

# ChatBot like ChatGPT for multiple websites using Langchain

## Installation

```
In [ ]: !pip install langchain openai
```

Setup OpenAI API Key (platform.openai.com => View keys => Create a new secret key)

```
In [ ]: import os
        from getpass import getpass
```

```
In [ ]: os.environ['OPENAI_API_KEY'] = getpass("Enter your key:")
```

Enter your key:.....

Create a list of urls for managing the complete site scraping into your local vector database like Chroma

```
In [ ]: URLS = [
        'https://en.wikipedia.org/wiki/Large_language_model',
        'https://en.wikipedia.org/wiki/LangChain',
        'https://en.wikipedia.org/wiki/Prompt_engineering#Retrieval',
        'https://techcrunch.com/2023/06/06/llamaindex-adds-private-',
        'https://www.geeksforgeeks.org/develop-an-llm-application-u
    ]
```

## Loaders- WebBaseLoader

```
In [ ]: from langchain.document_loaders import WebBaseLoader
```

```
In [ ]: loader = WebBaseLoader(URLS)
```

## Chunking- CharacterTextSplitter

```
In [ ]: from langchain.text_splitter import CharacterTextSplitter
```

```
In [ ]: data = loader.load()
```

```
In [ ]: text_splitter = CharacterTextSplitter(chunk_size=1000, chunk_ov
```

```
In [ ]: website_data = text_splitter.split_documents(data)
```

Collecting tiktoken - Installation

```
In [ ]: !pip install tiktoken
```

## Embeddings

```
In [ ]: from langchain.embeddings import OpenAIEmbeddings
```

```
In [ ]: embeddings = OpenAIEmbeddings()
```

## Vector Database - Installation of Chroma

```
In [ ]: !pip install chromadb
```

```
In [ ]: from langchain.vectorstores import Chroma
```

```
In [ ]: vectordb = Chroma.from_documents(website_data, embeddings)
```

## Large language model - Chat\_models from langchain

```
In [ ]: from langchain.chat_models import ChatOpenAI
```

```
In [ ]: llm = ChatOpenAI(model="gpt-3.5-turbo-16k", temperature=0.0)
```

## RetrievalQA

```
In [ ]: from langchain.chains import RetrievalQA
```

```
In [ ]: rag_chain = RetrievalQA.from_chain_type(llm=llm,chain_type="stu
```

## Bring the user and tell him to write the prompt

```
In [ ]: prompt = "what is RAG?" #query
```

```
In [ ]: response = rag_chain.run(prompt)
```

```
In [ ]: print(response)
```