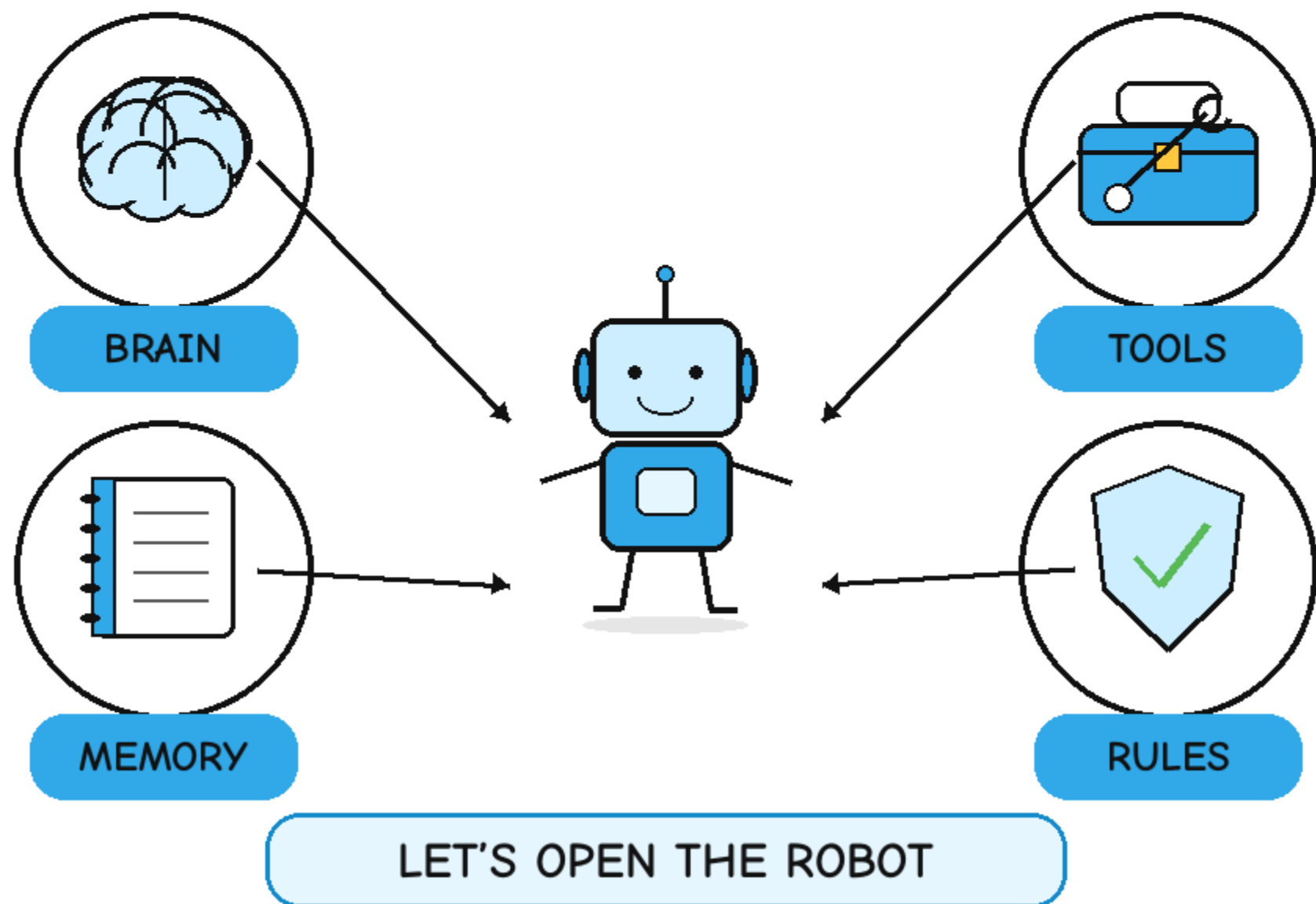


Inside an AI Agent Brain + Tools + Memory + Rules

An agent is not one magical model. It is a small system of parts working together.



The Easiest Analogy

Think of an AI agent as a capable new employee.

"Please organize our team lunch."

BRAIN



Decides what to do

TOOLS



Uses apps and systems

MEMORY

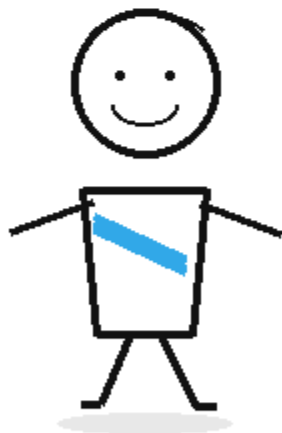


Checks notes and past work

RULES



Follows policy and asks approval

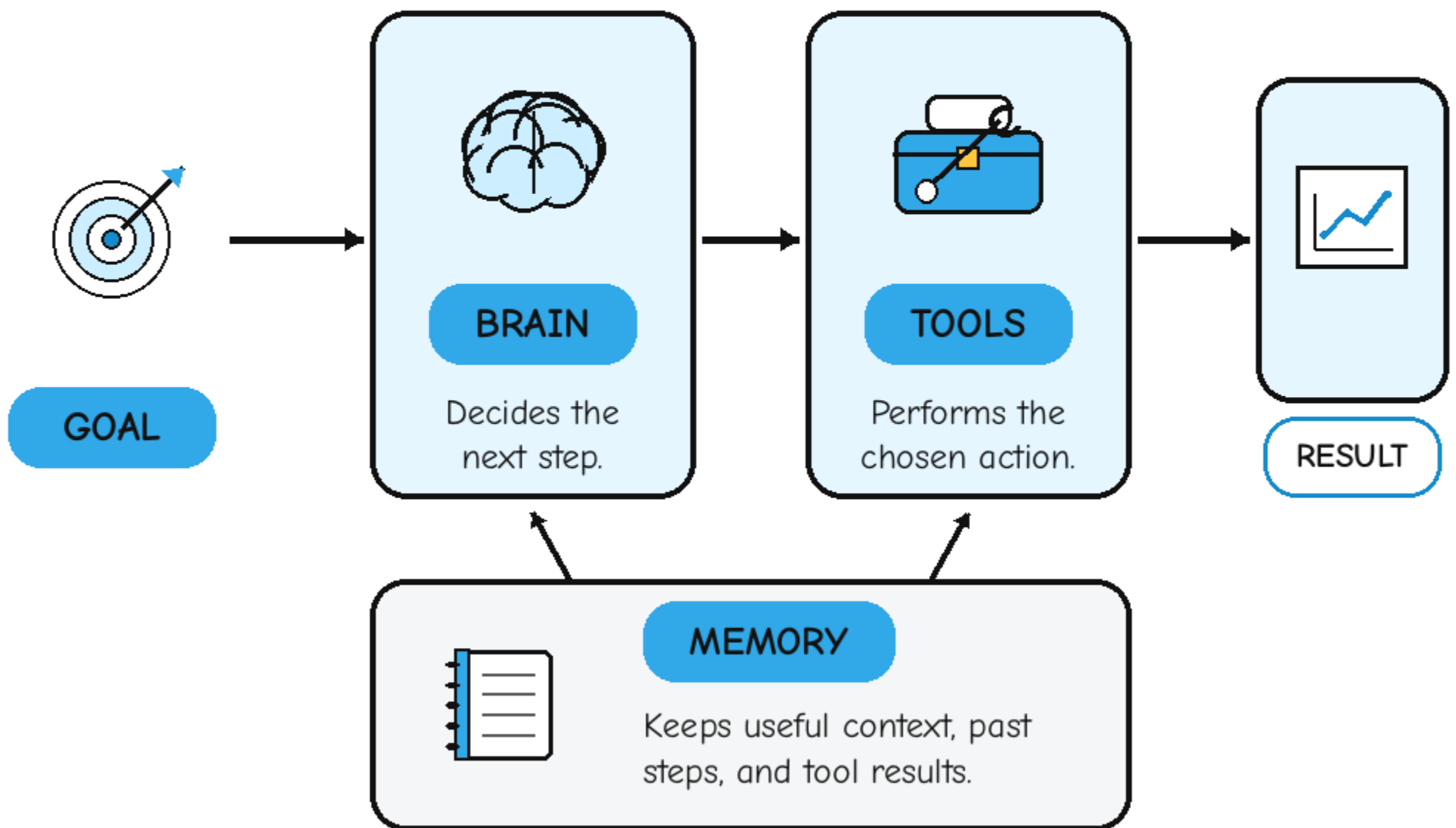


You give the goal. The employee figures out the work.

The Anatomy Map



RULES APPLY TO EVERY STEP



GOAL > DECIDE > ACT > OBSERVE > RESULT

AGENTIC AI SERIES: DAY 3

First: Give the Agent a Clear Goal

TOO VAGUE

"Do something with our sales data."

The agent may solve the wrong problem — or keep wandering.

CLEAR GOAL

"Find why sales fell last month and create a one-page summary using approved data."



A GOOD GOAL ALSO DEFINES

SUCCESS

What "done" looks like

LIMITS

Time or budget

OUTPUT

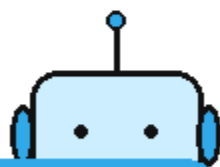
Report, table, or action

APPROVAL

When to ask a human

A smart agent with a bad goal can still fail.

1) Brain: The Decision Maker



EXAMPLE

Goal: Plan dinner for 6 under INR 2,000.

Brain: "I need preferences, budget, location, and available options."

OFTEN AN LLM OR OTHER MODEL

- Understands the goal and current situation.
- Breaks a large task into smaller steps.
- Chooses which action or tool to use next.
- Interprets results and adjusts the plan.

The brain decides — but cannot touch the outside world alone.

2) Tools: The Agent's Hands

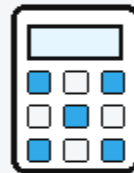
Tools let the agent interact with information, software, and the real world.

SEARCH / BROWSER



Find current
information

CALCULATOR / CODE



Compute and
analyze

EMAIL / CALENDAR



Coordinate work

FILES / DATABASE



Read and store data

APPS / APIs



Book, create, update

A tool is an ability—not intelligence.

3) Memory: The Agent's Notebook

WORKING MEMORY



Keeps what the agent needs right now:

- Current request
- Steps already completed
- Latest tool results

LONG-TERM MEMORY



Stores useful information for future tasks:

- User preferences
- Past decisions
- Lessons from earlier results

Example: "Vegetarian, lives in Hyderabad, prefers short reports."
Not every agent has long-term memory—and it should store only useful, permitted information.

4) Rules: The Seatbelt and Boundary



INSTRUCTIONS

What job should the agent do?

PERMISSIONS

Which data and tools may it access?

POLICIES

Which actions are forbidden or sensitive?

APPROVAL GATES

When must it ask a human first?

Draft an email: **ALLOWED**. Send it: **ASK FOR APPROVAL**.
Delete data or make a payment: **NEVER** without explicit permission.

AGENTIC AI SERIES: DAY 3

All Four Parts Working Together

GOAL: Plan a 2-day Goa family trip under INR 30,000—but do not book anything.



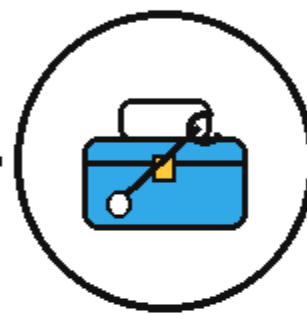
BRAIN

Creates a plan and decides what to check.



MEMORY

Remembers: 2 adults, 1 child, vegetarian.



TOOLS

Searches travel, hotels, weather, and costs.



RULES

Stops before booking and asks the user.

RESULT: A safe shortlist, estimated budget, and clear next steps.

The user gave one goal. The system coordinated the work.

AGENTIC AI SERIES: DAY 3

Example: A Learning Agent

GOAL: Help a student improve at fractions.

BRAIN

Chooses a lesson, example, and quiz.

MEMORY

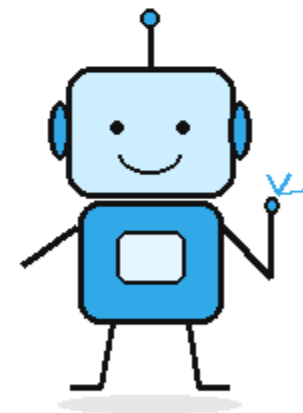
Remembers which mistakes keep happening.

TOOLS

Uses a worksheet, video, and quiz app.

RULES

Teach safely; do not just reveal every answer.



After each quiz, the next lesson changes based on the student's errors.

Example: A Tech-Support Agent

GOAL: Diagnose a VPN problem and create an expert-ready case if it cannot fix it.

BRAIN



Chooses the next diagnostic test.

TOOLS



Reads logs, knowledge articles, and ticket data.

MEMORY



Tracks tests already run and their results.

RULES



No account reset or risky change without approval.

RESULT: Fix the issue—or escalate with logs, tests performed, and a concise summary.

AGENTIC AI SERIES: DAY 3

Same Anatomy. Different Domains.

HEALTHCARE ADMIN



Schedule appointments and summarize forms.
Rule: do not diagnose.

FINANCE ASSISTANT



Categorize expenses and prepare a budget.
Rule: do not transfer money without approval.

FARMING ASSISTANT



Compare weather, soil notes, and crop plans.
Rule: do not activate equipment automatically.

CREATOR AGENT



Research, outline, and draft content.
Rule: do not publish without approval.

The parts stay similar. The tools, memory, and rules change by domain.

AGENTIC AI SERIES: DAY 3

What Happens When a Part Is Missing?



NO CLEAR GOAL

The system may loop or solve the wrong problem.



NO BRAIN

It becomes fixed automation with no real decisions.



NO TOOLS

It can talk—but cannot perform outside actions.



NO MEMORY

It forgets context and repeats questions or work.



NO RULES

It may take risky or unauthorized actions.

A production agent is the whole system—not just the model.

Your 6-Question Agent Checklist

1

What is the goal?

2

Which model makes decisions?

3

Which tools may it use?

4

What should it remember?

5

Which actions need approval?

6

How does it know when to stop?

If you cannot answer these questions, the agent is not designed yet.

DAY 3 TAKEAWAY

Brain decides.
Tools act. Memory remembers.
Rules protect.

Together, these parts turn a model into a useful and controlled agent system.



BRAIN



TOOLS



MEMORY



RULES

NEXT UP

Day 4: The Agent Loop — Goal > Think > Act > Observe

Which part would you like to understand more deeply?