ABSTRACT

Problem Solved

Rhea is an IT professional who is fascinated by the recent buzz in trading and investment and views it as a means to achieve financial freedom. Provide a solution for people like Rhea to easily access/design/execute their ideal investment strategy.

Solution

The biggest struggle of starting to invest in the stock market is learning the stock market. It can be quite an overwhelming task considering the complexity and risks involved in the stock market due to its volatility. Even the data about stocks are scattered everywhere on the web.

The solution presented here is a complete beginner-friendly stock dashboard where the user can get all the required information about any stock and it can also predict stock prices with considerable accuracy using supervised machine learning models.

The features of the application are:

1) Predict stock prices

The application can predict stock closing prices for the next day using the historical prices of the given stock using machine learning. The machine learning algorithm used is a combination of linear regression and logistic regression.

The logistic regression model used is a classification algorithm that can predict the direction of movement of stock using the percentage variations in the previous day.

Using the data provided by logistic regression the linear regression model can predict a considerably accurate closing price for the next day.

2) Learn the stock market for you

For a working professional managing time to learn the market and work is hard. So, this feature can learn the market for them and give them all the required information at the end of the day.

3) Compare stocks and get historical data

The user can compare difference stocks over any given duration of time using then historical data.

Technology used

The application is made in python and the frontend is made using the python library called streamlit.

Application and the future of the solution

The application is useful for beginners in the stock market , It can assist them in making hard decision by making the complex data understandable in an easy and visual way.