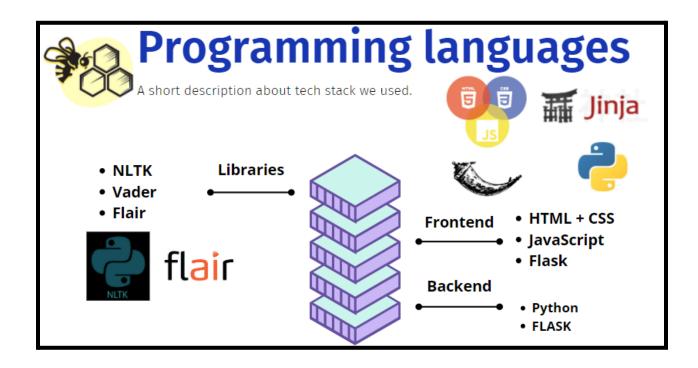


Programming Languages used:

The programming languages that we are using for Stockbeez can be divided into frontend and backend. For the frontend, we are using **JavaScript** along with **HTML** and **CSS** while we are using **Jinja** as a templating engine to render the pages. For the backend, we are using **Python** for our natural language processing models and web scraping while using **Flask** as a web framework to build our web application.



Programming Domains

Following are the programming domains involved in the project -

Web Development:

building a set of web pages for our intended applications. Making the web pages interactive with respect to user input. Handling get and post requests.

NLP (Natural Language Processing):

NLP is a collective term referring to the automatic computational processing of human languages. Here we use NLP for sentiment analysis for categorizing the vast amounts of major headlines from prominent websites like Yahoo Finance, CNBC, MoneyControl, LiveMint and MarketWatch.

Brief about the project:

Topic : Sentimental Analysis for Stock Prediction using Twitter Data

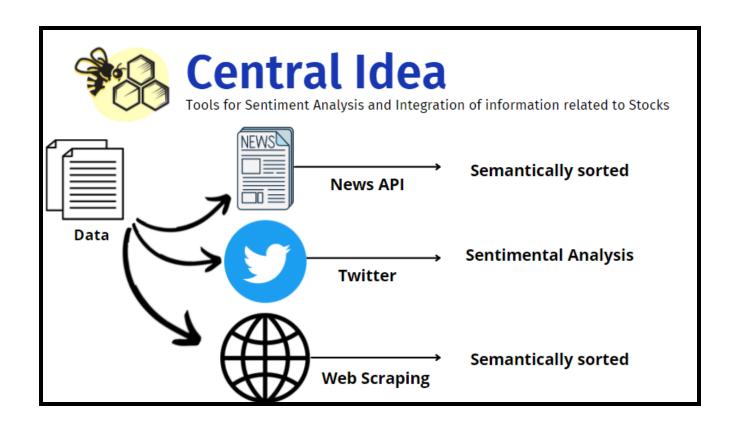
The world of stock is a world full of change. It generates a flood of information and picking out the essence out of this vast sea of information is our motive.

Stock prices are affected by social factors, economic factors, demand & supply and near term sentiment for the stocks or commodities. Stock prices rise and fall every due to variations in supply and demand, and public sentiment. Social media platforms like Twitter is the prominent platform to share emotions about any topic and significantly impact overall public opinion. It has been observed that the changes in stock prices are correlated with the public opinions.

At Stockbeez we thus aim to integrate the vast sea of information related to stocks and provide tools for sentiment analysis of stock related information.

For our aim we turned to Natural Language Processing and Web Scraping. We semantically sort and display the scraped information from prominent websites in stock like Finviz, MoneyControl, LiveMint, CNBC, Yahoo Finance, Economic Times and MarketWatch.

We also provide a tool with the help of Twitter API to view sentiment related to specific companies which might help the users to understand the dynamics of stocks better.



Program Flow:

Landing Page (with brief description of the project)

Go to Dashboard -→

News At a Glance Page: Before you start analyzing a select stock, it's a good idea for the user to get an overall Idea of the market.

For this we are using scraping data from various websites (viz. Finviz, moneycontrol, Yahoo Finance) to show you a custom dashboard by which the user will get a general understanding of the stock market.

Now when the user wants to search for a specific stock, a text box is given where the user enters the company of his choice which he wants to analyze deeper.

When the user clicks submit he is greeted with the following:

- 1) **Company specific news**: Curated news which are relevant only to the company that the user wants
- 2) A host of curated widgets:

- a) Stock Overview Widget
- b) Advanced Real-Time Chart Widget
- c) Technical analysis
- d) Fundamental analysis
- 3) **Semantic breakdown from twitter**: The user's select company is taken and is analyzed with
- 4) **Word Cloud**: A word cloud is a visual representation of text data, which is often used to depict keyword metadata on websites, or to visualize free form text. Tags are usually single words, and the importance of each tag is shown with font size or color.



Home Analytic Tools Headlines Stocks At A Glance

Stockbeez

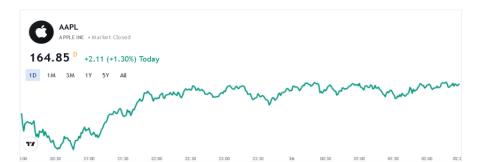
Now get Sentimental Analysis of your stocks













AAPL Financials Valuation Price History Average Volume (10 day) 87.697M Enterprise Value (MRQ) 2.971T 1-Year Beta 1.2860 Enterprise Value/EBIT... 21.1317 52 Week High 182.9400 Total Shares Outstandi... 16.319B 52 Week Low 116.2100 Number of Employees 154K 23.502K Number of Shareholders Price to Earnings Ratio... 27.0184 Dividends Paid (FY) -14.467B Price to Revenue Ratio (... 7.0989 Dividends Yield (FY) 0.5338 Price to Book (FY) 42,3727 Dividends per Share (FY) 0.8500 Price to Sales (FY) 7.5027 Balance Sheet Net Margin (TTM) Quick Ratio (MRQ) 0.9980 Gross Margin (TTM) 0.4321 Current Ratio (MRQ) 1.0378 Operating Margin (TTM) 0.3110 Debt to Equity Ratio (M... 1.7071 Pretax Margin (TTM) 0.3086 Net Debt (MRQ) 58.885B 122.798B TotalDebt (MRQ) Basic EPS (FY) Total Assets (MRQ) 381.191B Basic EPS (TTM) 6.0772 Operating Metrics EPS Diluted (FY) 5.6140 0.2735 Return on Assets (TTM) Net Income (FY) 94.68B 129.099B Return on Equity (TTM) 1.4557 EBITDA (TTM) 0.5845 54.2438 Return on Invested Capi... Gross Profit (MRQ) 152.836B Last Year Revenue (FY) 365.817B



Technical Analysis for AAPL by TradingView

Total Revenue (FY)

Free Cash Flow (TTM)

365.817B

101.853B

Latest News Headlines

WordCloud

Generate Wordcloud



General Report

The Average Sentiment is Neutral

% Stockbeez

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