# LangChain

**LangChain** is a framework for developing applications powered by large language models (LLMs).

LangChain simplifies every stage of the LLM application lifecycle:

- **Development**: Build your applications using LangChain's open-source <u>components</u> and <u>third-party integrations</u>. Use <u>LangGraph</u> to build stateful agents with first-class streaming and human-in-the-loop support.
- **Productionization**: Use <u>LangSmith</u> to inspect, monitor and evaluate your applications, so that you can continuously optimize and deploy with confidence.
- **Deployment**: Turn your LangGraph applications into production-ready APIs and Assistants with LangGraph Platform.

LangChain implements a standard interface for large language models and related technologies, such as embedding models and vector stores, and integrates with hundreds of providers. See the <u>integrations</u> page for more.

## **Architecture**

The LangChain framework consists of multiple open-source libraries. Read more in the <u>Architecture</u> page.

- langchain-core: Base abstractions for chat models and other components.
- Integration packages (e.g. langchain-openai, langchain-anthropic, etc.): Important integrations have been split into lightweight packages that are co-maintained by the LangChain team and the integration developers.
- **langchain**: Chains, agents, and retrieval strategies that make up an application's cognitive architecture.
- langchain-community: Third-party integrations that are community maintained.
- **langgraph**: Orchestration framework for combining LangChain components into production-ready applications with persistence, streaming, and other key features. See LangGraph documentation.

## Guides

### **Tutorials**

If you're looking to build something specific or are more of a hands-on learner, check out our <u>tutorials section</u>. This is the best place to get started.

These are the best ones to get started with:

- Build a Simple LLM Application
- Build a Chatbot
- Build an Agent
- Introduction to LangGraph

Explore the full list of LangChain tutorials <u>here</u>, and check out other <u>LangGraph tutorials</u> <u>here</u>. To learn more about LangGraph, check out our first LangChain Academy course, *Introduction to LangGraph*, available <u>here</u>.

### **How-to guides**

<u>Here</u> you'll find short answers to "How do I....?" types of questions. These how-to guides don't cover topics in depth – you'll find that material in the <u>Tutorials</u> and the <u>API Reference</u>. However, these guides will help you quickly accomplish common tasks using <u>chat models</u>, <u>vector stores</u>, and other common LangChain components.

Check out LangGraph-specific how-tos here.

### **Conceptual guide**

Introductions to all the key parts of LangChain you'll need to know! <u>Here</u> you'll find high level explanations of all LangChain concepts.

For a deeper dive into LangGraph concepts, check out this page.

### **Integrations**

LangChain is part of a rich ecosystem of tools that integrate with our framework and build on top of it. If you're looking to get up and running quickly with <u>chat models</u>, <u>vector stores</u>, or other LangChain components from a specific provider, check out our growing list of <u>integrations</u>.

#### **API** reference

Head to the reference section for full documentation of all classes and methods in the LangChain Python packages.

# **Ecosystem**

### □ □ LangSmith

Trace and evaluate your language model applications and intelligent agents to help you move from prototype to production.

## □ □ LangGraph

Build stateful, multi-actor applications with LLMs. Integrates smoothly with LangChain, but can be used without it. LangGraph powers production-grade agents, trusted by Linkedin, Uber, Klarna, GitLab, and many more.

## **Additional resources**

## **Versions**

See what changed in v0.3, learn how to migrate legacy code, read up on our versioning policies, and more.

### **Security**

Read up on security best practices to make sure you're developing safely with LangChain.

#### **Contributing**

Check out the developer's guide for guidelines on contributing and help getting your dev environment set up.