INTELLIGENT RAG SYSTEM FOR UNIVERSITIES

Al Assistant for improving student learning

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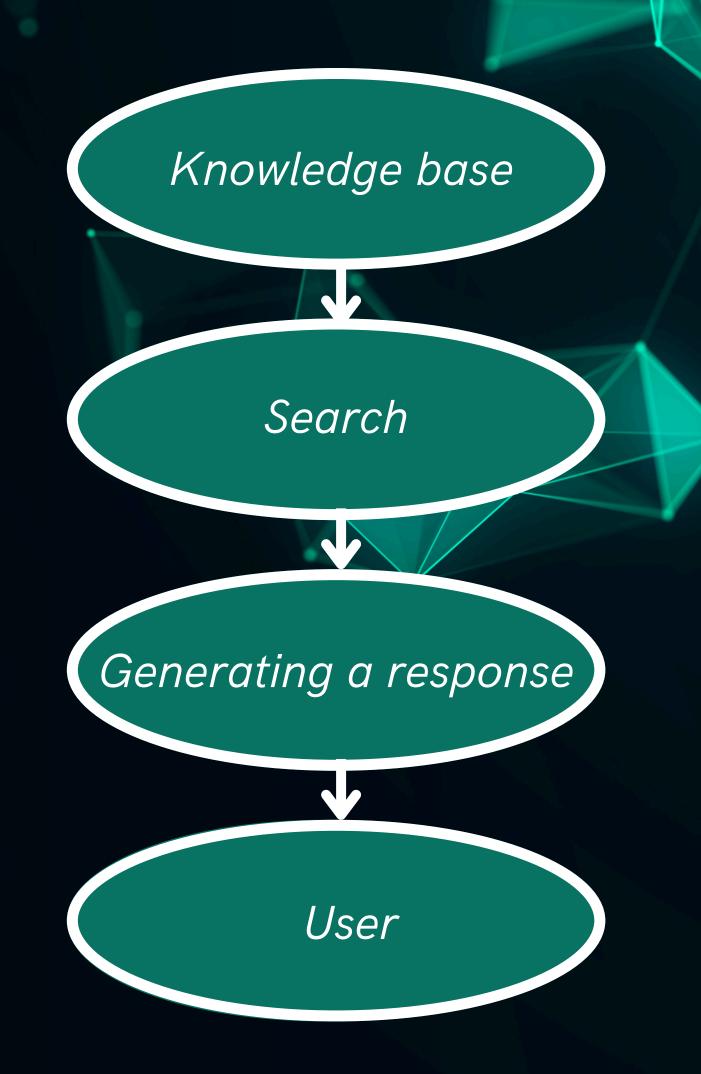
WHAT IS RAG?

RAG (Retrieval-Augmented Generation)

A combination of information search + response generation.

Accurate access to knowledge from the database.

Relevant, contextual answers to questions.



ARCHITECTURE OF THE RAG SYSTEM Vector Question Answer PDF Upload -> Chunking **→** Embeddings **→** Retrieval Store Input Generation

PIPELINE OF WORK

How does this work?

- 1. Loading and processing PDF.
- 2. Splitting into chunks.
- 3. Creating embeddings.
- 4. Saving to a vector database.
- 5. User input.
- 6. Searching for the most similar chunks.
- 7. Generating an answer based on the data found.





KEY FEATURES OF THE SYSTEM

Support for different types of documents (PDF).

High search speed thanks to embeddings.

Simple interface (chatbot).

Works via browser (any device).

PROJECT STATUS AND PROSPECTS

The architecture is implemented.

Basic functions work.

Next step: testing and optimization.