

Technical Assessment Report

PantryPal Application Design

Company: Techwalnut Innovations

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

Role Identification: Prompt Engineer

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Submission Date: September 21, 2025

--- SUMMARY OF DESIGN DECISIONS & LEARNINGS ---

****1. Strategic Workflow:****

My process involved a two-tool strategy: I utilized Google's AI Studio as an LLM to help structure and refine complex UI prompts, then executed those prompts in Gemini to generate the visual mockups. This allowed for a high degree of precision in my instructions and ensured a consistent design language across all generated screens.

****2. Consistent Design System:****

From the very first prompt, I established a clear design system for the "PantryPal" app. By strictly defining the color palette (primary #0D253F, accent #1DB954), typography (clean sans-serif), and overall style (minimalist, professional), I ensured that Gemini produced a cohesive set of screens that look like they belong to the same application. This foundational prompt was key to maintaining brand consistency.

****3. The Power of Iterative Refinement:****

Every screen in this report is the result of a deliberate, iterative process. The initial V1 prompt served to generate a baseline design. I then critically analyzed the output and crafted a V2 refinement prompt to address specific weaknesses or add crucial functionality. For example, changing the Vendor Dashboard's static data cards to a visual bar chart made the screen more insightful, demonstrating a focus on user experience through targeted prompt adjustments.

****4. Key Prompting Learnings:****

This task reinforced that clarity and specificity are paramount. Vague instructions lead to generic outputs. I learned that using precise UI/UX terminology like "Floating Action Button (FAB)", "data visualization", and "pie chart" gave the AI the exact context it needed, drastically improving the quality of the output and reducing the need for further iterations. My efficiency improved with each screen as I learned how to better communicate design intentions to the AI.