



Arize AI - Agent Mastery Course





Module 4: Tools and MCP

What are AI Agent Tools?

External capabilities agents can call to extend reasoning and action beyond the base LLM.

Categories of Tools



Data Access



Extraction



Analysis



Execution

Benefits

- Provide grounded knowledge
- Enable real-world actions
- Allow specialization & modularity
- Support scalability

Why Tools Matter in AI Agents

- Extend Capabilities Beyond the Model
- Bridge Knowledge Gaps with External Data
- Enable Automation of Workflows

Agent tool calls examples



Code generation



Data Query



MCP Call



Planning

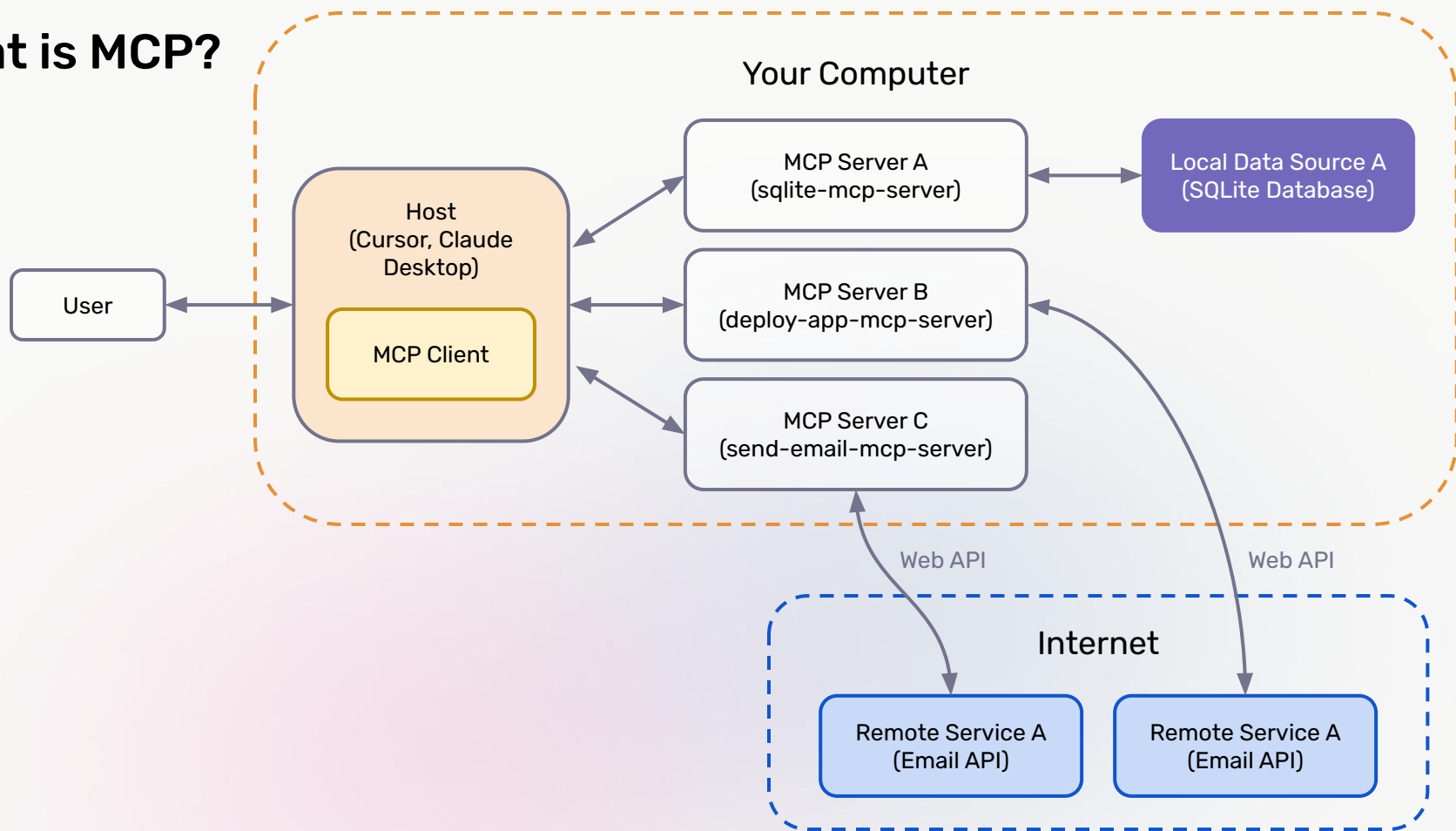


Web search



... many more

What is MCP?



Lab 4: Show difference in tools and MCP for the agent

- Now, we can see the difference in your agent for:
 - RAG
 - MCP
- Planning + Reasoning for an orchestrator agent
 - Which sub agents should be called by the orchestrator?
 - Evals:
 - Was the context preserved
 - Correct agent selected

Lab 4: Implement tools & MCP

- Navigate to `labs/lab4_tools_and_mcp`