Internship Hiring Task: The Autonomous Business Analyst

To the Candidate,
Thank you for your interest in joining our team.
This task is designed to test your resourcefulness, critical thinking, and ability to build intelligent systems. We care less about a "perfect" solution and more about your approach, your technical choices, and the quality of your final output.
Good luck, and we look forward to seeing what you build!

The Scenario & Your Objective

Imagine a student on an online learning platform that your are building - asks the following question:

"What is the RICE scoring model for prioritization, and how is it different from the Kano model?"

Your objective is to build a simple, autonomous agent system that can research this business concept online, synthesize the findings from multiple sources, and produce a single, reliable, and well-cited answer for the student.
You will **not** be provided with any input data or API keys. The challenge is to build a system that can find the information it needs on its own.

Required Architecture & Logic

Your system should follow this general architecture:

1. **Researcher Agents (Layer 1):** The first layer of agents must act as autonomous researchers.
    - Deploy one or more agents that use a web search tool (e.g., via a public Search API or a web scraping library) to find **at least 3-5 high-quality online sources** (articles, expert blog posts, etc.) that explain the RICE and Kano models.
2. **Model Flexibility:** You can use **any Large Language Model (LLM) you have access to**. We value adaptability. This can include:
    - Free tiers or trial credits for major APIs (OpenAI, Google, Anthropic, etc.).
    - Open-source models running locally (e.g., using Ollama, Hugging Face Transformers).
3. **Synthesizer & Fact-Checker Agent (Layer 2):** This is the core of the task. This final agent receives the content gathered by the researcher agents and must:

- **Process and understand** the information from the various sources.
- **Synthesize** the key points to clearly define the RICE model and explain its core differences from the Kano model.
- **Cross-reference** the information. Your agent should identify consistent themes and potential contradictions across sources to ensure the final answer is accurate and reliable.
- **Cite its sources.** The final answer must include clear citations (e.g., formatted links to the articles used) so the student can explore the topic further.

Deliverables

Please submit the following:

1. **Code:** A link to a public GitHub repository containing all your project code.
2. **Approach Document :** A clear and well-written document that explains:
   - Your overall approach and technical choices.
   - Your strategy for finding reliable, high-quality sources online.
   - Which LLM(s) you used and why you chose them
   - A brief overview of the logic your Synthesizer agent uses.
   - Clear instructions on how to set up and run your project.
3. **Final Output:** A single text file containing the final, synthesized answer your system generated, complete with citations.

What We're Looking For

We will evaluate your submission based on the following criteria:

- **Problem-Solving & Resourcefulness:** How did you tackle the challenge of finding high-quality information online? How did you adapt to the constraint of not having provided models or data?
- **Critical Thinking:** Does your final output represent a thoughtful synthesis of multiple sources, or is it just a simple summary of one? Did you identify and use credible sources?
- **Output Quality:** Is the final answer accurate, clear, concise, and well-structured? Is it something a business student could easily understand and trust?
- **Clarity:** Is your code well-organized and does your document articulate your approach clearly
- **Attention to Detail:** Are your sources cited correctly? Is the final output free of errors?

We are excited to see your approach to this challenge.