

Assignment 06: Assignment and practice of Prompt Engineering to craft effective prompts.

Assignment Tasks

Task 1: Prompt Categorization

1. "Generate a logo for a tech startup using neon colors."
 - Type: Visual Prompt
 - Reasoning: The request is for an AI image generator to design a logo with specific visual features.
 2. "Explain blockchain to a 5-year-old."
 - Type: Conversational Prompt
 - Reasoning: It requires the AI to simplify a technical concept into a conversation-like explanation.
 3. "You are a UX designer. Suggest improvements to this app layout."
 - Type: Instructional + Role-based Prompt
 - Reasoning: It gives the AI a role and asks for task-specific suggestions.
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Task 2: Refinement Practice

1. Original: "Write a story."
 - Refined: "Write a 300-word bedtime story for children about a magical forest where animals talk and teach life lessons."
2. Original: "Make a poster."
 - Refined: "Create a poster for a school science fair with a blue background, cartoon robots, and bold text saying *SCIENCE EXPO 2025*."
3. Original: "Explain AI."
 - Refined: "Explain Artificial Intelligence in simple terms for high school students, using examples like chatbots, recommendation systems, and self-driving cars."

Task 3: Prompt Design Exercise

Design 5 original prompts for different domains:

ChatGPT (text-based)

"You are a career coach. Suggest 3 future-proof career options for a student interested in artificial intelligence and sustainability, along with the skills they should start learning today."

DALL·E (image-based)

"Create an illustration of a futuristic library with floating books, holographic displays, and students studying in a cyberpunk-inspired environment."

SORA (video-based)

"Generate a 15-second cinematic video showing a sunrise over Mars, with astronauts building the first colony and futuristic rovers moving across the landscape."

Coding or Logic

"Write a Python program that takes a sentence as input and counts how many times each unique word appears, then displays the result in dictionary format."

Education or Training

"As a math teacher, design 5 multiple-choice questions with answers on quadratic equations for grade 10 students."

Practice Activity (Live Testing)

ChatGPT (text-based)

"You are a career coach. Suggest 3 future-proof career options for a student interested in artificial intelligence and sustainability, along with the skills they should start learning today."

Response:

1. AI-Powered Renewable Energy Engineer
 - Work on optimizing solar, wind, and smart grids using AI.
 - Skills: Python, machine learning, energy systems, data analytics.
2. Smart-City Planner (AI + Sustainability)
 - Design eco-friendly cities with AI-based traffic, waste, and energy management.
 - Skills: GIS, predictive modeling, urban design basics, Python.
3. Climate Data Scientist
 - Use AI to predict climate changes, natural disasters, and guide sustainable policies.

- Skills: Statistics, ML algorithms, climate science, data visualization.

Conclusion: Students should begin with Python, statistics, and sustainability fundamentals as a strong foundation, then build expertise in AI tools and environmental science for long-term career growth.

DALL·E (image-based)

"Create an illustration of a futuristic library with floating books, holographic displays, and students studying in a cyberpunk-inspired environment."



Canva (video-based)

"Generate a 15-second cinematic video showing a sunrise over Mars, with astronauts building the first colony and futuristic rovers moving across the landscape."

