

Lab 1: Getting Started with Strands Agents

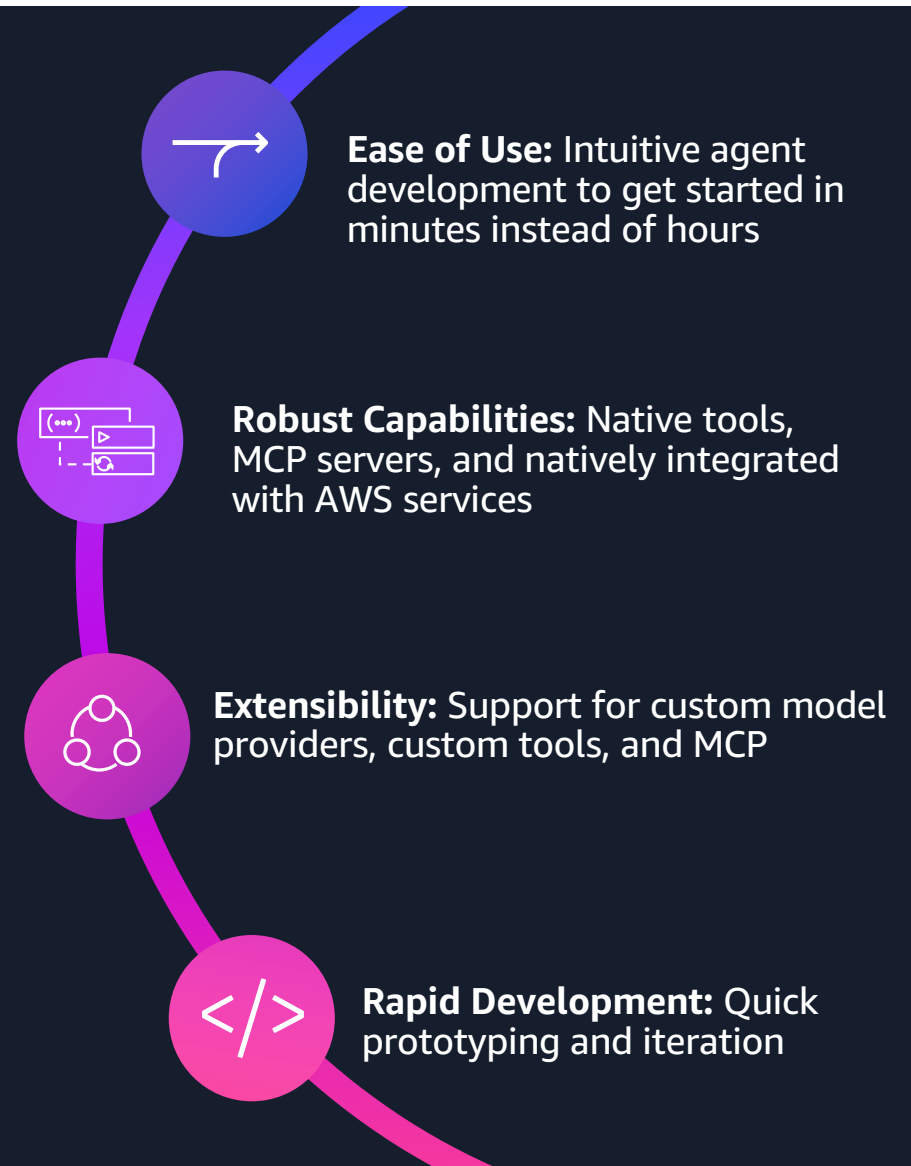


Learning Objectives

- Understand agents and agentic workflows
- Understand the Strands Agents SDK
- Install the Strands Agents framework
- Create your first agent
- Configure an agent with custom prompts
- Add tools to enhance your agent's capabilities

Strands Agents

Strands Agents is an open source python SDK for building agents using just a few lines of code



The Enhanced Agentic Loop

1. User provides a query that might need external data
2. Model analyzes the query and determines if tools are needed
3. If yes, model calls the appropriate tool(s) with the right parameters
4. Strands executes the tool and provides results back to the model
5. Model incorporates tool results into its final response
6. User receives a comprehensive answer combining model knowledge + real-time data

Troubleshooting & Best Practices

```
File "/Users/lausalin/Desktop/Strands Mooc/DevEx-Strands-Course/venv/lib/python3.13/site-packages/strands/event_loop/event_loop.py", line 245, in event_loop_cycle
    raise EventLoopException(e, invocation_state["request_state"]) from e
strands.types.exceptions.EventLoopException: An error occurred (throttlingException) when calling the ConverseStream operation: Too many requests, please wait before trying again. You have sent too many r
equests. Wait before trying again.
```

- Start simple and add complexity gradually
- Test your system prompts with different queries
- If you're using AWS services, understand your service quotas when using tools
- Be prepared to switch models if you encounter throttling

Key Takeaways

- Strands makes agent creation incredibly straightforward
- You can build functioning agents in under 10 lines of code
- System prompts are powerful for domain specialization
- Tools extend agents beyond simple text generation