All You Need to Know to Build Your First LLM App

A Step-by-Step Tutorial to Document Loaders, Embeddings, Vector Stores and Prompt Templates

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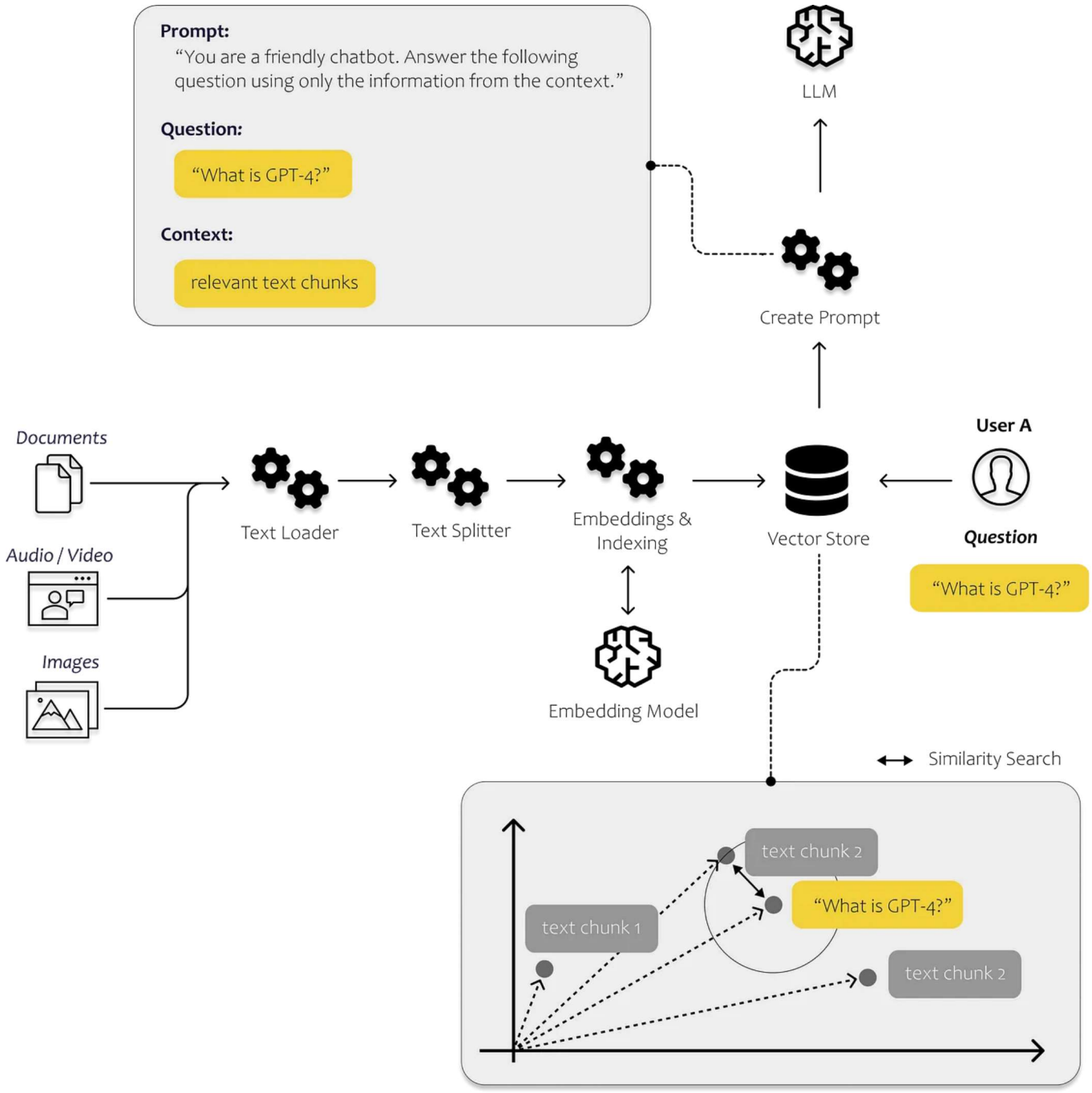

Build your own chatbot with context injection — Image by the author

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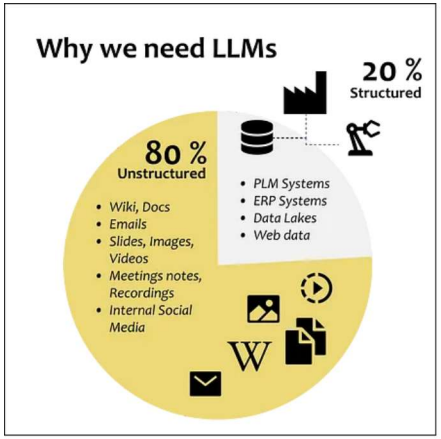
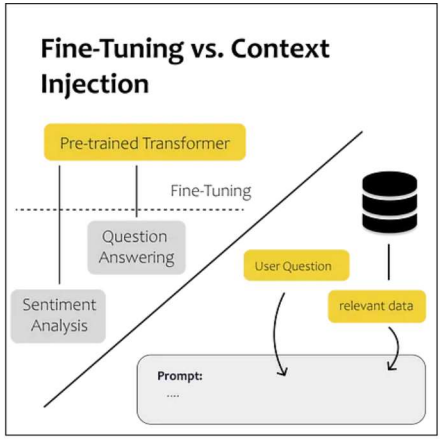
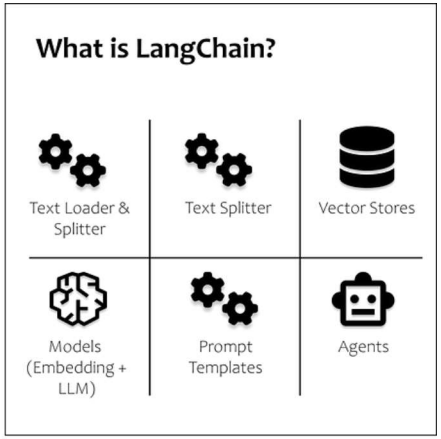
> *If you are just looking for a short tutorial that explains how to build a simple LLM application, you can skip to section "6. Creating a Vector store", there you have all the code snippets you need to build up a minimalistic LLM app with vector store, prompt template and LLM call.*

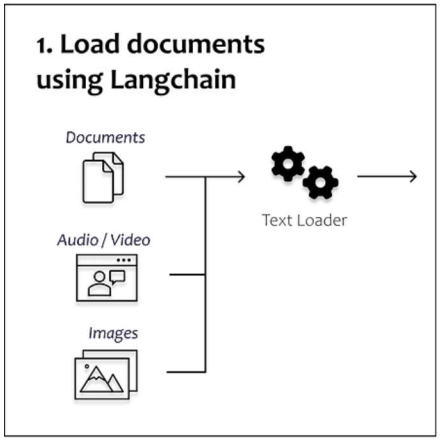
Intro

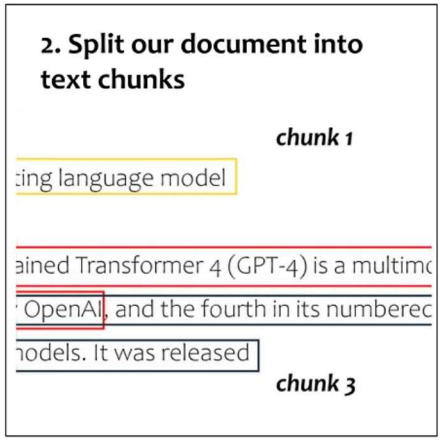
Step-by-Step Tutorial

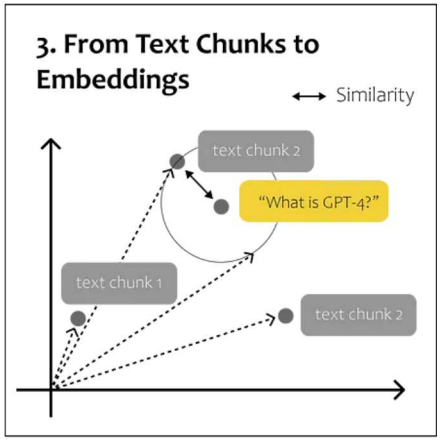


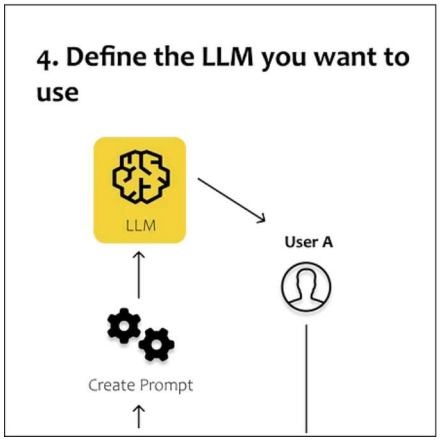


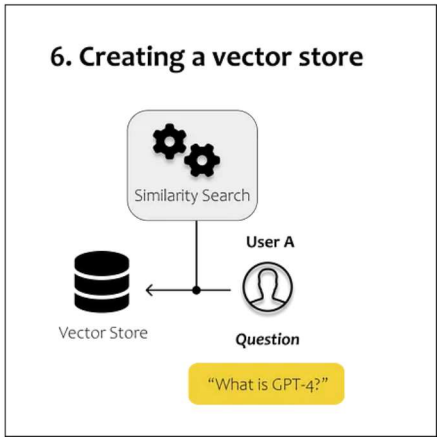












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Why we need LLMs

The evolution of language has brought us humans incredibly far to this day. It enables us to efficiently share knowledge and collaborate in the form we know today. Consequently, most of our collective knowledge continues to be preserved and communicated through unorganized written texts.

Initiatives undertaken over the past two decades to digitize information and processes have often focused on accumulating more and more data in relational databases. This approach enables traditional analytical machine learning algorithms to process and understand our data.

However, despite our extensive efforts to store an increasing amount of data in a structured manner, we are still unable to capture and process the entirety of our knowledge.

> About 80% of all data in companies is unstructured, like work descriptions, resumes, emails, text documents, power point slides, voice recordings, videos and…