DocSage: chat with your documents locally

https://github.com/KedoKudo/DocSage

by Chen Zhang, 2024

Control Panel

Select the Model

codellama:latest

Size/GB: 3.56

Temperature

0.85

0.00 1.00

Upload a file for RAG

Drag and drop files here

Limit 200MB per file • PDF, TXT

Browse files

Select the knowledge base

None

Ask me anything

What is DocSage?

- A simple RAG (Retrieval-Augmented Generation) model for local document search and chat.
- Backend:
  - **Ollama**: a local-host LLM server that allows users to run different LLMs models directly.
  - **Langchain**: a mature framework that allows users to send context embeddings to LLM service for context awear text generation.
- Frontend:
  - **Streamlit**: a low-coding Python library that allows users to spin up a simple web applications.

Ollama(🦙)

https://ollama.com, https://github.com/ollama/ollama

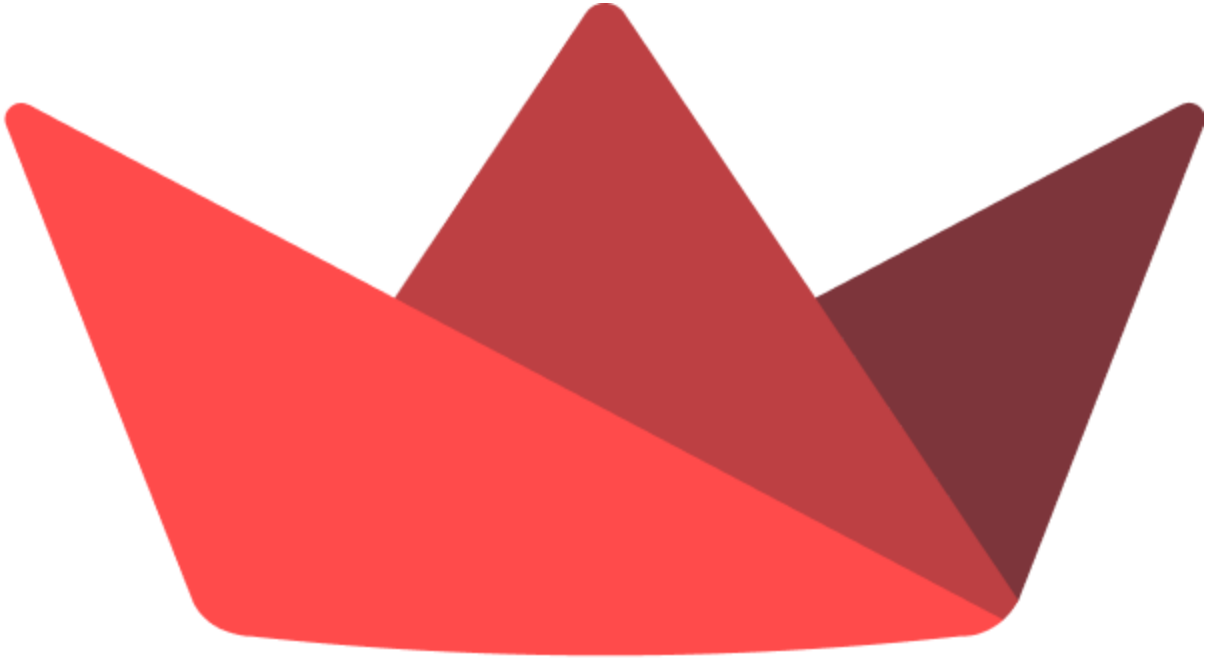
```
brew install ollama
brew services start ollama
ollama run llama2
```

Langchain

https://python.langchain.com, https://www.langchain.com

```
pip install langchain
```

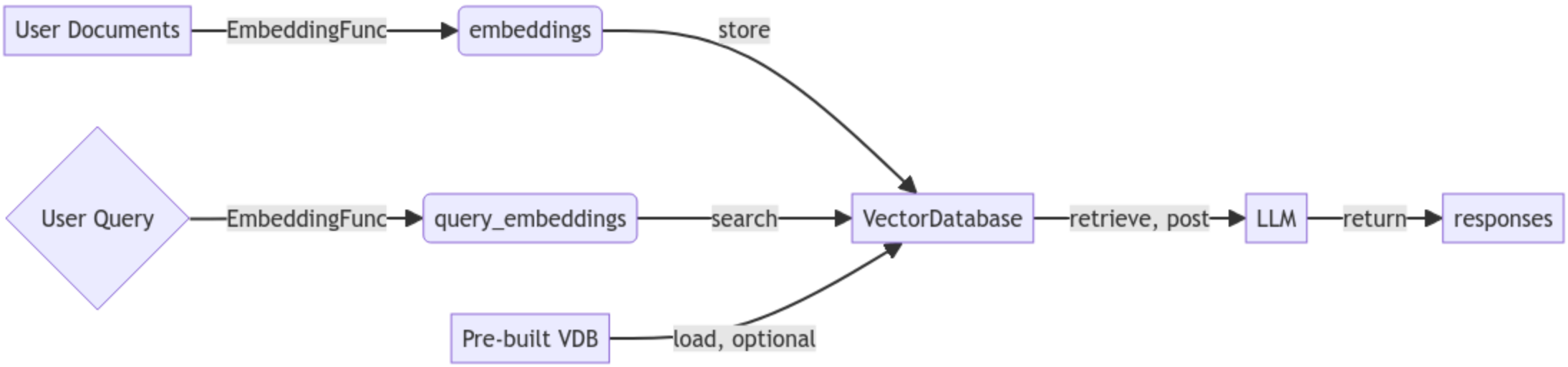
Streamlit



https://streamlit.io, https://github.com/streamlit/streamlit

```
pip install streamlit
```

What is RAG?


User Documents
EmbeddingFunc
embeddings
store
User Query
EmbeddingFunc
query_embeddings
search
VectorDatabase
retrieve, post
LLM
return
responses
Pre-built VDB
load, optional

Demo

Case 1: simple interaction with DocSage

- testing prompt: "What is Mantid?"
- temperature: 0.1, 0.5, 0.9

Case 2: chat with your documents

- testing prompt: "What is ornl-next?"
- temperature: 0.1, 0.5, 0.9

Case 3: chat with knowledge base

- testing prompt: "Provide a python script to calibrate PowGEN detector with mantid"
- temperature: 0.1, 0.5, 0.9
- knowledge base: Mantid

Q&A