

# **SkillCraft Technology Internship – AI Prompt Engineering**

## **Task 02: Prompting for Creativity**

### **Objective**

The main objective of Task 02 – Prompting for Creativity is to understand how the structure, tone, and examples used in prompts affect the creativity and quality of AI-generated responses. This task helps in exploring how artificial intelligence responds differently when given simple, detailed, tone-based, or example-based (few-shot) prompts.

By experimenting with various prompt styles, learners can observe how slight changes in wording, tone, or structure can completely alter the AI's output. The task focuses on improving prompt design skills to make AI responses more creative, relevant, and aligned with the user's expectations. It also introduces the concept of few-shot prompting, where examples are included to guide the AI in generating results that follow a desired pattern or style.

### **Task Description**

In this task, I experimented with different types of prompts to see how they impact creativity.

The creative topic I chose is “**Startup Ideas.**”

I created multiple prompts with different tones and styles and compared how ChatGPT’s responses changed.

### **Prompts and Outputs**

#### **Prompt 1 – Simple Prompt**

**Prompt:**“Give me 3 startup ideas”

#### **Output:**

#### **AI-Powered Health Monitoring Platform**

Develop an AI-based platform that integrates with wearable devices to monitor users' health metrics in real time. The platform uses machine learning to detect anomalies, provide early

warnings for diseases (like heart disease or diabetes), and offer daily personalized health recommendations.

### **Personalized Learning Assistant for Students**

Create a generative AI assistant designed for students, offering step-by-step help on coding, math, and science homework. The assistant adapts to each student's learning pace, provides real-time feedback, and generates customized quizzes for effective study.

### **Localized Quantum Computing Services**

Offer cloud-based quantum computing access for small enterprises and research labs. Your startup builds easy-to-use APIs and educational tools so that organizations without quantum expertise can run simulations, explore optimization problems, or develop new algorithms relevant to their field.

## **Prompt 2 – Structured Prompt**

**Prompt:“Suggest 3 creative startup ideas focused on sustainability and technology. Include the name, purpose, and target audience.”**

### **output:**

#### **1. EcoGrid Share**

- Purpose: A community-driven platform for sharing excess solar energy via a localized microgrid. It enables neighborhoods to trade renewable energy, reducing dependence on fossil fuels and maximizing clean energy use.
- Target Audience: Residential communities, neighborhood associations, and solar panel owners interested in sustainable energy solutions.

#### **2. SmartCompost IoT**

- Purpose: IoT-enabled smart compost bins that track organic waste decomposition, provide composting tips, and send reminders when compost is ready. This encourages efficient composting and reduces landfill waste.
- Target Audience: Environmentally conscious households, urban gardeners, and small-scale organic waste producers.

#### **3. CropSense AI**

- Purpose: An AI-driven platform for precision farming that uses IoT sensors and satellite data to optimize irrigation, fertilizer use, and crop monitoring. It aims to increase yields while minimizing environmental impact.

- Target Audience: Small to medium farmers, agricultural cooperatives, and agritech enterprises focused on sustainable practices.

### **Prompt 3 – Few-Shot Prompting:**

**Prompt: Example 1: “EcoBox” – A subscription box that delivers zero-waste lifestyle products to promote sustainable living.**

**Example 2: “SkillHive” – An app that connects local tutors and learners for personalized skill development.**

**Now generate three new and creative startup ideas with names, short descriptions, and target users.**

### **Output :**

#### **1. “MindLink”**

An AI-powered platform that helps students and professionals improve focus and productivity through personalized neurofeedback and mindfulness training.

Target users: University students, remote workers, and tech professionals seeking better mental clarity and work-life balance.

#### **2. “FarmNest”**

A smart marketplace connecting urban consumers directly with organic farmers using blockchain for transparent pricing and traceability of produce.

Target users: Health-conscious urban families and small-scale organic farmers.

#### **3. “ReVibe”**

An app that promotes community-based sustainability by rewarding users for recycling, sharing items, and participating in local green events.

Target users: Environmentally conscious citizens and students committed to reducing waste and promoting eco-friendly lifestyles.

## **Prompt 4 – Tone-Based Prompt**

### **(a) Prompt : Formal Tone**

**“Suggest 3 innovative startup ideas in the field of technology and sustainability. Describe each idea briefly in a professional and informative tone.”**

Smart Waste Analytics (“EcoSight”)

A platform that uses AI-powered image recognition and IoT sensors to monitor public and private waste bins, analyze waste streams, and provide actionable insights to cities and businesses. This system helps optimize collection schedules, reduce landfill volume, and increase recycling efficiency by identifying contamination sources in real time.

Target users: Municipalities, large office campuses, universities, and property management firms seeking data-driven waste reduction.

Regenerative Agriculture Networks (“AgroGrid”)

A digital marketplace and advisory tool for small- to mid-size farmers, leveraging remote sensing and climate-smart analytics to support regenerative agriculture practices. The platform matches farms with buyers seeking verified low-carbon produce, provides micro-financing for transition activities, and connects users with agronomists for guidance on biodiversity, soil health, and carbon credit programs.

Target users: Sustainable food brands, carbon credit marketplaces, and eco-conscious farmers.

Modular Urban Energy Hubs (“MicroNova”)

A network of scalable, community-owned microgrid pods that harness solar, wind, and advanced battery storage for neighborhoods or business parks. MicroNova uses predictive AI to balance grid loads, integrate EV charging, and offer transparent usage analytics to residents. This decentralizes energy production, reduces emissions, and increases local energy resilience.

Target users: Urban planners, real estate developers, and forward-thinking city councils aiming for energy independence and net-zero goals.

### **(b) Prompt : Fun and Excited Tone**

**“Pretend you’re a super-enthusiastic startup mentor!  
Give me 3 exciting and futuristic startup ideas that sound creative, fun, and inspiring.”**

## **1. “GlowCycle”**

Imagine a bike-sharing system where every pedal lights up the path and generates clean electricity for your neighborhood! GlowCycle’s smart bikes harvest kinetic energy as you ride, powering streetlights and charging stations, turning your daily commute into a glowing green revolution. Ride, shine, and power your city!

Why it’s fun: You’re literally lighting up the street with your ride!

## **2. “DreamWeaver VR”**

Step into an immersive virtual world where creativity meets sustainability. DreamWeaver VR lets users design futuristic eco-cities, plant virtual forests, and prototype climate solutions—all while learning how those changes can impact the real world. It’s gaming, education, and global good rolled into one spectacular experience!

Why it’s fun: Build your dream planet while saving the real one!

## **3. “BioBuddy”**

Say hello to your personal living assistant—a cute bioengineered pet that cleans your home’s air, tracks environmental changes, and even helps you reduce your carbon footprint with personalized eco-tips. BioBuddy evolves with you, making sustainability a delightful everyday adventure.

Why it’s fun: Your best eco-friend is alive, adorable, and planet-smart!

## **Comparison Table**

Prompt Type	Prompt Style / Approach	Tone of Response	Creativity Level	Detail & Structure	Observation / Key Insights
Prompt 1 – Simple Prompt	Very short and general (e.g., “Give me 3 startup ideas”).	Neutral and straightforward.	Moderate	Basic – lists ideas without much explanation.	Quick to generate but lacks structure and depth; responses are general and less innovative.
Prompt 2 – Structured Prompt	Includes clear instructions such as name, purpose, and	Formal and informative.	High	Well-organized and detailed.	Gives professional, practical, and focused ideas with clear format

	target audience.				and purpose.
Prompt 3 – Few-Shot Prompting	Provides examples before asking the question to guide AI's tone and structure.	Context-aware and balanced.	Very High	Consistent and creative.	AI follows the pattern from examples and produces unique, well-structured outputs.
Prompt 4 – Tone-Based Prompt	Uses tone variation (Formal vs Fun & Excited).	Changes by tone: professional or playful.	Very High	Creative and expressive.	Formal tone gives technical and polished ideas; fun tone creates energetic and imaginative responses.

## Conclusion

From this activity, it is clear that the structure, tone, and examples used in a prompt have a major impact on the quality, creativity, and clarity of AI-generated responses.

The simple prompt produced quick but limited ideas, while the structured prompt gave more organized and detailed results. The few-shot prompting method was highly effective because the examples guided the AI to generate responses with a consistent pattern and better creativity. Finally, the tone-based prompt showed how the same topic can produce very different outcomes depending on whether the tone is formal or fun.

Overall, this task helped in understanding that well-designed prompts lead to more relevant, engaging, and creative AI outputs. It also improved my ability to think critically about how to communicate effectively with AI systems for creative idea generation.