**📝 Task 3: Text Summarization and Sentiment Analysis**

In this task, we’ll practice using a **chat interface** to craft prompts for **text summarization** and **sentiment analysis**, mastering techniques to achieve **precise outputs** without API integration.

**📚 Theory**

**AI Technique: Text Summarization; Sentiment Analysis**

This task focuses on using **prompting techniques** with the OpenAI online chat interface (e.g., ChatGPT) to perform **text summarization** and **sentiment analysis**.

You will practice **crafting effective prompts** to achieve specific outputs **without the need for API integration**.

**🗂️ Text Summarization**

The process of **condensing a large body of text** into a shorter version while retaining its **essential meaning and key information**.  
Two main approaches:

* **Extractive Summarization:** Selecting and combining key sentences or phrases from the original text.
* **Abstractive Summarization:** Generating new sentences and paraphrasing the content for conciseness.

**😊 Sentiment Analysis**

A **Natural Language Processing (NLP)** technique used to determine the **emotional tone** of a given piece of text.  
It identifies whether the sentiment is:

* **Positive:** Reflecting optimism or satisfaction
* **Neutral:** Lacking strong emotional indicators
* **Negative:** Reflecting dissatisfaction, criticism, or pessimism

📊 **Sentiment scores** are often represented numerically:

* -1 → Very negative sentiment
* 0 → Neutral sentiment
* +1 → Very positive sentiment

**💬 Examples**

**Example 1**

* Text: *"I love how easy this app is to use. Great job!"*
* Sentiment: **Positive**
* Score: **+1**

**Example 2**

* Text: *"The website keeps crashing every time I try to log in."*
* Sentiment: **Negative**
* Score: **-1**

**🛠️ Task**

In this task, you are given a raw text input: **task\_3\_input.docx**.  
Your goal is to **craft a prompt** for an AI assistant to perform the following:

* 🔹 Generate a **concise summary** of the input text
* 🔹 Analyze the **sentiment** and classify it as **positive**, **neutral**, or **negative**
* 🔹 Provide a **sentiment score** (e.g., -1 for very negative, 0 for neutral, +1 for very positive)
* 🔹 Return the results in a **structured JSON format**, including all of the above and any relevant **metadata** you deem useful

**📌 Requirements**

* The result that you got using your prompt should **align with all the requirements** stated in the task description.