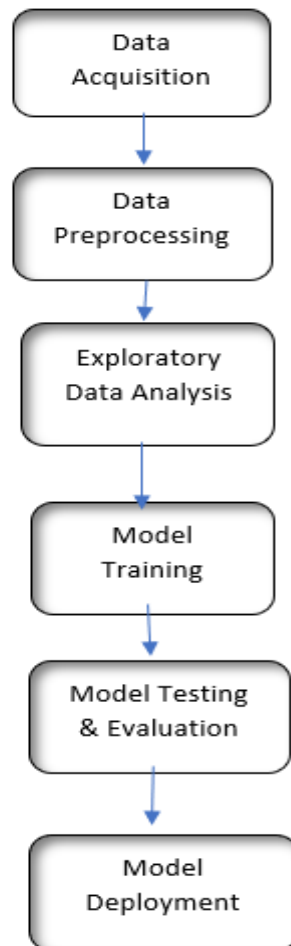


## BLUEPRINT OF THE MODEL

### Predicting Volatility in Equity Markets Using Macroeconomic News



- **Data Acquisition:** Gathering of Data. Datasets used are financial\_data\_MSFT.csv and twitter\_data\_MSFT.csv
- **Data Processing:** Includes Data Cleaning such as removing blanks, null value and duplicates if any, handling outliers and Standardizing the data
- **EDA:** Visualizing various plots to analyse the distribution pattern of various attributes and Feature Selection i.e., remove necessary columns.
- **Model Training:** Segregating Dependent and Independent Variables, splitting dataset into 80:20 ratio, Applying Naïve Bayes & SVM &

Logistic Regression for model training. Transforming Data and Hyper parameter tuning

- **Model Testing & Evaluation:** Testing 20% of data set in both cases and evaluation parameters include accuracy or any other parameters.
- **Model Deployment:** Deploy the machine learning model in Heroku