

1. Prerequisites

- Python 3.8 or higher installed
- Git installed (optional, for cloning repo)
- OpenAI API key (or HuggingFace API key if applicable)
- Basic command line knowledge

2. Setup Steps

Step 1: Clone the repository (or download source code)

```
git clone https://github.com/your-repo/project-name.git
cd project-name
```

Step 2: Create and activate a virtual environment

```
python -m venv venv
# Windows
venv\Scripts\activate
# Mac/Linux
source venv/bin/activate
```

Step 3: Install dependencies

```
pip install -r requirements.txt
```

Step 4: Setup environment variables

Create a .env file in the project root
Add your API keys and configs, for example:
OPENAI_API_KEY=your_openai_api_key_here

3. Running the API Server

Start the FastAPI server with:
uvicorn main:app --reload
The server will start on http://127.0.0.1:8000 by default

4. Using the API

Upload documents endpoint: /upload

Use this to upload PDF, DOCX, TXT, images (for OCR), CSV, SQLite DB files.

Query endpoint: /query

Send your question here to get answers generated by the Retrieval-Augmented Generation system.

5. Testing

You can use tools like Postman, curl, or the built-in Swagger UI at:
<http://127.0.0.1:8000/docs>

6. Optional

Run Docker container (if Dockerfile is provided)
Run the Streamlit frontend if available