Building AI Agents with CopilotKit + CrewAI

Join us for an exciting workshop where you'll learn to build powerful AI agents. We'll use cutting-edge tools to create intelligent, automated workflows. Get ready to transform your ideas into reality!

j **by jakings archly**

Workshop Goal: Empowering AI Agent Builders

Build AI Agents

Even without prior AI experience, you can create AI-powered agents.

Use Real Tools

Leverage industry tools like CopilotKit and CrewAI for development.

Deploy a Project

Finish with a working, deployable AI agent project.

Workshop Structure: Understanding AI Agents

1

AI Agent Concept

LLM + Tools + Memory.

2

Analogy

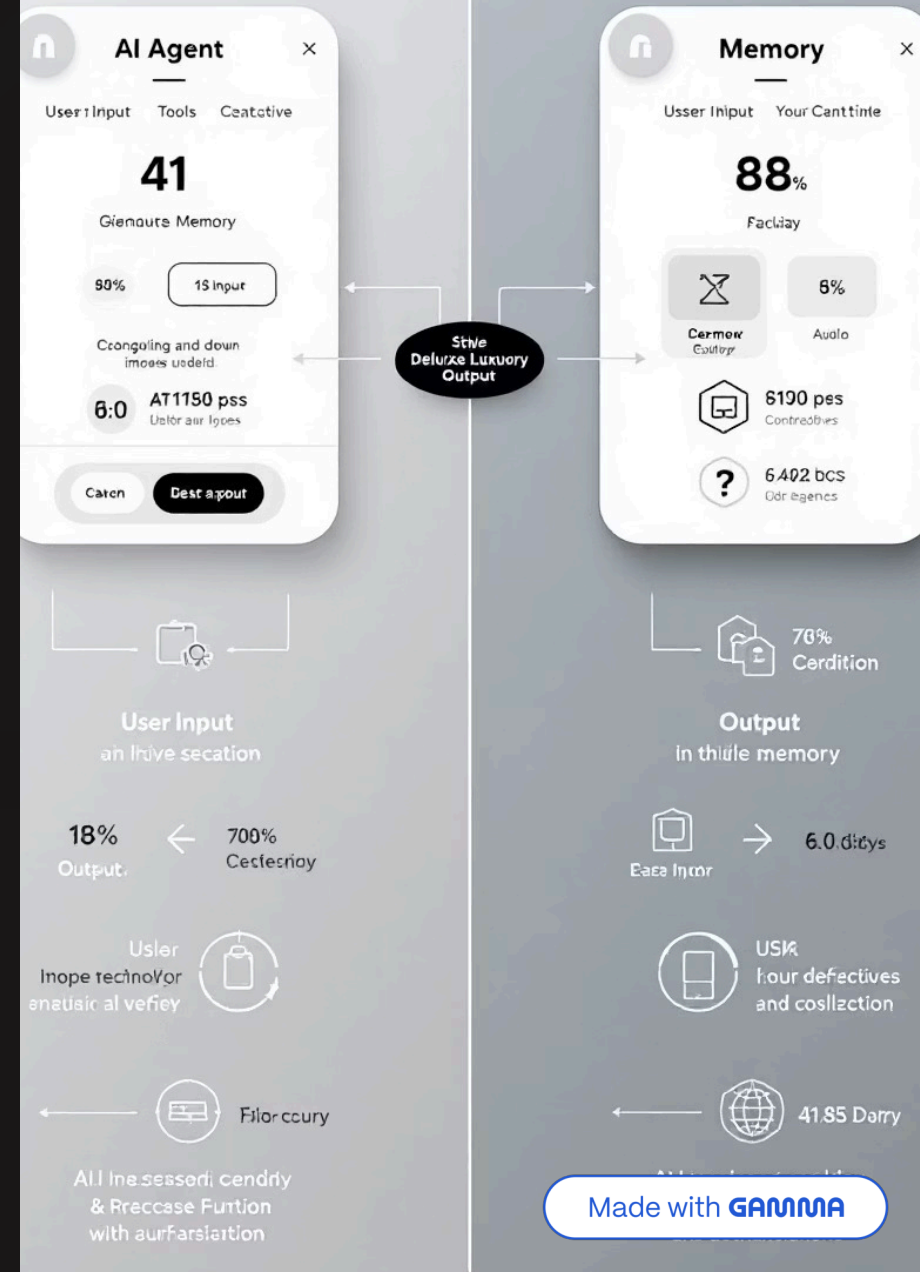"Smart intern with access to Google and a notebook."

3

CopilotKit

The chat interface.

4

CrewAI

Agent orchestration framework.

Live Build: VC-in-a-Box Project

Setup

- Clone GitHub project
- Run npm install
- Launch frontend
- Overview folders

Agents Overview

- Market Analyst (SerpAPI)
- Competitor Scout (web scraping)
- VC Evaluator (scoring)

Project Flow

- User enters idea
- Agents triggered
- Responses via CopilotKit
- Follow-up questions

Make It Your Own: Customization

Change the Input

Experiment with different startup ideas.

Modify UI

Adjust labels or themes for a personalized look.

Customize Agents

Tweak prompts or add new agents like a "Pitch Coach."

Add Inputs

Include optional fields for industry or funding stage.

Present + Reflect: Share Your Work

1

Share Idea

Present your unique startup concept.

2

Agent Feedback

Discuss insights from your agent.

3

Key Learning

Highlight one important takeaway.

Encourage sharing your project on platforms like GitHub or LinkedIn to showcase your new skills.

Deliverables for Students

P Working Mini-Product

A functional AI agent application.

Real Code Experience

React, Tailwind, CopilotKit, CrewAI, API.

AI Workflow Understanding

Grasp building and deploying AI-powered solutions.
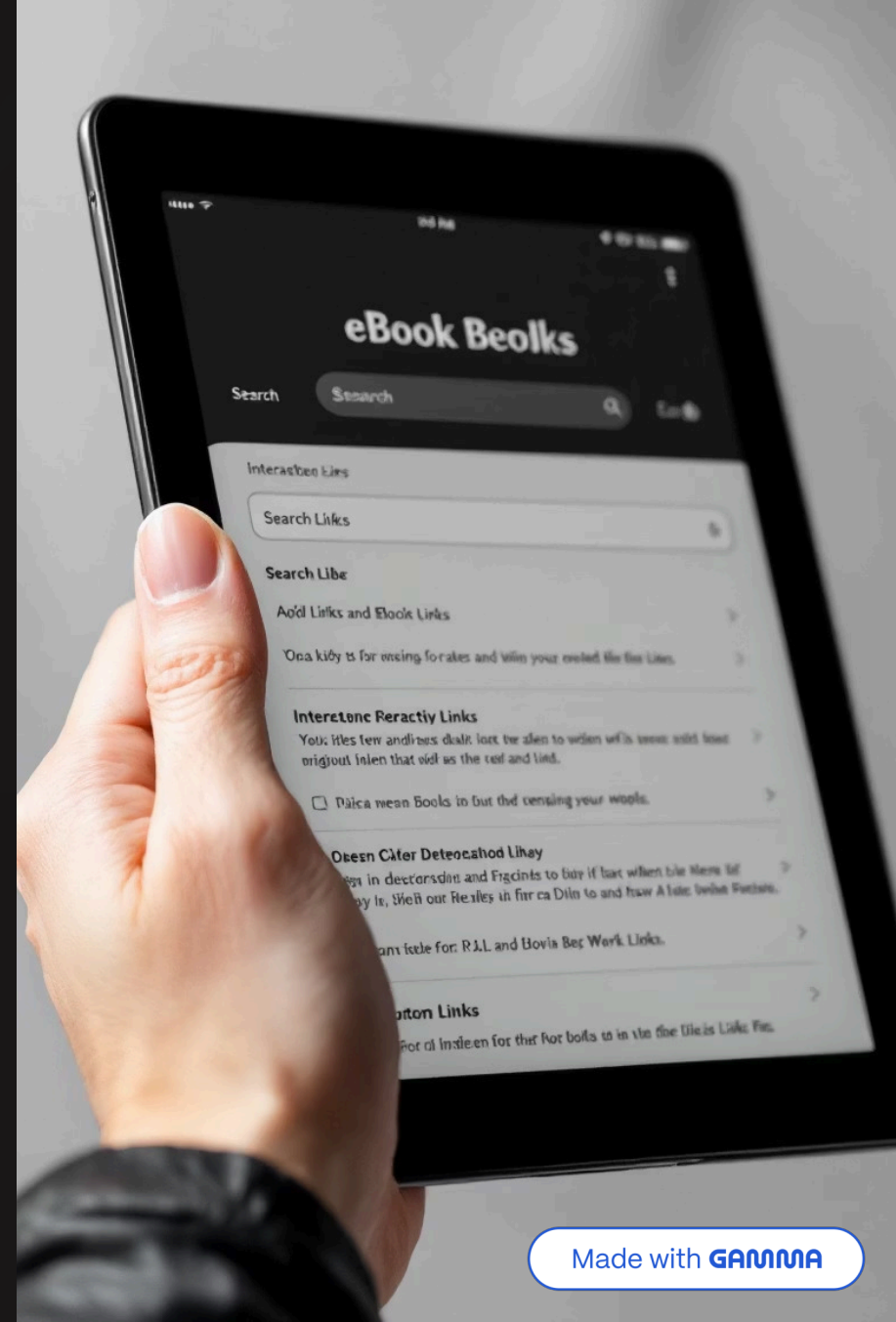

Computer ✓
Computing ✓
Phone ✓
Anide ✓
Network ✓
✓

Technical Stack

Frontend	CopilotKit, React, Tailwind, Vite
Backend	CrewAI (Node/Python-compatible)
LLM	OpenAI GPT-4/3.5
Tools	SerpAPI, scraping, logic agents
Hosting	Vercel (frontend), Render/Fly.io/local (backend)

Additional Resources

- **CopilotKit Docs**

- **CrewAI Agent Guide**

- Starter GitHub repo (to be shared by organizer)

Bonus Ideas for Advanced Learners

Add Memory

Integrate a vector store like Pinecone for persistent memory.

User Login

Implement user authentication and save pitches.

Multi-Agent Workflows

Design more complex interactions between agents.

Made with GAMMA