PRACTICAL PROJECT TASK FOR AI ENGINEER RECRUITMENT PROCESS

Dear Candidate,

Thank you for devoting your time and effort to apply for the AI Engineer position at Enocta. We are excited to inform you that you have been shortlisted from hundreds of applications. In the next stage, you will complete a practical project task that will serve as a key component of our final evaluation process. Top performers in this round will have the opportunity to meet with our Head of AI for a technical, yet fun, interview.

Project Overview

In this project, you are tasked with developing a **Leadership Coach**—a specialized AI chatbot designed to provide insightful answers on leadership practices, professional development, and business acumen. Unlike generic tools such as ChatGPT, Claude, or Gemini, your solution should deliver refined and context-specific guidance by leveraging a dedicated knowledge base.

The core objective is to create a chatbot that uses the content from a provided YouTube playlist as its primary source of wisdom. Complementary web resources may be used when the playlist does not cover the necessary information.

Functional Requirements

Your Leadership Coach should be capable of:

1) **Specialized Knowledge Base**: Extracting and utilizing relevant information from the following YouTube Playlist containing interviews with prominent business leaders sharing their experiences and wisdom.

   YouTube Playlist: https://www.youtube.com/playlist?list=PLCi3Q_-uGtdlCsFXHLDDHBSLyq4BkQ6gZ

2) **Web Search Capability to Enhance Responses**: Determining when the YouTube content is insufficient or irrelevant to answer a question and autonomously performing web searches to gather additional relevant resources.

3) **Response with References:** Providing textual answers based on the curated content from the knowledge base and/or web results, also including the references to the sources used to generate that answer.

4) **Voice Output**: Converting text responses to speech for an enhanced user experience.

5) **User-Friendly Interface**: Implementing a clean, intuitive UI for chat interaction.

6) **Web Accessibility**: Making the Coach accessible through a web link.

Priority Note:

The core competency we're evaluating is your ability to use the content from the YouTube playlist as a knowledge base for an LLM-powered chatbot. The other features are complementary. Please allocate your time and attention accordingly.

Technical Guidelines

Required: Python 3.10+

Suggested Tools:

- ✓ Streamlit (for rapid prototyping)
- ✓ Weaviate (for vector database)
- ✓ ElevenLabs (for voice synthesis)

These are only suggestions; use them only if you're already familiar with them.

You're free to use any other technologies or frameworks that will help you achieve the project goals efficiently.

Deliverables and Submission Details

Please submit the following items via email by the deadline:

- ✓ A working web link to your deployed Leadership Coach.
- ✓ The URL of your GitHub repository containing the complete project code.
- ✓ A brief demo video included in your GitHub repository. The video should not exceed 5 minutes. In the video, we expect you to vocally explain and demonstrate your application's workflow, including how it works, what you consider its best feature, and any other specific details you would like to mention.

Deadline

All project deliverables must be submitted via email to **emre.yilmaz@enocta.com** by:

10th March 2025, 19:00 (GMT +3 Istanbul Time)