

AI Agents

Web Agent, Finance Agent, Team lead

Framework - phidata

Step : 1

Login to cloudgroq - To create API Key to access Llama model

How to Setup Llama Model in VsCode

- Terminal
 - pip3 install phidata
 - pip3 install dotenv
- From phi.agent import Agent
- From phi.model.groq import Groq
- From dotenv import load_dotenv
- load_dotenv() # call this function to access the GROQ_API_KEY
- Agent = agent(
 Model = mode.Groq("llama-3.3-70b-versatile")
)

agent.print_response("Any task")

Task : Summarize and compare analyst recommendations and fundamentals for TSLA and NVDA

CODE :

```
Agent = agent(  
    Model = Groq(id = "llama-3.3-70b-versatile")  
    Tools = [YFinance(stock_price = True, analyst_recommendation = True,  
stock_fundamentals = True)]  
    Show_tool_calls = True  
    Markdown = True  
    Instructions = ["Use tables to display data"]  
    debug_mode = True    # step by step execution  
)
```

agent.print_response("Summarize and compare analyst recommendations and fundamentals for TSLA and NVDA")

Output :

```

PROBLEMS  OUTPUT  DEBUG CONSOLE  TERMINAL  PORTS
● siddharth@sids-macbook AI-Agent-Phidata % cd /Users/siddharth/AI-Agent-Phidata ; /usr/bin/env /opt/homebrew/bin/python3 /Users/siddharth/.vscode/extensions/ms-python.debugpy-2024.14.0-darwin-arm64/bundled/libs/debugpy/adapter/../../debugpy/launcher 50482 -- /Users/siddharth/AI-Agent-Phidata/2_finance_agent.py
Message
Summarize and compare analyst recommendations and fundamentals for TSLA and NVDA

Response (8.7s)
Running:
• get_analyst_recommendations(symbol=TSLA)
• get_analyst_recommendations(symbol=NVDA)
• get_stock_fundamentals(symbol=TSLA)
• get_stock_fundamentals(symbol=NVDA)
• get_current_stock_price(symbol=TSLA)
• get_current_stock_price(symbol=NVDA)

Analyst Recommendations for TSLA and NVDA
The analyst recommendations for TSLA and NVDA are as follows:

Stock Symbol  Strong Buy  Buy  Hold  Sell  Strong Sell
TSLA          6          13   15   8     5
NVDA          12          48   4    0     0

Fundamentals for TSLA and NVDA
The fundamentals for TSLA and NVDA are as follows:

```

```

PROBLEMS  OUTPUT  DEBUG CONSOLE  TERMINAL  PORTS

Fundamentals for TSLA and NVDA
The fundamentals for TSLA and NVDA are as follows:

Stock Symbol  Company Name  Sector  Industry  Market Cap  PE Ratio  PB Ratio  Dividend Yield  EPS  Beta  52-Week High  52-Week Low
TSLA          Tesla, Inc.   Consumer Cyclical  Auto Manufactu...  1,385,654...  132.35  19.80  N/A  3.67  2.30  488.54  138.80
NVDA          NVIDIA Corporation...  Technology  Semicondu...  3,355,374...  30.92  78.56  0.0003  2.53  1.66  152.89  47.32

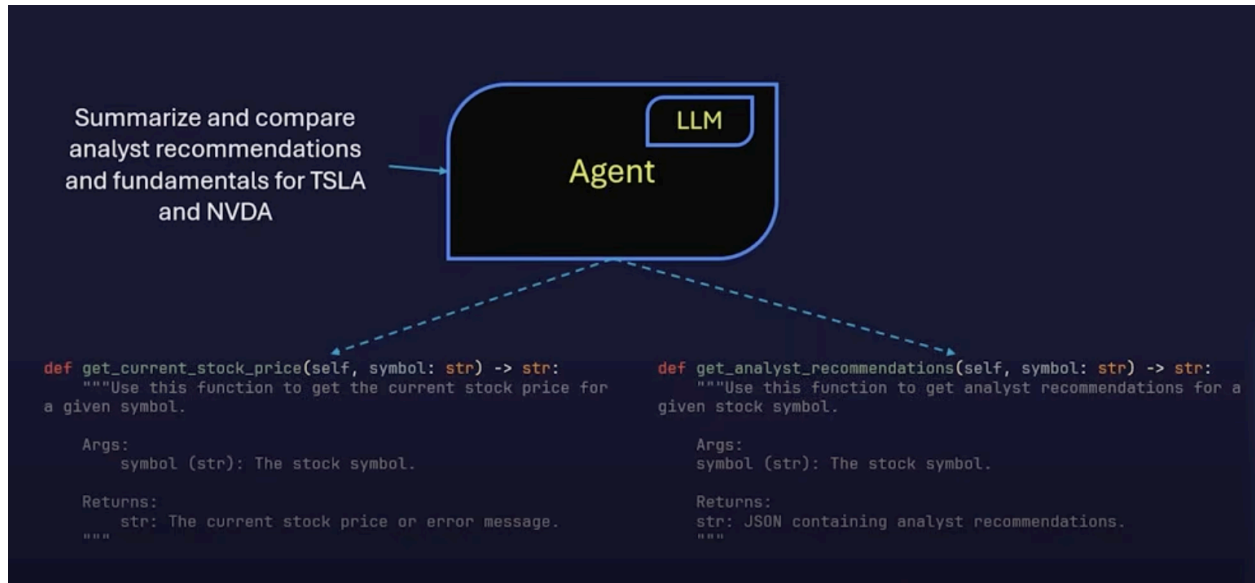
Current Stock Prices for TSLA and NVDA
The current stock prices for TSLA and NVDA are as follows:

Stock Symbol  Current Stock Price
TSLA          431.66
NVDA          137.01

Comparison of Analyst Recommendations and Fundamentals
Based on the analyst recommendations, NVDA has a higher number of strong buy and buy recommendations compared to TSLA. In terms of fundamentals, TSLA has a higher PE ratio and PB ratio compared to NVDA, indicating that TSLA may be overvalued. However, TSLA also has a higher market capitalization and a higher 52-week high price. NVDA, on the other hand, has a higher dividend yield and a lower beta, indicating that it may be a more stable investment. Ultimately, the decision to invest in either TSLA or NVDA depends on individual investment goals and risk tolerance.

```

Note: The AI Agent goes to the doc string provided by phidata and helps LLM to use them according to the function they are called upon and can map it to the intend of user



Q. What is the advantage of using phidata instead of chat gpt-4o or perplexity which serves the same purpose in giving stock prediction & comparison results ?

- A. Using phidata we can customize our AI agent, like instead of using tools from yahoo, you trust Bloomberg more.. Then import of specific tools from phidata can make a customised prediction

In VS code

Create 3_agent_teams

For latest news it will use - DuckDuckgo
Analyst recommendation - YFinance

Output :

D

DEFAULT

DASHBOARD

SESSIONS

PLAYGROUND

SETTINGS

API KEY

DOCS

COMMUNITY

GITHUB

D

DHAANESH SURE...

PLAYGROUNDBeta

ChatWorkflows

Log sessionsUTC

NEW SESSION

DH

Predict stock pricing for TSLA after 1 month

GET_CURRENT_STOCK_PRICEGET_ANALYST_RECOMMENDATIONS

Based on the current stock price of \$431.66 and analyst recommendations, it's difficult to predict the stock price of TSLA after 1 month with certainty. However, we can make an educated estimate based on the current trends and analyst expectations.

The current analyst recommendations for TSLA are:

| Period | Strong Buy | Buy | Hold | Sell | Strong Sell |
|--------|------------|-----|------|------|-------------|
| 0m | 6 | 13 | 15 | 8 | 5 |
| -1m | 5 | 13 | 17 | 8 | 5 |
| -2m | 6 | 12 | 19 | 7 | 4 |
| -3m | 5 | 13 | 18 | 7 | 4 |

As we can see, the majority of analysts have a "Hold" or "Buy" rating for TSLA, indicating a positive outlook for the stock. However, there are also some "Sell" and "Strong Sell" ratings, which suggests that some analysts are cautious about the stock's future performance.

Assuming that the overall trend of analyst recommendations remains the same, we can estimate that the stock price of TSLA may increase or remain stable over the next month. However, please note that this is a highly speculative prediction and should not be taken as investment advice.

Type something...

ENDPOINT

LOCALHOST:7777

AGENT

FINANCE AGENT

9

GROQ_LLAMA-3.3-70B-VERSATILE

HISTORY

CONFIG

Most recent

Predict stock pricing for TSLA...

Which tools do you have acc...