QUICK RECAP

In the previous week, we explored Fine-Tuning Large Language Models (LLMs). We started by understanding what fine-tuning means and why it's needed, and then compared different strategies ranging from full fine-tuning to parameter-efficient methods.

WEEK OVERVIEW

This week, we are exploring Agents. We'll begin by revisiting Large Language Models and then move into understanding reasoning in LLMs and how it extends into agentic capabilities.

A major focus will be on how AI agents operate, interact, and are enhanced with architectures, communication mechanisms, and memory in Agents. We will also introduce the role of Model Context Protocol (MCP) servers in building more robust agentic workflows.

The following topics will be covered in this module:

- Revisiting Large Language Models
- Introduction to AI Agents
- Exploring AI Agent Architectures
- Enhancing AI Agents with Memory
- Introduction to Model Context Protocol (MCP) Servers

LEARNING OBJECTIVES

By the end of this module, you will be able to:

- Understand the concept of reasoning in LLMs and its importance for agentic workflows.
- Define what AI agents are and describe how they interact with users, data, and other agents.
- Explore different AI agent architectures and explain their components.
- Understand how memory enhances agent capabilities and enables more dynamic interactions.
- Describe the role of MCP servers in enabling scalable and structured AI agent workflows.

LEARNING INSTRUMENTS

Week	Week Name	No. of Videos	Total Duration	No. of Test Your Understanding Quizzes	No. of Graded Quizzes	No. of Practice Assignments

Power Ahead!