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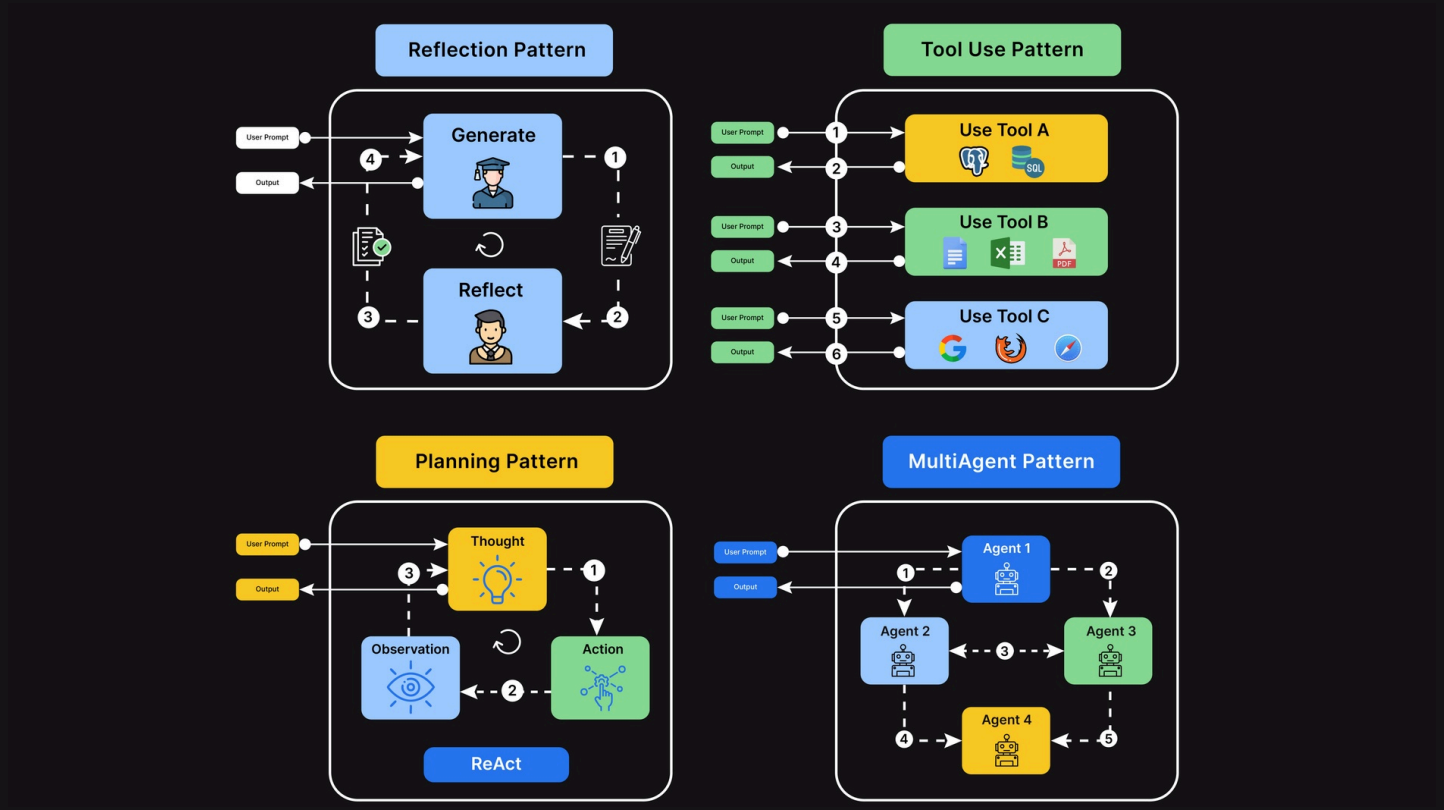
Course Introduction

Miguel Otero Pedrido

Senior ML / AI Engineer at Dressipi

Founder @ The Neural Maze

Building AI Agents from Scratch



Agentic Patterns

Source: https://theneuralmaze.substack.com/

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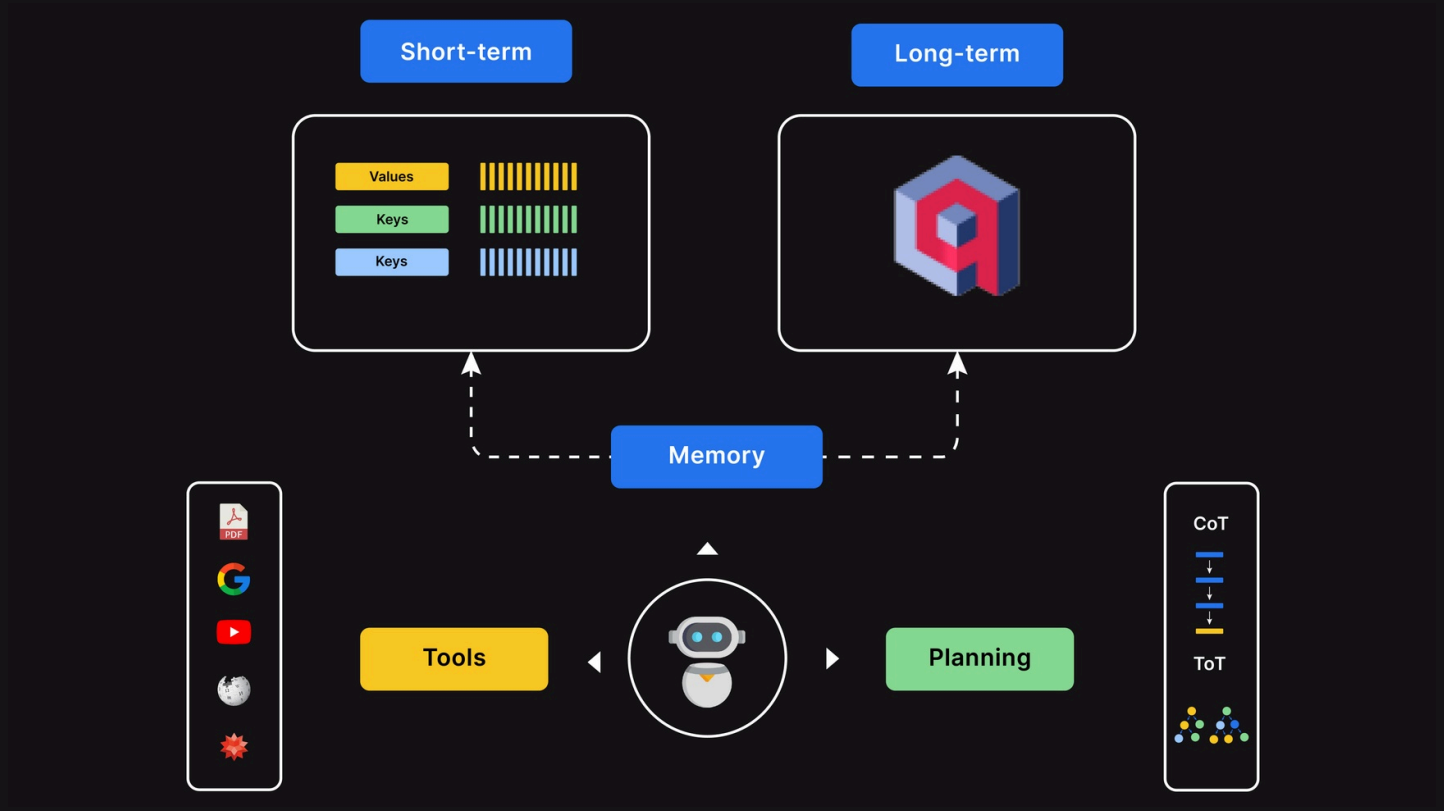
Building AI Agents from Scratch



What is an Agent?

Source: https://theneuralmaze.substack.com/

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What Is This Course About?

- Implementing Andrew Ng's 4 Agentic Patterns from scratch
- Reference Resources:
  - Andrew Ng's Talk
    (What's next for AI agentic workflows ft. Andrew Ng of AI Fund):
    Watch here
  - DeepLearning.AI Series on Agentic Patterns:
    How Agents Can Improve LLM Performance

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What's This Course About?

Framework-Free Implementation

- Focus on building Agentic Patterns using pure **Python** and LLM API calls, ensuring a deep understanding of the underlying concepts.
- What We Won't Use:
  - LangChain
  - LlamaIndex
  - CrewAI

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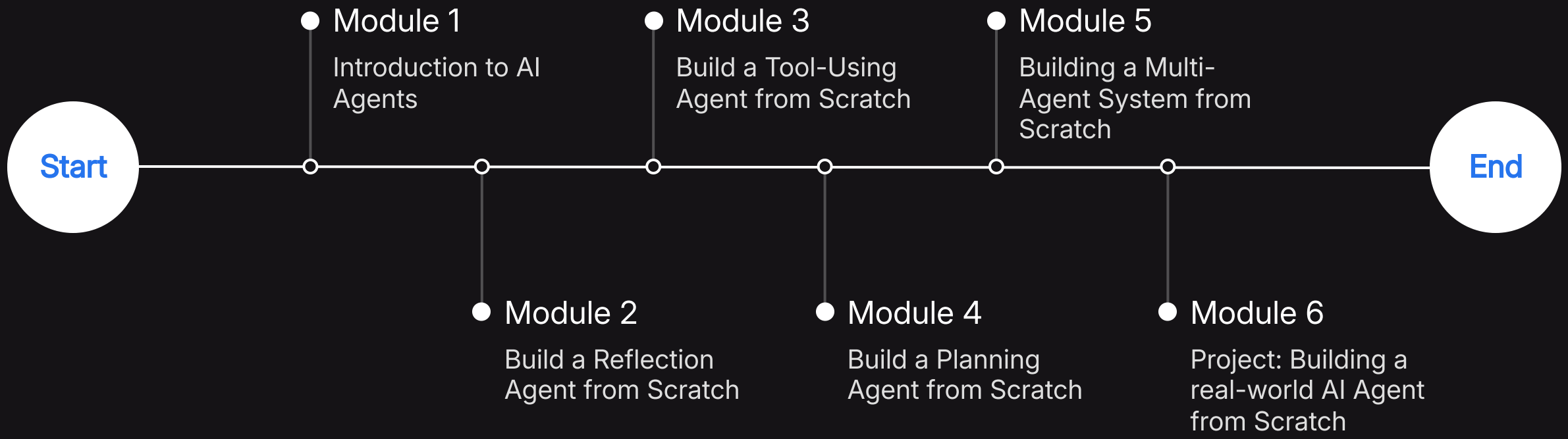
What's This Course About?

Why Framework-Free?

- Gain hands-on experience
- Understand the low-level mechanics of Agentic Patterns
- Build flexibility to adapt solutions without relying on specific frameworks

Course Journey



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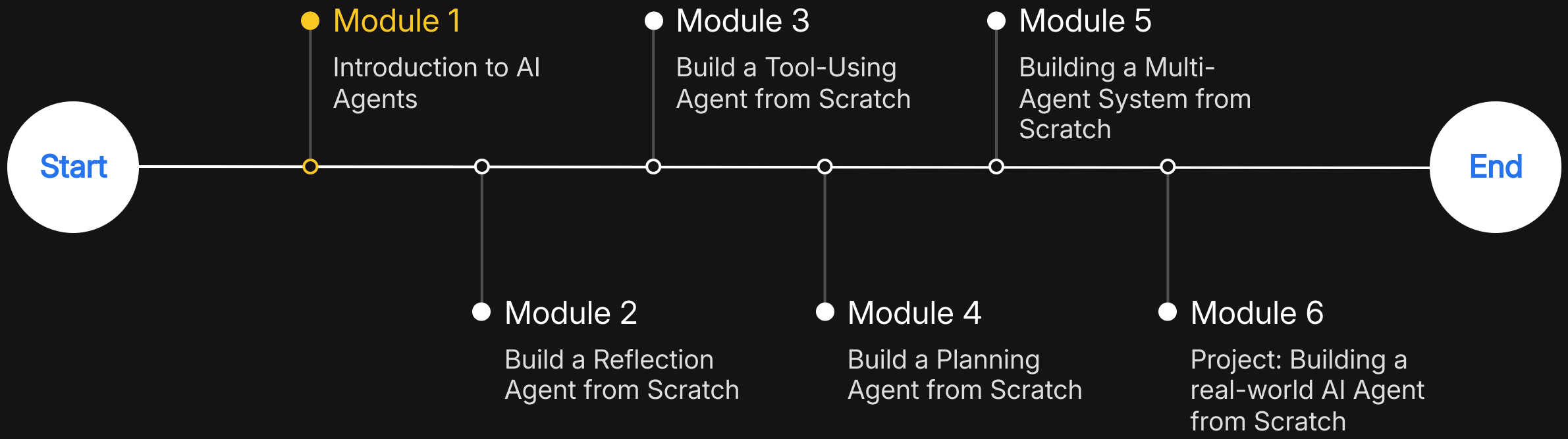
Course Journey



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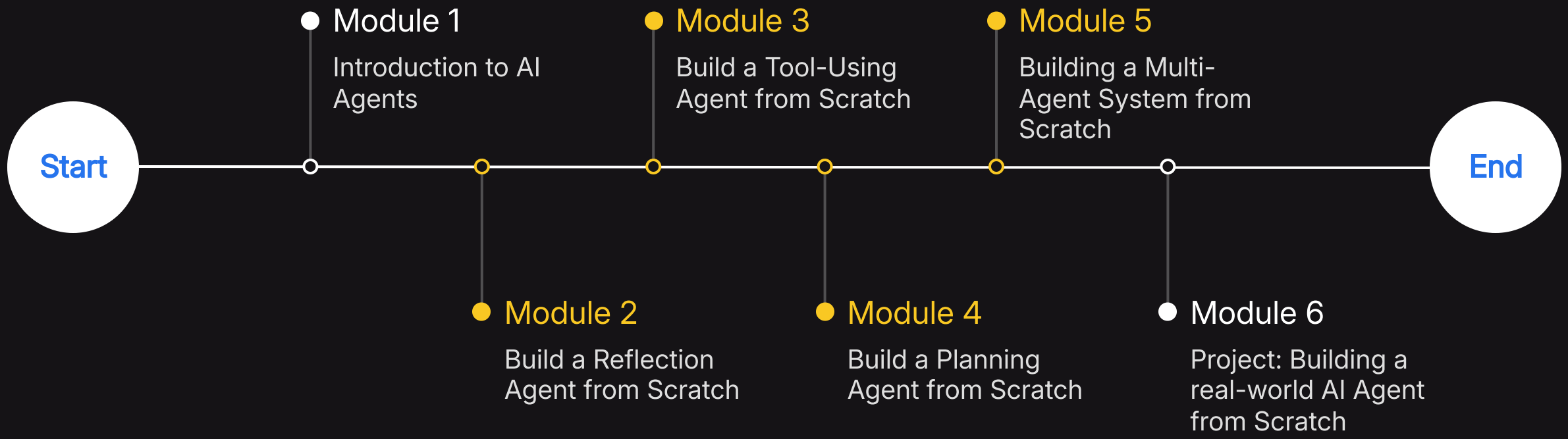
Course Journey



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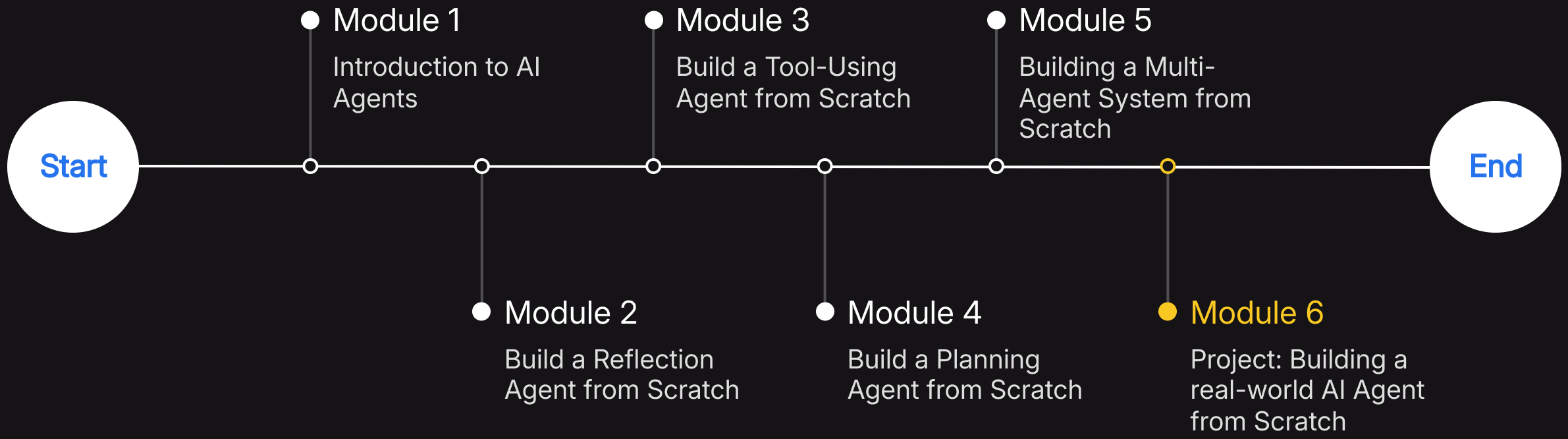
Course Journey



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Thanks