AI Prompt Engineering Sandbox Assignment

**Purpose:** This assignment is to help you become more familiar with artificial intelligence tools that may be beneficial for your writing and research. You will experiment with common free AI tools in order to identify best practices for developing effective AI prompts. You will also reflect on your comfort level with artificial intelligence and discuss the ethics of using AI tools in your work. Meeting these objectives will help you more easily identify opportunities for using AI in future projects and more effectively utilize different types of AI tools.

**Skills:**

* Identify commonly used artificial intelligence tools for writing and research.
* Understand basic prompt engineering principles.
* Differentiate between effective prompts for different types of AI tools.

**Knowledge:**

* Learn about how artificial intelligence processes and generates information to produce different types of work.
* Learn about the importance of using AI ethically and appropriately, as well as some common dangers of using AI.

**Tasks:** This assignment is designed to highlight pitfalls in your current approach to artificial intelligence tools, and therefore should present some difficulties. You will be asked to produce a number of deliverables using only AI tools, documenting your search and command processes, reflecting on why you were or were not happy with your results.

**Criteria for Success:** In order to successfully complete this assignment, you should complete at least one prompt or search in each of the AI tool categories and document your process. You should also write at least one or two sentences for each reflective question.

**Part One: Understanding Prompt Engineering**

1.     Choose one of the following tasks to perform using only artificial intelligence software.

a.     Write a cover letter applying for your dream job.

b.     Create a personal website for one of your hobbies.

c.     Write an essay on your favorite celebrity, historical figure, politician, etc.

d.     Create an image of a character from your favorite book.

e.     Create a new logo for an existing company.

f.      Summarize a scholarly article on a topic of your choice.

2.     Choose two or three of the following AI tools to complete your task. Use only ONE prompt for each tool.

|  |  |  |
| --- | --- | --- |
| ChatGPT/ChatPDF | Dall-E | Midjourney |
| Elicit | Google Bard | Scite.AI |
| IMG2Go | Quilbot | Fotor |

For each tool, write the exact words you used to complete your prompt/task and your results. DO NOT EDIT any part of your original prompt.

**Part Two: Intentionality and Reflection**

1.     Choose the results you’re least satisfied with to go back and edit.

a.     Through prompt editing or regeneration – you can use a different tool if you’d like – tweak your prompt until you get exactly what you want.

b.     What did you have to do differently? How long did it take?

c.     What was wrong with your original prompt?

2.     Was this an appropriate use of artificial intelligence? Why or why not?

**Part Three: Prompt Engineering Resources [Bonus/Extra Credit/Homework]**

1.     Read one of the following articles on prompt engineering for text-based artificial intelligence and identify 3-5 components of a successful prompt.

a.    [The CLEAR Path: A Framework for Enhancing Information Literacy through Prompt Engineering](https://saalck-wku.primo.exlibrisgroup.com/permalink/01SAA_WESTKY/1ot7kmv/cdi_crossref_primary_10_1016_j_acalib_2023_102720)

b.    [Artificial Intelligence Prompt Engineering as a New Digital Competence: Analysis of Generative AI Technologies such as ChatGPT](https://saalck-wku.primo.exlibrisgroup.com/permalink/01SAA_WESTKY/1ot7kmv/cdi_proquest_journals_2875130532)

c.    [10 Prompt Engineering Tips and Best Practices](https://www.techtarget.com/searchenterpriseai/tip/Prompt-engineering-tips-and-best-practices)

d.    [15 Tips to Become a Better Prompt Engineer for Generative AI](https://techcommunity.microsoft.com/t5/ai-azure-ai-services-blog/15-tips-to-become-a-better-prompt-engineer-for-generative-ai/ba-p/3882935)

e.    [Prompt Engineering Guide](https://www.promptingguide.ai/)

2.     Read one of the following articles on prompt engineering for AI image generators and identify 3-5 best practices for creating AI images.

a.    [Artificial Intelligence for Image Research](https://guides.library.utoronto.ca/c.php?g=735513&p=5295740#:~:text=In%20AI%20Image%20Generation%2C%20Prompts,towards%20the%20desired%20output%20image.)

b.    [Image Prompting](https://learnprompting.org/docs/category/%EF%B8%8F-image-prompting)

c.    [A Visual Introducing to Prompt Engineering](https://www.learnpromptengineering.org/)

d.    [PromptMagician: Interactive Prompt Engineering for Text-to-Image Creation](https://saalck-wku.primo.exlibrisgroup.com/permalink/01SAA_WESTKY/1ot7kmv/cdi_arxiv_primary_2307_09036)

e.    [Design Guidelines for Prompt Engineering Text-to-Image Generative Models](https://saalck-wku.primo.exlibrisgroup.com/permalink/01SAA_WESTKY/1ot7kmv/cdi_arxiv_primary_2109_06977)