

# Scenario-Based Report Development Utilizing Diverse Prompting Techniques

## Aim:

To create a comprehensive report for the design of a specific application, such as **AI-powered chatbot/solar panel system/automation in manufacturing**, using diverse prompt patterns. This report will employ scenario-based prompting techniques to guide each stage of the design process, ensuring the solution meets the functional and user experience requirements for the chosen application.

## Procedure:

### 1. Define the Scenario and Use Case:

Outline the purpose of the design, the target audience or user base, and its main objectives. Specify the goals the design aims to fulfill, such as **user engagement/energy efficiency/task automation**.

### 2. Identify Prompt Patterns for Each Design Aspect:

Select appropriate prompt patterns to guide different aspects of the design. Examples of prompt patterns and their applications in the report include:

- **Idea Generation Prompts:** Brainstorm innovative features or functions the design should incorporate to meet specific goals.
- **Persona and Context Prompts:** Define the tone, style, or experience the design should convey (e.g., **user-friendly/sustainable/reliable**), aligning with the intended audience.
- **Exploratory Prompts:** Investigate resources or information essential for the design, such as **user needs/environmental constraints/technical requirements**.
- **Refinement Prompts:** Refine design elements by adjusting specifications, materials, or style to meet project standards.
- **Scenario Testing Prompts:** Simulate realistic scenarios or use cases to test the design's effectiveness and adaptability in **user interaction/environmental settings/production workflows**.
- **Error Handling Prompts:** Design prompts to handle potential issues or challenges effectively within the **user interface/system functionality/automation processes**.

### 3. Implementation Plan:

Describe the steps to build and implement the design, from **system configuration/component selection/automation setup** to **testing and deployment/installation/integration**.

### 4. Evaluation and Feedback Collection:

Use targeted feedback prompts to gather insights from **users/stakeholders/operators**, refining the design based on their input for improved functionality and alignment with objectives.

## 5. Documentation of Findings:

Summarize insights from each prompting technique, noting how they enhanced the design. Include any best practices, limitations, or future improvements.

### Deliverables:

#### 1. Detailed Report:

- Sections covering aim, background, audience needs, and primary objectives.
- Documentation of prompt patterns applied at each development stage, with examples.
- Evaluation and feedback summaries with key findings.

#### 2. Prototype/System Outline:

- A functional version or detailed outline of the **AI-powered chatbot/solar panel system/automation setup**.

#### 3. Prompt Effectiveness Summary:

- Analysis of the most impactful prompt patterns, with examples of how they shaped the final design.

#### 4. User Testing Results and Improvement Plan:

- A report on testing, feedback received, and proposed enhancements for future iterations.

Prompt : give me a literature summary for the following paper :

<https://www.ijraset.com/research-paper/women-safety-device-with-gps-tracking-and-alerts>

### Result :

The paper titled "Women Safety Device with GPS Tracking and Alerts" presents a solution aimed at enhancing the safety of women through the integration of various technologies, including GPS, GSM modules, and emergency response systems. The primary objective is to develop a portable safety device that can send real-time location data and emergency alerts to pre-configured contacts when triggered by the user in distress.

Key aspects of the proposed system include:

- **\*GPS and GSM Modules\***: These are utilized to communicate the victim's location to emergency contacts. The GPS module tracks the exact geographic location, while the GSM module sends alerts via SMS.
- **\*Panic Button\***: A physical switch is included to manually trigger the emergency protocol, activating the GPS and sending location data.
- **\*Vibration Sensor and Siren\***: These components provide added security. When activated, an audible siren and flashing lights alert nearby individuals.
- **\*Self-defense Mechanism\***: A shock circuit offers a means of defense, giving the victim a chance to escape.

The device's modular design also supports future integration into wearable technology, such as smartwatches or VLSI chips. The system aims to provide rapid assistance, especially in situations where immediate human intervention may not be available. This project addresses

the increasing need for real-time safety measures and incorporates modern technology to ensure the safety of women in vulnerable situations.

For further information, you can access the full paper [\[here\]](#)(13).