



NEWS SENTIMENTAL ANALYSIS VS. STOCK MARKET



INTRODUCTION



Sentimental Analysis also known as Emotional AI or Opinion mining is the use of language processing and analysis to study, extract and identify subjective information.



It is basically the measurement of positive and negative languages.



The project uses sentimental analysis to illustrate how stock prices and news articles are related.

SCOPE OF THE PROJECT



Currently, there are limited methods to predict how stock prices varies.



But establishing a relationship between news articles and stock prices clearly opens a new window towards stock market prediction.



Using Sentimental Analysis this project shows how daily news articles on a company affect it's stock prices.

PROJECT SUMMARY

- Sentimental Analysis is performed on news articles scrapped from news websites to generate corresponding Sentiment Scores
- Stock prices were collected from Yahoo finance
- Sentiment scores generated and Stock prices collected are uploaded to Azure Cloud
- Relationship between both are visualized through Graphs.

DATA CURATION



Business Times News website :

News articles were scrapped using BeautifulSoup and stored in Azure Cloud.



Yahoo Finance :

Stock data were collected using yfinance Python library and stored to in Azure Cloud.

U.S. Markets closed

S&P 500 2,953.56 -26.82 (-0.90%)	Dow 30 26,583.42 -280.85 (-1.05%)	Nasdaq 8,111.12 -64.30 (-0.79%)	Russell 2000 1,550.41 -24.20 (-1.54%)	Crude Oil 54.44 -4.14 (-7.07%)	Gold 1,454.20 +16.40 (+1.14%)
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Alphabet Inc. (GOOG)

NasdaqGS - NasdaqGS Real Time Price. Currency in USD

Add to watchlist

Quote Lookup

1,209.01 -7.67 (-0.63%) **1,209.01** 0.00 (0.00%)

At close: 3:59PM EDT

After hours: 4:00PM EDT

Buy

Sell

Summary Chart Conversations Statistics Historical Data Profile Financials Analysis Options Holders Sustainability

Previous Close	1,216.68	Market Cap	838.849B
Open	1,214.03	Beta (3Y Monthly)	0.99
Bid	1,211.73 x 900	PE Ratio (TTM)	24.41
Ask	1,212.23 x 1400	EPS (TTM)	49.53
Day's Range	1,205.72 - 1,234.11	Earnings Date	N/A
52 Week Range	970.11 - 1,289.27	Forward Dividend & Yield	N/A (N/A)
Volume	1,548,686	Ex-Dividend Date	N/A
Avg. Volume	1,567,976	1y Target Est	1,369.00

Trade prices are not sourced from all markets

Related Video

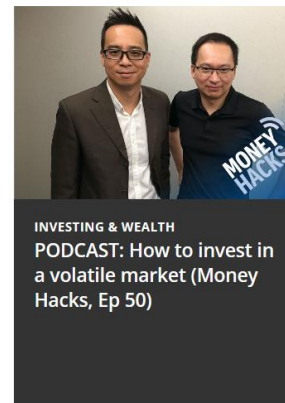
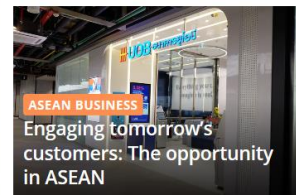


People Also Watch

Symbol	Last Price	Change	% Change
AAPL Apple Inc.	208.43	-4.61	-2.16%
FB Facebook, Inc.	192.73	-1.50	-0.77%
AMZN Amazon.com, Inc.	1,855.32	-11.46	-0.61%
NFLX Netflix, Inc.	319.50	-3.49	-1.08%

THE BUSINESS TIMES

ALL NEWS WEEKLY BREAKING TODAY'S PAPER LIFESTYLE OPINION GARAGE SME ASEAN WEALTH HUB



WEBSITES USED

- Business Times
- Yahoo Finance

TOOLS USED



Python : Programming platform.



nlk 'vader lexicon' : Perform Sentimental analysis on Articles scrapped.



BeautifulSoup : To scrape data from Business Times website.



yfinance Python library : To retrieve stock data from Yahoo Finance.

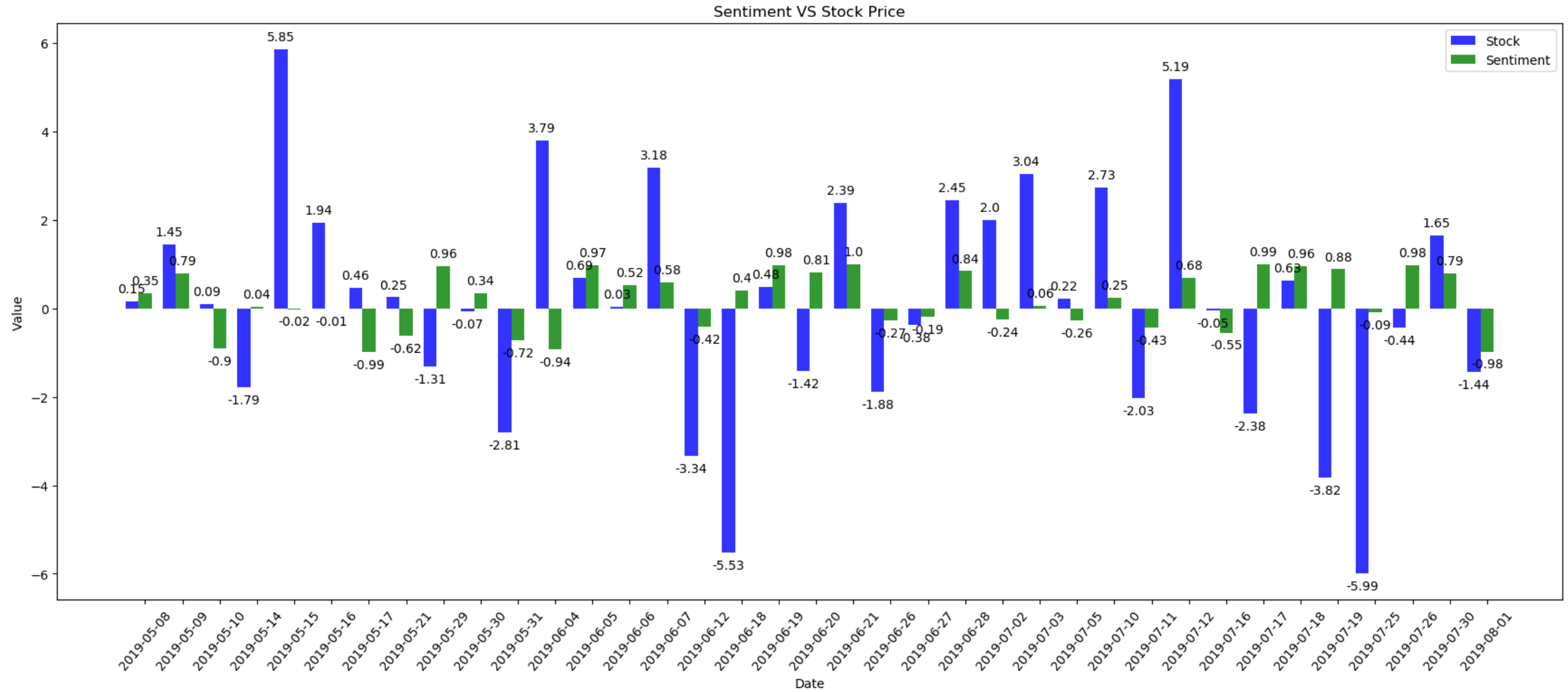


Azure Cloud : Store and retrieve Finance and Sentiment data as SQL tables.



Matplotlib : Used for Visualisation in Python

OUTPUT - 1



OUTPUT - 2

