



Stock Prediction using Social Media

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A platform for predicting Changes in Stock using sentiment analysis on Twitter data

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Problem

Investors do not get any realtime stock prediction of a company after any

New Product Launch

Acquisition of a new organisation

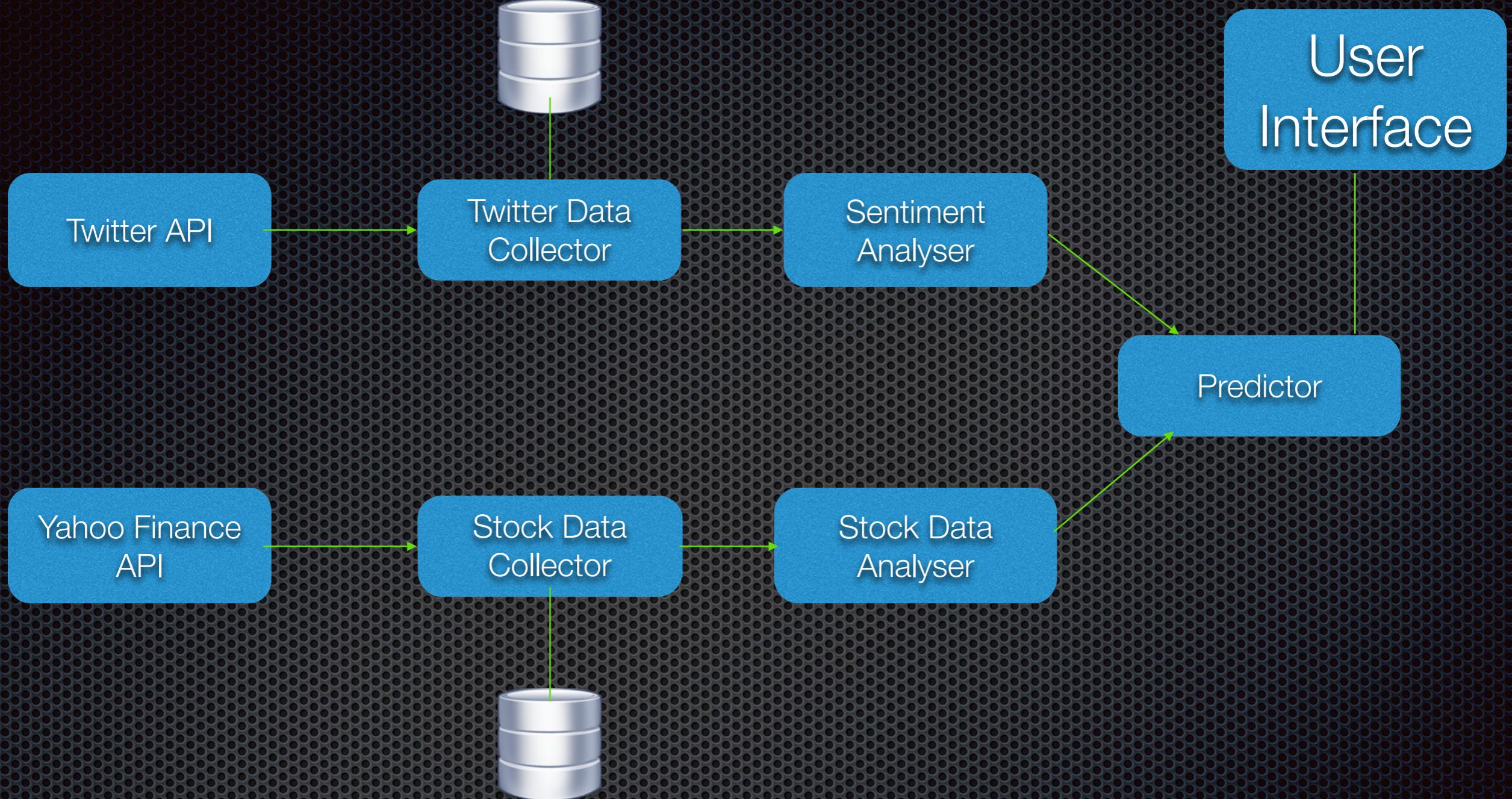
New branch Opening

Campaign by the Company

Using our tool investors will be able to get an approximate stock variation for the next day for that company.

Approach

- Ask the user the Twitter profile usernames of the company and their top management (executives, founders etc.).
- Ask any other keywords which are relevant to the company (eg. product name, acquired company's name etc.)
- Run a sentiment analysis algorithm which will provide a positive or negative score according to the overall sentiment towards the keywords asked above.
- Check the stock history of that company to find out the extent of the impact, the social media had on it, in past (some stocks may be very volatile and others may be more stagnant). We will calculate a score which defines how sensitive the stock has been, in past, to the social media.
- This data will be used to forecast the approximate closing value of that stock on the next day.



Data

- We need to collect raw data (tweets) from Twitter API for current day and store it in database.
- We will collect and store stock history from yahoo Finance API.
- From collected tweets we are going to use Text, HashTag, Timeline, location, user mentions fields to do sentiment analysis
- We do not manually label any data.

Timeline

1. Writing Code to Collect Twitter Data and Yahoo Finance data - 10/31/2015
2. Need to Write Sentiment Analyser Module - 11/14/2015
3. Need to Write Stock Market Analyser Module - 11/20/2015
4. Need to Write Prediction Module and UI - 11/30/2015
5. Testing and Project documentation - 12/05/2015