Trading Strategy Development

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Abstract— A trading strategy is a set plan which is planned to attain a beneficial return by going long or short in markets. A better strategy used to be a beneficial which have various things including identification of what to trade and how to trade. In this report, our aim is of development of trading strategy, its outcomes as well as its future scope.

Keywords: Trading Strategy, BSE, Stock Market

I. INTRODUCTION

Trading strategy is a procedure of not only buying but also selling in markets which is established on predetermined rules which are useful for making trading decisions.

Progressing an operative trading strategy needs a understandable touch of your financial plans. That is use to append meaningful your threat sufferance, determining your short as well as long term financial requirements, and understanding how trading is able to insert value to your portfolio.

Automated trading is a technique of take part in financial markets by using a program which carry out predetermined rules for entering as well as exiting trades.As a trader , you will cooperate detailed technical study with setting parameters for your positions, such as orders to open, trailing stops as well as guaranteed stops.

II. MODULES

A. Stock Market:-

Equity stock market is the dealing of buyers and sellers of stock (called as shares).

In which it represents ownership on businesses; in which it includes securities listed in public stock exchange and also which is only traded privately, sometimes the share of multinational or national private companies which are sold to the investors through the equated crowd funding platforms. Investment in stock market is done through stockbrokers and electronic trading platforms or online platforms such trading apps or websites.

This investment is done by strategic mindset or getting help from others also.

B. BSE:-

The S&P Bombay stock exchange sensitive index or the sensex means the Bombay Stock Exchange which is a free platform market-weighted share market(stock market)index of 30 well known established and financially sound companies listed in the Bombay stock market.

The 30 established companies are largest and highly active in stock exchanges in Bombay stock market, this companies are representative of various industrial sectors which are related to Indian economy.

The publication from January 1,1968, the S&P BSE SENSEX is the pulse of local and domestic stock market in whole country.

The basic value of the SENSEX was taken as 100 on April 1,1979 and the base year was 1978-79.

On the day of July 25, 2001 BSE launched DOLLEX-30, a dollar version of SENSEX.

III. ALGORITHMS

A. Volume Weighted Average Price (VWAP)

The Volume Weight average price (VWAP) which is a trading benchmark that has been used by traders which gives the average price a security has traded in a day. It is basically base on two things volume and price.

formula:- $VWAP = \sum Volume \sum Price * Volume$

B. Time Weighted Average Price (TWAP)

This is an algorithm which is based on the average price is used for the implementation of bigger orders without any harm to the market price.

The trading pattern of the running strategy can be easy to understand.

Sometimes the orders are not modified as in special way, then the parameters should be adjusted to make the strategies getting harder to track in that way.

C. LSTM:-

This algorithm are basically used for sequence prediction problems and its success rate is extremely effective.

The main point behind the success rate of LSTM which it can store important information in past and it forget the information which is not available.

D. Linear Regression:

This is used in science, business and the other relevant fields like where predictions and forecasting is been used.

It helps in identification of the relationships between dependent variables and one or many independent variables. A feature to predict an outcome means simple linear regression. All this things we are doing with the help of algorithms.
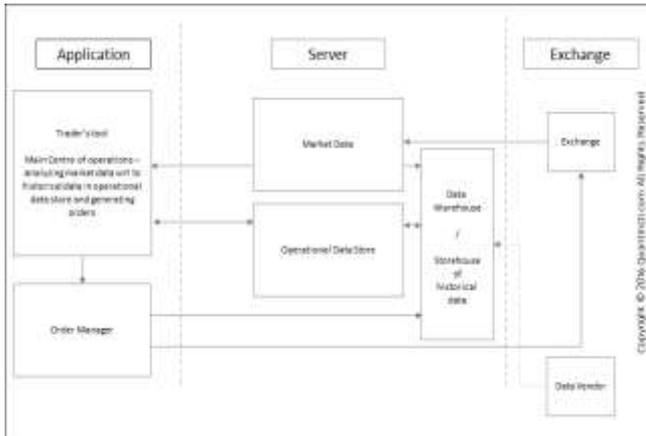
IV. SYSTEM DESIGN

Any trading system, conceptually, is nothing more than a computational block that interacts with the exchange on two different streams.

In its basic form, we can portray the exchange of data from the Exchange and the automated trading system as follows:

V. SYSTEM ARCHITECTURE

VI. CONCLUSION

Developing an effective trading strategy requires having a clear sense of your financial goals. This should know your risk, tolerance, determining your short-term and long-term financial needs, and understanding how trading can add value to your portfolio. In order to create the prediction model, the implementation process should be included different steps like data collection, data preprocessing, classification and model evaluation. The experiment conducted in this paper uses simple and efficient approach to stock prediction.

REFERENCES

[1] Mengmeng Liu, Xiaodong Liu, Wenjuan Jia, Yabing Du, "The trading strategy of inflection point futures analysis based on AFS theory",27-29 July 2020

[2] S.A. Povitukhin, E.V. Karmanova," The Development of a Profitable Trading Strategy with Data Mining Techniques",6-9 Oct 2020

[3] Ronnachai Jirapongpan, Naragain Phumchusri, "The Prediction of the Profitability of Pairs Trading Strategy Using ML", 16-21 April 2020

[4] Yingying Deng, Haiyan Wang, WeiWang , Weiting Xu, Shi Cheng, Dang Zheng, "Centralized Trading Pricing Strategy for Regional Integrated Energy System",22-25 Nov 2020