



Sentiment & Securities Analysis



CS Senior Project - Design Update
Brandon Fisher - Advisor: Dr. Hsu



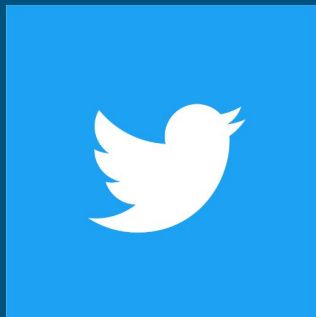
Overview

- Tracking stock prices of major companies
- Track sentiment of Tweets mentioning those companies

Goal: Investigate Effectiveness of buying/selling stocks based on Twitter activity

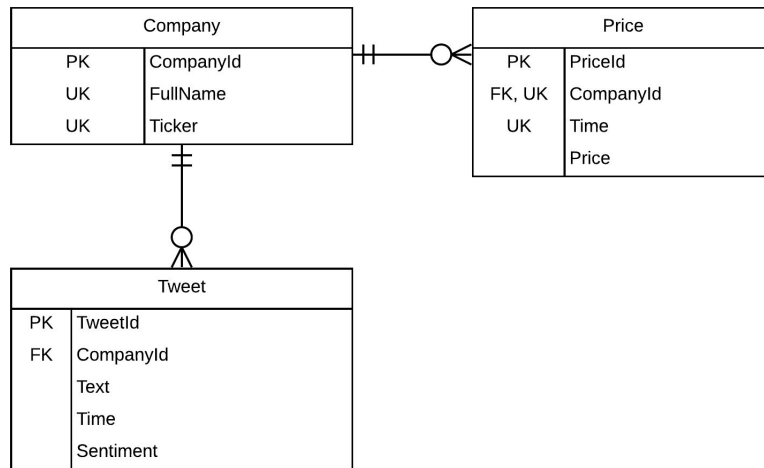
- Old plan - simulate day-trading with this strategy
- New plan - create an interactive visualization app to view data

Tools



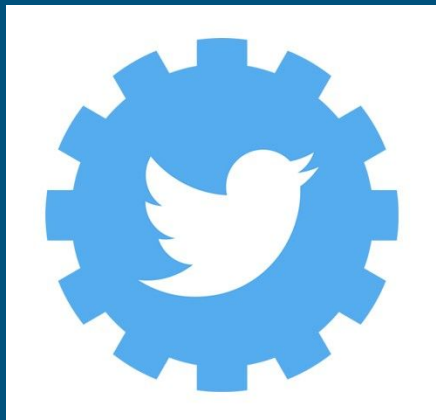
Currently Implemented

- PostgreSQL DB on AWS Lightsail
- Price tracker implemented on AWS Lightsail
- Currently ~120,000 prices captured
- Adding ~10,000 per trading day



In Progress

- Interact with Twitter API using Tweepy
- Use synonym sets to match variations on company names
- Track sentiment with NLTK

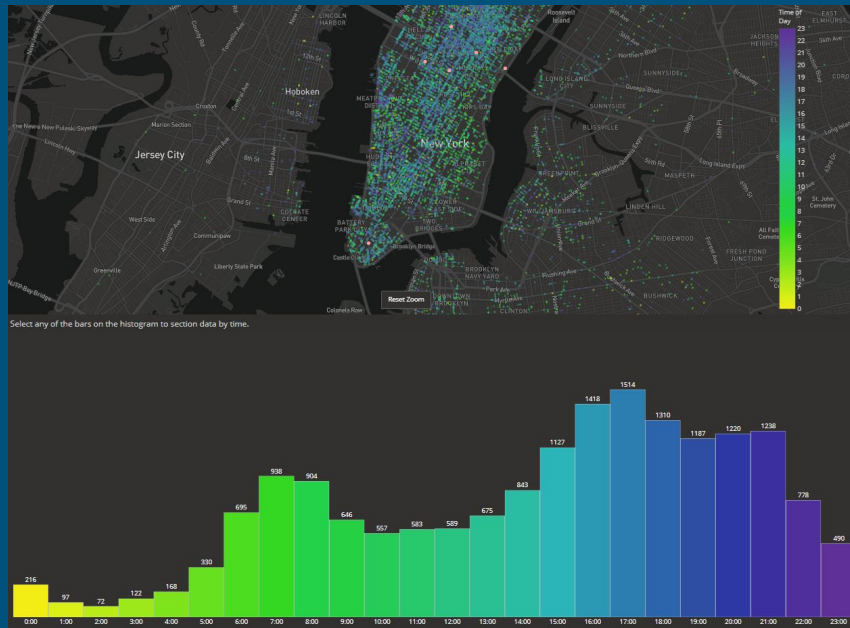


Future Plans



- Visualization app with Plotly
- <https://plot.ly/dash/>
- <https://dash-gallery.plotly.host/Portal/>
- Features
 - Filter by company
 - Filter by time
 - Trend line over variable timeframe

Example Plotly app - Uber rides NYC



Timeline

- September
 - Database design and creation ☐
- October
 - Recording stock price data ☐
 - Recording tweets and sentiment ☐
- November
 - Finish tweet and sentiment tracking
 - Visualization app with Plotly
- December
 - Final presentation

Questions?
