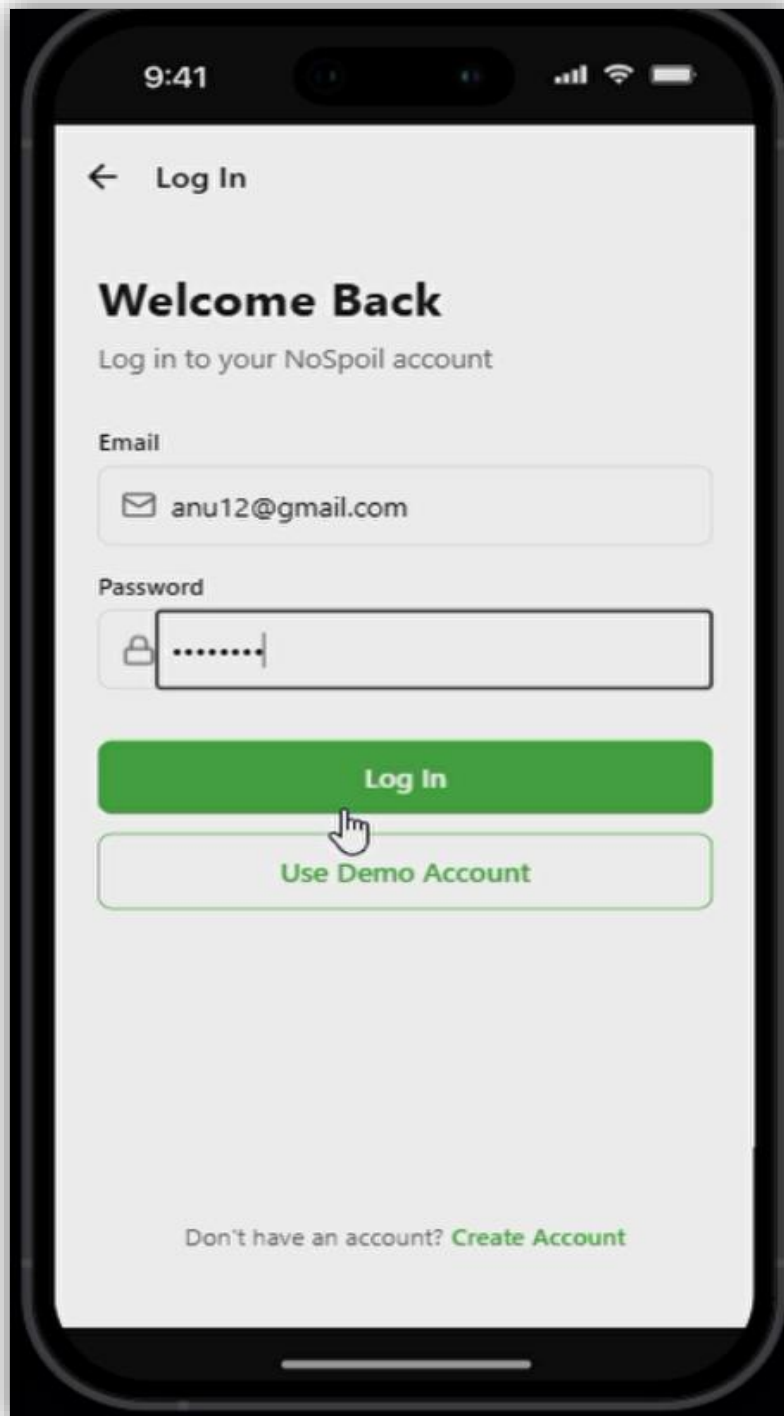**Drawings**

Figure 1 – NoSpoil Home Screen UI with primary navigation and entry points.
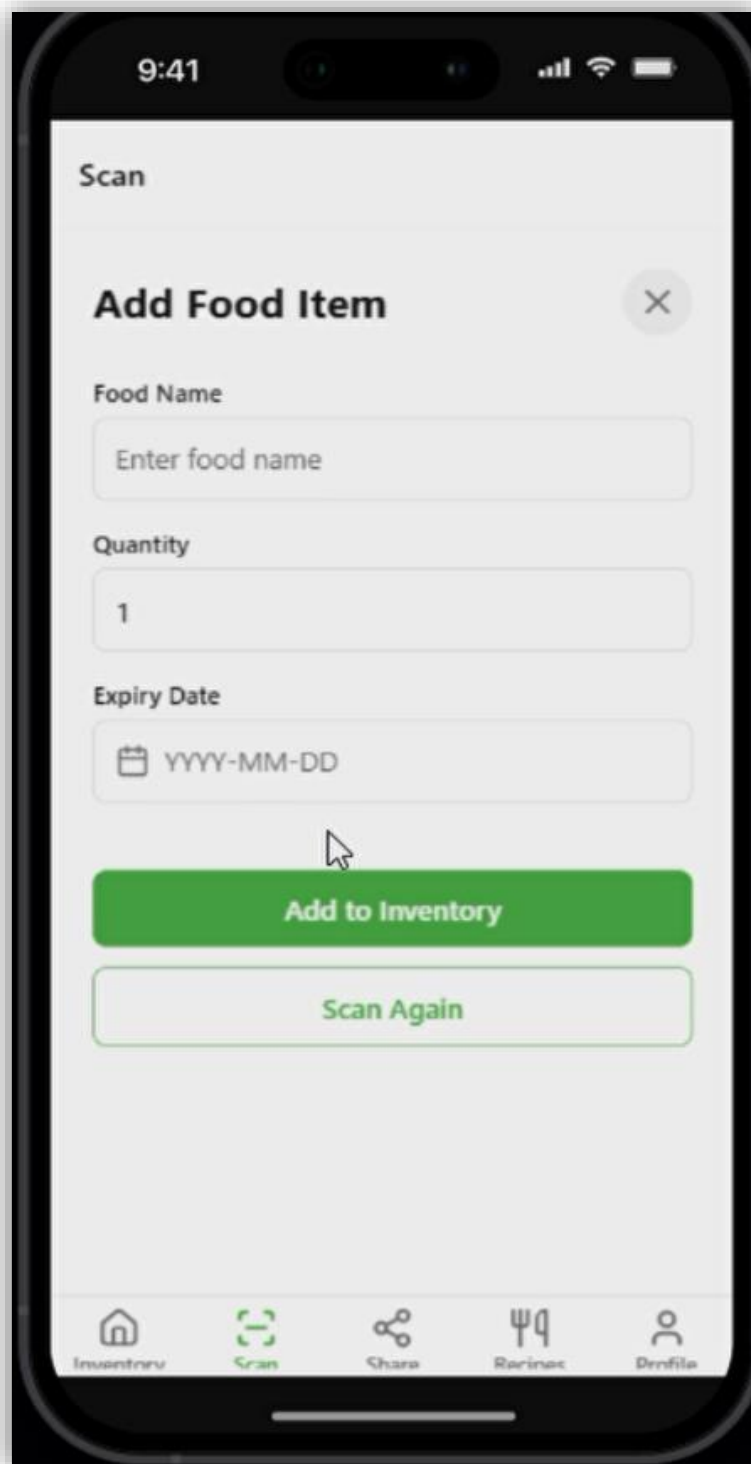
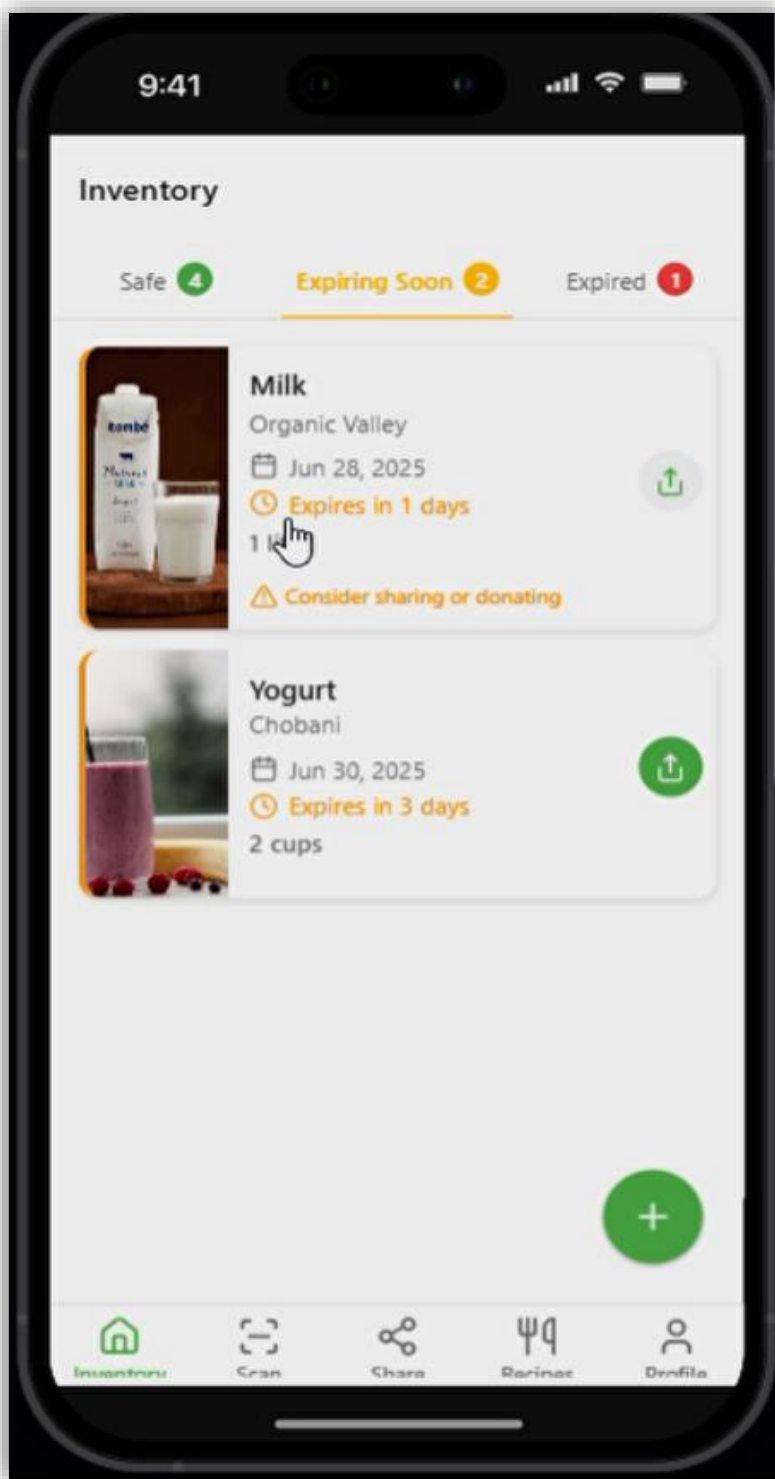Figure 2 – Barcode scanner module capturing product expiry via camera input.

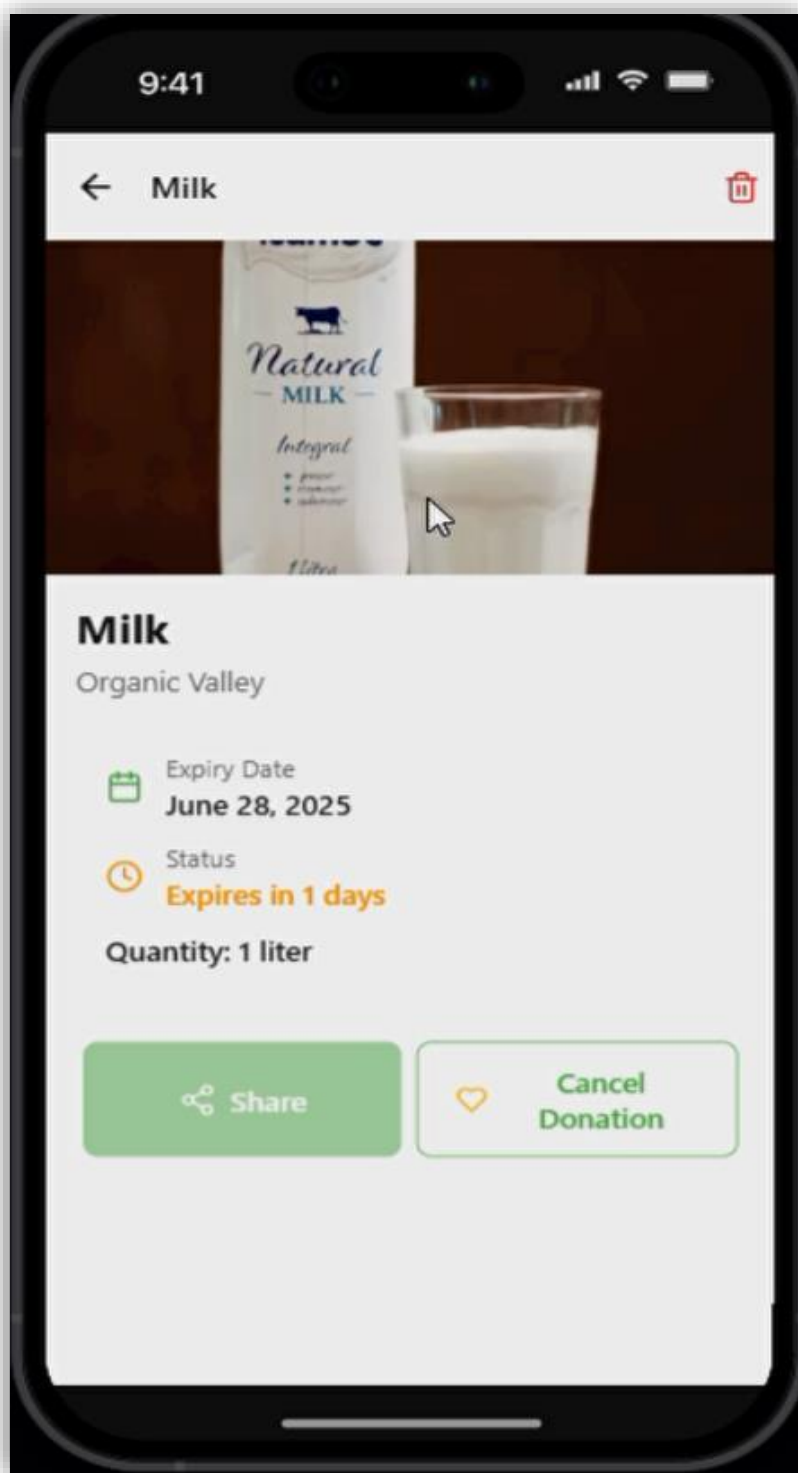Figure 3 – Pantry module displaying categorized food items with expiry tracking.

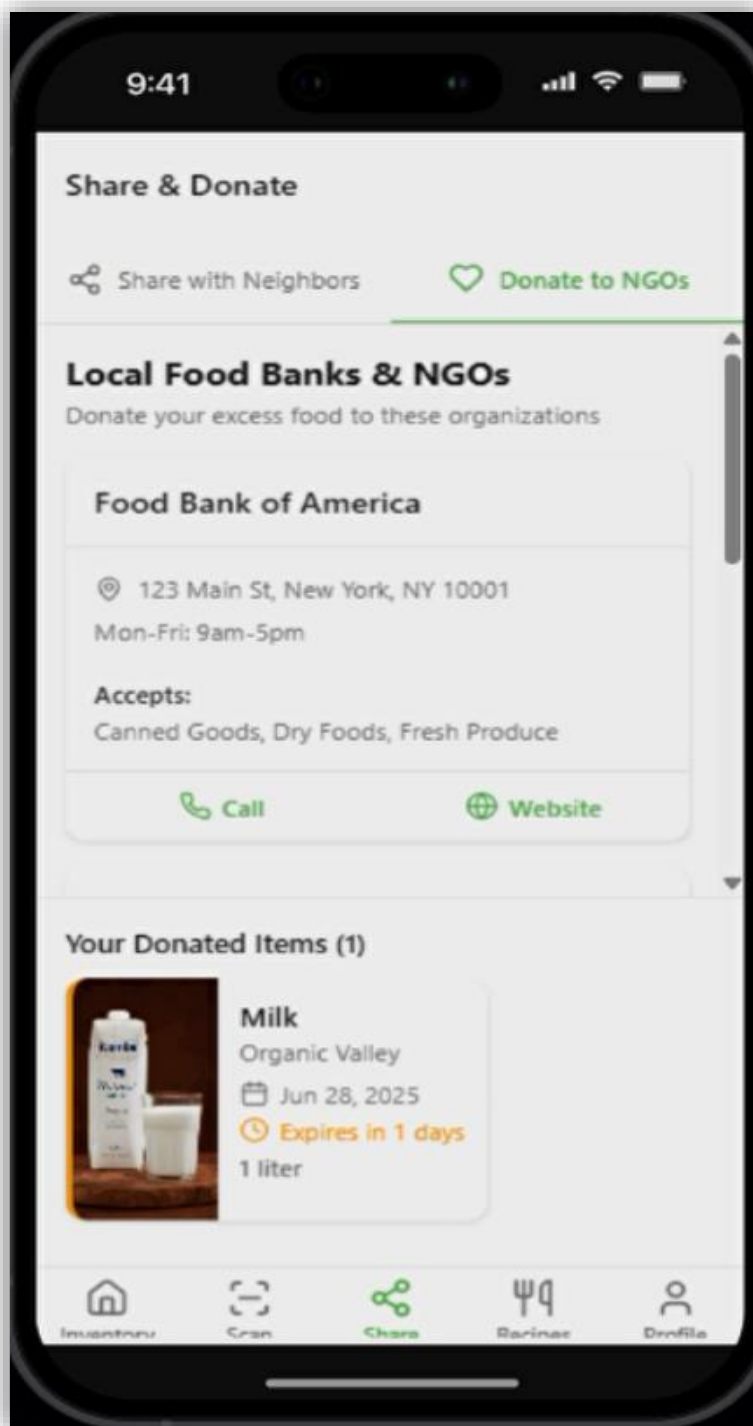Figure 4 – Expiry alert system with real-time notifications for soon-to-expire items.

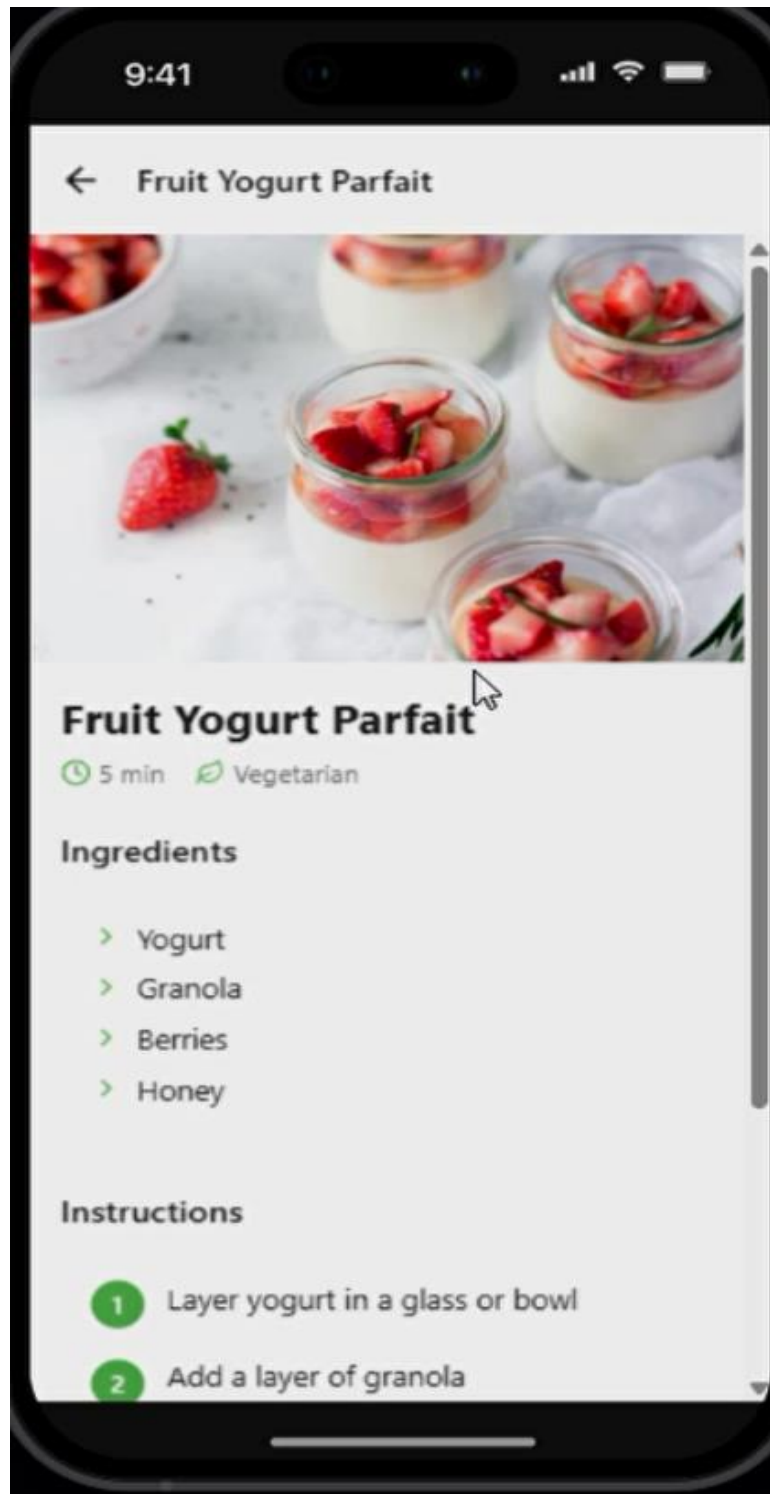Figure 5 – Share Box interface enabling food sharing with neighbors or NGOs.

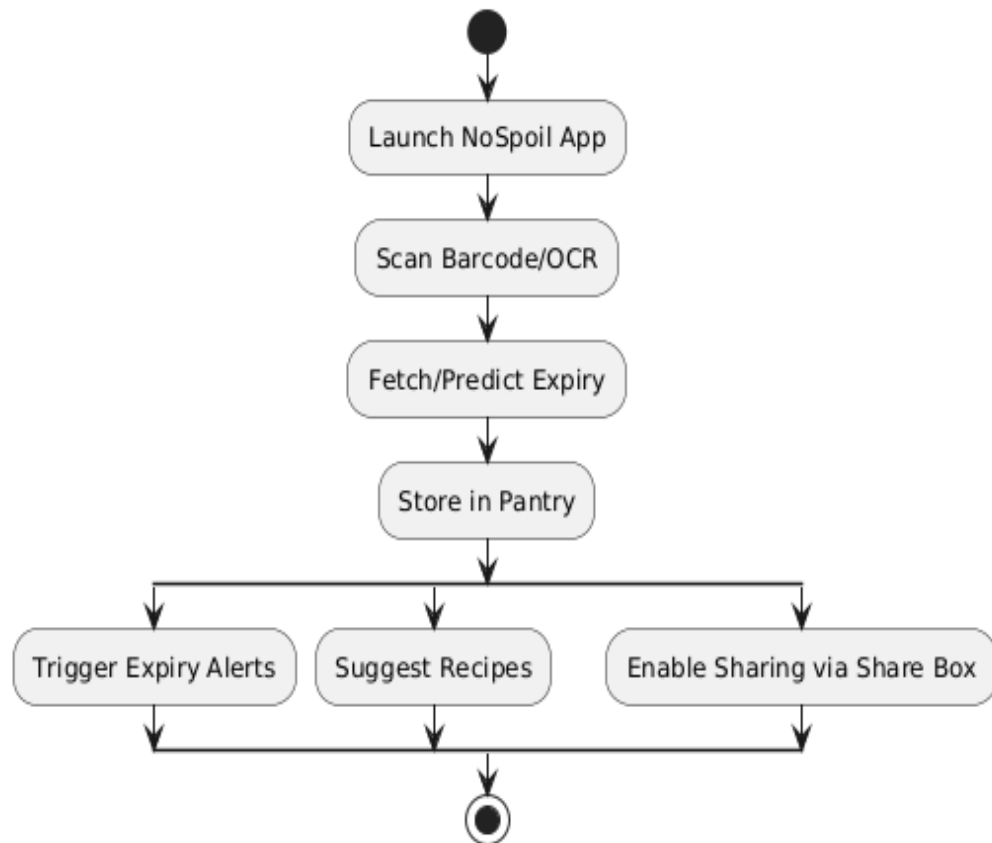Figure 6: Recipe Suggestions from Near-Expiry Items

Figure 7 – System Architecture of NoSpoil App

A block-level overview depicting the interaction between core modules including the scanner, expiry detection engine, pantry manager, alert system, share box, recipe engine, and cloud/database integrations.

Figure8– Share Box Workflow for Community Food Distribution

This flowchart illustrates the step-by-step process through which a user selects a food item to share, enables location access, enters quantity and item details, and notifies nearby users or food banks. Upon confirmation of pickup, the item is marked as donated in the system, completing the food redistribution process via the NoSpoil Share Box module.
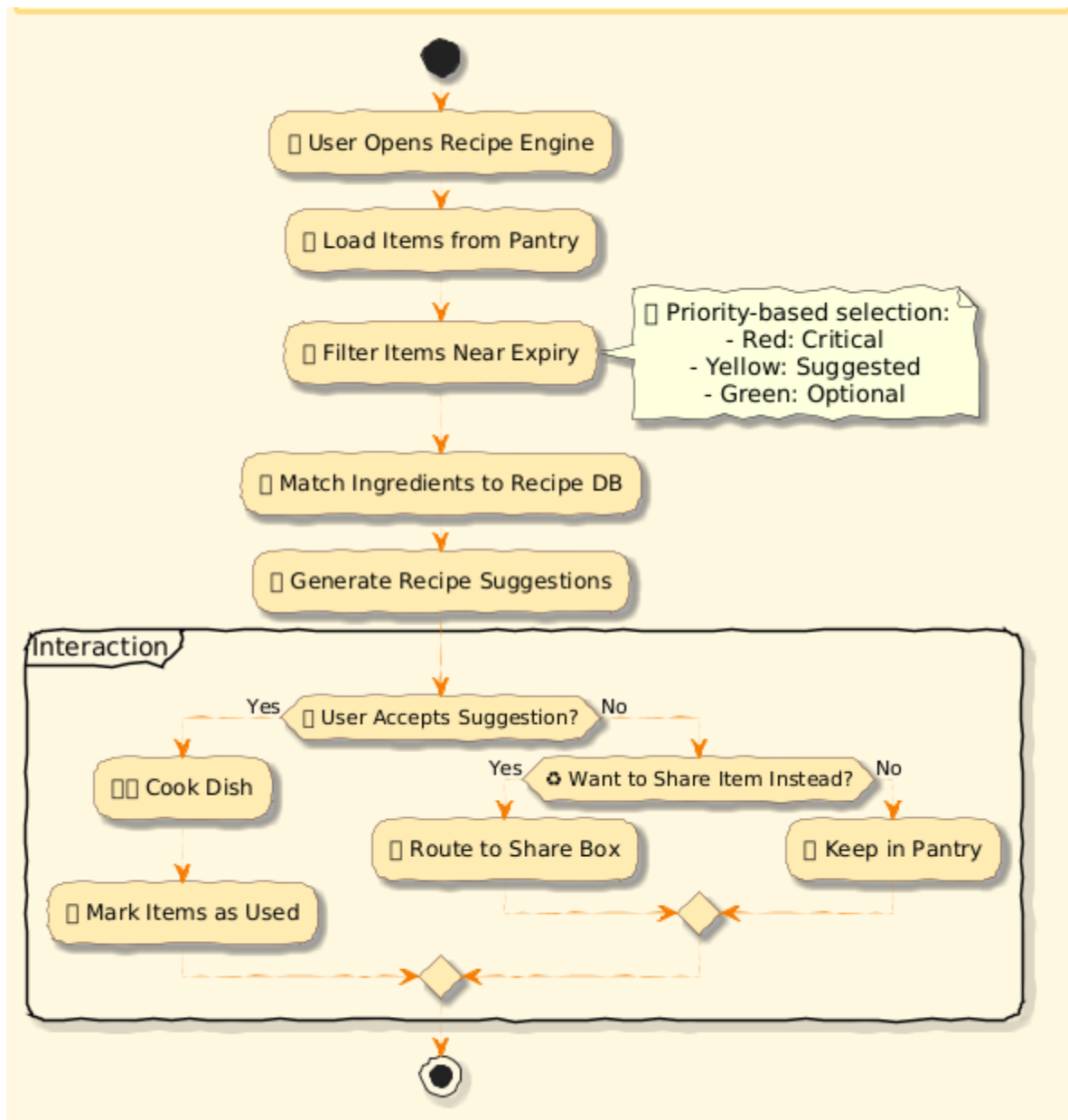
Figure 9 – Workflow of Recipe Suggestion Engine in NoSpoil App

This flowchart demonstrates the logic of the Recipe Engine module, wherein the user accesses pantry items, filters those nearing expiry, and receives AI-generated recipe suggestions based on ingredient availability. The process allows the user to either cook the suggested dish, share the item via the Share Box module, or retain it in the pantry for future use. The diagram also visually emphasizes the priority-based categorization (Red – Critical, Yellow – Suggested, Green – Optional) used to rank expiring items.
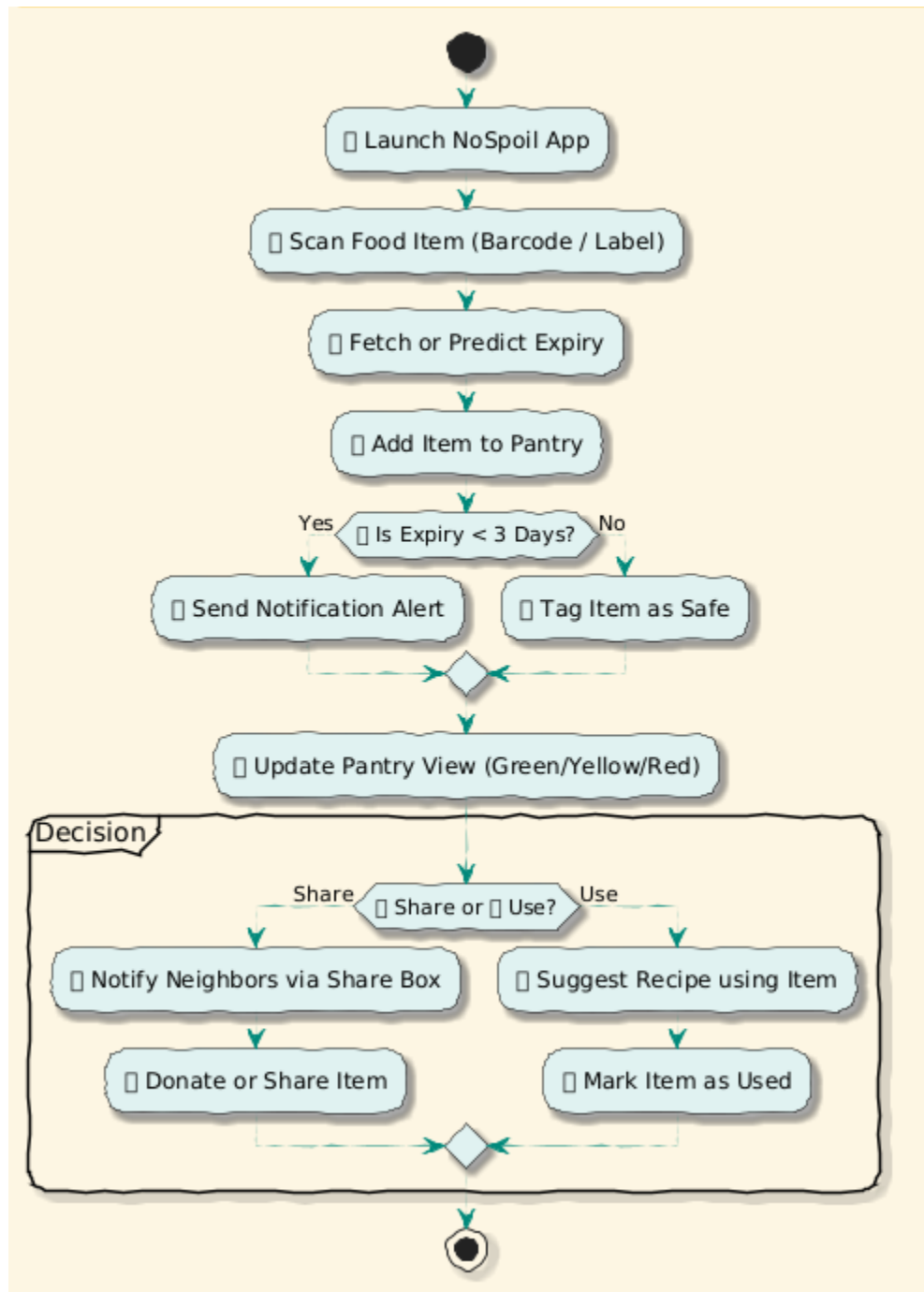
Figure 10 – End-to-End User Workflow of NoSpoil Application

This flowchart illustrates the full user journey in the NoSpoil app—from scanning a food item and detecting its expiry, to storing it in the pantry. If the item is near expiry, the app triggers an alert. The user then chooses to either share it via the Share Box or use it through suggested recipes, and the pantry is updated accordingly.