Project Introduction and Architecture: Build a Reflective Dynamic Planning Agent for Multi-Step Complex Query Analysis

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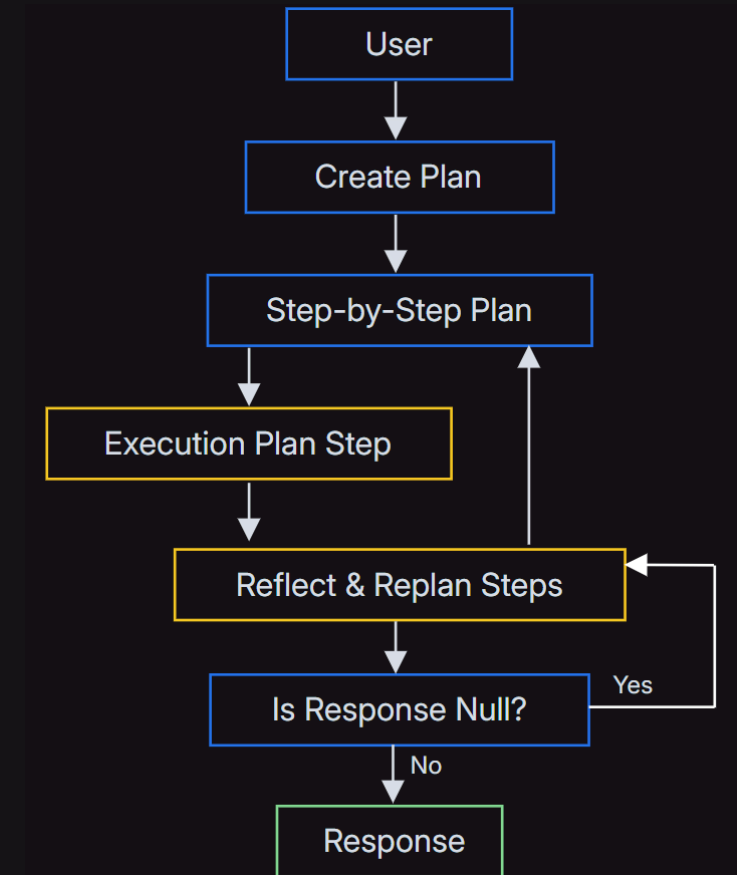Head of Community & Principal AI Scientist at Analytics Vidhya

Google Developer Expert - ML & Cloud Champion Innovator
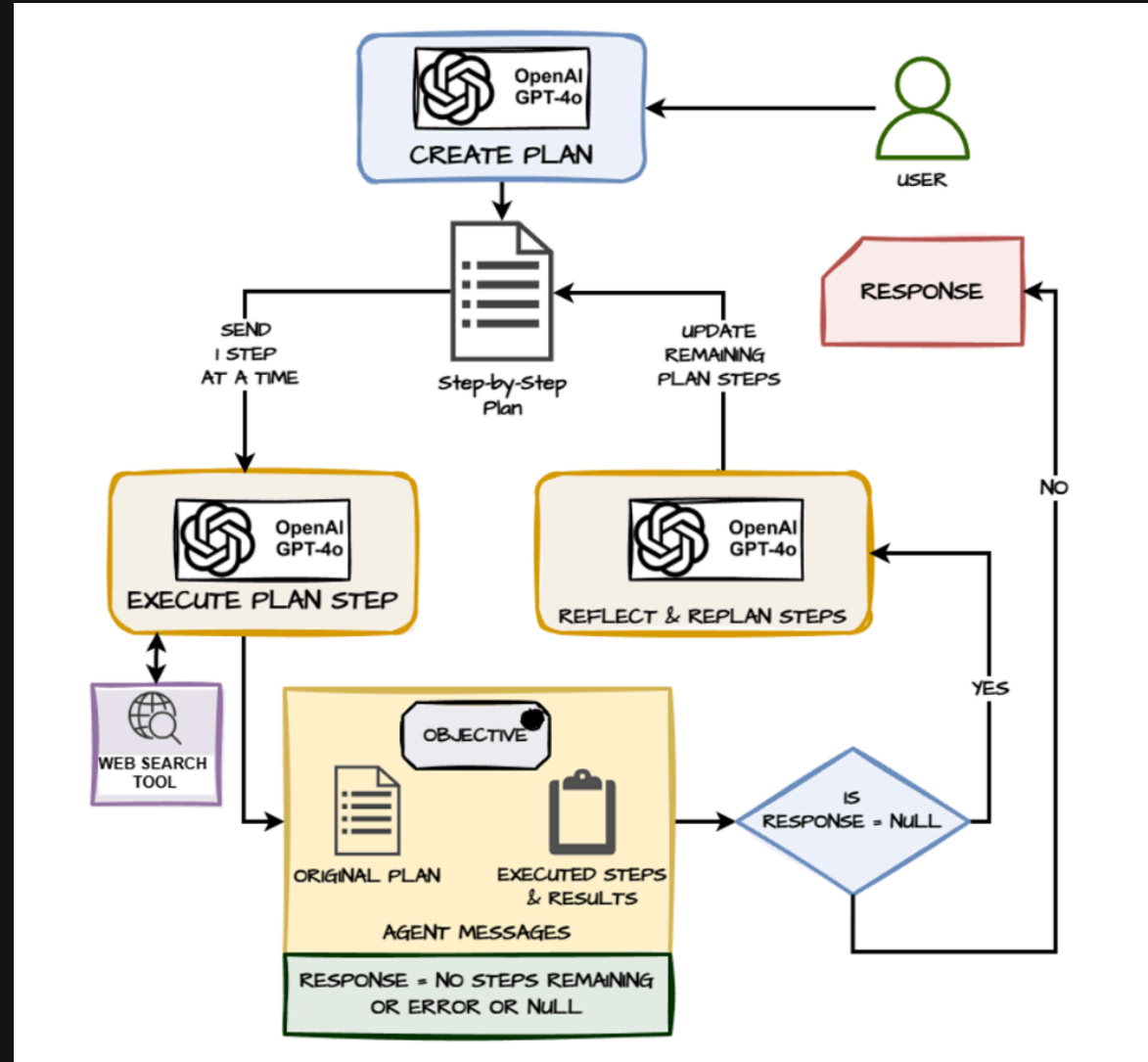
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Project Objectives

- Understand essentials of reflection and dynamic planning agents

- Build a Reflective Dynamic Planning Agent for Multi-Step Complex Query Analysis:
  - Analyze user topic or question
  - Break it down into a plan of sub-questions or steps to solve the overall task
  - Execute each step
  - Update agent state with steps executed and their result
  - Send overall plan, steps executed, results and remaining steps to the replanner
  - Replanner may or may not update remaining steps
  - Repeat till errors or all steps are executed
  - Compile and show final response

User → Create Plan → Step-by-Step Plan → Execution Plan Step → Reflect & Replan Steps → Is Response Null? — Yes → Reflect & Replan Steps / No → Response

Reflective Dynamic Planning Agent for Multi-Step Complex Query Analysis Architecture

Thanks