Techwalnut Innovations

Technical Assessment



Prompt Engineer Task

Task Code: TW-TSK-PE-25-01

Objective

Design a 5–6 screen application for a given business or operational use case using AI tools (like ChatGPT, Claude, Gemini, MidJourney, Figma AI, or other UI-generating AI). The focus is on prompt engineering, iterative refinement, and generating functional, visually coherent screens.

Problem Statement: Office Pantry Management Application

You are tasked with designing an application for office pantry management that supports two types of users: **the company admin and the vendor**. The company admin is responsible for managing and maintaining logs of tea, coffee, biscuits, and other pantry items consumed by employees or visitors. They can track consumption on a daily or per-visit basis and generate consolidated reports to monitor overall usage.

The vendor, on the other hand, is responsible for setting the prices of pantry items and monitoring total quantities sold. Based on the consumption logs provided by the admin, the vendor can generate monthly invoices and download them for billing purposes.

The objective of the application is to streamline the entire process of logging, tracking, and billing pantry consumption, ensuring accurate records for the admin while automating billing and invoicing for the vendor.

1. Application Design Using Al

- 1.1. Use AI to generate wireframes or UI mockups for each screen of the application.
- 1.2. Each screen should have a clear purpose and functionality, aligned with the use case provided.
- 1.3. Ensure the screens are consistent in design language, color, and layout.
- 1.4. Key Deliverables:
 - 1.4.1. 5–6 screens for the application
 - 1.4.2. Screens must demonstrate navigation flow, interactive elements, and key functionalities

2. Prompt Engineering for AI

- 2.1. Write effective AI prompts to generate the screens, including all UI elements, text, and layout instructions.
- 2.2. Iterate on AI outputs to refine the screens based on feedback or gaps in design.
- 2.3. Include variations to test different layouts, color schemes, or functionality enhancements.
- 2.4. Key Deliverables:
 - 2.4.1. Prompt effectiveness (measured by how closely AI output matches intended design)
 - 2.4.2. Iteration efficiency (number of iterations needed to finalize a screen)
 - 2.4.3. Consistency and completeness of generated screens

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3. Documentation & Process Transparency

- 3.1. Maintain a complete record of all AI interactions used to generate screens.
- 3.2. Document all prompts, Al outputs, and refinements in chronological order.
- 3.3. Include rationale for changes and why certain prompts worked better.
- 3.4. Key Deliverables:
 - 3.4.1. Completeness of AI chat logs
 - 3.4.2. Clarity of prompt documentation
 - 3.4.3. Traceability from prompt \rightarrow Al output \rightarrow final screen

Deliverables

- 1. Screens of the application (5–6 screens) in any viewable format (PNG, PDF, Figma, etc.).
- 2. An entire AI chat transcript was used to generate the screens, including prompts, responses, and iterations.
- 3. Optional: Brief summary (3–5 points) explaining key design decisions, prompt strategies, and learning outcomes.

Submission Guideline

- 1. **Submission Components:** Each submission must include:
 - 1.1. Screens:
 - 1.1.1. 5–6 application screens in PNG/PDF/Figma link.
 - 1.2. **Documentation**:
 - 1.2.1. A PDF report containing:
 - 1.2.1.1. All prompts and iterations in chronological order.
 - 1.2.1.2. Explanations of changes and final outcomes.
 - 1.2.1.3. Summary of design decisions and learnings (3–5 points).
 - 1.3. Al Transcript:
 - 1.3.1. Exported or copied transcript of AI chats used for the task. (Mandatory)
- 2. File & Folder Naming Convention
 - 2.1. A dedicated folder must be created by each student inside the shared Google Drive
 - 2.2. Folder Name Format: Role_FullName_TaskID
 - 2.2.1. Example: PromptEngineer_AkashMehta_TSK-PE-25-01
 - 2.3. Inside this folder:

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- 2.3.1. Screens → PE_Screens_FullName.pdf/png/figma
- 2.3.2. Transcript → PE_Transcript_FullName.pdf

3. Submission Drive

- 3.1. All students must upload their work to the common Google Drive folder shared by the coordinator.
- 3.2. Create your own subfolder as per the naming convention.
- 3.3. Submissions sent via email or personal links will not be accepted.

4. Deadline

- 4.1. The final submission must be completed by Sunday, 21st September, at 7:00 PM.
- 4.2. Late submissions will not be evaluated unless pre-approved.

5. Role Identification

- 5.1. This task is assigned for the role: **Prompt Engineer**
- 5.2. Task Code: TW-TSK-PE-25-01
- 5.3. The role name and task code must be clearly mentioned on the **cover page** of the PDF report.