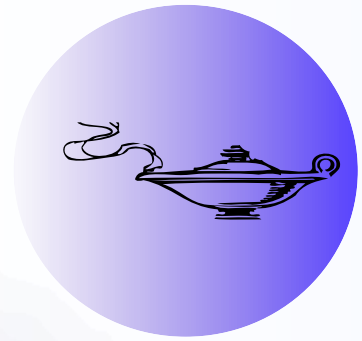# Luddy Hacks Case 1

IdeaGenie

AI Agent for Prioritizing Ideas using ReAct Framework

Helping teams move faster by building what truly matters - first!

Problem Statement Challenge:

Organizations collect hundreds of innovation ideas via platforms like ServiceNow. The challenge is to prioritize them efficiently.

Key Questions:
•How do we balance implementation effort, ROI, and strategic alignment?
•How can AI help in reasoning through this decision-making process?

Objective: Build an AI Agent that evaluates ideas using reasoning + action (ReAct), then ranks them with justifications.

Solution Overview Architecture:

- 🧠 **LLM-based ReAct Agent** — Thinks & Acts in two phases.
- 🧮 **Evaluation Metrics** — Effort (Time, Resources), ROI (Value, Demand, Impact).
- 📦 **Vector Search (FAISS)** — Finds similar ideas for better context.
- 📄 **Logs & Justifications** — Transparent and explainable decisions.
- 📊 **Dashboard (React)** — Visualizes Top 3 ideas with reasoning.
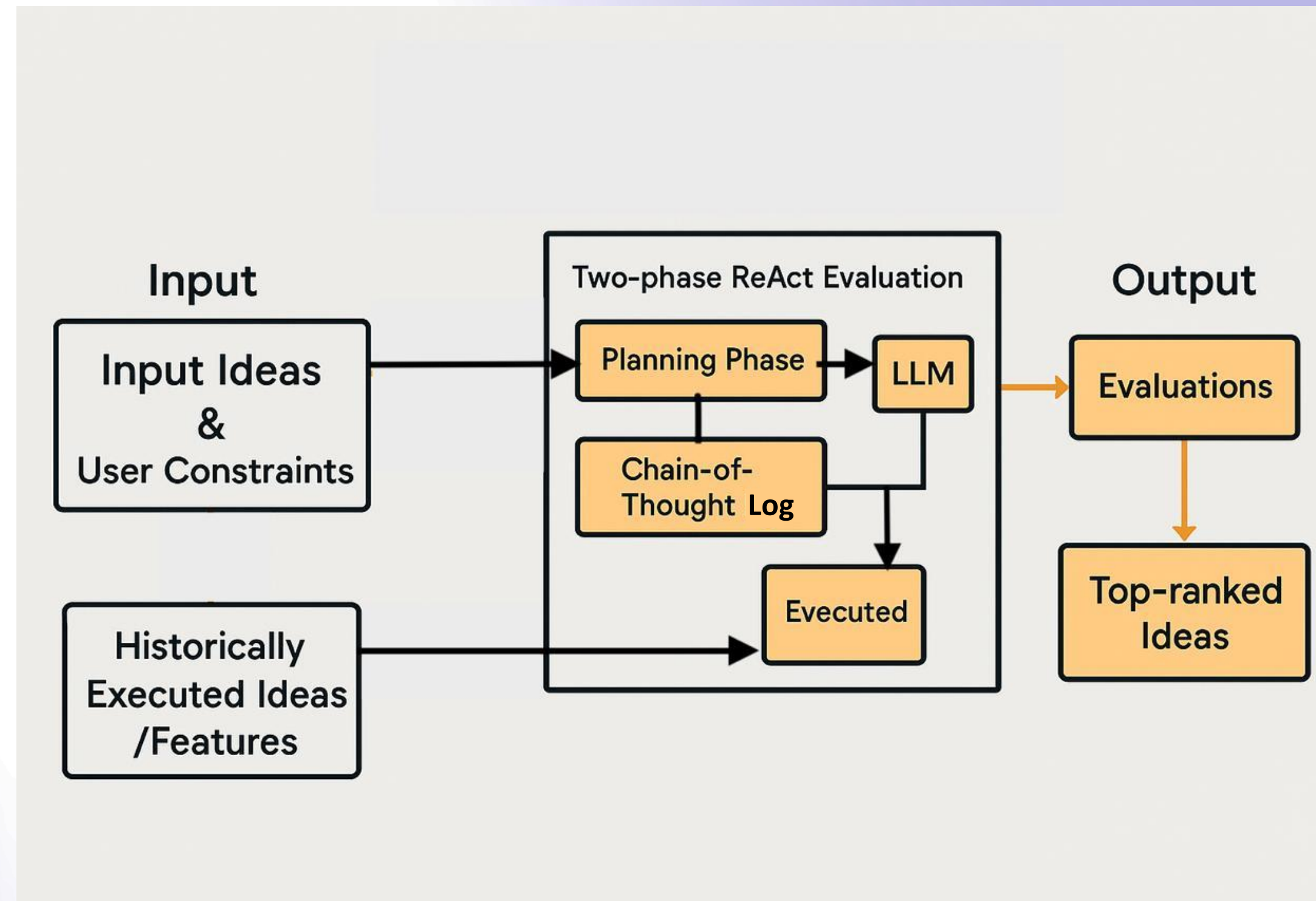
ReAct Logic Breakdown Two-Phase Chain-of-Thought Process:

1.Planning Phase (Reasoning):

    1.Decides if similar ideas should be retrieved.

    2.Creates an evaluation plan.

    3.Output: "Action: RetrieveSimilar" or "Action: NoRetrieve".
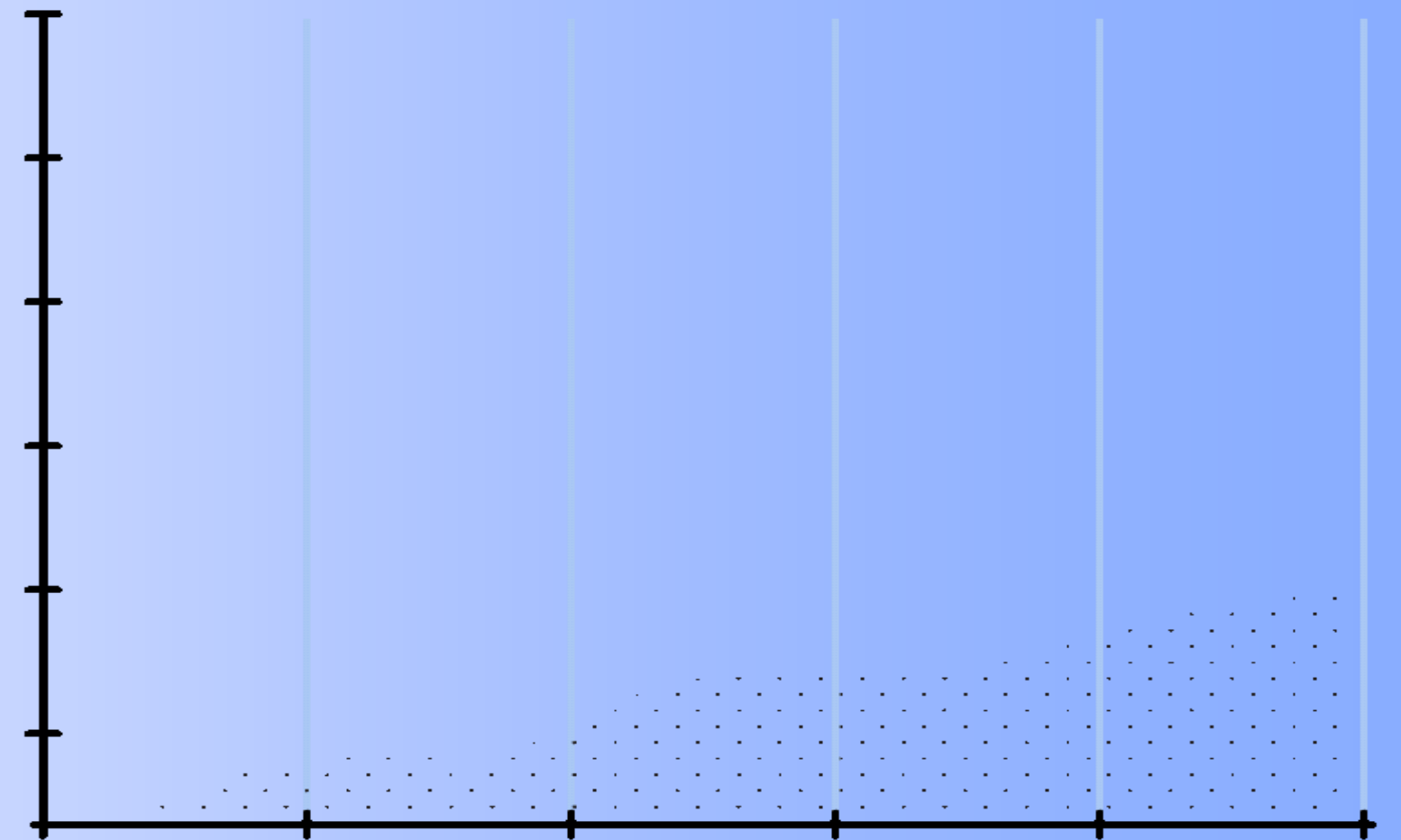
2.Finalization Phase (Action):

    1.Executes evaluation using plan + context.

    2.Outputs: Composite Score + Justification.

Bonus: Logs full plan, action, and final output for transparency.

How Our ReAct-Based AI Agent Meets the Requirements

- ✅ **Effort & ROI Analysis**
→ Uses LLM prompts with metrics like engineering hours, dependencies, revenue uplift, user impact.
- ✅ **Top 3 Idea Selection**
→ Automatically ranks ideas by composite score and justification.
- ✅ **Explicit Reasoning (ReAct)**
→ Two-phase logic: Plan (Reasoning) + Final Evaluation (Action) with verbose logging.
- ✅ **Mock Dataset + Similarity Search**
→ Realistic idea dataset and FAISS-based retrieval of related past ideas.
- ✅ **Explainability + Logs**
→ Justifications and reasoning saved for clear audit and visualization.
- 💡 **Future Ready**
→ Modular design allows adding feedback loop for learning.

Lets Get Into Demo

THANK YOU!