Task Write-up for an Entry-Level Generative AI Engineer

#1 Summarizer Task

Objective:

Generate a concise summary of the book "[Crime and Punishment](#)" limited to 20 pages.

Task Details:

1. Source Material:
- Book Title: Crime and Punishment
- Provided link

2. Output Requirements:
- The summary should be concise and limited to 20 pages.
- The summary should be presented in a PDF format.

#2 Prompt Engineering Task:

Objective:

Write a LangChain `PromptTemplate.`

Task Details:

Design a detailed prompt to create personalized study plans for students. You have access to a [range of information](#) about each student. The prompt should direct the AI to thoroughly analyze the diverse array of student-specific data, encompassing their subjects and academic performance across different subjects, preferred learning styles (visual, auditory, kinesthetic), extracurricular activities, and distinct personal objectives or challenges (such as preparing for a specific exam or overcoming a learning difficulty). The prompt should be well-structured to ensure that the AI synthesizes this information to create a study plan that not only addresses academic requirements but also aligns with each student's unique needs and aspirations. Highlight how you would structure the prompt to ensure all-inclusive and individualized plans are generated.

Note: Write a detailed and comprehensive prompt. Make sure that the prompt caters to each student's specific needs.

Suggested Technologies and Tools:

1. Primary Tools:

- **LangChain**: An advanced tool for processing and analyzing natural language. You might find LangChain useful for generating high-quality summaries.
- **OpenAI APIs**: These APIs offer a range of capabilities that assist you in creating coherent summaries from large volumes of text.

2. Programming Language & Environment:

- **Python**: Given the versatility of Python in text processing and its compatibility with the suggested tools, it is recommended as the primary language for this task.
- **Jupyter Notebook**: For iterative development, visualization, and documentation of your process, consider using Jupyter Notebook. It offers an interactive platform and will allow you to document your steps conveniently.

General Guidelines:

1. Research and Planning:

- Familiarize yourself with LangChain, OpenAI APIs, and Jupyter Notebook. Understand their capabilities and how they can be beneficial for this task.
- Plan your approach considering the strengths and features of the suggested tools.

2. Data Handling:

- As you work with the book's content, consider any data cleaning or preprocessing that might be necessary to achieve optimal results with your chosen tool(s).

3. Quality Assurance:

- Ensure that the generated summary maintains the essence and primary themes of "Crime and Punishment."
- Review your summary for coherence, relevance, and accuracy before finalizing.

4. Document Presentation:

- Pay attention to the presentation of the final PDF, ensuring it's reader-friendly and aligns with the 20-page limit.

5. Code Versioning and Management:

- Regularly commit and push your code to a GitHub repository.
- Organize your repository to ensure it is easily navigable, with clear instructions for any potential users or reviewers in the README.

Submission:

- Please submit the final PDF file(s) once completed.
- Provide a link to the GitHub repository containing all the code and Jupyter Notebooks used in the task.

Notes:

- Remember to continuously save your progress and potentially maintain versions of your summaries.
- You have the autonomy to decide the best approach, but consider leveraging the strengths of the suggested tools for optimal results.
- Feel free to reach out if you encounter any challenges or require clarifications.

Best of luck with your assignment!