 24
  + 2 Page Project Intermediate Report Due
* April 8
  + Final regression model will be chosen, begin writing final report.
* April 21
  + Final Project Report Due