

LangChain

**Introduction:
A Framework for Large
Language Model
Applications**

Agenda

- **What is LangChain?**
- **Key Components of LangChain**
- **Applications and Integrations**
- **Getting Started: Basic LangChain Setup**
- **Building a Simple Application with LangChain**
- **Resources and Further Learning**

What is LangChain?

- Software development framework designed to simplify the creation of applications using large language models.
- Launched by Harrison Chase in October 2022.
- Quickly became popular with hundreds of contributors on GitHub, and has raised significant venture funding.

Langchain: Combine LLM with external data & apps



LLM

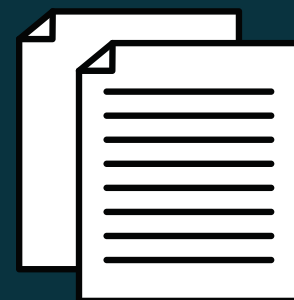


Question

Langchain



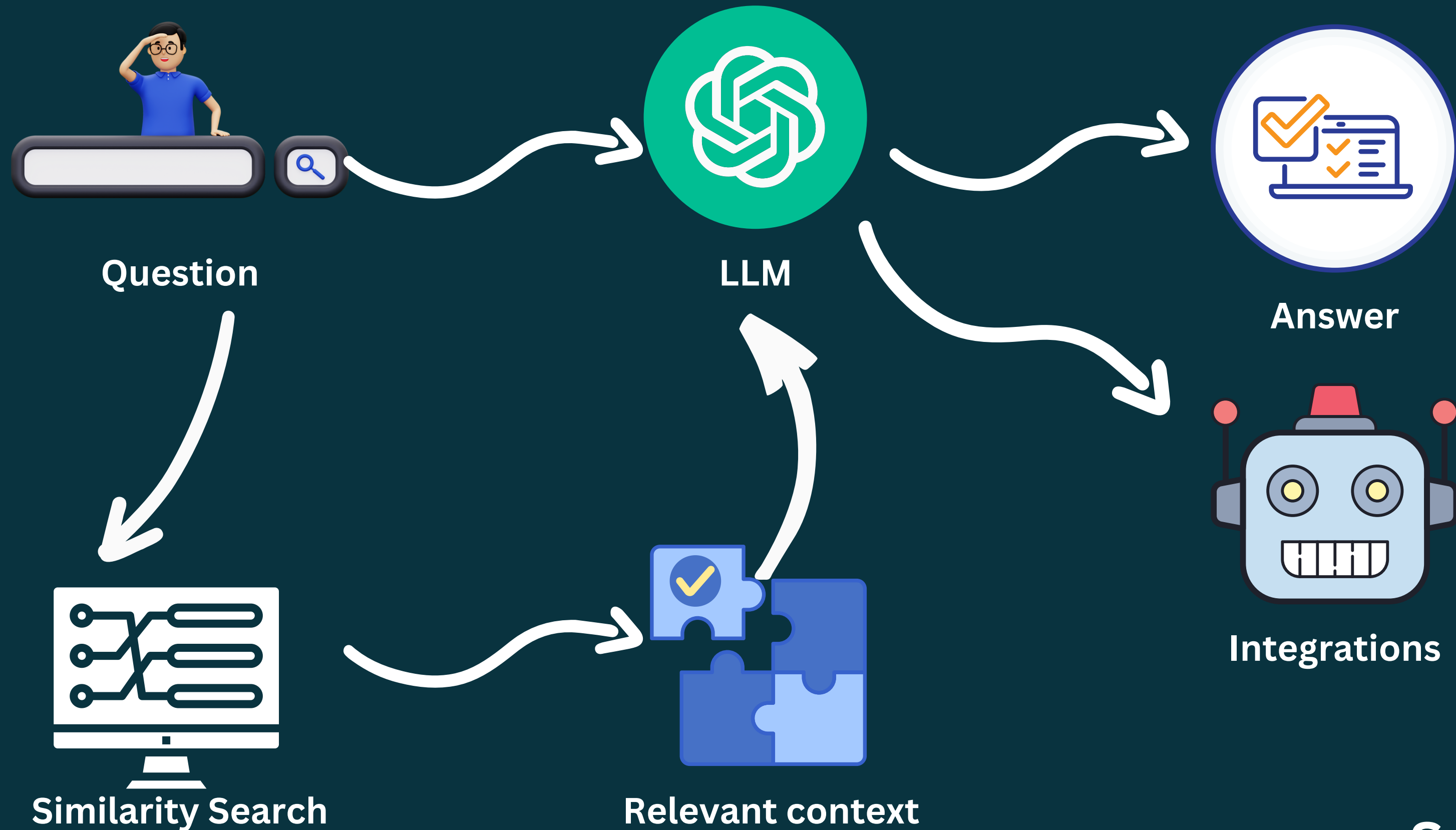
Integrations



Documents

SamurAI

Pipeline



Key Components of LangChain

- LangChain is written in Python and JavaScript.
- The framework is primarily used for tasks like document analysis and summarization, chatbots, and code analysis.
- Some of the key components include Chain, PromptTemplate, and LLMChain.

Basic Setup

Installation

python

 Copy code

```
pip install langchain
```

Import LangChain

python

 Copy code

```
import langchain
```

Setting up the LLM with environment variables

```
import os
from langchain.chat_models import ChatOpenAI

# Get OpenAI key from environment variables
openai_key = os.getenv('OPENAI_KEY')

# Initialize the language model
llm = ChatOpenAI(key=openai_key)
```

Applications and Integrations

- LangChain has integrations with major cloud storage providers, API wrappers, web scraping subsystems, and more.
- It can read from more than 50 document types and data sources.
- LangChain includes features for text summarization, code generation, and database storage, among others.

Building an Application

- Refer to our colab notebook -
<https://colab.research.google.com/github/SamurAIGPT/langchain-course/blob/main/getting-started/Introduction.ipynb>

Resources and Further Learning

- Github Repo- <https://github.com/SamurAIGPT/langchain-course>
- Twitter: - [Ankur](#) & [Anil](#)
- Discord: <https://discord.gg/Mcjm9YShSP>

Thanks