# Assignment 1: Prompt Anatomy & Prompt Frameworks

**Due: 2024-09-24 15:29 PM**

# Tasks

1. A. Apply prompt frameworks for given 5 tasks: **5 pts**
2. Analysis: **5 pts**

**Total 10 pts**

# Python Notebook for Assignment 1

- Use the same Python Notebook file with the TA session.
  - "PE2024F_Assignment_1.ipynb" file from eTL
- Will use lower part of the notebook for the assignment 1

Topic 1: Prompt Anatomy & Prompt Frameworks

Environment Setup

Prompt Anatomy

    Task(Instruction)

    Persona(Role)

    Exemplar(Example)

    Tone

    Context

    Output format

Prompt Frameworks

    Task 1: Generate self-introduction

    Task 2: Create a blog post

    Task 3: Create marketing strategies

**Assignment 1: Prompt Anatomy & Prompt Frameworks**

    Task 4: Generate an advertising slogan for the product.

    Task 5: Generate recipes for the given materials

    Task 6: Lyric generator

    Task 7: Planning a team project

    Task 8: Chatbot for customer service

    Task 9: Joke generator

    Task 10: Novel project idea generator

# 1. Apply prompt frameworks

- For given **7 tasks** and prompt examples, you should **select 5 tasks** and modify each prompts for better outputs.
- You can apply prompt frameworks from the lecture note, or you can use your own prompt framework.
- Include your **prompts** and **outputs** in the report file
- You will get **1 point for each task**

Task 4: Generate an advertising slogan for the product.

```
[14] completion = client.chat.completions.create(
        model="gpt-4o-mini",
        ############ TODO: Modify here ############
        messages=[
            {"role": "system", "content": "You are a helpful assistant."},
            {
                "role": "user",
                "content": """
                Generate an advertising slogan for the mechanical keyboard.
                """
            }
        ],
        ###########################################
        temperature = 0.0,
        max_tokens=512
    )

    print(completion.choices[0].message.content)
```

Prompt

Output  "Type with Precision, Feel the Passion - Elevate Your Game with Every Key!"

# 2. Analysis

- The analysis part must include an analysis of the following:
  - Difference between the original output and the modified output.
  - How the components of the prompt affects to the better output.
  - Highlight the prompt components in your prompts.
    - Ex)

```
messages=[
    {"role": "system", "content": "You are a helpful assistant."},
    {
        "role": "user",
        "content": """
You are a new developer interested in AI.          Role
Please write a self-introduction, in a concise sentence of no more than 100 words.
        """
    }                 Task                    Format
],
```

- There is no amount limit for the analysis section, so using LLMs for generating analysis is not effective. So just analyze on your own, do not use LLM for generating analysis report.

# Submission

- Due: 9/24 (Tue), 15:29 PM (right before class)
- After you have completed the assignment, you need to submit your report as a PDF via eTL assignment submission
  - Ex) 2024-00000.pdf
- We will calculate deducted score according to the following equation:
  - $(Original\_score) \times (1 - 0.1 \times ceil(delayed\_days))$
  - After 5 days (120 hours), there is no score.
  - Ex1) 50 hours late: 70% of the original score
  - Ex2) 115 hours late: 50% of the original score
  - Ex3) 120 hours late: 0% of the original score