SJSU SAN JOSÉ STATE UNIVERSITY

Web UI Copilots Hackathon Charter

You have graduated from San Jose State University with a specialization in advanced intelligence-based Copilot web UI development. Given your skillset, NewWebCo hired you to develop a productivity-enhanced WebUI for the organization's employees. NewWebCo is a leading provider of Artificial Intelligence (AI) services, catering to Fortune 500 companies and top 10 DOW Jones movers. In essence, NewWebCo sets the tone and trend for the next AI wave in major commercial markets. As a graduate of San Jose State University, you will be working with cutting-edge technologies that transform the way companies, countries, and users conduct their business.

The charter of the WebUI (please see figure 1) is to enable employees to achieve more with less effort using Agentic AI. The purpose of Agentic AI is to develop orchestration using FastAPI[1] and have three agents: one for general WebUI queries, one for Clinical RAG[2], and one for Food Security queries. NewWebCo's manager has provided all PDFs and UI specifications. They would like to have the WebUI deployed for all employees to access via the web portal. While handling the specifications, your manager reminded you of the strategic importance of the project and the improvements your department contributes to the overall success of the company.

[1] FastAPI - FastAPI is a modern, fast (high-performance), web framework for building APIs with Python based on standard Python type hints. https://fastapi.tiangolo.com/

[2] RAG - What is RAG (Retrieval-Augmented Generation)? , https://aws.amazon.com/what-is/retrieval-augmented-generation/

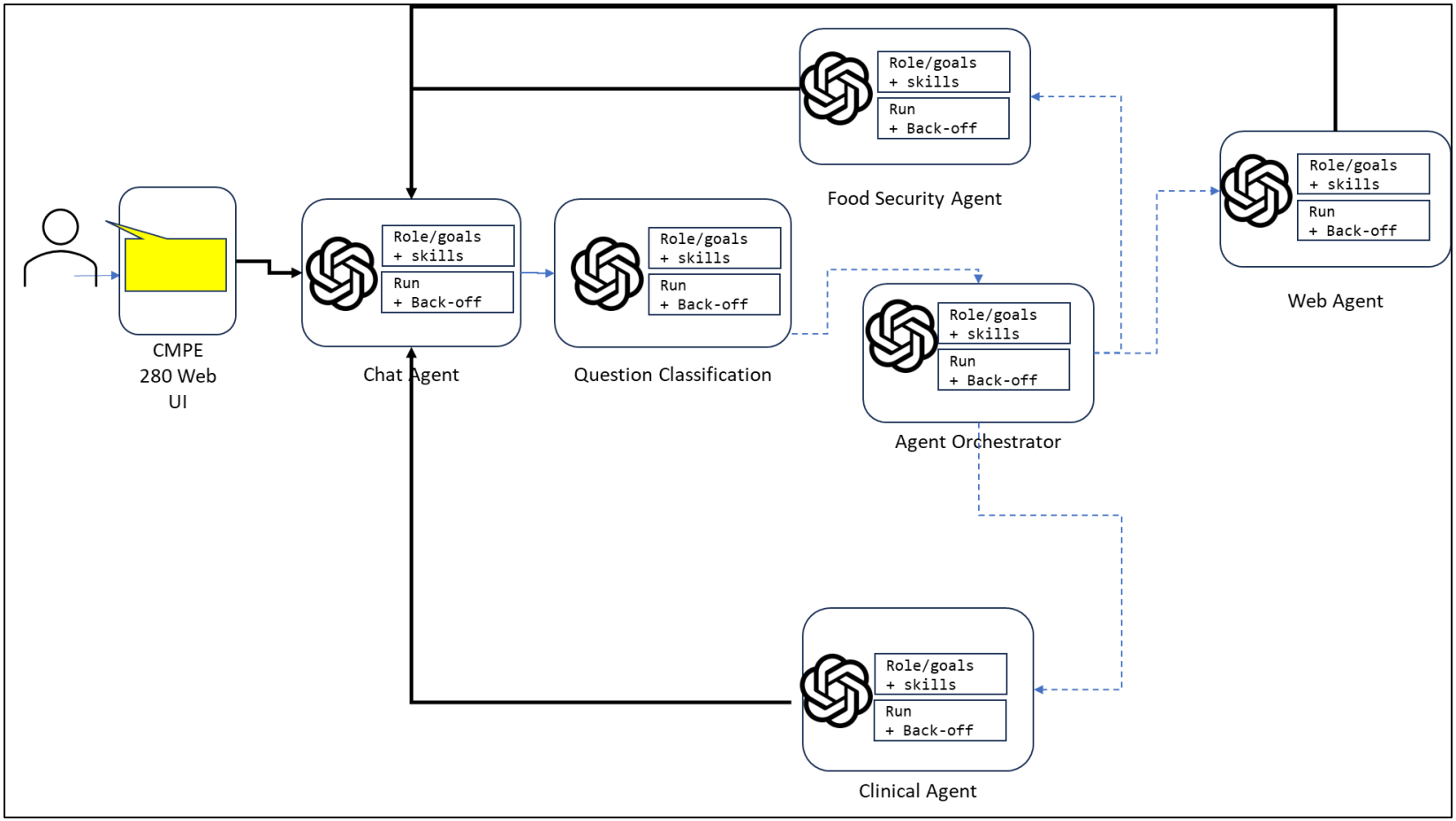

Figure 1: CMPE 280 Multi Agentic Architecture

CMPE 280 Class Hackathon – Multi-Agentic AI Copilot architecture.
March 29, 2025 – March 30, 2025, Spring 2025, Professor Chandrasekar Vuppalapati
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