**PDF Q&A Application**

## **What It Does**

This app lets you upload PDF files and ask questions about their content. It uses FastAPI, LangChain, Google’s Gemini model, and Chroma Vector Database to process PDFs and provide answers.

**Requirements**

* Python 3.9 or 3.10
* A Google API Key (see )

## **Setup**

### **1. Install Dependencies**

pip install -r requirements.txt

**2. requirements.txt**

fastapi

uvicorn

langchain

langchain-community

langchain-google-genai

google-generativeai

google-ai-generativelanguage==0.4.0

chromadb

PyPDF2

pydantic

python-dotenv

**3. Set Up Environment**

Create and open .env file and add google API key

GOOGLE\_API\_KEY=your-google-api-key

## 

## **4. Running the App**

Start the server:

uvicorn app.main:app --reload --port 8080

* The app runs on <http://localhost:8080>.
* Use CTRL+C to stop it.

**5. How to Use**

Upload a PDF

**Response:** {"message": "PDF test\_pdf successfully processed and stored"}

Ask a Question

**Response:** {"answer": "The main topic is [answer]", "source\_context": ["text chunk 1", "text chunk 2"]}