

Running a **Streamlit app** on a local computer is simple and beginner-friendly. Here's a step-by-step guide (*OpenAI ChatGPT 4o*):

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## Step-by-Step Instructions

### 1. Install Python

- **Prerequisite:** You need Python installed (version 3.7 or higher is recommended).
- **Download Python:** Go to <https://www.python.org/downloads/> and download the latest version for your operating system.
- During installation:
  - Check "**Add Python to PATH**".
  - Select "Customize installation" → Enable "pip" (a package manager for Python).

### 2. Install Required Libraries

- Open a terminal/command prompt and run the following commands:
- `pip install streamlit`
  - If your app uses additional libraries like `openai` or `dotenv`, install them as well:
  - `pip install openai python-dotenv groq`

### 3. Write the Streamlit App

- Create a `.py` file for your app. For example:
  - Open any text/code editor (e.g., VSCode, PyCharm, Notepad++).
  - Save your file as `app.py`.
  - Paste your Streamlit code into the file.

### 4. Run the Streamlit App

- Open a terminal/command prompt in the directory where the `app.py` file is located.
- Run the app using the command:
- `streamlit run app.py`

### 5. View the App in Your Browser

- Once you run the command, Streamlit will start a local server and show output like this:
- Local URL: `http://localhost:8501`
- Network URL: `http://<your-ip>:8501`
- Open the **Local URL** (`http://localhost:8501`) in your web browser to view the app.

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## Additional Setup for Beginners

### A. Create a Virtual Environment (Optional, but Recommended)

- To avoid conflicts between packages, use a virtual environment:
- `python -m venv streamlit_env`
- `source streamlit_env/bin/activate` # Mac/Linux
- `streamlit_env\Scripts\activate` # Windows
- `pip install streamlit`

### B. Store API Keys Securely

- If your app uses API keys, avoid hardcoding them. Use a .env file:
  - Create a file named .env in the same directory as app.py.
  - Add your key like this:
  - `GROQ_API_KEY=your_api_key_here`
  - In your app, load the .env file:
  - `from dotenv import load_dotenv`
  - `import os`
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  - `load_dotenv()`
  - `api_key = os.getenv("GROQ_API_KEY")`

### C. Troubleshooting Tips

- If streamlit command is not found:
  - Ensure Python and pip are installed correctly.
  - Check the Python PATH environment variable.
- To update Streamlit:
- `pip install --upgrade streamlit`

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### Summary of Commands

Here's a recap of the most important commands:

1. Install Streamlit:
2. `pip install streamlit`
3. Run the app:
4. `streamlit run app.py`
5. Stop the app:

- In the terminal, press **Ctrl+C**.