

Stock Price Prediction

This repository contains the code and data necessary to build a stock price prediction model using machine learning. The model is trained on a historical dataset of stock prices and other relevant financial data, and can be used to predict the future prices of stocks.

To use this repository, you will need to have the following installed:

- Python 3
- Jupyter Notebook/Google Colab
- NumPy
- Pandas
- Matplotlib

Once you have these dependencies installed, you can clone this repository and start working on the project.

The following steps will guide you through the process of building and evaluating the stock price prediction model:

Data Preparation: The first step is to prepare the data. This involves cleaning and transforming the data into a format that can be used by the machine learning model.

Model Training: Once the data is prepared, you can train the machine learning model. This involves feeding the data to the model and allowing it to learn the patterns in the data.

Model Evaluation: Once the model is trained, you need to evaluate its performance on a held-out test set. This will give you an idea of how well the model will perform on new data.

Model Deployment: Once you are satisfied with the performance of the model, you can deploy it to production. This involves making the model available to users so that they can use it to predict stock prices.

The following Jupyter notebooks provide step-by-step instructions on how to complete each of these steps:

data_preparation.ipynb: This notebook shows you how to prepare the data for the machine learning model.

model_training.ipynb: This notebook shows you how to train the machine learning model.

model_evaluation.ipynb: This notebook shows you how to evaluate the performance of the machine learning model.

model_deployment.ipynb: This notebook shows you how to deploy the machine learning model to production.

Conclusion

This project is still under development, but it has the potential to be a valuable tool for stock investors. The project can be improved by using more sophisticated machine learning models, more data sources, and a more sophisticated evaluation metric. If you are interested in contributing to this project, please feel free to submit a pull request.