**⚡ How to Run the Chatbot**

This chatbot is designed to run in Google Colab for an easy, beginner-friendly experience. Here’s how you can try it out:

**Option 1: Running on Google Colab (Recommended ✅)**

Since this chatbot is built in **Google Colab**, you can run it directly in your browser without installing anything on your system.

**Steps to Run on Colab:**

1. **Upload the chatbot script (chatbot.py)** to your Google Drive or local Colab session.
2. **Open Google Colab** and create a new notebook.
3. **Mount Google Drive** (if script is stored there):
4. from google.colab import drive
5. drive.mount('/content/drive')
6. **Navigate to the script location**:
7. %cd /content/drive/My Drive/path\_to\_script
8. **Run the chatbot**:
9. !python chatbot.py
10. **Start interacting** by entering queries in the Colab interface.

💡 **Why Colab?**

✅ No need to install Python locally.

✅ Runs on **Google’s cloud servers**, so no heavy local computation required.

✅ **Easy to share & collaborate** on the chatbot with teammates.

**Option 2: Running Locally on Your Computer**

If you prefer running the chatbot on your system, follow these steps:

**Steps for Local Execution:**

1. **Ensure Python is installed** (Python 3.7+ recommended):
2. python --version

If not installed, download from [python.org](https://www.python.org/downloads/).

1. **Open Terminal (Mac/Linux) or Command Prompt (Windows)** and navigate to the script’s folder:
2. cd path\_to\_your\_chatbot\_script
3. **Run the chatbot script**:
4. python chatbot.py
5. **Start interacting** by typing your financial queries.

💡 **Why Local Execution?**

✅ **Faster execution** (no internet dependency).

✅ Full control over modifications.

❌ **Requires Python installation**.

**Option 3: Running in a Jupyter Notebook**

If you want to **run the chatbot inside a Jupyter Notebook**, follow these steps:

**Steps for Jupyter Notebook Execution:**

1. Install Jupyter if not installed:
2. pip install notebook
3. Open Jupyter Notebook:
4. jupyter notebook
5. Create a new Python notebook (.ipynb).
6. Copy and paste the chatbot code into a cell and run it.
7. Interact with the chatbot by typing queries in another cell.

💡 **Why Jupyter Notebook?**

✅ Great for **interactive testing & debugging**.

✅ Supports **step-by-step execution**.

❌ Not ideal for deployment or user-facing interactions.

**Option 4: Running via Google Cloud or Any Cloud Server**

For **deployment in a cloud environment**, follow these steps:

**Steps for Cloud Execution:**

1. Upload chatbot.py to a cloud server (AWS, Google Cloud, Azure, etc.).
2. SSH into the cloud instance:
3. ssh your\_username@your\_server\_ip
4. Navigate to the chatbot’s directory:
5. cd path\_to\_script
6. Run the chatbot:
7. python chatbot.py
8. Access it via a web-based terminal or integrate it into a chatbot API.

💡 **Why Cloud Deployment?**

✅ **Scalability** – More users can access it.

✅ Can be integrated into **web or mobile apps**.

❌ Requires **server setup** & cloud costs.

**Option 5: Running via VS Code (For Developers & Debugging)**

If you want to test and modify the chatbot in **Visual Studio Code**, follow these steps:

**Steps for VS Code Execution:**

1. Install [VS Code](https://code.visualstudio.com/) if you haven’t already.
2. Open the chatbot’s folder in VS Code.
3. Open chatbot.py and run it using the built-in terminal:
4. python chatbot.py
5. Modify the code in VS Code and test different queries.

💡 **Why VS Code?**

✅ Great for **debugging & modifications**.

✅ Integrated **code linting & suggestions**.

❌ Requires Python setup & VS Code installation.

**Which Method Should You Use?**

| **Method** | **Best For** | **Requires Python?** | **Installation Needed?** |
| --- | --- | --- | --- |
| **Google Colab** | Quick testing & collaboration | ❌ No | ❌ No |
| **Local Execution** | Fast execution & modifications | ✅ Yes | ✅ Yes |
| **Jupyter Notebook** | Interactive testing & debugging | ✅ Yes | ✅ Yes |
| **Cloud Deployment** | Scaling for many users | ✅ Yes | ✅ Yes |
| **VS Code** | Debugging & development | ✅ Yes | ✅ Yes |