



## Task 3: Text Summarization and Sentiment Analysis

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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.

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### 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.

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### 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.
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### 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:

- $-1 \rightarrow$  Very negative sentiment
  - $0 \rightarrow$  Neutral sentiment
  - $+1 \rightarrow$  Very positive sentiment
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## 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**
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## 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
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## Requirements

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