

MES COLLEGE OF ENGINEERING, KUTTIPPURAM
DEPARTMENT OF COMPUTER APPLICATIONS
20MCA246 – MAIN PROJECT

PRO FORMA FOR THE APPROVAL OF THE FOURTH SEMESTER MAIN PROJECT

(Note: All entries of the pro forma for approval should be filled up with appropriate and complete information. Incomplete Pro forma of approval in any respect will be rejected.)

Main Project Proposal No : 2
(Filled by the Department)

Academic Year : 2021- 22
Year of Admission : 2020

1. Title of the Project : STOCK MARKET PERDICTION USING MACHINE LEARNING
2. Name of the Guide : Mr. Vasudevan T V
3. Student Details (in BLOCK LETTERS)

Name

Register Number

Signature

MUHAMED SADHIO P V

MES20MCA-2032

Date:

Approval Status : Approved / Not Approved

Signature of
Committee Members }

Comments of the Guide

Dated Signature

Initial Submission : _____

First Review : _____

Second Review : _____

Comments of the Project Coordinator

Dated Signature

Initial Submission: _____

First Review _____

Second Review _____

Final Comments :

Dated Signature of HOD

STOCK MARKET PREDICTION USING MACHINE LEARNING

MUHAMED SADHIQ P V

Introduction: Investor sentiment plays an important role on the stock market. User-generated textual content on the Internet provides a precious source to reflect investor psychology and predicts stock prices as a complement to stock market data. This project integrates sentiment analysis into a machine learning method based on support vector machine. Tweets are downloaded from tweeter and sentiment analysis is performed on the tweets.

Support Vector Regression is applied on historical stock price data and closing value of stock for next day is predicted. Our model will help investors to take wiser decision while trading.

Objectives:

- To automatically perform opinion mining of people regarding particular stock using sentiment analysis
- To predict near future price of stock using machine learning.
- To provide visualization of data.
- To build computer based decision support system which will help investors while taking decision about selling and buying of stock so that they can make more profit.

Problem Definition: The stock market process is full of uncertainty and it's affected by many factors such as company news and performance, industry performance, investor sentiment, economic factors etc. that can cause the price of a stock to rise or fall. The common problem faced by the investor include high market volatility, loss of money, stock market crash, poor investment skills and lack of market knowledge. These reasons may lead to wrong decisions. If investor makes wrong decision while selling and buying of the share then they may face loss. Hence before investing money, it is very important for investors to predict the stock market. Hence the stock market prediction is one of the important exertions in business and finance

Basic functionalities: System should collect accurate data from the tweeter and historical data of stock price from yahoo finance. System should be able to accurately classify the sentiments of the comments from tweeter. System should properly apply support vector machine (regression) algorithm to historical stock price data.