



AI+ Foundation™

Certification



AI + Foundation

Module 2

Hands-on using ChatGPT & DALLE

Hands-On 1:

Hands-on using ChatGPT

Title:

Exploring ChatGPT's 5 Key Principles Through Hands-on Lab Practice

Problem Statement:

As AI becomes increasingly integrated into content creation, education, and business strategy, understanding how to effectively interact with AI models like ChatGPT is essential. In this lab practice, you are tasked with exploring the five key principles of using ChatGPT for writing prompts: giving direction, formatting responses, providing examples, evaluating response quality, and dividing labor across AI tasks. The goal is to enhance your ability to generate high-quality, structured, and relevant outputs by crafting effective prompts.

Steps to be followed:

1. Giving Direction for Writing Prompts
2. Formatting Responses
3. Providing Relevant Examples
4. Evaluating Response Quality
5. Dividing Labor for Various AI Tasks

Tools Used:

- **ChatGPT (OpenAI)** – As the primary AI language model for generating text based on prompt: <https://chatgpt.com/> .
- **Browser Interface** – To access ChatGPT via OpenAI's official website or supported platforms.

Steps in Detailed Manner:

Important points on the capabilities of ChatGPT:

Activity	Description	Hands-on Example
Writing Prompts Giving Direction	Create clear and specific prompts that guide AI in producing desired outcomes for various tasks.	<p>Task: Write a blog post about the benefits of AI in education.</p> <p>Prompt: "Write a 500-word blog post outlining the benefits of AI in education, focusing on personalized learning, adaptive learning platforms, and real-time feedback for students."</p>
Formatting Responses	Design prompts that guide AI to format responses in a particular structure (e.g., bullet points, paragraphs).	<p>Task: Summarize key benefits of using AI in customer service.</p> <p>Prompt: "Summarize the top 5 benefits of using AI in customer service. Please format your response in bullet points and ensure each benefit is clearly explained."</p>
Providing Examples	Include examples in the prompts to help AI understand the context and generate more accurate responses.	<p>Task: Provide a marketing strategy for a new AI product.</p> <p>Prompt: "Provide a marketing strategy for a new AI product aimed at the healthcare sector. For example, consider promoting its ability to improve patient care and streamline hospital operations."</p>
Evaluating Quality	Assess AI-generated responses based on clarity, relevance, accuracy, and coherence, and refine prompts accordingly.	<p>Task: Generate a detailed description of AI in healthcare.</p> <p>Prompt: "Provide a detailed description of how AI is used in healthcare, with examples of its applications in diagnosis and treatment."</p> <p>Evaluation: After receiving the response, assess whether the information is clear, accurate, and relevant. If not, refine the prompt by adding more context or specifying areas that need to be covered.</p>
Dividing Labor for Different AI Tasks	Develop prompts that assign specific tasks to AI, ensuring efficient division of work for	<p>Task: Divide AI tasks between content creation and data analysis.</p> <p>Prompt: "First, summarize the main points of the article on AI in education.</p>

	<p>different types of queries.</p>	<p>Then, analyze the data presented in the article to highlight trends and key insights. Please ensure to separate the summary and analysis into distinct sections."</p>
--	------------------------------------	--

Applying the Five Principles

Step-1: Search ChatGPT

Google search results for "chatgpt". The first result is from OpenAI's website, titled "Introducing ChatGPT", dated Nov 2022. It describes ChatGPT as a sibling model to InstructGPT, trained to follow instructions. The second result is from ChatGPT's own website, with a large red arrow pointing to it. This result highlights that ChatGPT helps users get answers, find inspiration, and be more productive.

Step-2: Sign-up using Google id or Microsoft id or Apple id.

Welcome back

Email address or phone number*

Continue

Don't have an account? [Sign Up](#)

OR

Continue with Google

Continue with Microsoft Account

Continue with Apple

Step-3: Type your Prompt

What can I help with?

Message ChatGPT



Create image

Summarize text

Surprise me

Help me write

More

1. Giving Direction

Example:

Input: people in a business meeting, by Van Gogh

Output:



Here is the image of a business meeting scene inspired by Van Gogh's style. Let me know if you'd like to explore more artistic interpretations!

Try these prompts on Giving Direction

1. Using this advice, can I have a list of product names for a pair of shoes that can fit any foot size?
2. Rose flower, by any famous artists
3. Give me exercises for leg pain for 50yrs people

2. Formatting Responses

Example

Input: business meeting of four people watching on MacBook on top of table, in Minecraft

Output:



Here is the image of a business meeting with four characters in Minecraft style, gathered around a table with a MacBook on top. If you'd like any changes or further ideas, let me know!

Try these prompts on Formatting Responses

1. Classroom study of four students watching on MacBook on top of table, in London

3. Provide Examples

Examples

Input
write the tiger image

Output



Here is the image of a majestic tiger resting under a waterfall in a photorealistic style. Let me know if you'd like any modifications!

Try these prompts on Provide Examples

1. stock photo of business meeting of 4 people watching on white MacBook on top of glass-top table, Panasonic, DC-GH5

4. Evaluating Quality

Example

Input
(stock photo, oil painting, illustration) of business meeting of (four, eight) people watching on white MacBook on top of glass-top table

Output



Here is the creative depiction of a business meeting with eight people gathered around a glass-top table, watching a white MacBook. If you have any further requests or need modifications, let me know!

Try these prompts on Evaluating Quality

{cricket bat photo, oil painting, illustration} of cricket ground of {two, four} people watching on white MacBook on top of glass-top table

Vs

1. cricket bat photo of cricket ground of two people watching on white MacBook on top of glass-top table
2. cricket bat photo of cricket ground of eight people watching on white MacBook on top of glass-top table
3. cricket bat photo of cricket ground of four people watching on white MacBook on top of glass-top table
4. cricket bat photo of cricket ground of eight people watching on white MacBook on top of glass-top table
5. illustration of cricket ground of four people watching on white MacBook on top of glass-top table
6. illustration of cricket ground of eight people watching on white MacBook on top of glass-top table

5. Dividing Labor

Example

Input:

Rate this list of product names for a pair of shoes that can fit any foot size. The rating should be out of 10, inline next to the product name:

UniFit SoleStrides
FlexiSize All-Fit Shoes
OmniFit FootFlex
—
AnyStep AdaptiWalkers
FlexiRange UniversalSteps
PerfectGlide MultiFit Shoes

Output:

Here's a rating for each product name out of 10, based on clarity, marketability, and appeal:

- UniFit SoleStrides: 8/10
- FlexiSize All-Fit Shoes: 7/10
- OmniFit FootFlex: 9/10
- AnyStep AdaptiWalkers: 7/10
- FlexiRange UniversalSteps: 8/10
- PerfectGlide MultiFit Shoes: 6/10

Let me know if you'd like to adjust any of the names!

QH □ C v

Try these prompts on Dividing Labor

Let's think step by step. Rate this list of product names for a pair of shoes that can fit any foot size. The rating should be out of 10, inline next to the product name:

UniFit SoleStrides
FlexiSize All-Fit Shoes
OmniFit FootFlex
...
AnyStep AdaptiWalkers
FlexiRange UniversalSteps
PerfectGlide MultiFit Shoes

Activity 2:

Discover how GPT-4 transforms industries with practical demonstrations in business, healthcare, and various sectors.

Activity	Description	Hands-on Example
Discover How GPT-4 Transforms Business	Practical demonstration of how GPT-4 aids in data analysis, customer insights, and marketing strategies in business.	Task: Analyze customer reviews to identify key trends for improving a product. Prompt: "Summarize the key customer feedback trends from the reviews. Highlight common issues and feature requests to guide product improvement."
Discover How GPT-4 Transforms Healthcare	Explore GPT-4's role in improving patient care through predictive analytics, medical research, and personalized treatment plans.	Task: Generate a personalized treatment plan based on patient data. Prompt: "Create a personalized treatment plan for a patient with diabetes, considering their medical history and current health status."
Discover How GPT-4 Transforms Education	Demonstration of GPT-4 in personalized learning, automated grading, and knowledge dissemination in education.	Task: Generate a set of quiz questions on a topic for adaptive learning. Prompt: "Create a quiz with 5 multiple-choice questions on climate change, with increasing difficulty levels and immediate feedback for each question."
Discover How GPT-4 Transforms Creative Industries	Explore GPT-4's capabilities in content creation, scriptwriting, and design ideation in the creative sectors.	Task: Create a script for a short advertisement promoting a new AI product. Prompt: "Write a 30-second script for a commercial promoting a new AI-powered

		health app, highlighting its features and benefits.”
Discover How GPT-4 Transforms Customer Service	Demonstration of GPT-4's use in enhancing customer service through automated responses and issue resolution.	<p>Task: Generate an automated response for a customer query.</p> <p>Prompt: “Write an automated response for a customer inquiring about the return policy for a defective product, offering clear instructions and next steps.”</p>

Discover How GPT-4 Transforms Business

Input

Summarize the key customer feedback trends from the reviews. Highlight common issues and feature requests to guide product improvement.

output

Please upload the customer reviews dataset, and I will analyze it to summarize key feedback trends, common issues, and feature requests. This will help guide product improvements effectively.

Discover How GPT-4 Transforms Healthcare

Input

Create a personalized treatment plan for a patient with diabetes, considering their medical history and current health status

output

To create a personalized treatment plan for a patient with diabetes, I need details such as:

1. **Type of Diabetes** (Type 1, Type 2, or Gestational)
2. **Age and Weight**
3. **Current Medications**
4. **Blood Sugar Levels (Fasting, Postprandial, HbA1c)**
5. **Other Health Conditions** (e.g., Hypertension, Kidney Disease, Neuropathy)
6. **Lifestyle Factors** (Diet, Physical Activity, Smoking, Alcohol Use)
7. **Any Complications** (e.g., Vision Issues, Foot Ulcers)
8. **Patient's Treatment Goals** (Weight Loss, Blood Sugar Control, Reducing Medications)

Discover How GPT-4 Transforms Education

Input

Create a quiz with 1 multiple-choice questions on climate change, with increasing difficulty levels and immediate feedback for each question.

output

Here's a climate change quiz question with immediate feedback:

Question (Medium Difficulty):

Which of the following gases is the **most significant** contributor to global warming?

A) Oxygen (O₂)
 B) Carbon Dioxide (CO₂)
 C) Nitrogen (N₂)
 D) Helium (He)

Correct Answer: B) Carbon Dioxide (CO₂)

Immediate Feedback:

Correct! Carbon dioxide (CO₂) is the primary greenhouse gas driving climate change, mainly due to fossil fuel combustion.

Discover How GPT-4 Transforms Creative Industries

Input

Write a 30-second script for a commercial promoting a new AI-powered health app, highlighting its features and benefits

output

[Scene opens with a busy professional juggling work and personal life.]

Narrator: Struggling to keep track of your health? Meet **HealthSync AI**—your personal health assistant, powered by cutting-edge AI!

[Cut to a user checking the app on their phone.]

Narrator: Instantly analyze your vitals, get personalized fitness and nutrition plans, and even receive real-time health alerts—all in one app.

[Quick shots of step tracking, meal suggestions, and an AI chatbot providing insights.]

Narrator: Need expert advice? Our AI-powered doctor chat helps you make informed health decisions—anytime, anywhere.

Narrator: Stay healthy, stay ahead—with **HealthSync AI**. Download now and take control of your well-being today!

[End with app logo and tagline: "Your Health, Your AI."]

Discover How GPT-4 Transforms Customer Service

Input

Write an automated response for a customer inquiring about the return policy for a defective product, offering clear instructions and next steps.

output

Subject: Return Policy for Defective Product – Next Steps

Dear [Customer's Name],

Thank you for reaching out to us. We're sorry to hear that you received a defective product, and we're here to make things right.

To initiate your return, please follow these steps:

1. **Submit a Request:** Reply to this email with your order number and a brief description of the issue. Attaching photos of the defect will help us process your request faster.
2. **Approval & Return Label:** Once reviewed, we'll send you a prepaid return shipping label and instructions.
3. **Return the Item:** Pack the product securely and drop it off at your nearest shipping location.
4. **Refund/Replacement:** Once we receive and inspect the item, we will process either a full refund or a replacement, based on your preference.

Hands-on using DALLE

Title: Optimizing Prompt Engineering for DALL·E 3: Enhancing Image Generation Accuracy and Contextual Relevance.

Problem Statement:

You are a digital content creator tasked with generating high-quality, contextually relevant images using DALL·E 3 for a marketing campaign. Despite the model's advanced capabilities, you notice that some outputs lack precision, coherence, or visual alignment with the intended concept. The challenge is to master prompt engineering techniques specific to DALL·E 3 in order to consistently generate accurate, creative, and visually compelling images that meet project requirements.

Steps to be followed:

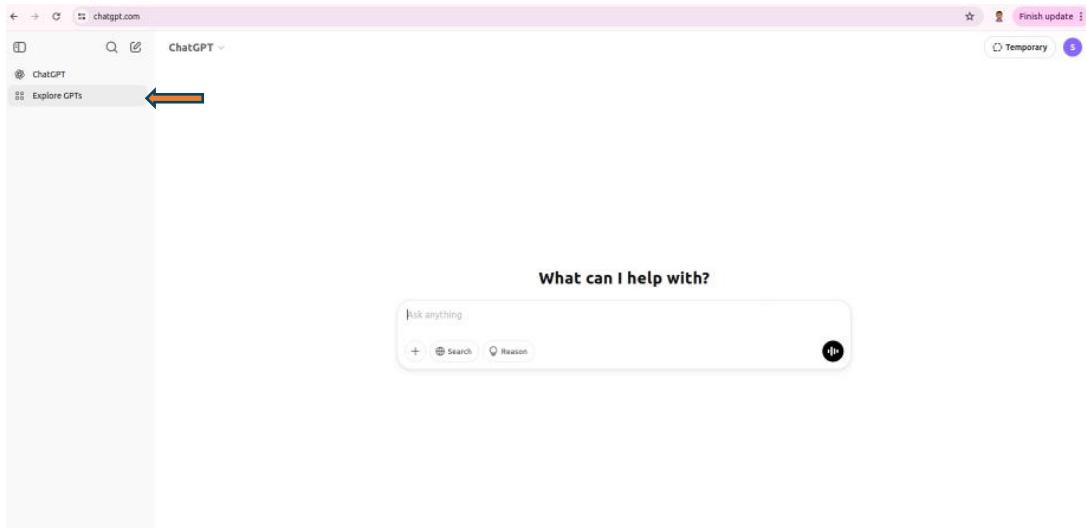
1. How to open DALLE in ChatGPT
2. Search for DALLE
3. Type your prompt
 - a. Giving Direction
 - b. Formatting Responses
 - c. Providing Examples
 - d. Evaluating Quality
 - e. Dividing Labor for Different AI Tasks

Tools Used:

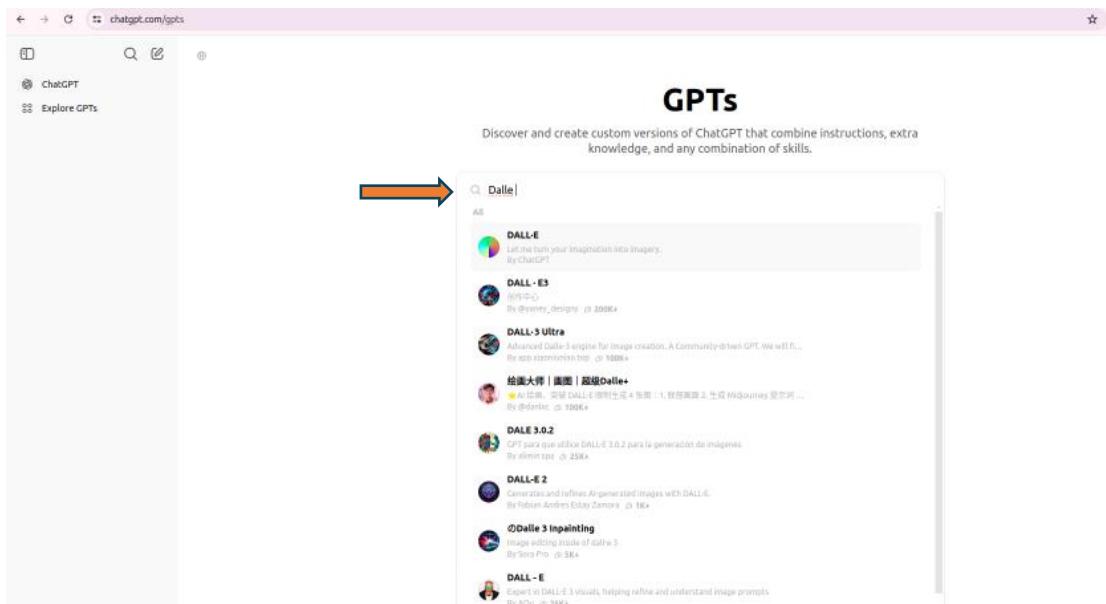
- **DALL·E 3 (OpenAI)** – AI-powered image generation model used to create visuals from textual prompts: <https://chatgpt.com/g/g-2fkFE8rbu-dall-e>
- **Browser Interface** – To access DALL·E 3 via platforms like ChatGPT or Bing Image Creator

Steps in detailed manner:

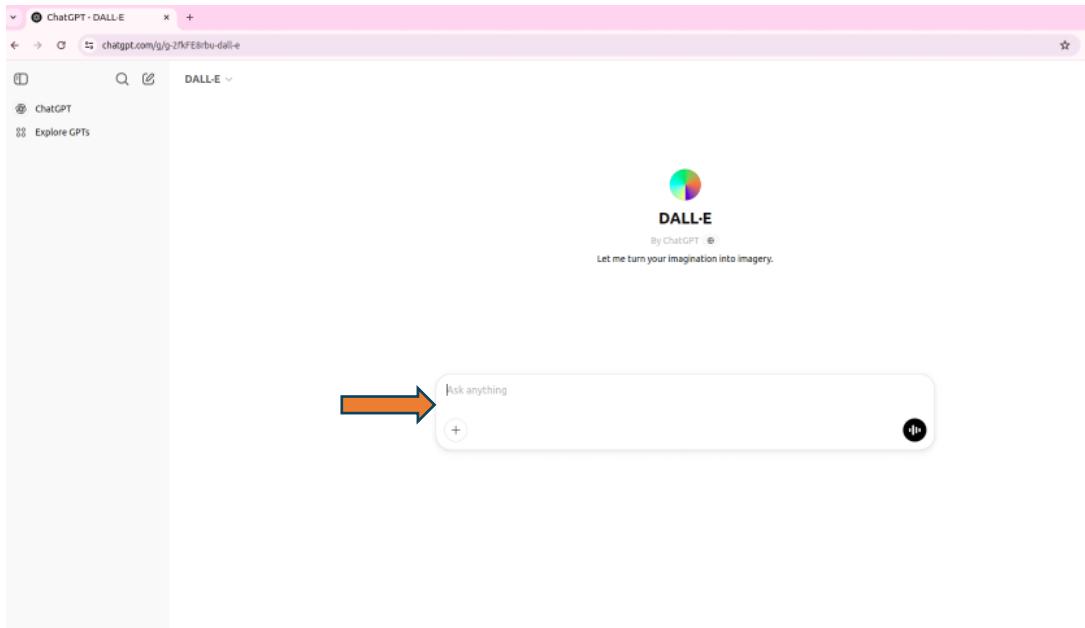
Step-1: How to open DALLE in ChatGPT



Step-2: Search for DALLE



Step-3: Type your prompt



Writing Prompts

Giving Direction:

Task: Generate an AI-generated illustration of a futuristic classroom.

Prompt: "Create a high-resolution digital illustration of a futuristic AI-powered classroom. Include holographic screens, robotic assistants, and students interacting with AI-driven tutors. The environment should be modern, well-lit, and filled with advanced learning technology."

→ **Example:** Create a high-resolution digital illustration of a futuristic AI-powered classroom. Include holographic screens, robotic assistants, and students interacting with AI-driven tutors. The environment should be modern, well-lit, and filled with advanced learning technology."



Here are two high-resolution digital illustrations of a futuristic AI-powered classroom. Let me know if you'd like any modifications or additional details! 🎨🖼️

🔗 🔍 🔍

Try these prompts on Giving Direction

Task: Generate an image of an ancient Egyptian marketplace.

- **Prompt:** "Create a historically accurate illustration of an ancient Egyptian marketplace. Include merchants selling pottery, textiles, and spices, with the Great Pyramid in the background. The crowd should wear traditional Egyptian attire, and the lighting should reflect a warm desert sunset."

Task: Design a sci-fi battle scene.

- **Prompt:** "Generate a high-action sci-fi battle scene on an alien planet. Include humanoid warriors in advanced armor, futuristic weaponry, and flying drones. The battlefield should have neon-lit explosions and a dark, smoky sky for a dramatic effect."

Formatting Responses:

Task: Generate an image of a medieval city with specific details.

Prompt: *"Create a detailed fantasy-style medieval city. The scene should include:

- A bustling marketplace with merchants selling goods.
- A towering castle in the background.
- Cobbled streets with people in period clothing.
- Warm, golden evening lighting for an immersive atmosphere."*



**Create a detailed fantasy-style medieval city. The scene should include:

A bustling marketplace with merchants selling goods.

A towering castle in the background.

Cobbled streets with people in period clothing.

Warm, golden evening lighting for an immersive atmosphere."*



Here are two detailed fantasy-style medieval city scenes with a warm, golden evening ambiance. Let me know if you'd like any adjustments or additional details! 🔥🏰🛍️

Try these prompts on Formatting Responses

Task: Generate a portrait of a fantasy warrior with structured details.

- **Prompt:** **Create a highly detailed portrait of a fantasy warrior. Format the image as follows:
 - Close-up view focusing on facial expressions.
 - Silver and blue armor with intricate engravings.
 - A scar over one eye and long flowing hair.
 - Background: A misty battlefield at dawn."*

Task: Design a cyberpunk street scene.

- **Prompt:** **Illustrate a cyberpunk street at night, formatted with:
 - Neon signs in Japanese and English.
 - Characters in cybernetic enhancements interacting.

- Rainy streets reflecting vibrant city lights.
- A distant view of towering skyscrapers and flying cars."*

Providing Examples

Task: Generate a surreal landscape featuring floating islands.

Prompt: "Create a dreamlike surreal landscape with floating islands above a sea of clouds. The islands should have waterfalls flowing into the air, glowing mystical plants, and ancient ruins."



Create a dreamlike surreal landscape with floating islands above a sea of clouds. The islands should have waterfalls flowing into the air, glowing mystical plants, and ancient ruins.

< 2/2 >



Here are two dreamlike surreal landscapes with floating islands, glowing mystical plants, and ancient ruins above a sea of clouds. Let me know if you'd like any modifications!

Try these prompts on Providing Examples

Task: Generate an image of a futuristic space colony.

- **Prompt:** "Illustrate a futuristic space colony on Mars. For example, include geodesic dome habitats, astronauts conducting research, and a space shuttle landing pad. The Martian landscape should have red rocks, dust storms, and a view of Earth in the distant sky."

Task: Depict an enchanted forest with magical creatures.

- **Prompt:** "Create a fantasy-style enchanted forest. For instance, feature glowing blue mushrooms, fairy-like creatures, and ancient trees with floating lanterns. Add a mysterious river reflecting the starlit sky to enhance the magical feel."

Evaluating Quality:

Task: Generate a cyberpunk cityscape at night.

Prompt: "Create a neon-lit cyberpunk city at night, filled with towering skyscrapers, flying cars, and holographic advertisements. The streets should be bustling with futuristic characters in cybernetic enhancements. Ensure the lighting effects capture the neon reflections on wet streets."

Evaluation Criteria:

1. **Clarity & Detail:** Does the image include the requested elements (skyscrapers, neon lights, flying cars)?
2. **Accuracy:** Does it match the cyberpunk aesthetic, or does it deviate into a different style?
3. **Visual Coherence:** Are all objects well-formed and proportionate, or are there inconsistencies?
4. **Artistic Quality:** Does the lighting, color contrast, and composition create an immersive cyberpunk vibe?



Create a neon-lit cyberpunk city at night, filled with towering skyscrapers, flying cars, and holographic advertisements. The streets should be bustling with futuristic characters in cybernetic enhancements. Ensure the lighting effects capture the neon reflections on wet streets.



Here are two neon-lit cyberpunk cityscapes filled with towering skyscrapers, flying cars, and bustling futuristic streets. Let me know if you'd like any adjustments!

Try these prompts on Evaluating Quality

Task: Generate an image of an underwater city.

- **Prompt:** "Create a detailed illustration of an advanced underwater city with glowing coral buildings, marine life swimming between structures, and futuristic submarine transport. Ensure a sense of depth and realism with accurate light refraction."
- **Evaluation:**
 - Are the underwater elements clear and realistic?
 - Does the lighting and depth make the scene immersive?
 - Is there a futuristic aesthetic without losing the aquatic theme?

Task: Design a Viking raid scene.

- **Prompt:** "Illustrate a Viking raid on a coastal village, featuring Viking ships in the background, warriors in fur-lined armor wielding axes, and a burning settlement. The scene should feel dynamic and intense."
- **Evaluation:**
 - Are the Viking details historically accurate?
 - Does the action convey motion and energy?
 - Is the color palette appropriate for a dramatic, intense scene?

Dividing Labor for Different AI Tasks

Task: Generate distinct AI-generated images for two separate aspects of an eco-friendly city—architecture and transportation.

Prompt:

*First, create an image of a futuristic eco-friendly city with sustainable skyscrapers covered in greenery, solar panels, and rooftop gardens. Ensure a bright, clean, and utopian atmosphere with a clear blue sky.

Next, generate a separate image focusing on sustainable transportation in the same city. Include electric buses, solar-powered bikes, pedestrian-friendly walkways, and a well-

integrated public transport system with minimal traffic congestion. Each image should maintain a consistent artistic style but focus on its respective theme."*

First, create an image of a futuristic eco-friendly city with sustainable skyscrapers covered in greenery, solar panels, and rooftop gardens. Ensure a bright, clean, and utopian atmosphere with a clear blue sky.

Next, generate a separate image focusing on sustainable transportation in the same city. Include electric buses, solar-powered bikes, pedestrian-friendly walkways, and a well-integrated public transport system with minimal traffic congestion. Each image should maintain a consistent artistic style but focus on its respective theme."



Try these prompts on Dividing Labor

Task: Create separate images for different areas of an alien civilization.

- **Prompt:** "First, generate an image of an alien marketplace filled with intergalactic species trading futuristic goods. The market should have a neon-lit environment and advanced technology. Next, create a separate image of the alien government headquarters, featuring a grand futuristic council hall with representatives from various species discussing interstellar politics."

Task: Illustrate different time periods in a single story.

- **Prompt:** **Create two separate images:

- One image depicting a medieval kingdom with castles, knights, and villagers in traditional attire.
- A second image showing the same location in a dystopian cyberpunk future, where neon-lit skyscrapers replace castles, and armored knights are now cyber-enhanced warriors."*



aicerts.ai

Contact

252 West 37th St., Suite 1200W
New York, NY 10018