AI-Powered PDF Q&A System - Prerequisites Guide

This document outlines the necessary prerequisites and setup steps to run the AI-powered PDF document Q&A system locally.

Generated on: 2025-07-03 20:35:32

Python Environment

- Python 3.8 or later

- pip (comes with Python)

- Virtual environment (recommended)

To set up the environment:

```
python -m venv venv

venv\Scripts\activate

pip install -r requirements.txt
```

Ollama (Local LLM Server)

Used to run the LLaMA 3 language model locally.

1. Install from: https://ollama.com/download

   (Or use the PowerShell command below)

```
Invoke-WebRequest https://ollama.com/download/OllamaSetup.exe -OutFile "$env:TEMP\OllamaSetup.exe"; Start-Process "$env:TEMP\OllamaSetup.exe"
```

2. Pull the LLaMA 3 model:

```
ollama pull llama3
```

3. Start the Ollama server:

```
ollama serve
```

Expected to be available at: http://127.0.0.1:11434

Verify Ollama is Running

Use this curl command to check the API:

```
curl http://localhost:11434
```

Should return:

{"status":"OK"}

Summary

Tool	Purpose	Install Location or Command
Python	Run backend + Streamlit app	https://python.org
pip	Install Python packages	Comes with Python
Ollama	Run LLaMA model locally	https://ollama.com/download
llama3	LLM used by this system	ollama pull llama3
FAISS	Vector search DB	Installed via requirements.txt