DATA SCIENCE INTERN –Coding Task

Task:

You are required to create a program that takes any job description as input and returns the matching candidates profiles as output from the given candidate's data using any open-source framework.

Recommended steps:

Database Setup:

- Use a database (e.g., MongoDB, PostgreSQL) to store this given candidate data.
- You can also use Elasticsearch or FAISS to index the data for efficient retrieval.

Preprocess and Index Data:

- Preprocess the data and index them.

LLM Fine-Tuning:

- Fine-tune an LLM on a representative sample of the candidate data to understand our specific domain and terminology. You can pick the sample dataset here.

Implement RAG Framework:

- Use a RAG framework to combine the retrieval capabilities of Elasticsearch with the generative capabilities of the fine-tuned LLM.

Build Chat Interface:

- Develop a chat interface to interact with the RAG system, using a web framework like Flask for the backend and React for the frontend Or simply with command line input for the query and output the results.

Method of Submission

- You can develop and test the application in your local server in **Python**.
- Upload your entire code in your **github** profile as a new project with name 'Interactly task <your name> and share the link of the repo.
- Share the following through mail to fareeda@interactly.video with subject as 'Data Science Intern Profile Matching Task - <Your name>' ,
    - Your github project link.
    - Record video of your working application for the input query
        - "Pick up the top 10 profiles for the following job description, *We are looking for a skilled UI Developer to join our dynamic team. The ideal candidate will have a strong background in front-end development, with proficiency in HTML, CSS, JavaScript, and modern frameworks like React or Angular. Your primary*

responsibility will be to create visually appealing and user-friendly web interfaces that enhance user experience and align with our brand guidelines."

- Attach your latest resume.

ALL THE BEST! 😊