# Stock recommendation – Master (ClientID – 0057)

**Description**

Making a recommendation using in python using yahoo finance data. Which will have all the stock information. This will be tkinter app where the app will make future prediction for the next day using model called ARIMA(autoregressive integrated moving average) where you select the stock and the prediction will be shown. The value of the most searched stock based on keyword(stock price and share price) in “US” this can be any country you type in app. Stock recommendation which will grab data from the yahoo finance api and based on the technical functions like MACD and RSI signals it will recommend the stock to buy

**Which covers:**

1. Prediction of the stock value for the next day
   1. User input the stock name
2. Which stock is most searched at the moment using Pytrends module in python
   1. No user input it will generate the csv file showing top trending stocks
3. Based on MACD and RSI. Recommending the stock to buy from all the stocks in yahoo finance dataset
   1. It will print the values and the stock name in Tkinter window
4. Additional improvement and changes if applied will be notified

Functional Programming will be applied for this task using python programming language

# Installation details

Install ananconda from this link (https://www.anaconda.com/products/distribution)

copy the “stock.yml” file to the new folder

then search “anaconda prompt” in windows or mac

type “cd paste location of the folder where you have .yml file saved”

type “ conda env create -f stock.yml”

after the installation finished now when ever we want to run the code we open “Anaconda prompt”

# How to run the app

Run the app called “stock\_recommender.py”

To run the app open anaconda prompt

Type “cd paste location where you have recommender saved”

Type “conda activate stock”

Type “python stock\_recommender.py”

Forecasting tab-1

* + Input the Ticker value of the stock then click button called “Weekly forecast”
  + Select “output folder”
  + Output folder will have the forecasted stock values

Trending stock tab-2

* Based on the keyword 'share price','stock price'
* This process will ask for the output directory
* This will look for the trending keywords in USA
* Then collect data from the pytrend module of python
* It will only look for last 3 months of data
* Results will show most trending stocks

Stock recommendation tab-2

* This app will require yahoo.csv file which will be sent on upwork
* This file consist of all the stocks
* This function will filter the file and keep only 100 top rows to make the process faster.
* If you are only looking for particular stocks you should only keep the stock for which you want to know the buying signal
* The buying signals are based on MACD and RSI
  + Read more about it on <https://www.investopedia.com/terms/m/macd.asp#:~:text=in%20the%20period.-,Learning%20From%20MACD,below%20the%2026%2Dperiod%20EMA>.
* Result will have csv file showing which stocks to buy
* Eg: (Buying signal MACD – T). here based on MACD we should buy the stock called -> https://finance.yahoo.com/quote/T/