HBL Visualization Assistant – User Manual

How to Run the App Locally

Install Dependencies:
 Make sure Python and pip are installed. Then run:

pip install streamlit pandas matplotlib python-dotenv requests openpyxl

Run the App:
Inside the project folder, run the following command in your terminal or command prompt:
streamlit run chatbot.py

1. *(Replace chatbot.py with your main Python file name if it's different)*

2. **How I Ran It:**
     I ran this on a local Windows 10 laptop using VS Code. I kept the .env file in the same directory as the code and ran it through D:\Desktop\AlinasPrograms\myenv\Scripts\streamlit.exe run "D:\Desktop\AlinasPrograms\myenv\HBL Proj2\chatbot.py" to test queries like:

     ○ "Show total deposits by branch in June"

     ○ "Compare personal vs business accounts"

File Path & Dataset Info

The project reads the Excel dataset from the following path (used during development):

D:\Desktop\AlinasPrograms\myenv\HBL Proj2\Deposit_Chatbot_Data_Schema.xlsx

- **To change the file path**, update this line in the code:
  df = pd.read_excel("YOUR_NEW_PATH.xlsx", sheet_name="Deposit_Transactions")

Changing the Dataset

- The current dataset has **2,000 rows from June 1–5** with the following columns:

  ○ transaction_id, date, branch_id, branch_name, city, region, deposit_amount, account_type, customer_segment

- You can **replace the Excel file** with new or larger data while maintaining the same column structure. The assistant will adapt accordingly.

Setting API Keys

The app uses two APIs:

- **OpenRouter** (for chart generation using Claude 3 Haiku)

- **Together AI** (for insight generation using LLaMA 3)

1. **Create a .env file** in the project folder.
   Paste your API keys like this:
   TOGETHER_API_KEY=your_together_key_here

   OPENROUTER_API_KEY=your_openrouter_key_here

2. You can get free API keys from:

   - https://openrouter.ai

   - https://www.together.ai

How HBL Can Customize

- **Change Prompts:** To make responses more tailored to HBL's business logic or language, you can edit the chart_prompt and insight_prompt strings in the code.

- **Switch LLM Models:** You can try different models by changing:

  model="anthropic/claude-3-haiku" # for OpenRouter
  model="meta-llama/Llama-3-8b-chat-hf" # for Together

- **Add Filters or UI Enhancements:** Streamlit supports dropdowns, date pickers, and buttons to make the interface more interactive.