STOCK PRICE PREDICTION BASED ON PREVIOUS DATA

Group No. : 101

Project Group Members:

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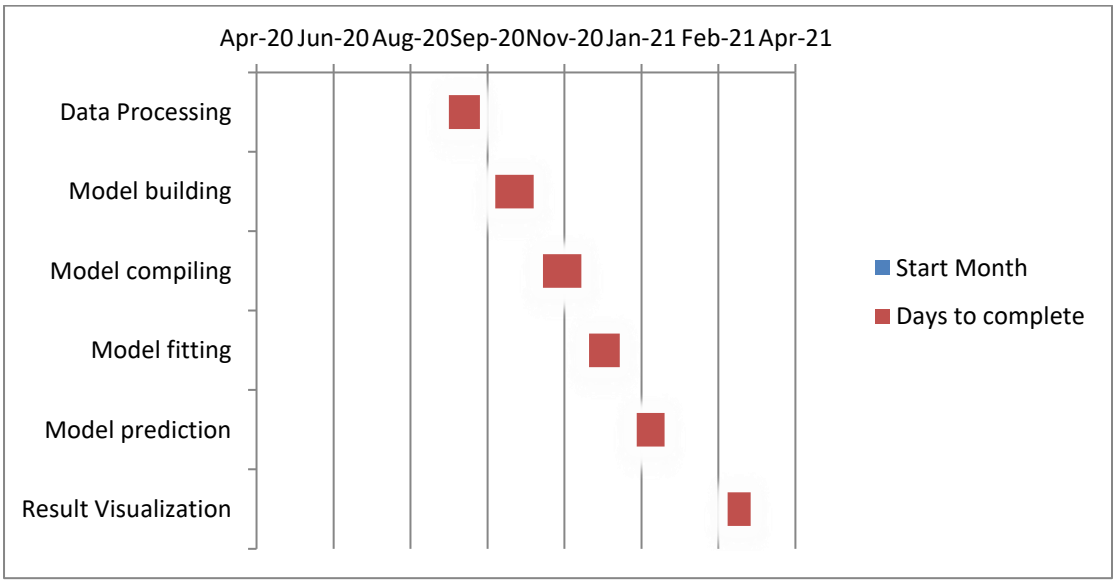
About the Project: Stock price prediction is one among the complex machine learning problems. It depends on a large number of factors which contribute to changes in the supply and demand. This project presents the technical analysis of the various strategies proposed in the past, for predicting the price of a stock, and evaluation of a novel approach for the same. Stock prices are represented as time series data and neural networks are trained to learn the patterns from trends. Along with the numerical analysis of the stock trend, this research also considers the textual analysis of it by analyzing the public sentiment from online news sources and blogs. Utilizing both this information, a merged hybrid model is built which can predict the stock trend more accurately.

Motivation: Analysis of stocks using RNN algo will be useful for new investors to invest in stock market based on the various factors considered by the software. Stock market prediction is the act of trying to determine the future value of a company stock or other financial instrument traded on an exchange. The successful prediction of a stock's future price could yield significant profit. The efficient-market hypothesis suggests that stock prices reflect all currently available information and any price changes that are not based on newly revealed information thus are inherently unpredictable.

Project Planning:



Tools required:

- **Hardware Requirements:**
  - Computer System with minimum 8GB of RAM
- **Software Requirements:**
  - Python 3
  - Numpy
  - pandas
  - Keras
  - Tensor-flow
  - Sklearn
  - Matplotlib
  - Jupyter Notebook

Signature of Project Supervisor: _____