## Prediction of Stock Price movement based on Trading using Supervised Learning Model

The blueprint follows the following pattern:



Data	Data Sets -> DataFrame.csv (22805, 7) & MSFT.csv (8857, 7)
	Collect the RAW data from GitHub.
	File Format -> .CSV
Data Processing	Data Cleaning -> remove blanks, null value and duplicates if any, handling outliers
	Parse the date into date time data type, identified general statistics
	Standardizing the data
EDA	Visualizing various plots> to analyze the distribution pattern of various attributes
	Understand the data pattern with respect to target variable (Close)
	Feature Selection> remove unnecessary columns, Identifying Correlation -> Using Heat Map/Matrix
Training Model	Segregating Dependent (close variable) and Independent Variables, Splitting data set ->
	80:20 (ratio), SVM Linear & SVM Polynomial -> For Model Training , Transforming Data ->
	Feature Scaling
	Hyper parameter Tuning -> Apply various ML/DL Techniques to select for best suitable model
Test Model & Evaluation	Test Data -> 20% of data set in both cases
	Data -> 4561 rows of dataframe.csv and 1771 rows of msft.csv
	Evaluation Parameters -> Accuracy, Mean Absolute Error and other parameters if any.
Model Prediction	Predict the Stock Price using Trading -> After applying SVM (linear & polynomial)
	Rectify the model performance techniques -> like Cross validating the model etc.
Model Deployment	Deploy model ->
	using flask,
	Microsoft Azure
	Check functionality