Introducing Agentic AI

Agentic AI functions as an autonomous AI agent.

It sets goals, plans tasks, makes decisions, executes actions, and interacts with systems and humans.

This technology thinks like a human assistant or co-pilot.

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Key Capabilities of Agentic AI

Autonomy

Makes decisions without constant prompts.

Memory

Remembers goals, history, and preferences.

Planning

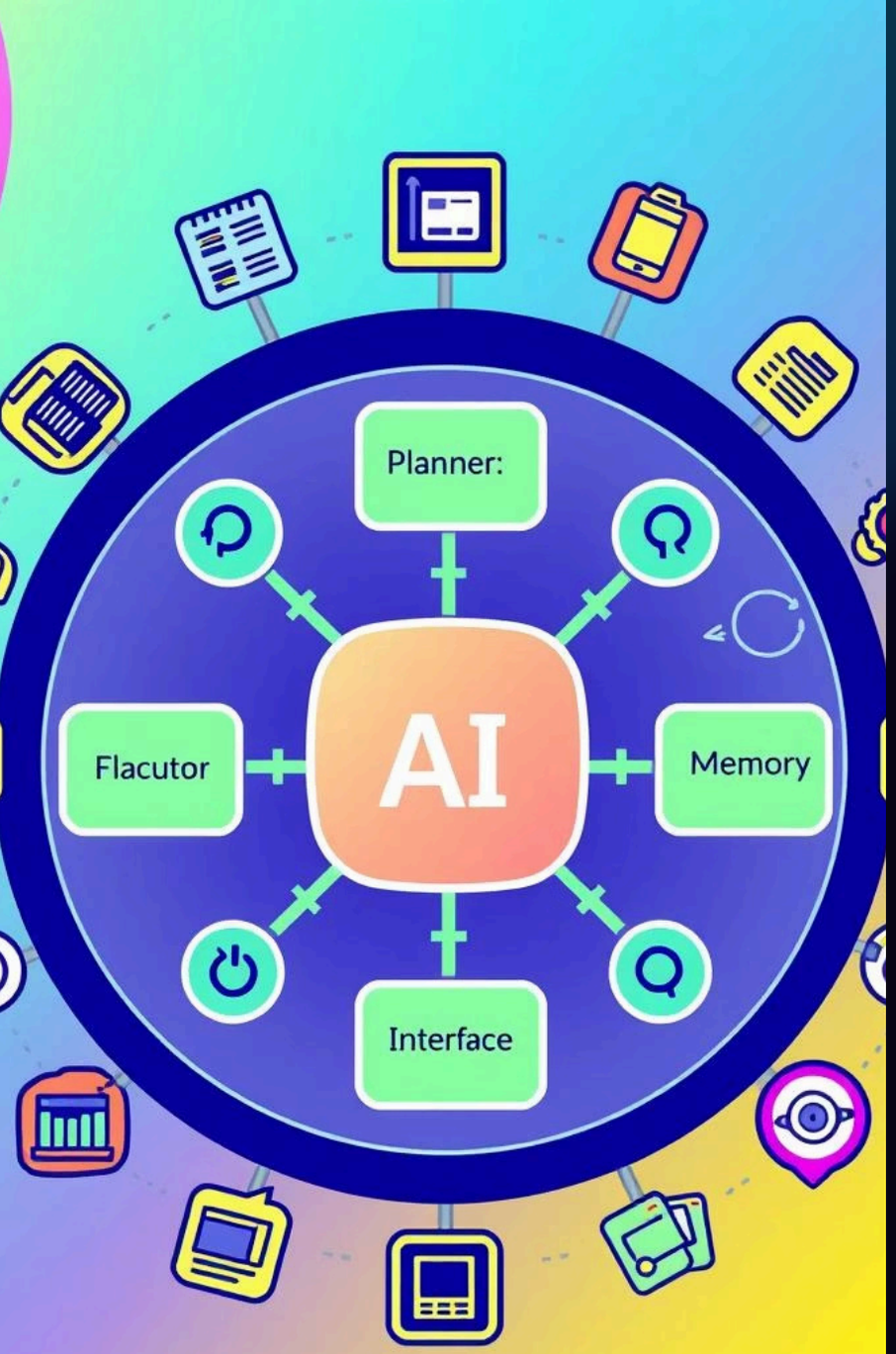
Breaks down objectives into steps.

Tool Use

Interfaces with APIs, websites, and databases.

Feedback Loop

Self-improves with evaluation.



Agentic AI Architecture

1

Planner

Determines actions and strategy.

2

Executor

Performs designated tasks.

3

Memory

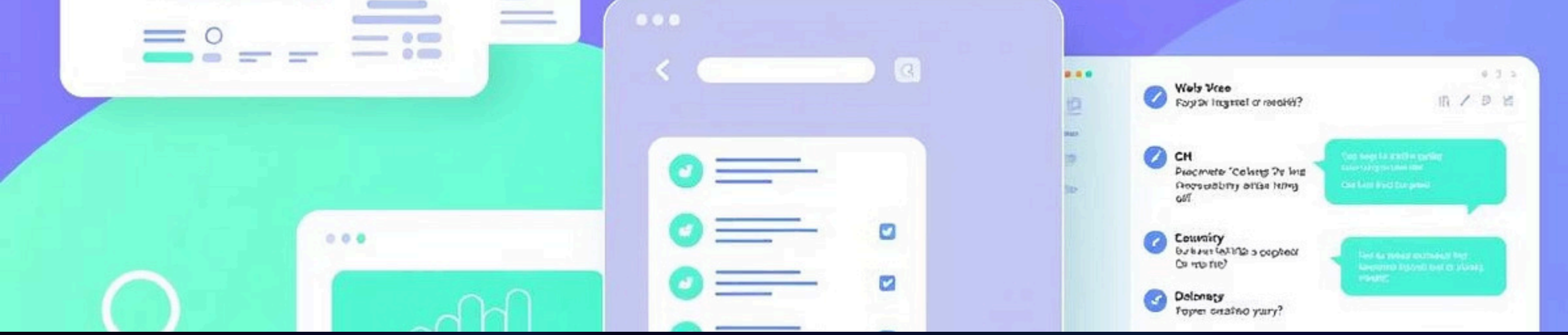
Stores and recalls information.

4

Interface

Communicates with agents and tools.

Often implemented with LLMs, APIs, and tool access (e.g., ReAct, AutoGPT).



Real-World Examples of Agentic AI

AutoGPT

Executes business tasks end-to-end autonomously.

BabyAGI

Creates and completes sub-tasks toward a larger goal.

HyperWrite AI Agent

Browses the web to answer complex queries.

Salesforce AI Agents

Automate sales follow-ups, scheduling, and emails.

Agentic AI in Healthcare

Virtual Assistant

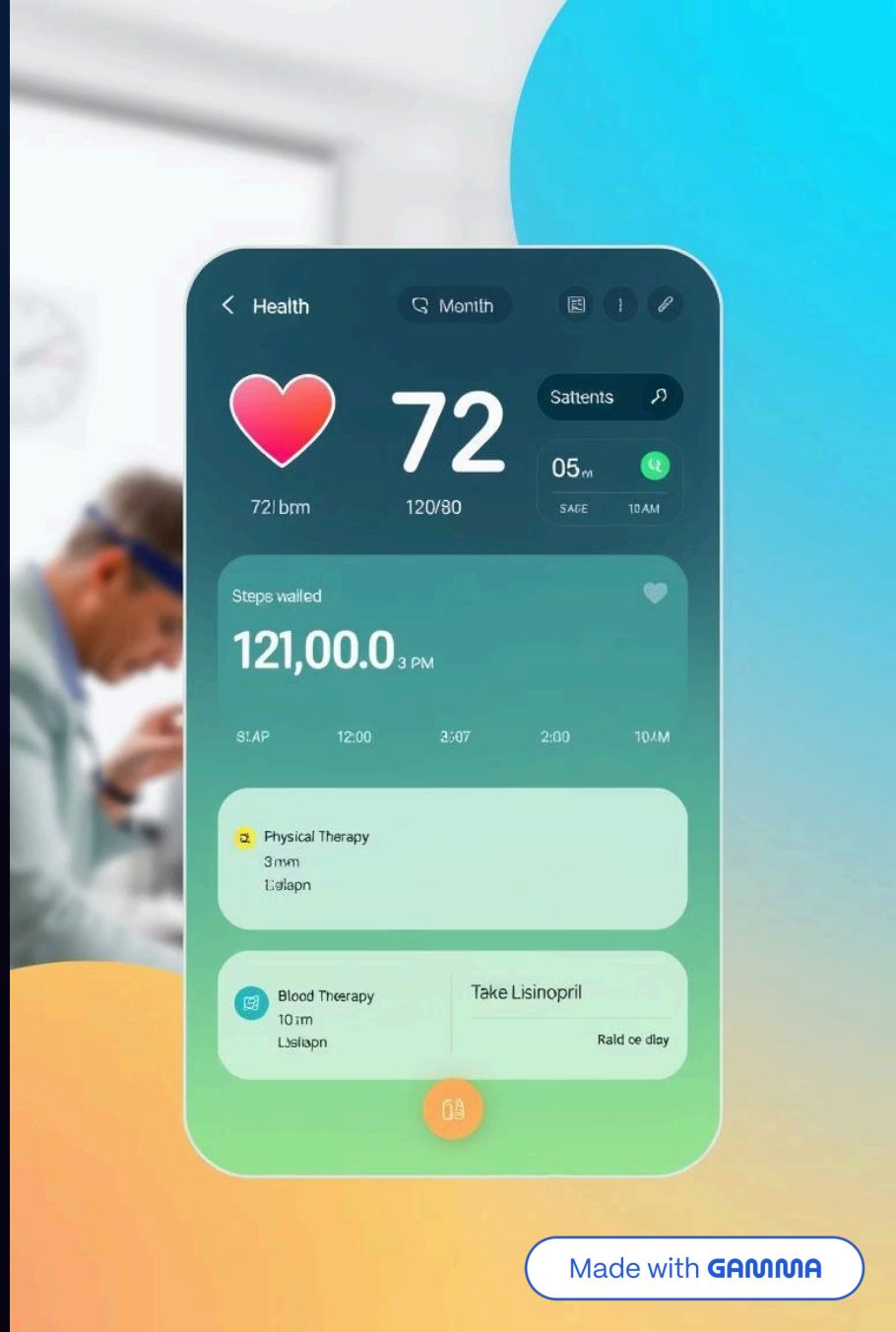
Schedules appointments and monitors medications.

Vital Alerts

Alerts doctors based on patient vitals.

Supply Ordering

Example: Diabetic patient's AI tracks glucose and orders supplies.



Agentic AI in Education

Personalized Learning

AI acts as an adaptive learning assistant.

Curriculum Planning

Plans curriculum based on learner's pace.

Adaptive Lessons

Gives practice tests and adapts lessons.

Example: Khanmigo by Khan Academy offers tailored educational support.

Agentic AI in Business

Workflow Automation

Automates entire business workflows.

Admin Management

Manages emails, schedules, and reporting.

CEO Co-pilot

Generates financial summaries and investor decks.

Performance Analysis

Analyzes performance and recommends actions.

Agentic AI in Customer Service

1

Conversational Agents

AI agents with persistent memory for seamless interactions.

2

Issue Resolution

Escalate tickets, resolve issues, and follow up effectively.

3

Service Automation

Example: AI agent tracks support history and books service appointments.

Agentic AI in Software Development

Goal-Driven Code

Codes based on high-level goals, not just prompts.

Full-Stack Creation

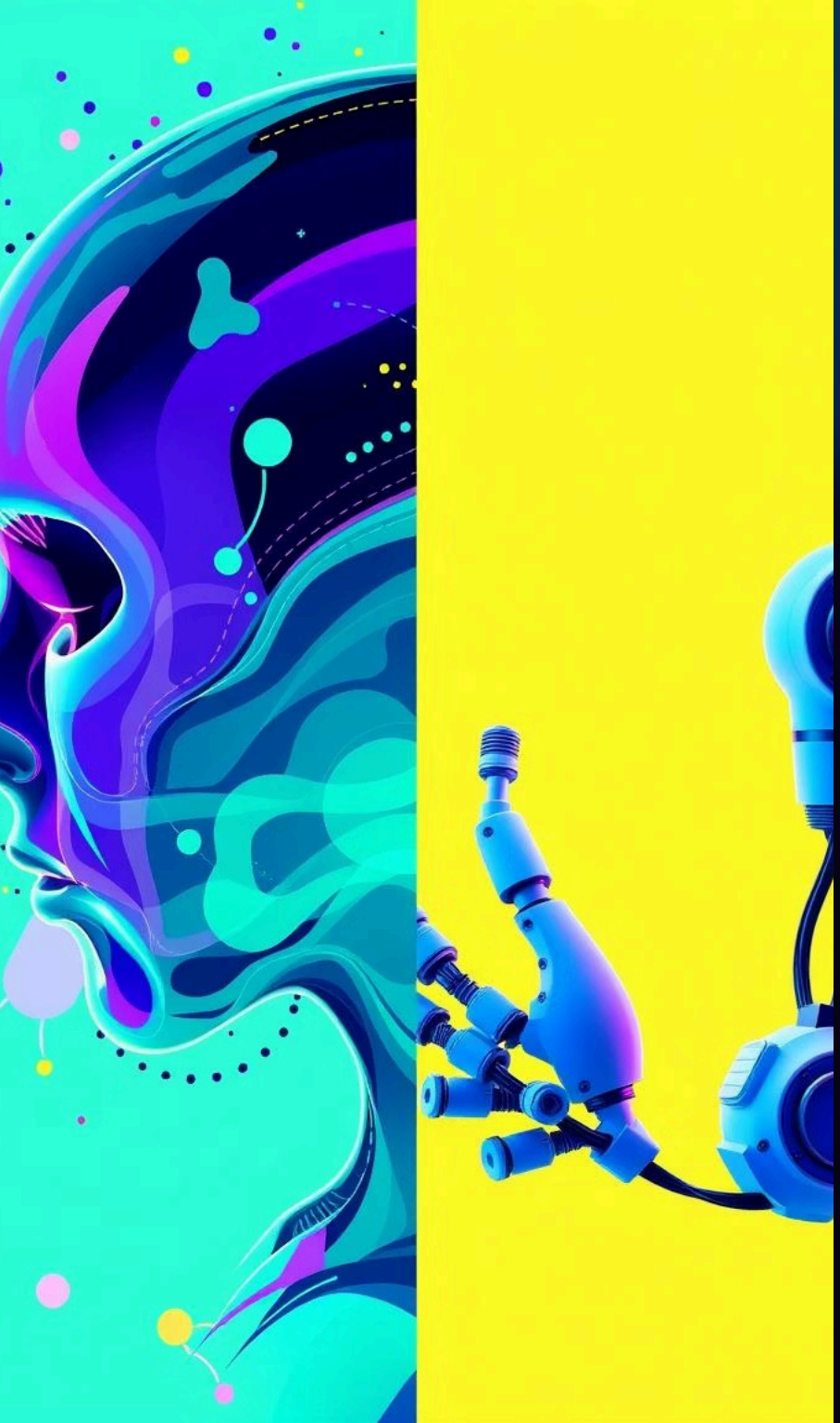
Example: "Build me a to-do app" generates full-stack code.

Automated Debugging

Debugs, tests, and deploys autonomously.

Tool Integration

Uses tools like Replit and AutoGPT seamlessly.



How Agentic AI Differs from Generative AI

Response Type	Static, single-shot	Dynamic, goal-driven
Autonomy	None	High
Memory	Usually none	Persistent
Planning	None	Yes
Tool Usage	Limited	Extensive

Agentic AI stands out with its persistent memory and goal-driven actions, unlike the static, single-shot nature of Generative AI. This fundamental difference enables Agentic AI to perform complex tasks autonomously, leveraging extensive tool usage and sophisticated planning capabilities.