



INTRODUCTION

A market where shares are publicly issued and traded is known as a share market.

Implementing the concept of algorithmic trading, which uses automated, pre-programmed trading strategies to predict stock prices.

Time series forecasting (predicting future values based on historical values) applies well to stock forecasting.

Developed a User Interface



FUTURE WORK

- Machine learning and Data science is a game changer in this domain so there is a lot of data to find patterns in for predicting with high degree of accuracy.
- In future we'll try to predict the values based on multiple factors such as politics, global economic conditions, unexpected events like covid, companies financial performance, and so on.
- We are going to implement multiple types of algorithms because different types of data requires different types of techniques.
- Decided to implement a simple User Interface to operate this whole process for users so to make people engage in Stock market.

Need of Project

- The stock market is known for being volatile, dynamic, & nonlinear
- Accurate stock price prediction is extremely challenging because of multiple factors.
- But, all of this also means that there's a lot of data to find patterns in.
- So, we keep exploring analytics techniques to detect stock market trends.
- So, they can be analyzed as a sequence of discrete-time data
- Despite the volatility, stock prices aren't just randomly generated numbers.



METHODOLOGY



Python Language

Python is a rich language for Data Science and AI



Algorithm

Long Short Term Memory (LSTM)



Libraries

Pandas, Numpy, Sklearn, Tensorflow, etc



Streamlit UI

Provided User Interface using Streamlit

