

Take-Home Assignment — Senior AI/Backend Engineer

Context

We're building an AI-powered conversational platform for the casino hospitality industry. As a first step, we'd like to see how you approach building a property-aware conversational agent from scratch.

The Task

Build a conversational AI agent that can answer guest questions about a specific casino property — its restaurants, entertainment, amenities, rooms, promotions, and anything else a guest might ask before or during a visit.

Requirements

- The agent must be built using **LangGraph**
- The agent should only respond based on **one property that is loaded as context**. Below are some examples to help:
 - [Twin Arrows Navajo Casino Resort](#) (Flagstaff, AZ)
 - [Mohegan Sun](#) (Uncasville, CT)
 - [Foxwoods Resort Casino](#) (Mashantucket, CT)
 - [Agua Caliente Casinos](#) (Palm Springs, CA)
- The agent should **only answer questions about the property** — it should not take actions (no bookings, no reservations, no account operations)
- The solution must include **tests** and a **Docker** setup
- An **API** is required if your chosen interface needs one

Everything else — LLM provider, chat interface, knowledge ingestion approach, architecture decisions, tooling — is up to you.

What We're Looking For

This is an open-ended assignment. There is no single correct solution. We're interested in how you approach the problem, the trade-offs you make, and the design decisions. This will serve as the foundation for a deeper technical conversation in the interview.