

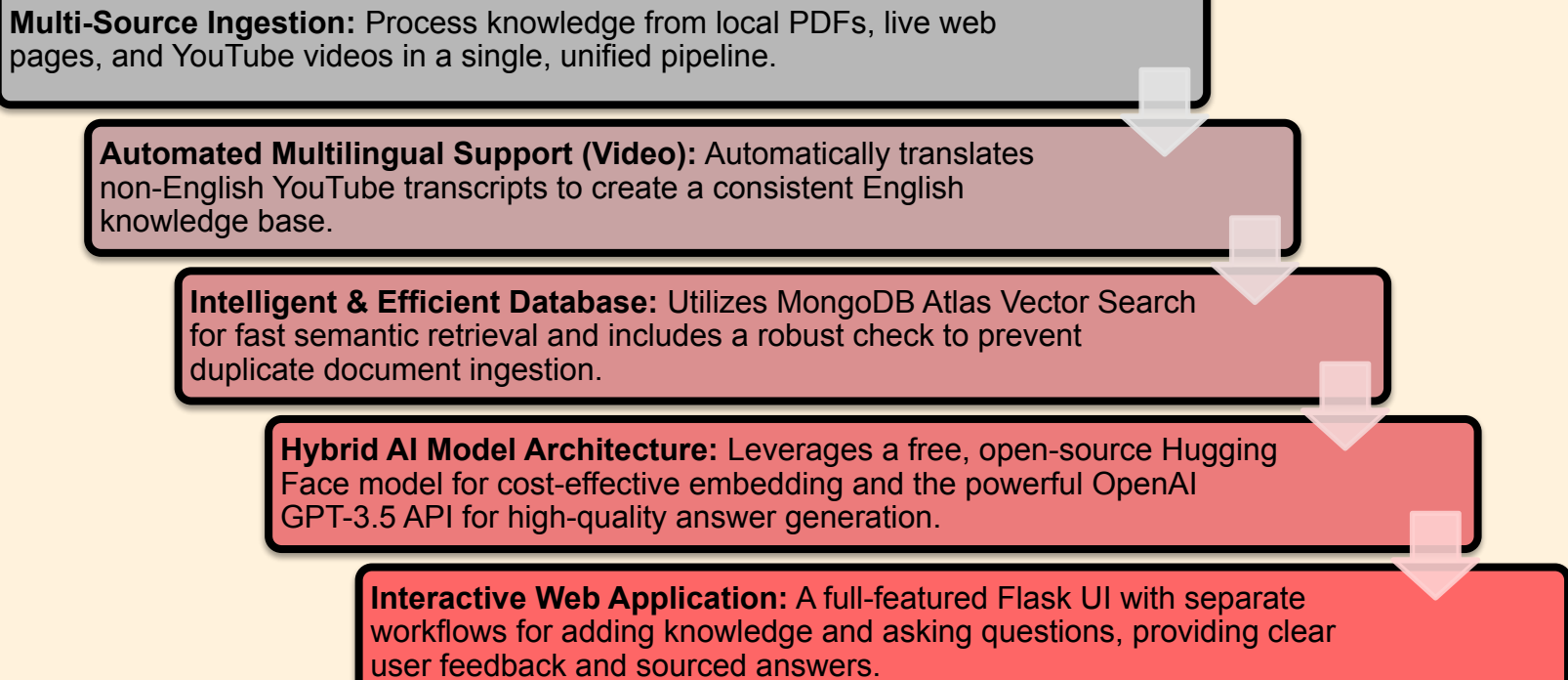
# RAG Knowledge Engine

This is a web application built to transform static documents into an interactive, conversational knowledge base.

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# Key capabilities

**Multi-Source Ingestion:** Process knowledge from local PDFs, live web pages, and YouTube videos in a single, unified pipeline.



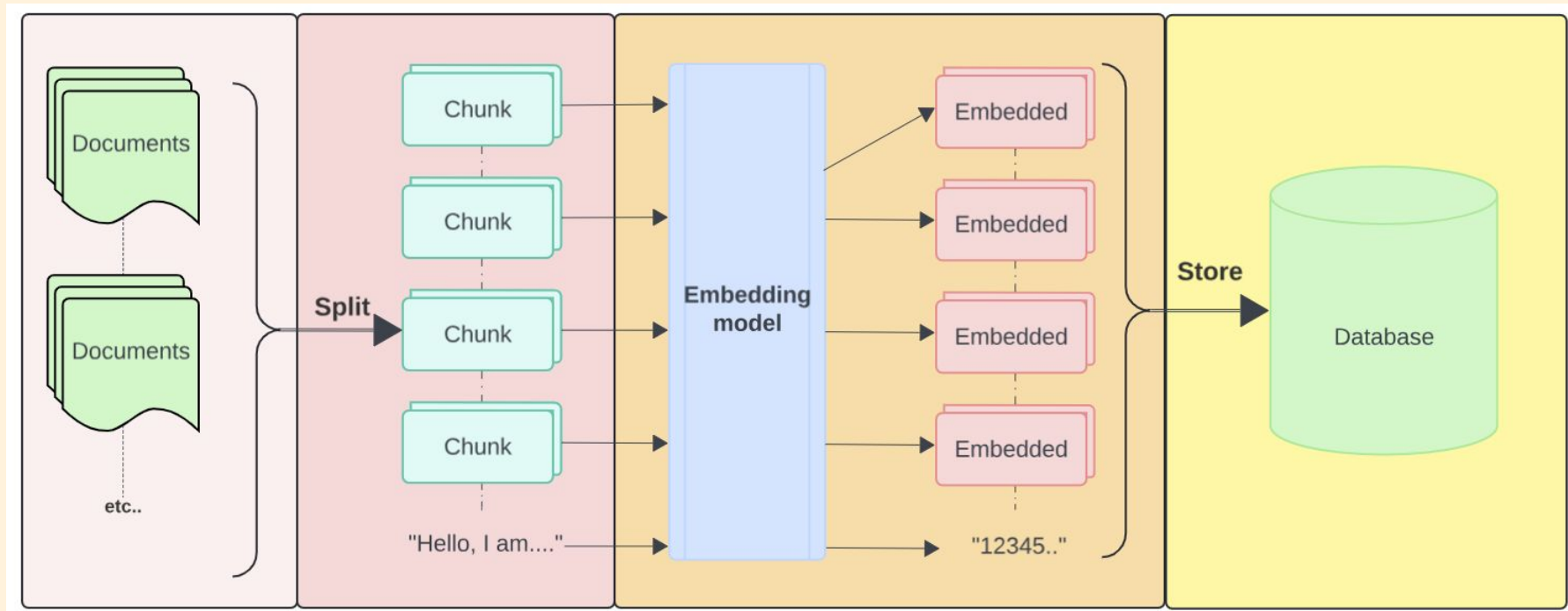
**Automated Multilingual Support (Video):** Automatically translates non-English YouTube transcripts to create a consistent English knowledge base.

**Intelligent & Efficient Database:** Utilizes MongoDB Atlas Vector Search for fast semantic retrieval and includes a robust check to prevent duplicate document ingestion.

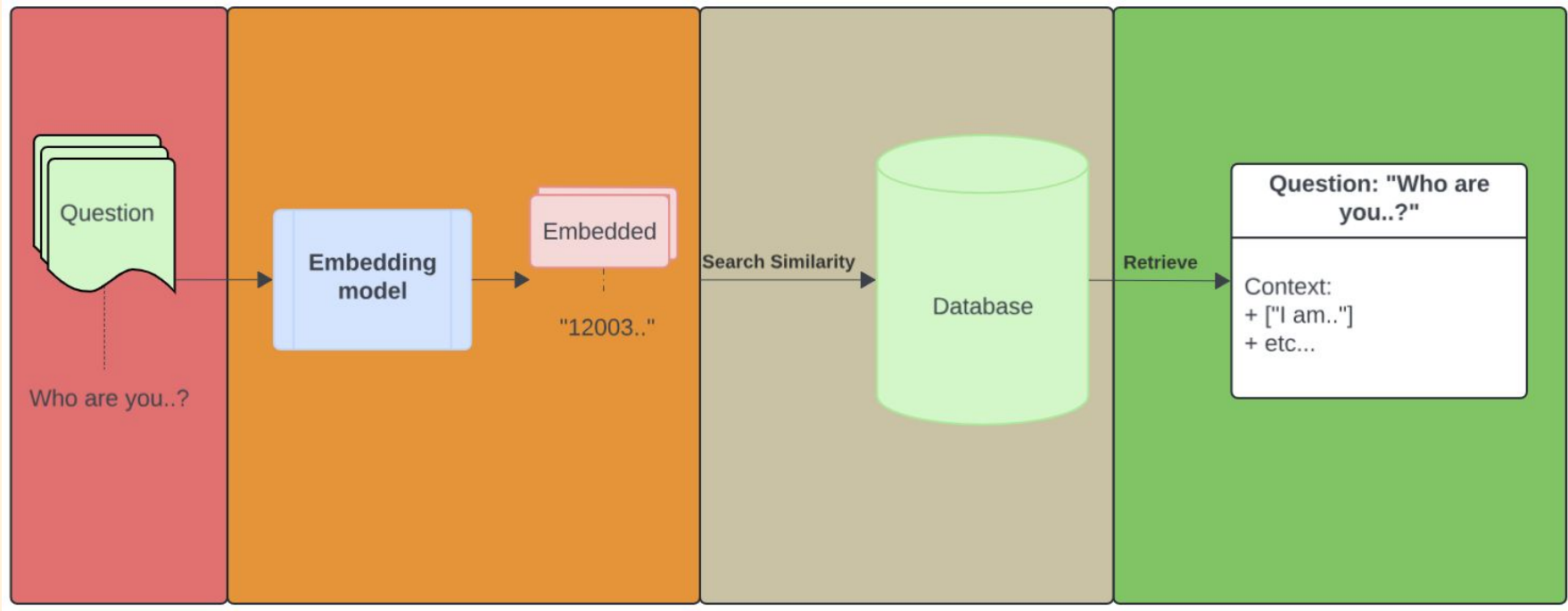
**Hybrid AI Model Architecture:** Leverages a free, open-source Hugging Face model for cost-effective embedding and the powerful OpenAI GPT-3.5 API for high-quality answer generation.

**Interactive Web Application:** A full-featured Flask UI with separate workflows for adding knowledge and asking questions, providing clear user feedback and sourced answers.

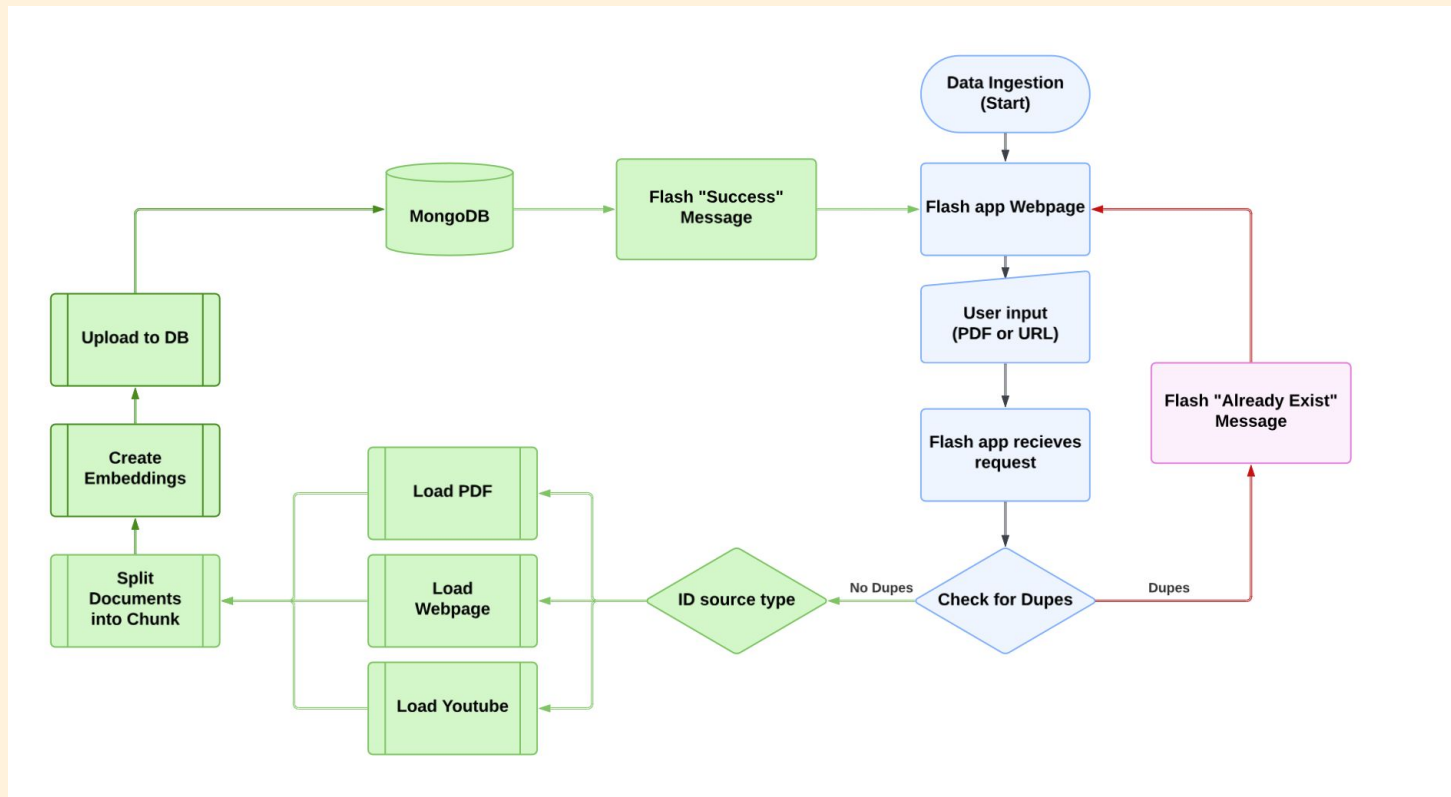
# What is RAG?



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# Pipeline (1 of 2) - Ingestion



# Pipeline (2 of 2) - QA

