

**MINI PROJECT – II**  
**(2019-2020)**

**Stock Price Prediction**  
**Group No-**

**SYNOPSIS**



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## **ABSTRACT**

In the finance world stock trading is one of the most important activities. Stock market prediction is an act of trying to determine the future value of a stock other financial instrument traded on a financial exchange. This paper explains the prediction of a stock using Machine Learning. The technical and fundamental or the time series analysis is used by the most of the stockbrokers while making the stock predictions. The programming language is Used to predict the stock market using machine learning is Python. In this paper we propose a Machine Learning (ML) approach that will be trained from the available stocks data and gain intelligence and then uses the acquired knowledge for an accurate prediction. In this context this study uses a machine learning technique called Support Vector Machine (SVM) to predict stock prices for the large and small capitalizations and in the three different markets, employing prices with both daily and up-to-the-minute frequencies.

## **Project Prospective –**

### **Motivation:**

Nowadays, as the connections between worldwide economies are tightened by globalization, external perturbations to the financial markets are no longer domestic. With evolving capital markets, more and more data is being created daily.

The intrinsic value of a company's stock is the value determined by estimating the expected future cash flows of a stock and discounting them to the present, which is known as the book value. This is distinct from the market value of the stock, that is determined by the company's stock price. This market value of a stock can deviate from the intrinsic value due to reasons unrelated to the company's fundamental operations, such as market sentiment.

The fluctuation of stock market is violent and there are many complicated financial indicators. Only few people with extensive experience and knowledge can understand the

meaning of the indicators and use them to make good prediction to get fortune. Most people have to rely solely on luck to earn money from stock trading. However, the advancement in technology, provides an opportunity to gain steady fortune from stock market and also can help experts to find out the most informative indicators to make better prediction. The prediction of the market value is of paramount importance to help in maximizing the profit of stock option purchase while keeping the risk low.

## **Requirements:**

### **a) Hardware:**

- Computer/Laptop
- 8GB RAM
- Processor: i3 or more

### **b) Software:**

- Jupyter
- Anaconda Navigator
- Pandas
- numpy

## **Future Prospects:**

- It is used to predict the future value of company stocks.
- Can be used to predict the price hike
- Can be beneficial for stock buyer as they get to know the future hike of stock
- Explaining stocks value to others

## **Conclusion –**

In the project, we proposed the use of the data collected from different global financial markets with machine learning algorithms in order to predict the stock index movements. SVM algorithm works on the large dataset value which is collected from different global financial markets. Also, SVM does not give a problem of over fitting. Various machine learning based models are proposed for predicting the daily trend of Market stocks. Numerical results suggest the high efficiency. The practical trading models built upon our well-trained predictor. The model generates higher profit compared to the selected benchmarks.

## **References -**

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