

Stock Price Prediction

Enter a valid stock symbol as per Yahoo finance (e.g., M&M.NS for Mahindra ,TCS.NS for Tata consultancy services) and the number of days for prediction.

ticker

TCS.NS

days

7

Clear

Submit

output

Date	Predicted Close Price
2023-10-30	3438.72511574023
2023-10-31	3439.4644882269067
2023-11-01	3440.2038607135833
2023-11-02	3440.94323320026
2023-11-03	3441.6826056869363
2023-11-06	3442.421978173613
2023-11-07	3443.1613506602894

Flag

Examples

ticker	days
TCS.NS	7
M&M.NS	5

EXPLORER

NO FOLDER OPENED

You have not yet opened a folder.

Open Folder

Opening a folder will close all currently open editors. To keep them open, add a folder instead.

```
stock_prediction_chat_bot.py X
C: > Users > HP > OneDrive > Desktop > roboAI > R_dir > stock_prediction_chat_bot.py > ...
1 import gradio as gr
2 import yfinance as yf
3 import pandas as pd
4 from sklearn.linear_model import LinearRegression
5 from sklearn.model_selection import train_test_split
6 import numpy as np
7
8 def stock_predict(ticker, days):
9     try:
10         stock_data = yf.download(ticker, period="1y", interval="1d")
11         if stock_data.empty:
12             print(f"No data found for the stock {ticker}.")
13             return None
14
15         stock_data = stock_data.reset_index()
16         stock_data["Day"] = stock_data.index
17
18         X = stock_data[["Day"]]
19         y = stock_data["Close"]
20
21         X_train, X_test, y_train, y_test = train_test_split(X, y, test_size=0.2, random_state=0)
22
23         model = LinearRegression()
24         model.fit(X_train, y_train)
25
26         future_data = np.array([[f"{i} days" for i in range(1, days+1)]]).reshape(-1, 1)
```

PROBLEMS OUTPUT DEBUG CONSOLE TERMINAL PORTS SEARCH TERMINAL OUTPUT

Python +

PS C:\Users\HP> & C:/Python312/python.exe c:/Users/HP/OneDrive/Desktop/roboAI/R_dir/stock_prediction_chat_bot.py

Running on local URL: http://127.0.0.1:7860

To create a public link, set `share=True` in `launch()`.

[*****100%*****] 1 of 1 completed

C:\Python312\Lib\site-packages\sklearn\base.py:465: UserWarning: X does not have valid feature names, but LinearRegression was fitted with feature names

warnings.warn()

[]

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stock_prediction_chat_bot.py

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```
21 X_train, X_test, y_train, y_test = train_test_split(X, y, test_size=0.2, random_state=0)
22
23 model = LinearRegression()
24 model.fit(X_train, y_train)
25
26 future_days = np.array([i for i in range(len(stock_data), len(stock_data) + int(days))]).reshape(-1, 1)
27
28 future_prediction = model.predict(future_days)
29
30 future_dates = pd.date_range(start=stock_data["Date"].iloc[-1], periods=int(days), freq='B').date.tolist()
31
32 prediction_df = pd.DataFrame({"Date": future_dates, "Predicted Close Price": future_prediction.flatten()})
33
34 return prediction_df
35
36 except Exception as e:
37     print(f"An error occurred: {e}")
38     return None
39
40 interface = gr.Interface(
41     fn=stock_predict,
42     inputs=["text", "number"],
43     outputs="dataframe",
44     title="Stock Price Prediction",
45     description="Enter a valid stock symbol as per Yahoo finance (e.g., M&M.NS for Mahindra ,TCS.NS for Tata consultancy services) and the number of
46     examples=[["TCS.NS", 7], ["M&M.NS", 5]]
47 )
48
49 interface.launch()
```

OUTLINE

TIMELINE stock_prediction...

File Saved now

File Saved 54 secs

File Saved 3 mins

File Saved 8 mins

File Saved 10 mins

PROBLEMS

OUTPUT

DEBUG CONSOLE

TERMINAL

PORTS

SEARCH TERMINAL OUTPUT

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Python

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Python 3.12.0 64-bit

Blackbox

IND - ENG

IND win

Search

ENG IN

13:25

30-10-2023