# **Setup Instructions**

### **To set up and run the project locally, follow these steps**

1. **Prerequisites Python 3.7+ installed on your system. PostgreSQL installed and running. Virtual Environment (optional but recommended).**
2. **Clone the Repository Clone the project repository to your local machine:**

* git clone <repository-url>  
  cd <repository-directory>

1. **Set Up a Virtual Environment (Optional) Create and activate a virtual environment:**

* python3 -m venv venv  
  source venv/bin/activate

1. **Install Required Packages Install the dependencies listed in requirements.txt:**

* pip install -r requirements.txt
* If requirements.txt is not available, install the dependencies manually:
* pip install fastapi aiofiles psycopg2-binary sentence-transformers scikit-learn pymupdf

1. **Set Up PostgreSQL Database**

* Ensure PostgreSQL is running.
* Create a new database named pdf\_management.
* Create a table named pdf\_embeddings with the following structure:

**CREATE TABLE pdf\_embeddings (  
 ID SERIAL PRIMARY KEY,  
 filename TEXT UNIQUE,  
 embeddings VECTOR(384) *-- Adjust the dimensionality based on your embeddings* );**

1. **Run the Application Start the FastAPI server:**

* uvicorn main:app --reload
* Access the application at http://127.0.0.1:8000.
* API documentation will be available at http://127.0.0.1:8000/docs.

1. **Upload PDFs and Query for Answers**

* **Use the /upload/ endpoint to upload PDF files.**
* **Use the /download/ endpoint to download PDF files.**
* **Use the /update/ endpoint to update PDF files.**
* **Use the /delete/ endpoint to delete PDF files.**
* **Use the /question/ endpoint to question for relevant information.**