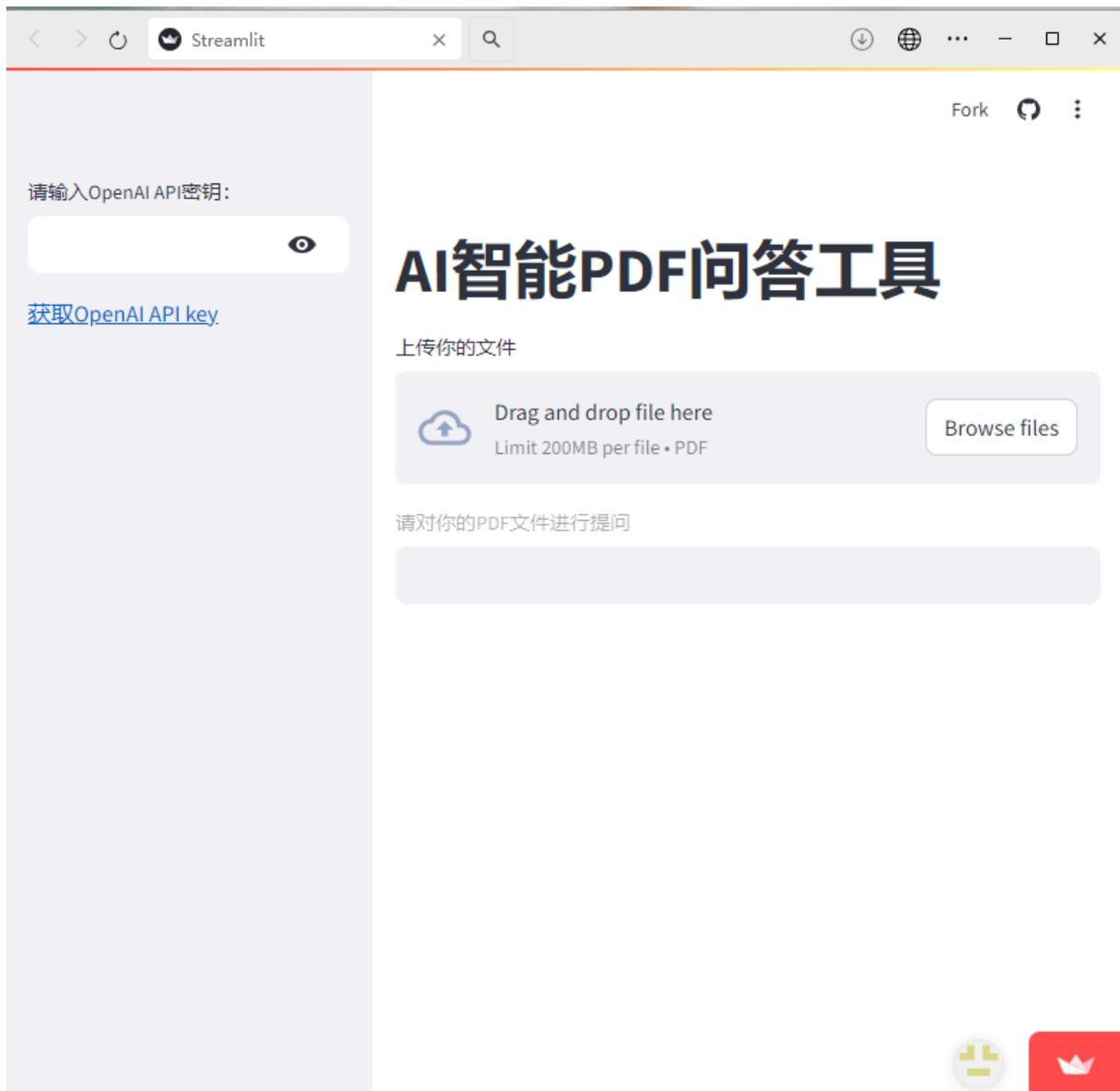
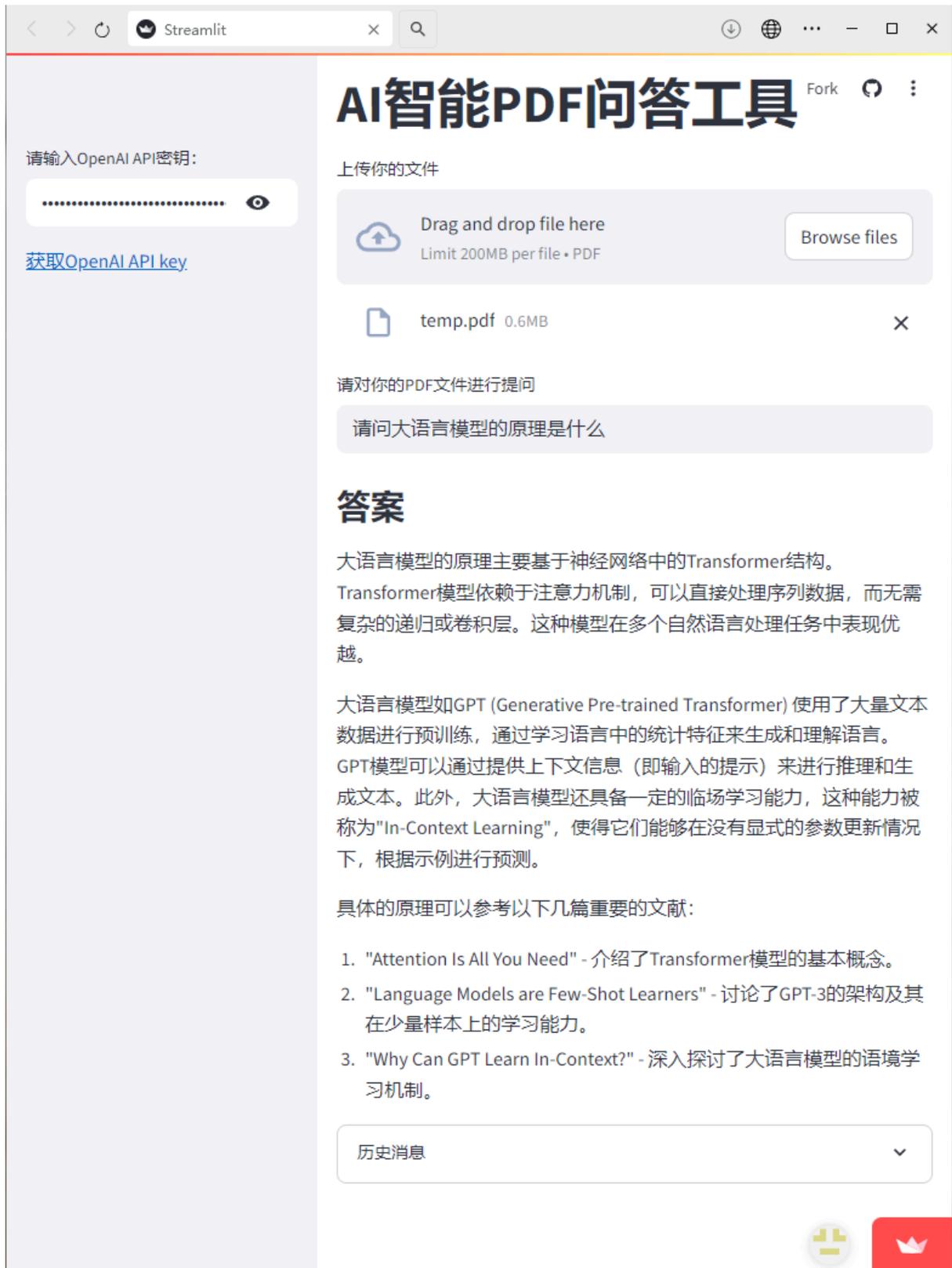


# 智能PDF问答工具网址： <https://pdfaireader.streamlit.app/>

🕒 创建时间	@2025年7月17日 22:05
🏷️ 标签	

- 🌟 网页需要科学上网才可见 许久不打开需要手动刷新
- 🌟 本视频脚本生成器调用OpenAI API
- 🌟 下方为前后效果图





```
from langchain_openai import ChatOpenAI
from langchain_community.document_loaders import PyPDFLoader
from langchain_text_splitters import RecursiveCharacterTextSpli
```

```

tter
from langchain_openai import OpenAIEmbeddings
from langchain_community.vectorstores import FAISS
from langchain.chains import ConversationalRetrievalChain

def PDF_Reader(uploaded_file,question,memory,openai_api_key):
    model=ChatOpenAI(model="gpt-4o-mini",openai_api_key=openai_
api_key)
#因为上传的文件不在本地 我们需要创建一个 将用户上传的文件读取 存入我们制作的
临时虚拟文件中
    file_content=uploaded_file.read()
#创建文件路径 文件在磁盘上的位置信息 注意这里并没有创造真正的文件 只是创造
了路径与名字
    temp_file_path="temp.pdf"
#创建了文件 注意这里temp_file只是在with代码块中有效
    with open(temp_file_path,"wb") as temp_file:
        temp_file.write(file_content)
    loader=PyPDFLoader(temp_file_path)
    docs=loader.load()
    text_splitter=RecursiveCharacterTextSplitter(
        chunk_size=1000,
        chunk_overlap=50,
        separators=["\n", "。", "!", "?", ",", "、", ""]
    )
    texts=text_splitter.split_documents(docs)
    embeddings_model=OpenAIEmbeddings(model="text-embedding-3-l
arge",openai_api_key=openai_api_key)
    db=FAISS.from_documents(texts,embeddings_model)
    retriever=db.as_retriever()
    reader=ConversationalRetrievalChain.from_llm(
        llm=model,
        retriever=retriever,
        memory=memory,
    )
    response=reader.invoke({"chat_history":memory,"question":qu
estion})
    return response

```

```

import streamlit as st
from langchain.memory import ConversationBufferMemory

from utils import PDF_Reader

st.title("AI智能PDF问答工具")

with st.sidebar:
    openai_api_key=st.text_input("请输入OpenAI API密钥: ", type
="password")
    st.markdown("[获取OpenAI API key](https://platform.openai.co
m/account/api-keys)")

if "memory" not in st.session_state:
    st.session_state["memory"]=ConversationBufferMemory(
        return_messages=True,
        memory_key="chat_history",
        output_key="answer"
    )

uploaded_file=st.file_uploader("上传你的文件", type="pdf")
question=st.text_input("请对你的PDF文件进行提问",disabled=not uploa
ded_file)

if uploaded_file and question and not openai_api_key:
    st.info("请输入你的OpenAI API密钥")

if uploaded_file and question and openai_api_key:
    with st.spinner("AI正在思考中,请稍等..."):
        response = PDF_Reader(uploaded_file,question,st.session
_state["memory"],openai_api_key)
        st.write("### 答案")
        st.write(response["answer"])
        st.session_state["chat_history"] = response["chat_history"]

if "chat_history" in st.session_state:
    with st.expander("历史消息"):
        for i in range(0, len(st.session_state["chat_histor
y"]), 2):

```

```
human_message = st.session_state["chat_history"][i]
ai_message = st.session_state["chat_history"][i+1]
st.write(human_message.content)
st.write(ai_message.content)
if i < len(st.session_state["chat_history"]) - 2:
    st.divider()
```