PantriHub

Connecting Food Banks Through Shared Inventory Visibility

ENSE 281 - Software Engineering Management

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👥 Meet the Team

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⚠️ The Problem

"Who has what, and where?"

We spoke with food banks in Regina, Calgary, and Vancouver.

They told us their biggest coordination challenge:

- No visibility into what other locations have in stock

- Surplus at one location, shortage at another - and no one knows

- Communication happens through phone calls and spreadsheets

- Food expires before it can be redirected

♥ Why This Matters

Vulnerable Communities

Food banks serve people on tight budgets who depend on these resources

Wasted Donations

Wasted food = wasted donations = fewer people fed

Coordination Gap

The problem isn't supply - it's coordination

The food exists. The information doesn't flow.

💡 Our Reason for Creating

We're solving a coordination problem.

If Location A knew Location B had 50 cases of pasta expiring next week, they could:
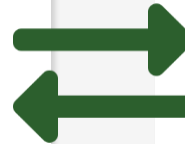
- Redirect clients
- Share resources
- Reduce waste

Right now, that information is invisible.

We want to make the invisible visible.

🚀 Impact

Current Reality	New Reality
Food banks operate in silos with no visibility into each other's inventory.	A connected network where surplus can be identified and shared before it expires.

How we get there:

Build a simple, shared inventory dashboard that any food bank staff member can update and view - no technical expertise required.

Who We're Building For

Primary Users

- Warehouse coordinators

- Inventory managers

- Procurement staff

Where are they?

- Local/regional (starting with Saskatchewan)

- Use spreadsheets, paper logs, phone calls

- Non-technical - need something simple

Validated

Problem confirmed through direct conversations with food bank staff in Regina, Calgary, and Vancouver.

What We're Building

MVP - Minimum Viable Product

User Accounts

Food banks can register and log in

Inventory Management

Add, update, remove items with name, category, quantity, expiry date

Shared Dashboard

View inventory across all participating locations

Search & Filter

Find items by type, location, or expiry date

Architecture: Domain-Driven Design with MVC Pattern (Model-View-Controller)

Tech Stack

Frontend	HTML, CSS, Bootstrap, JavaScript
Backend	Node.js
Database	MongoDB or MySQL
Version Control	GitHub + Project Boards (Kanban)
Hosting	Localhost (dev) / Cloud for demo

Repository will be publicly accessible on GitHub

⚙ Constraints

Constraints push us to focus on what matters most.

Timeline

~2 months to design and develop

Team Experience

Moderate coding skills - keeping scope realistic

Budget

Minimal to none - using free tools

Access

Limited direct access to food bank systems - building based on interviews

Summary

Problem	Food banks can't see each other's inventory
Solution	A shared, web-based inventory tracker
Impact	Less waste, better coordination, more people fed
Approach	Agile, MVC architecture, GitHub collaboration

Questions?

Group B

GitHub