play_view

July 4, 2025

```python
[3]: import os
     from api_key import OPENAI_API_KEY
     from langchain_openai import OpenAIEmbeddings
     from langchain.vectorstores import FAISS
     from langchain.chains import RetrievalQA
     from langchain.llms import OpenAI
     import gradio as gr
```

```python
[9]: #     embedding
     embeddings = OpenAIEmbeddings(openai_api_key=OPENAI_API_KEY)
     vectordb = FAISS.load_local("faiss_db", embeddings,␣
      ↪allow_dangerous_deserialization=True)
```

```python
[10]: #
      qa = RetrievalQA.from_chain_type(
          llm=OpenAI(openai_api_key=OPENAI_API_KEY, temperature=0),
          retriever=vectordb.as_retriever(search_kwargs={"k": 3}),
          return_source_documents=True
      )
```

```python
[11]: #
      def answer(query):
          result = qa(query)
          sources = "\n".join([f"- {doc.metadata.get('source', '  ')}: {doc.
       ↪page_content[:150].strip()}…" for doc in result["source_documents"]])
          return result["result"] + "\n\n**Sources:**\n" + sources
```

```python
[12]: # Gradio
      iface = gr.Interface(
          fn=answer,
          inputs=gr.Textbox(lines=2, placeholder="Ask your question..."),
          outputs="markdown",
          title="    ",
          description="   FAISS       ",
      )
      iface.launch()
```

* Running on local URL: http://127.0.0.1:7860

1

```
* To create a public link, set `share=True` in `launch()`.

<IPython.core.display.HTML object>
```

[12]:

```
C:\Users\user\AppData\Local\Temp\ipykernel_26732\3348745992.py:3:
LangChainDeprecationWarning: The method `Chain.__call__` was deprecated in
langchain 0.1.0 and will be removed in 1.0. Use :meth:`~invoke` instead.
  result = qa(query)
```

[ ]: