Internship Task

1.TECH STACK USED:

The task is performed using Python and LangChain. LangChain is a framework that is built around LLMs. LangChain provides modules for managing and optimizing the use of language models. We have used “text-davinci-003” model which belongs to the GPT-3 model family.

2.PROMPTS USED:

We have used PromptTemplate to generate the questions for each Job Profile and FewShotPromptTemplate for evaluating the profiles.

3.QUESTIONS GENERATED:

Job Sector: Agriculture
Job Category: Engineering
Job Title: Crop Monitoring Technician

1. What experience do you have in agriculture engineering?
2. What technical skills do you possess related to crop monitoring?
3. How do you stay up to date with the latest developments in agriculture engineering?
4. What challenges have you faced in the past when working on crop monitoring projects?
5. How do you ensure that crop monitoring projects are completed on time and within budget?

Job Sector: Engineering
Job Category: Quality Assurance and Control
Job Title: Quality Inspector

1. What experience do you have in engineering?
2. What specific quality inspection techniques have you used?
3. How do you ensure that quality standards are being met?
4. What methods do you use to prevent defects and reduce costs?
5. How have you implemented quality assurance and control processes in your previous positions?

Job Sector: Refineries
Job Category: Operations and Productions
Job Title: Field Operator

1. What experience do you have in refineries operations and production?
2. How have you handled challenging situations while working in a refinery?
3. What safety protocols have you employed while working as a field operator?
4. Describe a successful project you have completed in the refinery operations and production field.
5. What methods have you used to optimize the efficiency of refinery operations and production?

4.HOW THE TASK WAS PERFORMED?

1. Firstly we generated an API key from OpenAI. This API key provides a powerful API to intera ct with a wide variety of models. It can be used to perform any task that involves understandi ng and generating natural language.

2. Then we imported OpenAI package from LangChain and created our model using “text-davin ci-003” model of OpenAI.

3. Then we imported PromptTemplate package from LangChain to create our prompts.

4. After that we defined our template and our input variables to generate the questions.

5. Then we create our final prompt by formatting the prompt and feeding it the respective Job Sector , Job Category and Job Title.

6. Then we use our model to print the questions that are generated and we do this for each Job Profile respectively and get 5 questions each.

7. After the questions generation we import FewShotPromptTemplate from LangChain to find out the most relevant Job Profile.

8. Now we create our examples and our example template and prompt example from our create-d template.

9. Now we create our FewShotPromptTemplate object and feed it all the important information that includes examples, example-prompt, prefix ,suffix , input variable and example separator.

10. Then we pass our query as input variables and use our created language model to print the desired result that gives us the most relevant Job Profile.

SUMMARY: We used LangChain and imported the important modules to create prompts that he-lped us to generate questions and then used FewShotPromptTemplate to evaluate the relevant profile.