SEM PROJECT -III

Abstract

Project Title: Stock Price Prediction

Domain / Technology: Machine Learning, Deep Learning, Time Series Analysis, Finance

Application: To forecast future stock prices based on historical market data for informed investment decisions.

Dataset (if applicable): Historical stock market data from sources like Yahoo Finance, NSE/BSE datasets, or Kaggle stock datasets.

Expected Algorithm / Processing: GRU (Gated Recurrent Unit) Networks, ARIMA, Linear Regression, Data Preprocessing (Scaling, Trend Analysis).

Expected Output from Project: A reliable stock price forecasting model capable of predicting short-term or long-term trends with high accuracy.

Abstract:
Stock price prediction is a key challenge in financial analytics due to the complex and volatile nature of the market. This project aims to develop a predictive model that forecasts stock prices using historical trading data, including open, high, low, close (OHLC) prices, and trading volumes. Advanced machine learning and deep learning algorithms such as GRU networks and ARIMA models will be applied to capture temporal dependencies and market trends. By learning from past patterns, the system will provide future price estimates, helping traders, analysts, and investors make informed decisions. The approach can be integrated into trading platforms or financial analysis tools to enhance investment strategies, reduce risk, and improve portfolio performance.

Team Members:
1. Bhavya DipakBhai Chauhan (TY-DS-10-231106011)
2. Sudarshan Walmik Bhosale(TY-DS-30-231106031)
3. Prerana Rajesh Bholane(TY-DS-40-231106042)
4. Paragi Vilas Patil (TY-DS-51-231106055)