Building Agentic RAG with Llamaindex

Duration: 01 day (08 hours)

In this course, we will learn LlamaIndex to start using agentic RAG, a framework designed to build research agents skilled in tool use, reasoning, and decision-making with your data.

In this course:

- Build the simplest form of agentic RAG a router. Given a query, the router will pick one of two query engines, Q&A or summarization, to execute a query over a single document.
- Add tool calling to your router agent where you will use an LLM to not only pick a function to execute but also infer an argument to pass to the function.
- Build a research assistant agent. Instead of tool calling in a single-shot setting, an agent is able to reason over tools in multiple steps.
- Build a multi-document agent where you will learn how to extend the research agent to handle multiple documents.
- Unlike the standard RAG pipeline-suitable for simple queries across a few documents-this intelligent approach adapts based on initial findings to enhance further data retrieval. You'll learn to develop an autonomous research agent, enhancing your ability to engage with and analyze your data comprehensively.

We will be covering the below mentioned topics:

- Introduction to LlamaIndex
- Router Query Engine
- Tool Calling
- Building an Agent Reasoning Loop
- Building a Multi-Document Agent