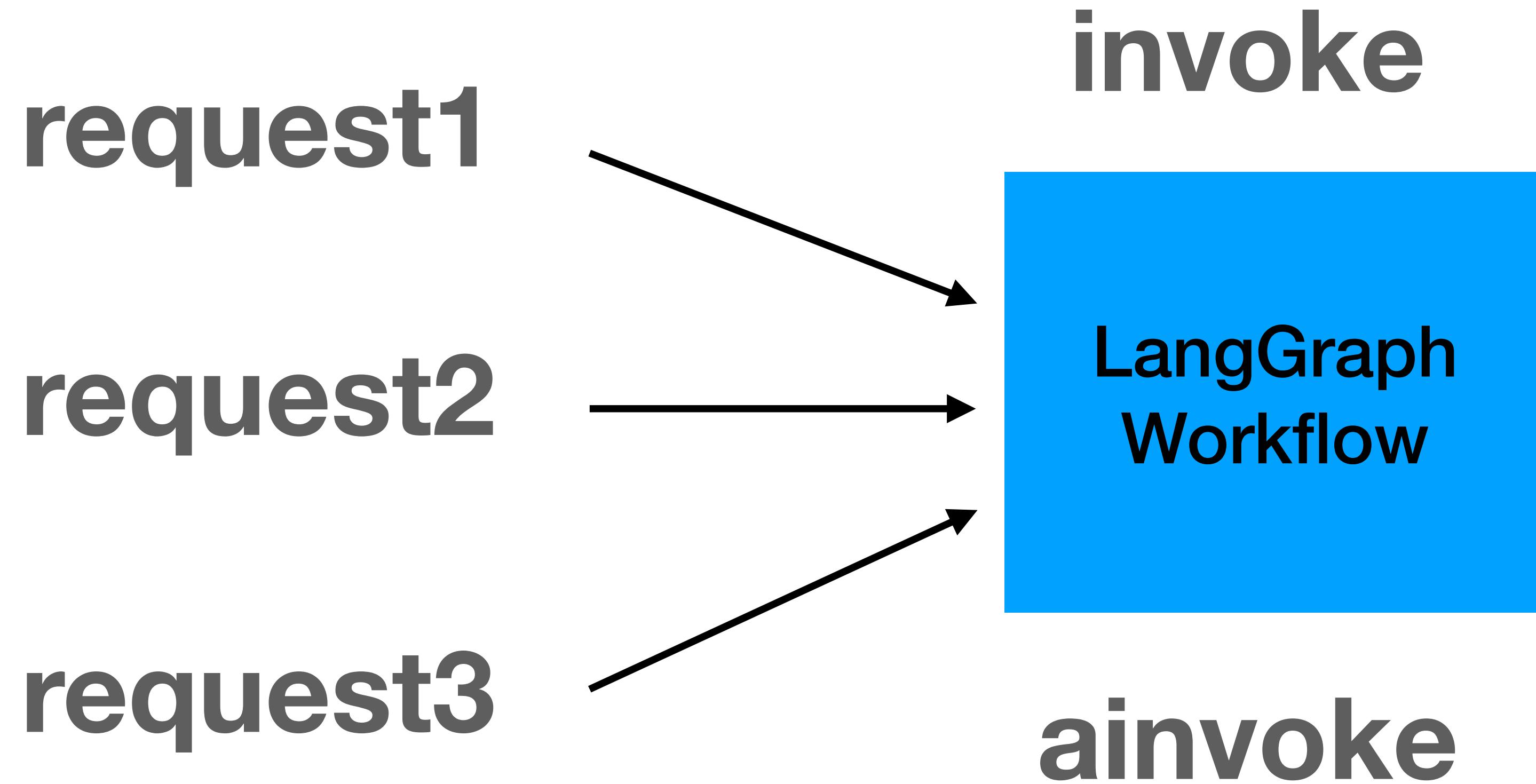


MessageState

add_message

Async and Streaming

Async



Streaming Types

values

updates

messages

custom

debug

Reflection



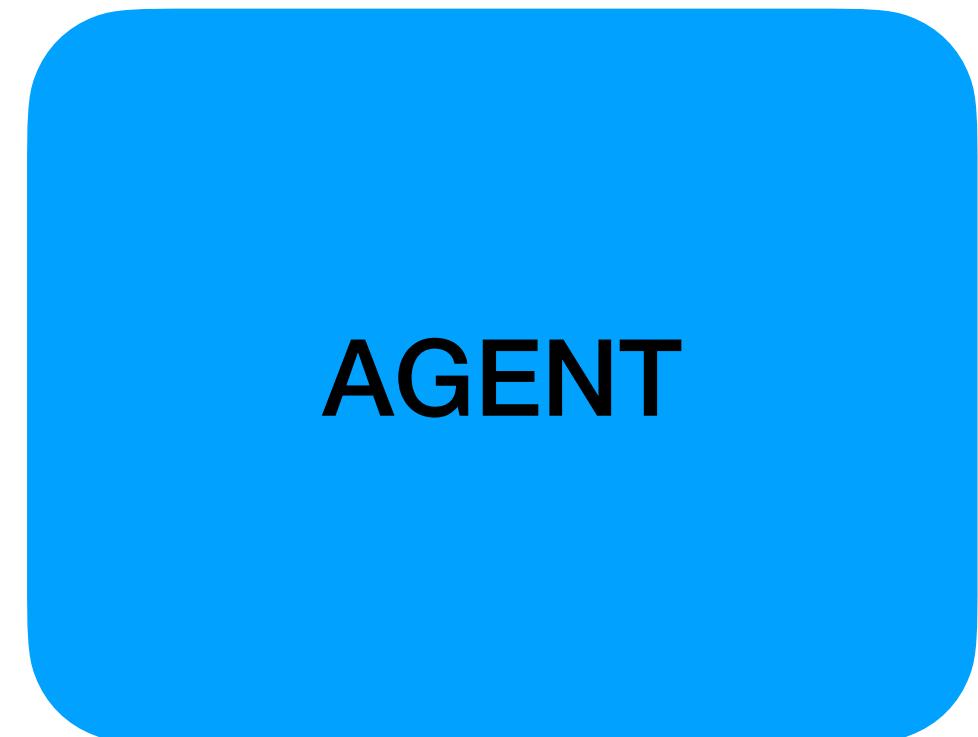
Generates an initial solution

Reviews and evaluates its own output

Improves based on feedback

Repeats until a stopping criterion is met

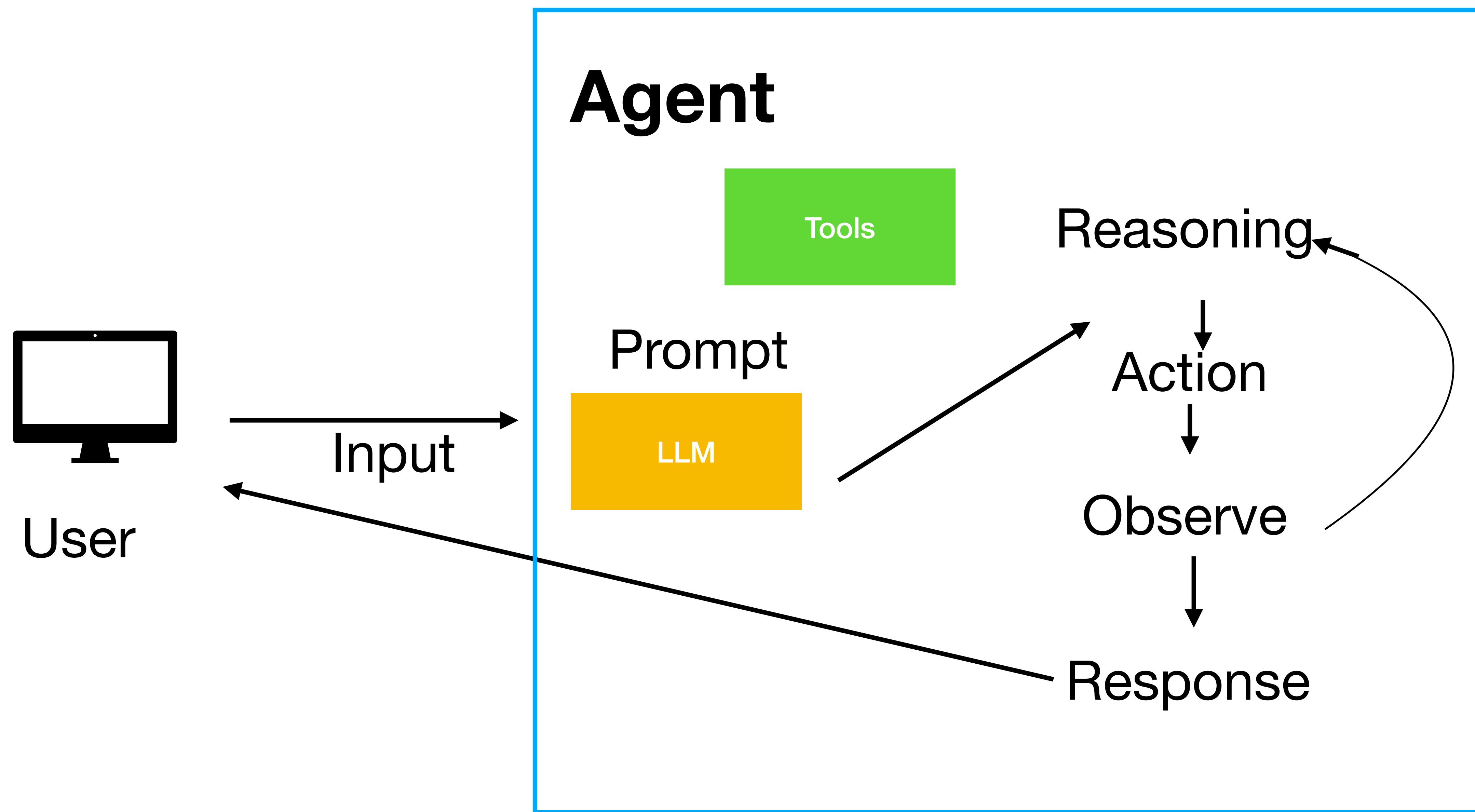
Tree Of Thought



Generates multiple solutions

Breaks down and evaluates

Ranks and selects the best option



Tools

Search Tools

Retrieval Tools

Calculation Tools

Code Execution Tools

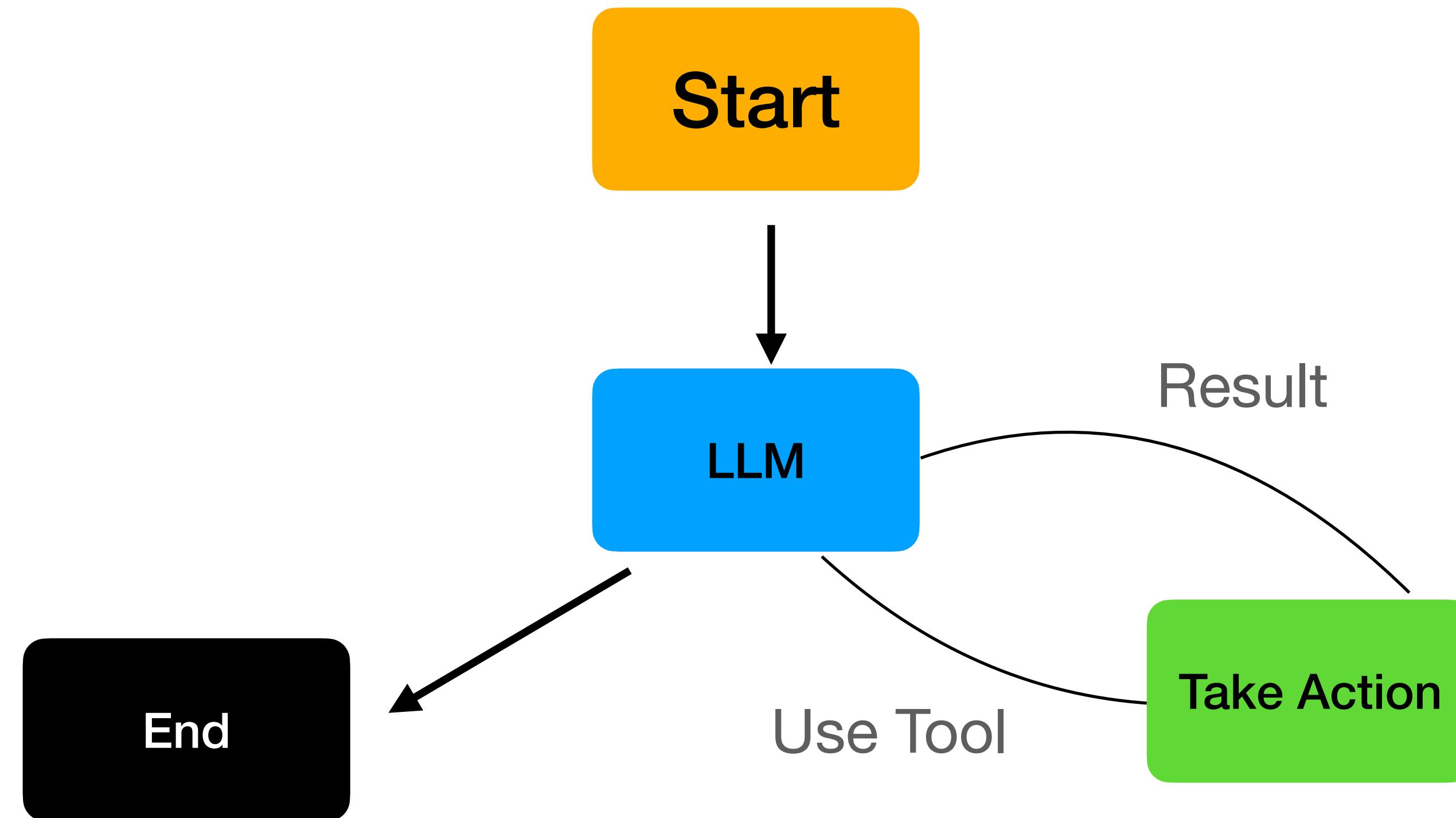
Data Querying Tools

File Manipulation Tools

Custom API Tools

Browser Tools

What is LangGraph



Workflow

Why

Memory/state sharing

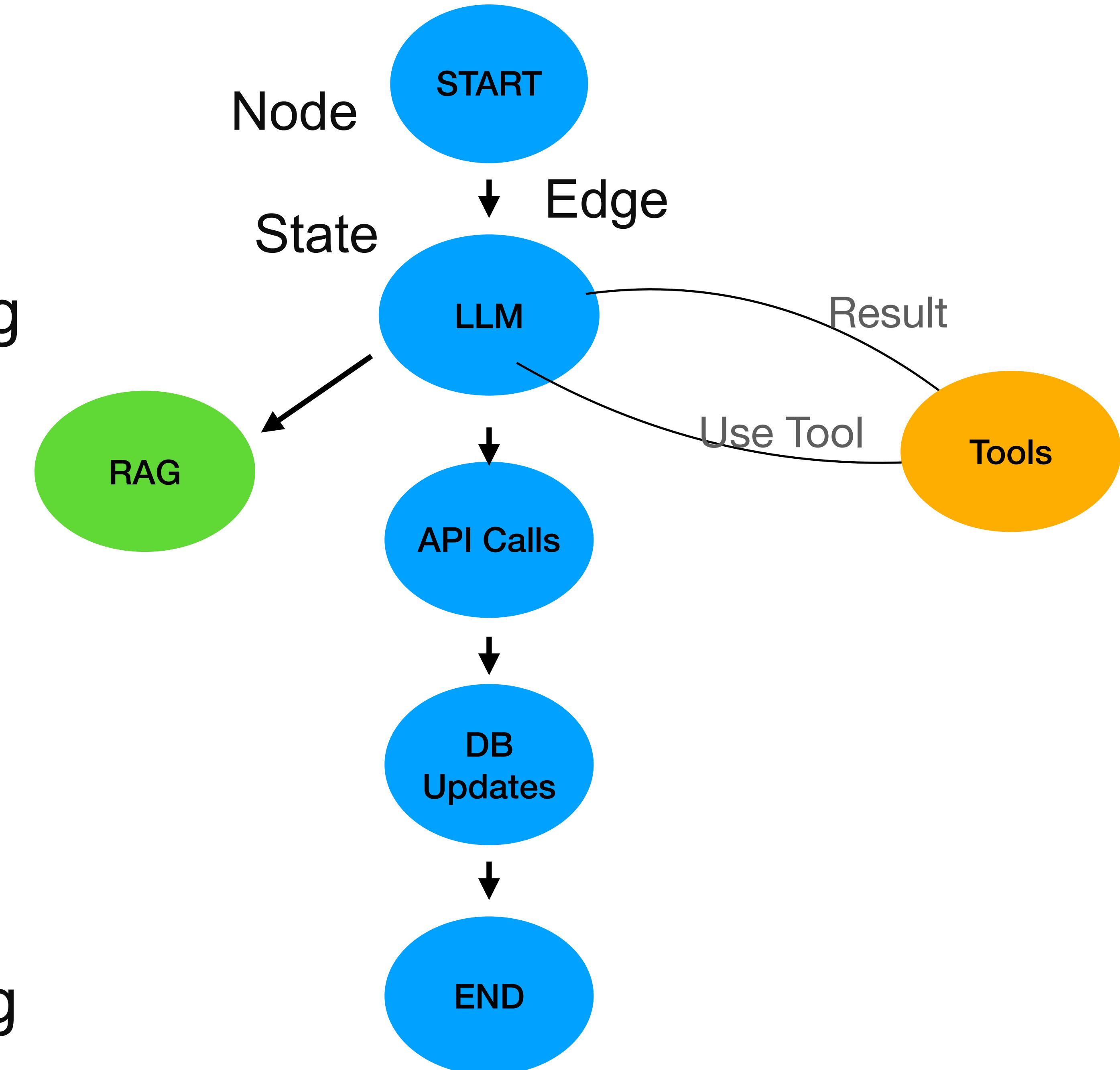
Conditional Routing

Tool Calling

Human in the loop

Persistence

Async and Streaming



Usecases

Multi-Agent Research Assistant

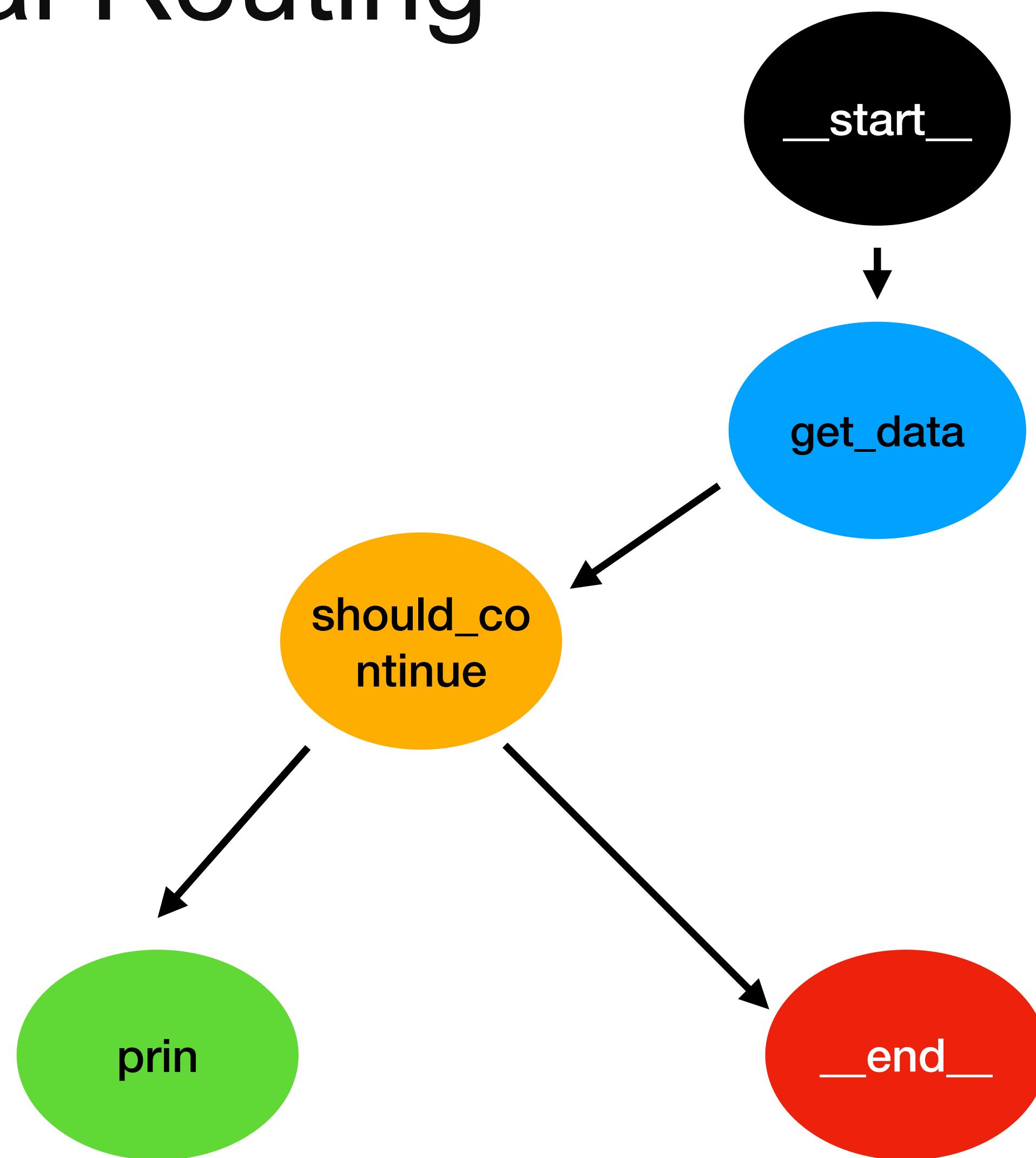
RAG-Based Knowledge Bot

Intelligent Claim Processing System

AI-Powered Student Tutor

Autonomous Coding Assistant with Reviewer Loop

Conditional Routing



Checkpointer

Checkpoint ID

Graph State

Current Node Info

Edge info

Metadata (optional)



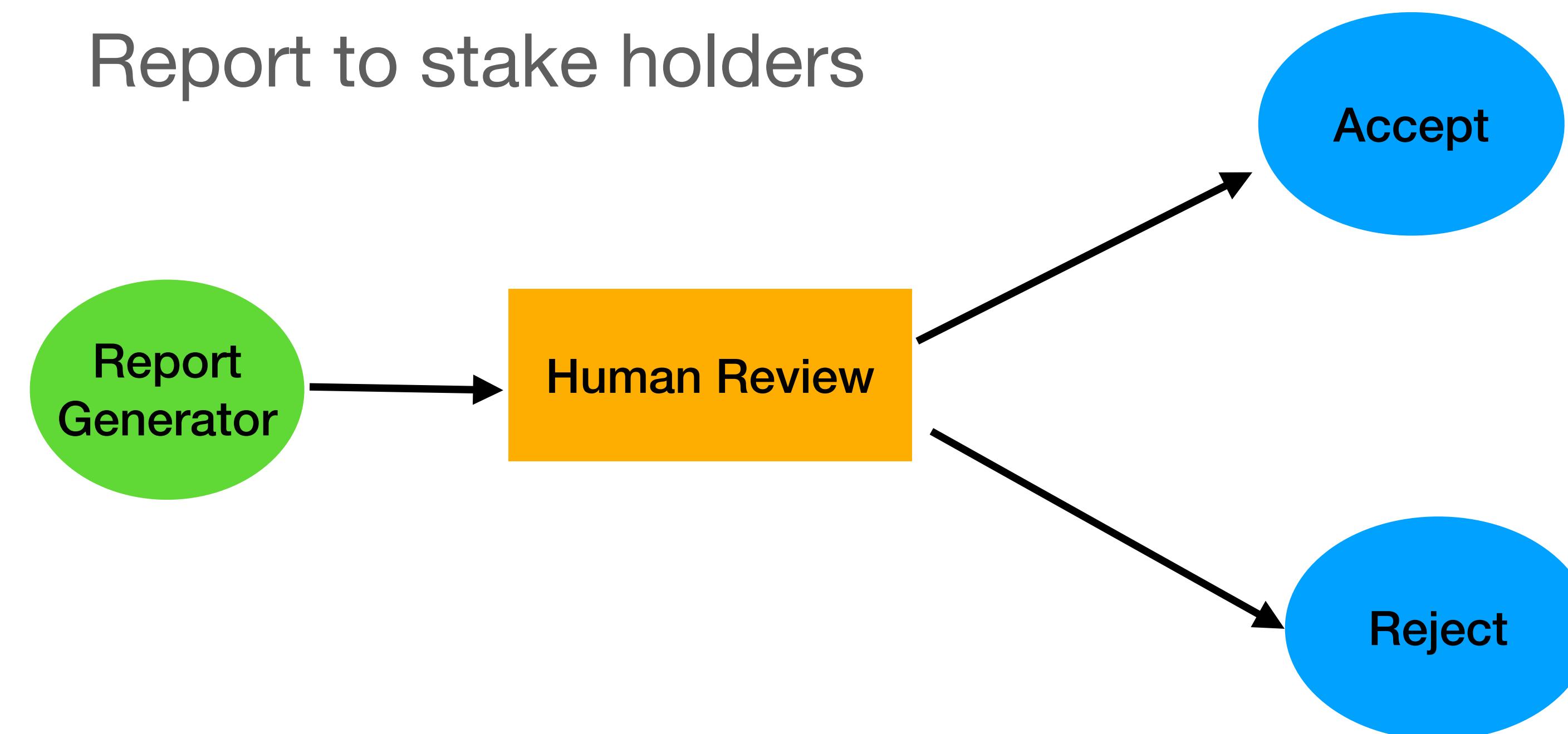
Validation

Input

Decision

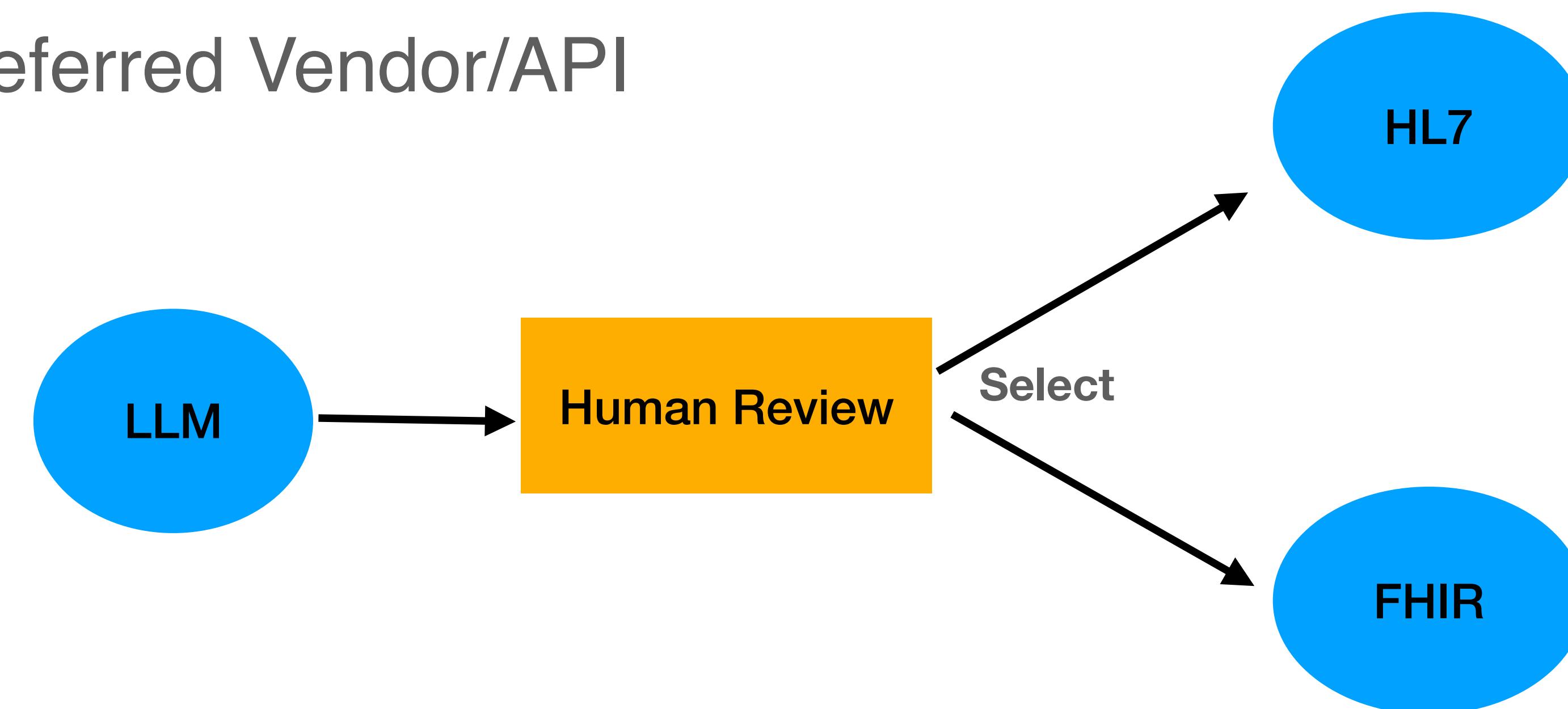
Accept/Reject

Report to stake holders



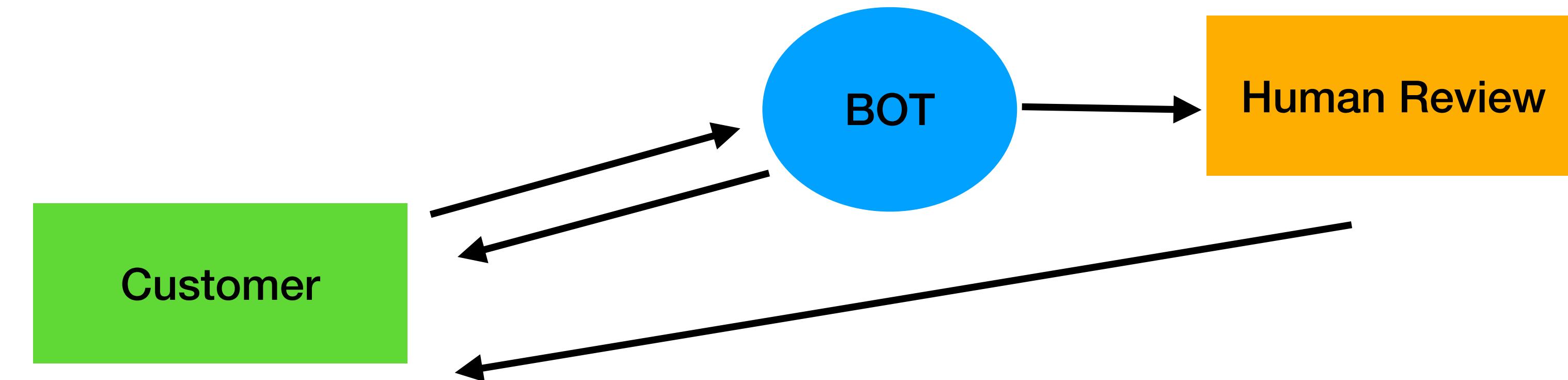
Review Tool Calls

Preferred Vendor/API



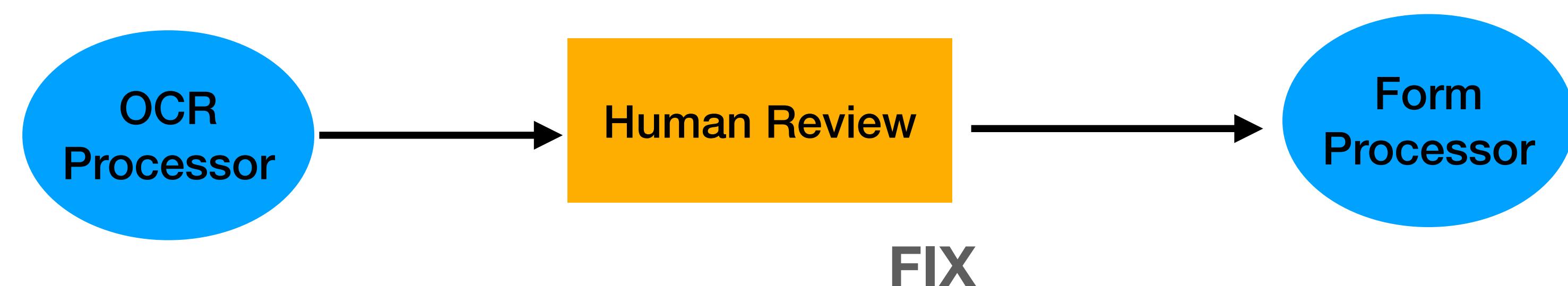
Fallback when agent is uncertain

Complex Customer Service Issue

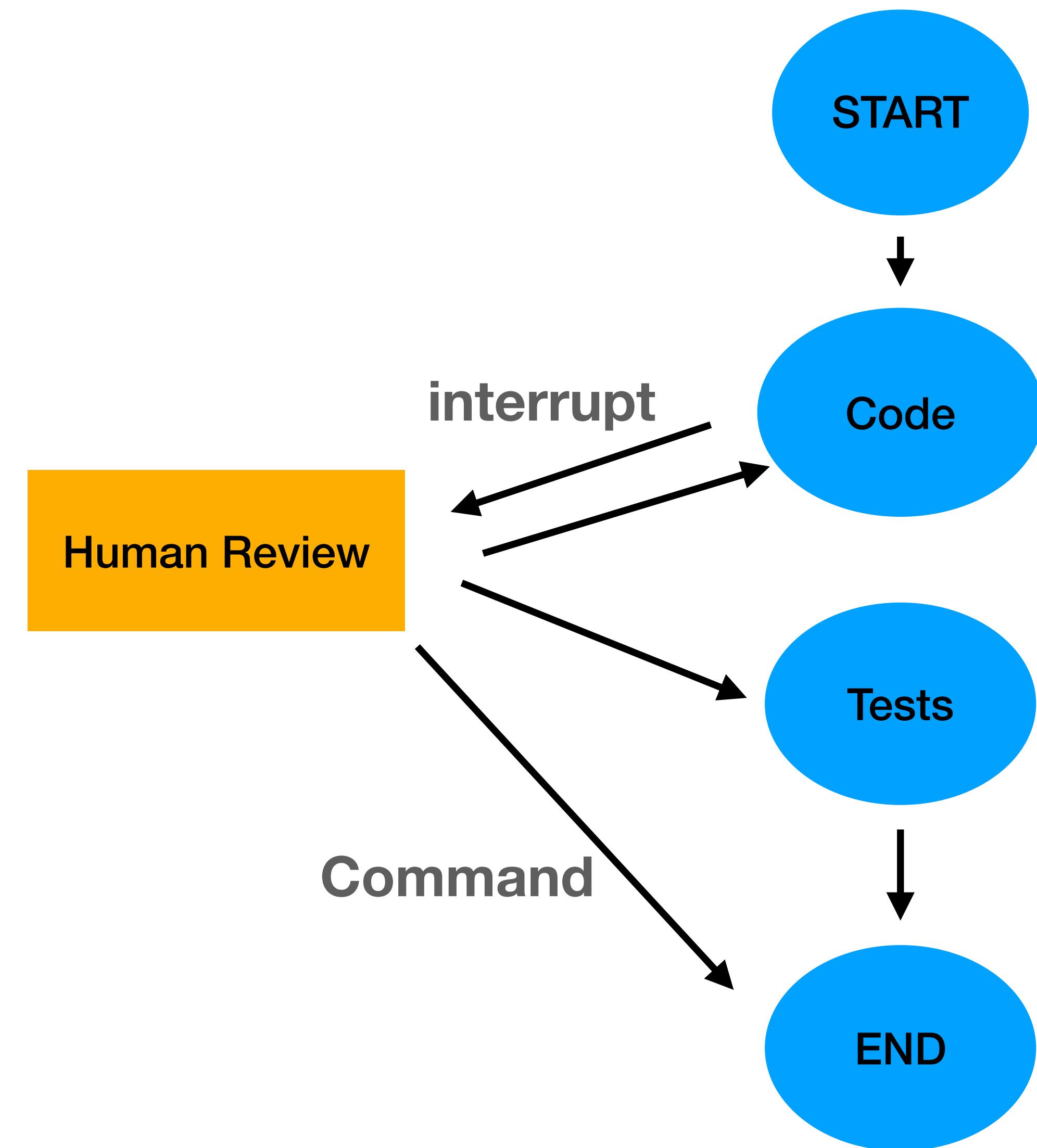


Review and Edit State

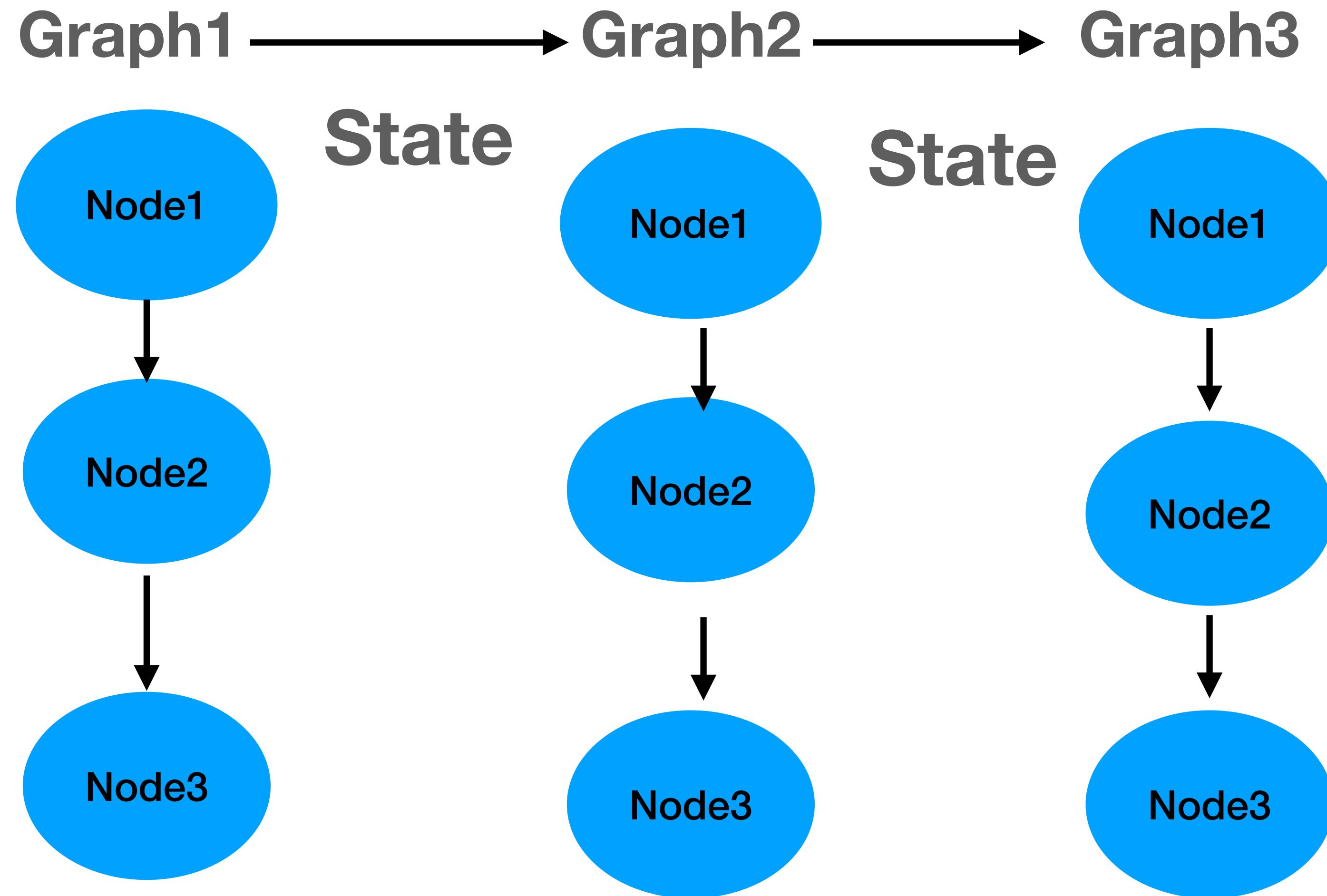
OCR to Form



Code and Test Generation



Subgraphs



Multi Agentic Systems

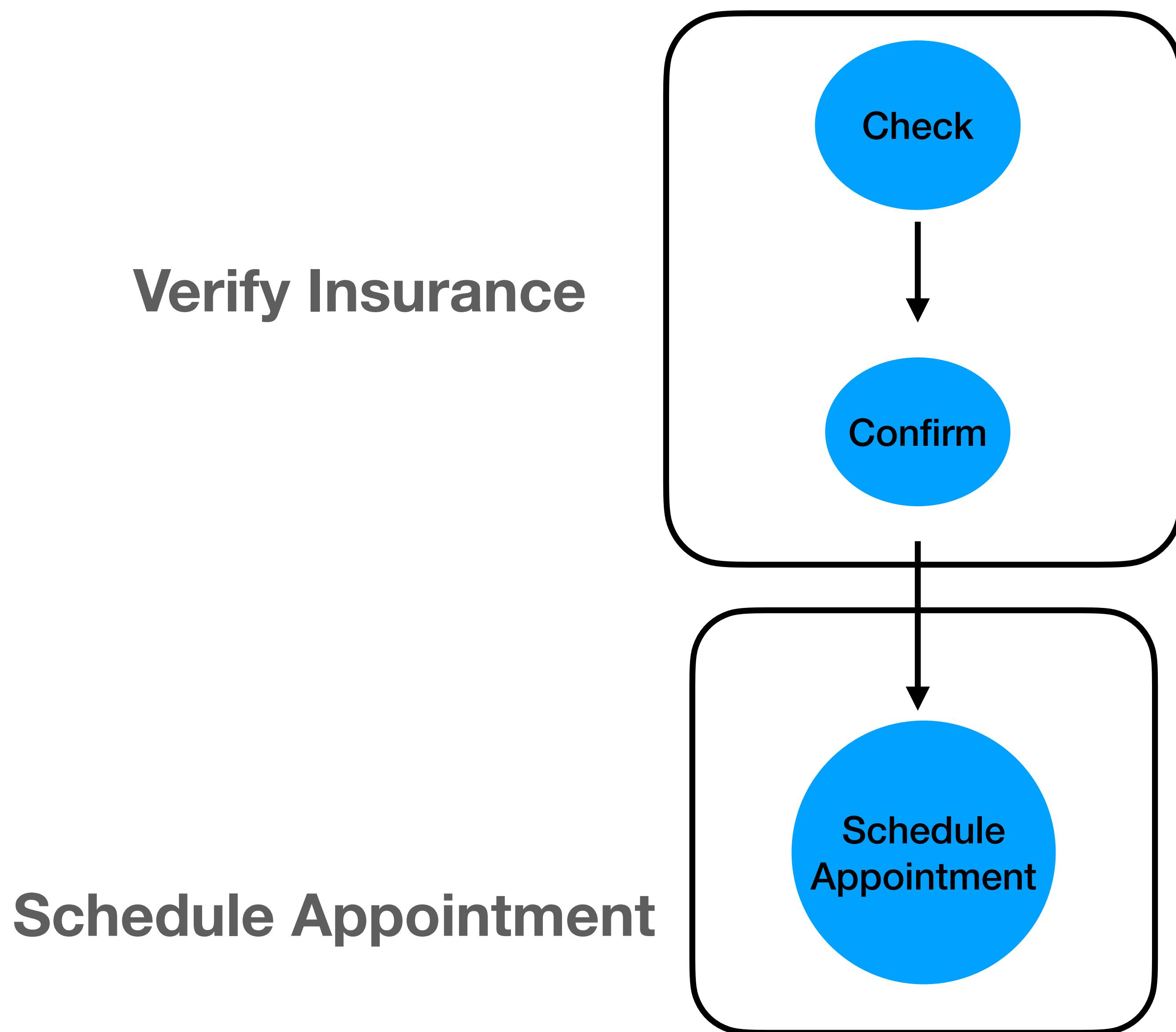
Modularity

Reusability

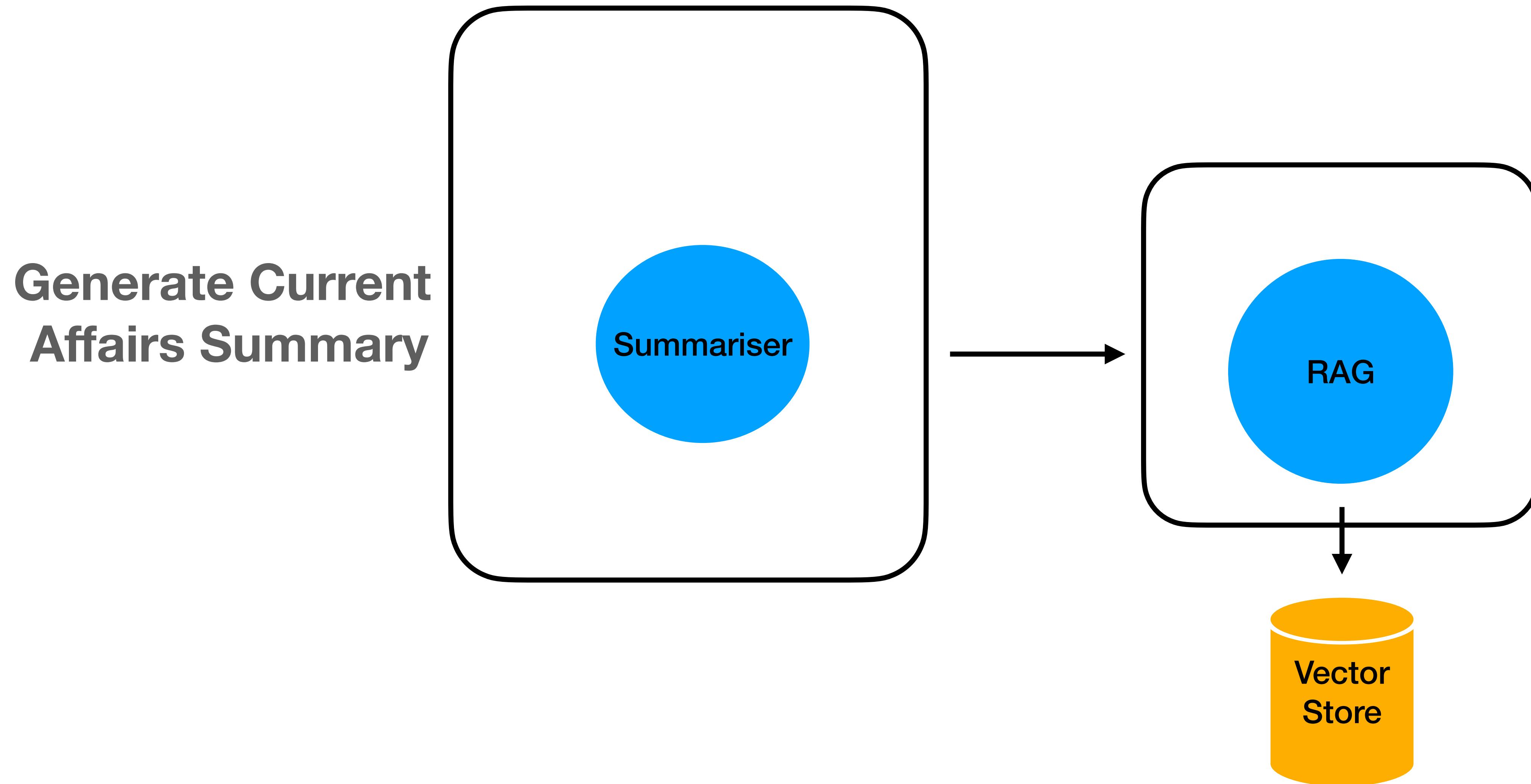
Testability

Clean Design

As Node



Invoke



Insurance Claim Processing Flow



Agentic Patterns

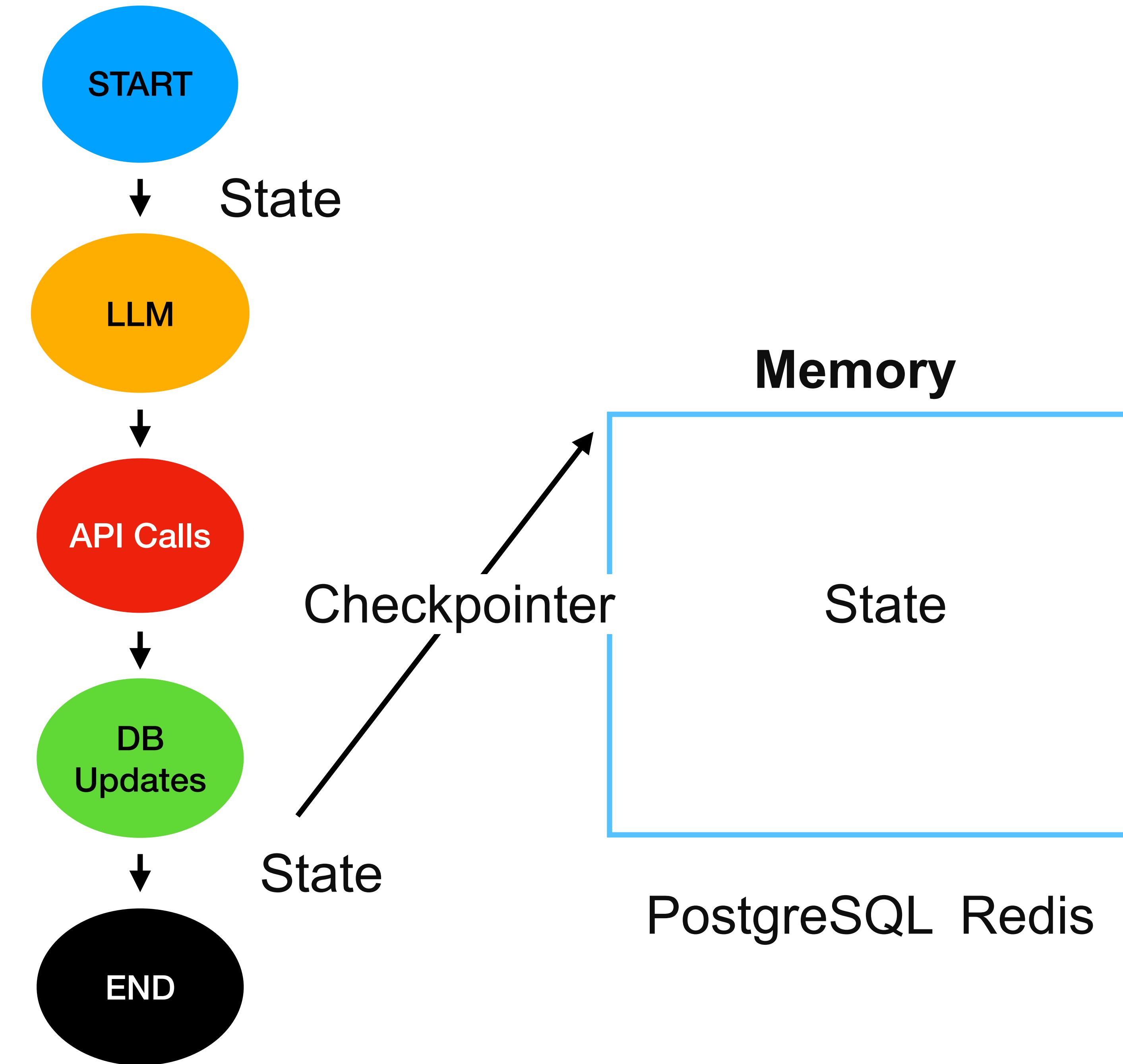
Blueprint

Reflection

Tree Of Thought

Parallel Execution

Memory



LangSmith

LangChain

Observability

LangGraph