# Forex Trading Bot and Dashboard

Includes Data Analysis Dash Board + Regression + Classification algorithms + NLP for sentiment analysis

Aakash, Abhishek, Aditya, Pushpendra, Gourav, Rupesh

# Objective

- Providing the key data analytics for taking manual decisions
- Providing the time to enter the market
- Providing the signals (Weather to buy or sell)
- Guiding how much to buy along with the future returns that can be expected
- Auto close the trade while maximizing the profit and minimizing the risk

# Timeline and Issues

| 4th Aug Understanding & Planning | 5th Aug – 8th Aug Data Collection & Feature Selection | 9th Aug – 10th Aug Model Building and Testing | 11th Aug – 12th Aug Model Tuning and Deploying in AWS |
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**4th Aug Understanding & Planning**
- What is Forex Market?
- What are the factors that influence the market?
- How the big players takes the decision?
- How to collect the time series data?
- How to use sentiment analysis for finding the impacts of news/policies on the exchange rates.
- Work Planning

**5th Aug – 8th Aug Data Collection & Feature Selection**
- Collect the time series forex data of the past 10 year
- Collect the forex news data and policy data(Including the sentiment of the policy and date)
- Feature Engineering
- Data Pre-processing

**9th Aug – 10th Aug Model Building and Testing**
- Create a dash board using matplotlib which explains the story of the data and major policy changes and sentiments that affected the prices to change majorly
- Build Pycaret
- Apply different regression and classification models
- Apply Sentiment analysis and obtain the predictions
- Combine both the above and check with the accuracy
- If the accuracy is > 55%,Boom!!! You just created a money making machine!

**11th Aug – 12th Aug Model Tuning and Deploying in AWS**
- Create a basic website where everyday data can be given in .csv format
- Deploy the final model in AWS and the website
- Upload everything in github
- Enjoy!