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**Team Assignment 2: Project Extension**

**Project Extension:**

The program will analyze the data extracted from Twitter leveraging Tweepy API and will implement analysis to find out the result where a stock/crypto is trending positively, negatively or neutrally in the public domain. This will allow the customer to take a decision to buy, sell or hold according to the program of python. This is an extension of the part 1 documentation where we worked on gathering data on Tesla Stock. In this part, we have added for Moderna, BTC Bitcoin and GameStop stock.

**Enhancement to existing program:**

We improvised on the code by changing the final decision feature to giving the user data for buy, sell and hold in a percentage format. For Example- The code will now tell the user the following data- Buy- 75%, Hold- 20%, Sell- 20% instead of just Buy, Sell or Hold which gives more transparency to the user if the results are very close in nature.

**Twilio:**

Twilio Messaging is an API to send and receive SMS messages. Created Twilio developer account to configure sending texts through python. We are using existing variables to cast the SMS feature to the user, eventually meaning that there is none / limited modification is required while using Twilio package. This is done to automate the SMS feature for the respective stock. The SMS notifications to the user states the buy, hold and sell percentages of the particular stock.

Diagram, text

Description automatically generated

**Matplotlib:**

Matplotlib provides online graphing, analytics, and statistics tools for individuals and collaboration, as well as scientific graphing libraries for Python, R, MATLAB, Perl, Julia, Arduino, and REST. Matplotlib’s open-source graphing libraries are free to use, work offline and does not require any account registration. Matplotlib is a free and open-source graphing library for Python. We use matplotlib here to graph out our results of the pulled twitter data on the stocks which would give us a better understanding of the market trend.



**Note**: Please refer to demo video by clicking [here](https://share.vidyard.com/watch/aH6XEt8w3bLSmXkTpn6Hed?) to see how the program executes.