

Problem Statement: "AI-Powered Excel Mock Interviewer"

1. The Business Context (The 'Why')

Our company is rapidly expanding its Finance, Operations, and Data Analytics divisions. A key skill for all new hires is advanced proficiency in Microsoft Excel. However, our current screening process is a major bottleneck. Manual technical interviews for Excel are time-consuming for our senior analysts and lead to inconsistent evaluations. This slows down our hiring pipeline and impacts our growth targets.

We believe an AI-driven solution can solve this problem.

2. Your Role & Mission (Setting the Persona)

You are the founding AI Product Engineer for this initiative. Your mission is to **design the strategy and build an automated system to assess a candidate's Excel skills.**

Your role is hybrid: you must think like a Product Manager to define the solution and its success, and like an AI Engineer to build the system. We are intentionally leaving the solution space open-ended. While a "conversational AI" is one path, you are encouraged to propose the best possible solution, even if it's different.

Core Requirements:

1. **Structured Interview Flow:** The agent must manage a coherent, multi-turn conversation that simulates a real interview. It should introduce itself, explain the process, ask a series of questions, and provide a concluding summary
2. **Intelligent Answer Evaluation:** This is the core challenge. The agent must evaluate the user's responses.
3. **Agentic Behavior and State Management:** The agent needs to think and act like an interviewer.
4. **Constructive Feedback Report:** At the end of the interview, the agent must generate a performance summary.

Expected Deliverables

1. Design Document & Approach Strategy
2. Working Proof-of-Concept (PoC):
 - The complete, runnable source code in a shared repository.

- Deployed Link for the Mock Interviewer.
- A few sample interview transcripts demonstrating the agent's capabilities.

Project Constraints & Ambiguities (The 'Real World')

- **Technology Stack:** You have full autonomy, but you must justify your choices (e.g., choice of LLM, frameworks, hosting platform).
- **The "Cold Start" Problem:** Assume you have no pre-existing dataset of mock Excel interview transcripts. Your strategy must account for how you would bootstrap and improve the system over time.