

## **Experiment 5: Scenario-Based Report Development Using Diverse Prompting Techniques**

### **Objective:**

To understand and compare different prompting techniques for generating responses in scenario-based report development.

### **Scenario**

A travel company is creating a report to inform their customers about sustainable travel practices. The company wants a section explaining how tourists can reduce their environmental impact. We'll apply three types of prompting to see how the responses vary in depth, focus, and clarity.

### **Prompts and Responses**

#### **1. Direct Prompting**

Prompt: "Explain how tourists can reduce their environmental impact when traveling."

Response:

"Tourists can reduce their environmental impact by using public transportation instead of renting cars, staying in eco-friendly accommodations, minimizing plastic use, conserving water, and respecting local wildlife and natural habitats. Sustainable travel also includes supporting local businesses and reducing energy consumption wherever possible."

#### ***Analysis:***

- Strengths: Provides a quick, high-level overview of practices.
- Limitations: Lacks specific examples, context, or actionable details. The response may seem too general for a report aimed at educating customers.

#### **2. Iterative Prompting**

Initial Prompt: "Explain how tourists can reduce their environmental impact when traveling."

Follow-Up Prompt: "Provide more examples and specific actions tourists can take."

Response:

"Tourists can reduce their environmental impact by choosing eco-friendly transportation options like trains, buses, or electric vehicles when available. Staying at accommodations certified for environmental responsibility, such as LEED-certified hotels or eco-lodges, can also reduce energy use. Packing reusable items like water bottles, bags, and utensils minimizes plastic waste. Tourists should conserve resources by turning off lights and air conditioning when leaving their rooms, using towels and linens for multiple days, and taking shorter showers. Supporting local and small businesses, especially those with sustainable practices, also reduces the carbon footprint associated with international supply chains."

**Analysis:**

- Strengths: The follow-up prompt encourages more detail and specific examples, making the response more useful and engaging for readers.
- Limitations: Requires multiple interactions to achieve a comprehensive answer, which can be time-consuming if many refinements are needed.

### **3. Guided Prompting**

Prompt: "Write a paragraph for a travel report that explains five specific actions tourists can take to reduce their environmental impact. Use a friendly and informative tone."

Response:

"When traveling, tourists can reduce their environmental impact in a few easy ways. First, opt for public transportation, biking, or walking over renting a car, which lowers emissions. Second, choose eco-friendly hotels that implement green practices, like energy-efficient lighting and water-saving fixtures. Third, pack a reusable water bottle and avoid single-use plastics. Fourth, take shorter showers and skip daily towel changes to save water and energy. Finally, support local businesses and farmers' markets, which reduces the carbon footprint from food and product imports. By making these small changes, travelers can enjoy their trips while protecting the environment."

**Analysis:**

- Strengths: Highly targeted, clear, and organized response. The specified tone makes the text engaging and customer-friendly.
- Limitations: Limited to exactly what the prompt specifies, which could omit details if they aren't requested directly.

## Comparison of Responses

Prompt Type	Strengths	Weaknesses	Best Use Case
Direct Prompting	Quick and efficient overview; concise response.	Generalized, lacks detail or examples.	When short, to-the-point answers are needed.
Iterative Prompting	More detailed, with additional context and specific examples from follow-up prompts.	Requires multiple prompts, potentially time-consuming.	When depth and comprehensiveness are important.
Guided Prompting	Provides structured, engaging, and reader-friendly responses that match tone and format requirements.	Highly specific to prompt instructions, so missing details may require re-prompting.	When a well-structured and stylistically tailored response is needed.

## Conclusion

Guided prompting delivered the most polished response aligned with the goal of informing customers in a friendly and structured way, making it ideal for customer-focused reports. However, iterative prompting was helpful for adding detail when needed, while direct prompting was quick for generating general ideas.