

Course Objectives

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Key Objectives

- Understand key components of LangGraph
- Learn the building blocks of Agentic AI Systems
- Build Simple Agentic AI Systems with LangGraph
- Build Advanced Agentic AI Systems with LangGraph

Key Components of LangGraph



Agent States &
Messages



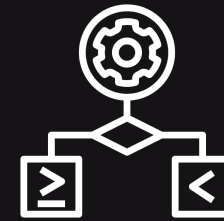
Directed Graphs



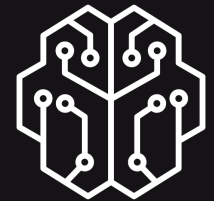
Nodes



Edges



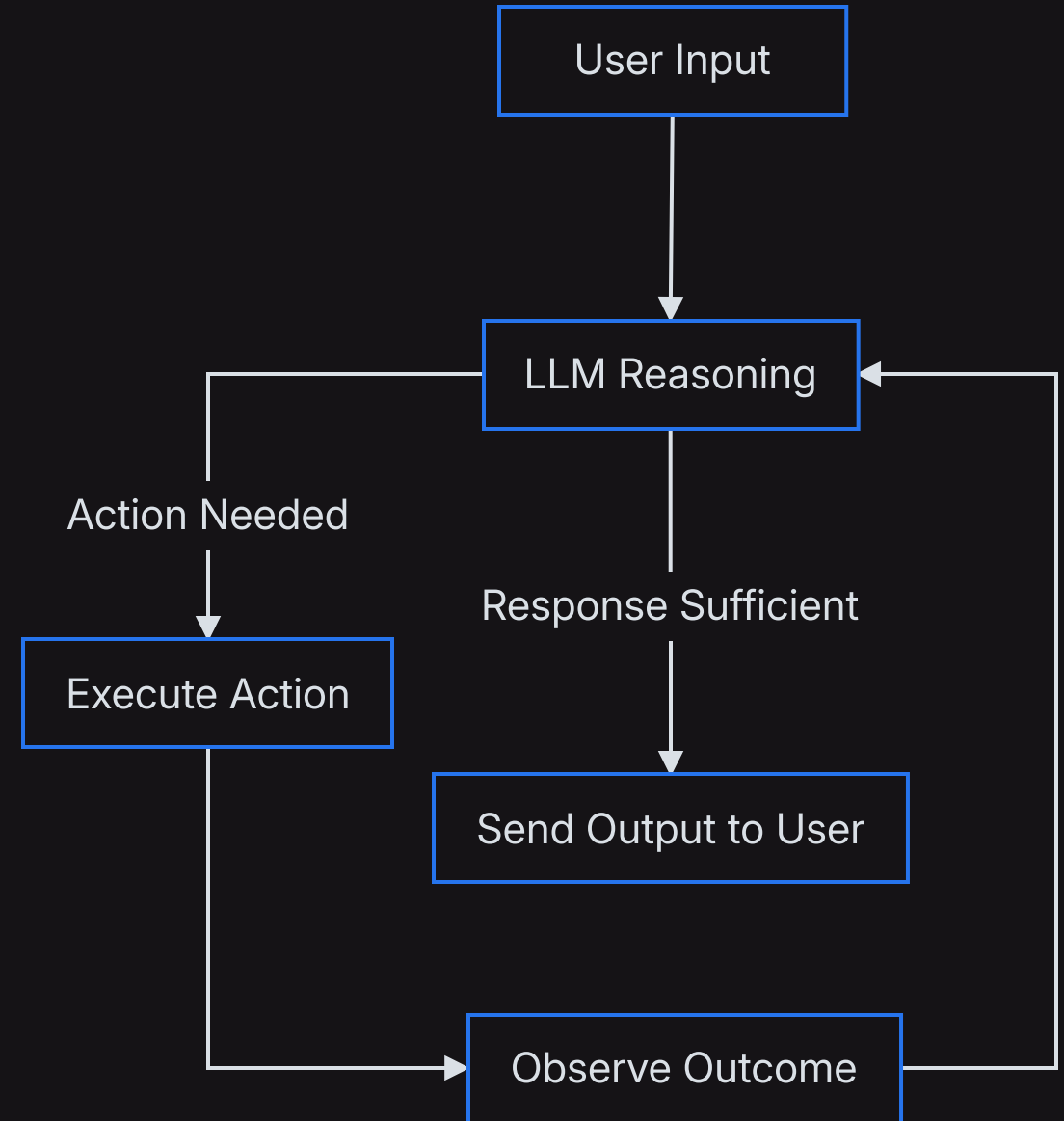
Conditional Edges



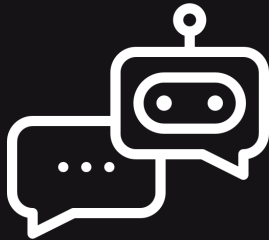
Memory & Threads

The Agent Loop

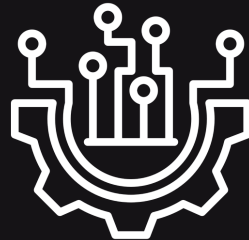
- LLMs
- Tools
- Node Functions
- Execution Loops
- Observations



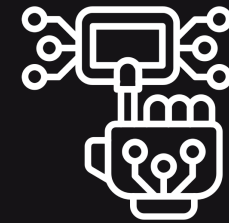
Build Simple Agentic AI Systems with LangGraph



Simple LLM-Powered Chatbots

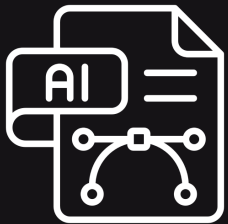


Augmented LLM with Tools

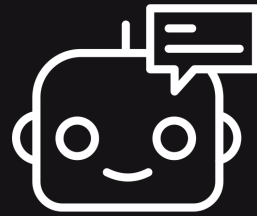


Simple Tool-Based ReAct Agents

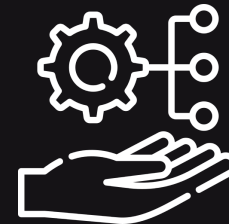
Build Advanced Agentic AI Systems with LangGraph



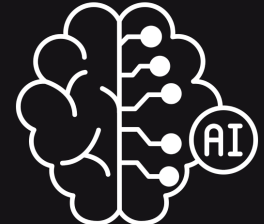
Design, Architect and
Develop Complex
Agentic AI Systems



Multi-User
Conversational Agentic
AI Systems



Reflection, Planning
and Multi-Agent
Systems



Agentic AI Systems
combining popular
Agentic design patterns

Thanks