Share Market Prediction using Deep Learning Approach

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Abstract: This paper develops algorithm for predicting market direction more accurately. This paper is useful for various business or market. This model depend on past data or historical data and current data. Firstly the model analyse past data and current data and then it predict the future data i.e. prices of stock. This paper represent various technology to represent the price of stock. In this paper deep learning process is used. Deep learning is used for analysis of past data and then it predict future data. Deep learning is functioning of the same as human brain i.e Neural network.

Keywords- Data Mining, Share Market, Predictive Modelling, Stock Market Strategy ,Deep learning.

1. INTRODUCTION

One of the most fundamental concept of economics is the rule of supply and demand. Share market also works on the same principle. With the increase in demand, prices of the stocks tend to increase and with the decrease in demand, they tend to decrease. Factors like economic news, corporate policy and interest rates tend to affect the demand for stock. While demand for stock can change rapidly with change in corporate policy, economic shifts and government change, the supply of stocks shows only leisure change. Manual assessment of supply and demand to get insight on the future stock price used to be a trend in the past. However, with the advancement in computing capabilities, research on computational method using Neural Networks to assess the behavior of stock market is an area of concern today. Particularly for decision making in buying and selling the stocks in market we require a precise system that predict the nature of current movements in stock exchanges and should give the stock process so that the buyer or seller could make his transaction without any loss and with more profit.

The Artificial Neural Network is a deep learning approach in hidden data neurons, to forecast the price of a stock. A Neural Network consists of an input layer, hidden layer and output layer. The weights are assigned for each input layer. The summation function is calculated for the weighted output. The output layer calculates the sigmoid function for the summation value. The final output is the predicted stock price. The prediction model predicts daily prediction and monthly prediction. Sentiment Analysis is combined with a best predicting algorithm to refine the outcomes in the stock market. Hence the prediction model acts as a stock market broker in finance and business streams.

2. IMPLEMENTATION

The system will be having User-name and   Password section on the front page, as per the user-name and password the system get access to the register user.
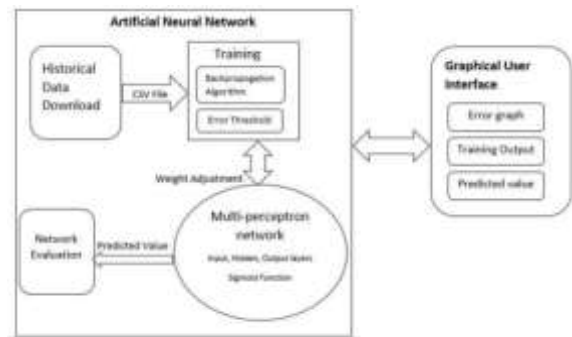

Fig-Architecture diagram

2.1 Scenario of Project

Scenario 2.1.1 User Registration

User can create new account, with registration form where user provides user name, Email Id, password ,contact number.

Scenario 2.1.2 User Login

User login with their Email ID and password which is enter at a time of registration.

Scenario 2.1.3. Prediction

When user login successfully then they get the actual prediction of share with prediction value with graph.

2.2 Software implementation

Proposed application is web application build using Python, PHP and MySql database.

2.2.1 Software Interface

Client on Internet: Web Browser, Operating System (any)

Client on Intranet: Web Browser, Operating System (any)

Web Server: Xampp Server, Operating System (any)

Data Base Server: MySql.

2.2.2 Communication Interface

Client (customer) on Internet will be using HTTP/HTTPS protocol.
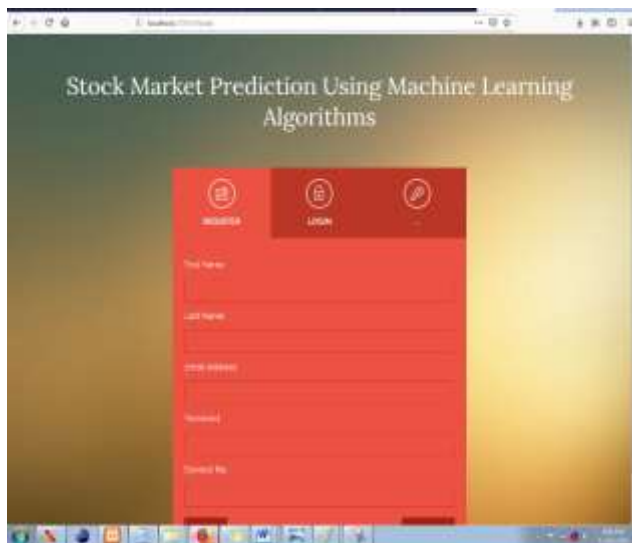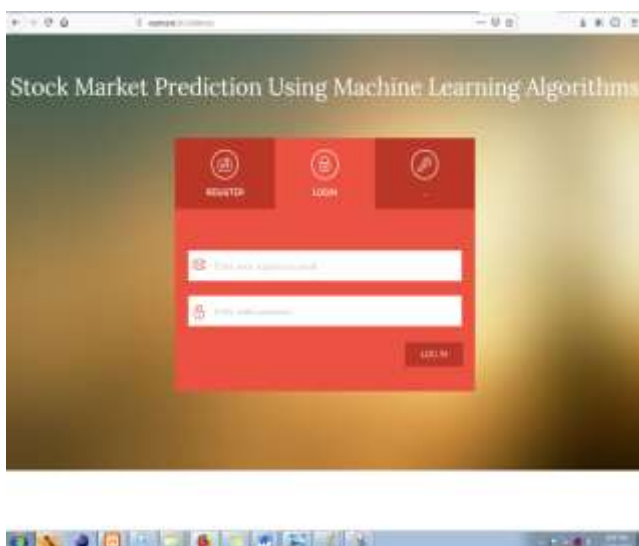
3. SCREENSHOT

Fig1.Home Page of Project

Fig 2 .To display the Customer requirement

Fig 3 .Prediction

4. FUTURE SCOPE

The future plan of this project is to improved design; implementation and documentation in such a way that anyone can use this project for better perform. Future work can be made on the data collection and analysis method. It can possible with improvement in more refined data and more accurate algorithm.

5. CONCLUSION

Determining the share market values is always been clallenging task for business analysts.The purpose of this system is to get the more accurate prediction algorithm like Artificial Neural Network in the share market. A prediction model uses big data analytical capabilities analytics and machine learning to periodically predict the trend of share markets. Model shows that Time series analysis to get the historic data in the form of the dataset. So system predict the future value of the share market more accurately.

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