**PROJECT TITLE:**

**STOCK MARKET PREDICTION**

**PROBLEM DEFINITION:**

* Stock market prediction is the act of trying to determine the future value of a company stock or other financial instrument traded on an exchange. The successful prediction of a stock's future price could yield significant profit. The efficient-market hypothesis suggests that stock prices reflect all currently available information and any price changes that are not based on newly revealed information thus are inherently unpredictable. Others disagree and those with this viewpoint possess myriad methods and technologies which purportedly allow them to gain future price information.

**DESIGN THINKING:**

**.** The existing system fails while there are uncommon consequences or predictors.

**.** The former outcomes indicate that the stock price is changeable when the use of the traditional classifier

**.**  The actuality of the device stated in large part prophetic values, opting a relevant term for their enjoy with a purpose to benefit in large part prophetic rankings.

**.** It would not concentrate on outside occasions within the terrain, similar as modern-day occasions or social media.

**Proposed system:**

. On this proposed system, we focus on vaticination of stock request values the usage of gadget literacy algorithms comparable as Random Forest and aid Vector Machines

. We proposed We used the pandas Python library for facts processing, which mixed more than one dataset into one data block.

**LITERATURE SURVEY:**

|  |  |  |
| --- | --- | --- |
| Title | Methodology | Outcome |
| Stock Market Prediction Using Machine Learning | 1. Artificial Neural Networks (ANN) 2. K-Nearest Neighbor (k-NN) 3. Support Vector Machine (SVM) 4. Decision Tree | Stock market forecasting is a trending topic in the market nowadays. Therefore, our study focuses on comparing seven  machine learning algorithms on four different stock indices datasets, NASDAQ, NYSE, NIKKEI, and FTSE, to  facilitate the reduction of risk investment. Further, results concluded that Random Forest with leaked dataset and  Bagging with leaked dataset provides above satisfactory performance. |
| A Survey on Stock Market Prediction Using  Machine Learning Techniques | 1. Holt-Winters 2. Artificial Neural Network 3. Hidden Markov Model 4. ARIMA Model 5. Time Series Linear Model 6. Recurrent Neural Networks. | This paper provides a review and comparative analysis of different stock market prediction parameter techniques. These techniques are used to evaluate stock market  performance and trends. The stock market forecasting system is to increase accuracy. In  this study to analyze a novel approach to improve the prediction of the results of stock,  it means we will combine two or more methods to construct a novel approach method. |
| Short-term stock market price trend prediction using a comprehensive deep learning system | 1. principal component analysis 2. long short-term memory (LSTM) model | This work consists of three parts: data extraction and pre-processing of the Chinese stock market dataset, carrying out feature engineering, and stock price trend prediction model based on the long short-term memory (LSTM). We collected, cleaned-up, and structured 2 years of Chinese stock market data. |

**REFERENCES:**

1. Stock Market Prediction Using Machine Learning,panelAbdulhamit Subasi, Faria Amir, Kholoud Bagedo, Asmaa Shams, Akila Sarirete <https://www.sciencedirect.com/science/article/pii/S1877050921021128>
2. A Survey on Stock Market Prediction Using Machine Learning Techniques Polamuri Subba Rao1(&) , K. Srinivas2 , and A. Krishna Mohan3 1 Department of CSE, KIET, Korangi, India psr.subbu546@gmail.com 2 Department of CSE, VR Siddhartha Engineering College, Vijayawada, AP, India vrdrks@gmail.com 3 Department of CSE, UCEK, JNTUK, Kakinada, AP, India [krishna.ankala@gmail.com](mailto:krishna.ankala@gmail.com)

<https://www.researchgate.net/publication/341482418_A_Survey_on_Stock_Market_Prediction_Using_Machine_Learning_Techniques/link/5ff3fc01299bf140887028e4>

1. Short-term stock market price trend prediction using a comprehensive deep learning system

Jingyi Shen & M. Omair Shafiq Journal of Big Data <https://journalofbigdata.springeropen.com/articles/10.1186/s40537-020-00333-6>