Release Plan

Product Name: Fridge Friend – Smart Food Waste Reduction App

Team Name: FridgePal Dev Collective

Release Name: MVP-1

Release Date: June 1, 2025

Revision Number: 1.0

Revision Date: April 13, 2025

High-Level Goals

- Enable users to track items in their fridge and pantry easily.

- Notify users before items expire to reduce food waste.

- Suggest recipes based on ingredients already at home.

- Allow syncing of household members for shared inventory management.

- Provide food storage tips and expiration tracking for common items.

- Built with **Next.js**, **TailwindCSS**, **FastAPI**, **Supabase**, and **OCR / Barcode APIs**.

User Stories Defining the Scope of the Release

Sprint 1: Onboarding and Core Setup (April 15–April 28)

- 🥇 US-1.1: As a user, I want to manually add items to my fridge list with expiration dates. [5 points]
- 🥇 US-1.2: As a user, I want to scan items using a receipt to auto-fill name and shelf life. [5 points]
- 🥈 US-1.3: As a developer, I want to scaffold the frontend using Next.js and Tailwind. [3 points]
- 🥉 US-1.4: As a developer, I want to build backend item storage and user accounts via FastAPI & Supabase. [3 points]

Sprint 2: Project Browsing and Matching Logic (April 29–May 12)

- 🥇 US-2.1: As a user, I want to receive reminders when items are nearing expiration. [8 points]
- 🥈 US-2.2: As a developer, I want to build a job that runs daily to trigger food expiry alerts. [5 points]
- 🥉 US-2.3: As a developer, I want to integrate an external recipe API to suggest meals based on inventory. [3 points]

Sprint 3: Contribution Tracking and GitHub Integration (May 13–May 26)

- 🥇 US-3.1: As a user, I want to sync my fridge with household members and see real-time updates. [8 points]
- 🥈 US-3.2: As a developer, I want to build household grouping logic and permission control. [5 points]
- 🥈 US-3.3: As a developer, I want to detect "low usage" items and suggest donation or fast-use recipes. [5 points]

Sprint 4: Learning Paths, Recognition, and Final Polish (May 27–June 1)

- 🥇 US-4.1: As a user, I want to get food storage tips for items I add (e.g. "store bananas separately"). [5 points]
- 🥈 US-4.2: As a user, I want a clean dashboard summarizing what needs to be used soon. [3 points]
- 🥇 US-4.3: As a developer, I want to run end-to-end usability tests and polish the UI across devices. [5 points]

Sanity Check

Total Story Points: 69
Assumed Team Velocity: ~18 points per sprint (4 sprints)
Result: Within capacity. Load per sprint is balanced and includes setup, integration, and polish.

Known Bugs:

- Spoonacular API is limited
- EmailJS requests is limited
- Notifications are sent on every page refresh

Product Backlog

These features are planned but deferred to post-MVP:

- Smart OCR for handwritten fridge labels

- Geolocation-based food donation recommendations

- AI-generated weekly meal plans from inventory

- Integration with grocery APIs for price-matched shopping lists

- iOS/Android app with push reminders and widget support