■ Intelligent PDF Summarizer & QA Bot - One Pager

Overview

The Intelligent PDF Summarizer & QA Bot is an AI-powered assistant that enables users to upload PDFs, provide website URLs, or process YouTube videos to extract knowledge. It uses a Retrieval-Augmented Generation (RAG) pipeline with Google Gemini to deliver summaries (English & Hindi) and context-aware question answering.

Key Features

- Upload and process **PDFs, Web URLs, YouTube videos** - Generate concise summaries in **English & Hindi** - Context-aware answers via **RAG + Gemini LLM** - Store and view **conversation history** - Interactive **Streamlit web app**

■ Workflow

Intelligent PDF Summarizer & QA Bot - Workflow Diagram



■ Use Case & Impact

- **For Students & Researchers**: Quickly understand lengthy academic papers. - **For Professionals**: Extract insights from technical documents or business reports. - **For Content Consumers**: Summarize and query YouTube educational content. - **Impact**: Saves hours of manual reading, improves productivity, and supports multi-language accessibility.

■■■ Developed With

Python | Streamlit | LangChain | Google Gemini API | FAISS | PyPDF2 | YouTubeTranscriptApi