Mini Assignment: Prompt Engineering with a Multimodal Model

Topic: *"Cute Dog" Image Generation*

Objective: This assignment is designed to give you hands-on experience with *prompt engineering* using a multimodal generative model (a text-to-image model).

Task Description

1. **Use the specified multimodal model (mandatory)**
   - For fairness, **all students must use the same tool**:
     Bing Image Creator (Microsoft Designer Image Creator)
   - Access it here: https://www.bing.com/images/create
   - You must use **only the free version** (free tier / free credits). **Do not use any paid or premium features.**

2. **Design your prompt**
   - Write a text prompt that you think will produce a *very cute* dog image.
   - You may try multiple prompts and refine them (this is encouraged).
   - Choose **one final prompt** that gives a result you like.

3. **Generate the image**
   - Use Bing Image Creator (free version) to generate the image based on your **final** prompt.
   - If the tool gives multiple variations, choose **one final image** as your main result.

4. **Record your process**

   Please submit the following items:

   a. **Final interface snapshot (required):**
   - Take a **screenshot of the Bing Image Creator page** that clearly shows:
     - The **final prompt** in the prompt box
     - The **generated images**, including your chosen final image
   - It should look like a single snapshot of the interface (similar to the example shown in class).

   b. **Process snapshots (required, 1–3 screenshots):**
   - Include **screenshots** showing your **earlier attempts** or prompt edits.
   - Each screenshot should show:
     - The prompt you tried at that step
     - The images generated for that prompt
   - Label them in your PDF as **"Attempt 1"**, **"Attempt 2"**, etc., so we can follow your iteration.

   c. **Reflection (required, ~1–2 short paragraphs):**
   - Using your screenshots as reference, briefly explain your **prompt engineering process**, for example:
     - What was your **initial prompt**, and what was missing or unsatisfying in the images?
     - How did you **modify the prompt** (e.g., added "eyes closed with a satisfied face," "fluffy fur," "colorful toys," etc.)?
     - Which **changes** led to the final result you liked most?
     - What did you learn about how wording affects the generated images?

Submission Format

Please submit a **single PDF** that includes, in this order:

1. Your **name** and **student ID**
2. Your **final interface snapshot** (final prompt + generated images)
3. Your **process snapshots** (labeled)
4. Your **process explanation / reflection** (1–2 short paragraphs)

File name format:

StudentID_Name_cute-dog-prompt.pdf (Example: 12345678_AlexChen_cute-dog-prompt.pdf)

Grading

- **Completion credit (main score, total 5 pts):**

  You will receive full credit as long as:

  - You use **Bing Image Creator (1pt) (free version only)**
  - You provide the **final image (1pt) and interface snapshot with the final prompt text (1pt)**
  - You provide **process snapshots with explanation (1pt)**
  - You write the **reflection (1pt)**

- **Bonus points (TA's Choice – Cutest Dogs):**

  - The TAs will select **three images** that they consider the **"cutest dogs"** among all submissions.
  - **Each selected submission will receive +0.5 bonus point added to your overall course grade.**
  - The selection is subjective and meant as a *fun* extra incentive, not the main grading criterion.

- **Academic integrity:**

  - You must create your own prompts and run them by yourself using Bing Image Creator (free version).
  - Do **not** submit images found on the internet or created by someone else.
  - If we suspect plagiarism (e.g., downloaded images, AI results not generated by you), you may receive **zero** for the assignment.

Fairness & Notes

- The **main grade** for this assignment is based on **completion** (screenshots + final prompt + reflection). The "cutest dog" bonus is **purely for fun** and has only a **small impact** on your overall score.
- To keep the assignment fair, **all students are required to use the same free tool and only its free version: Bing Image Creator (Microsoft Designer Image Creator)**, available at https://www.bing.com/images/create.
- The bonus images will be selected **subjectively** by the TAs (for example, via a small internal vote). This is *not* a strict measure of your technical ability, but a light, creative activity to make the exercise more enjoyable.