# Foodbank Management Backlog

## Hardware & Software Requirements

### a. Hardware Requirements

* Tablets or Smartphones.
* Barcode scanners are to be used to take ID information.
* Label Printer generates tickets for registrants.

### b. Software Requirements

* Cloud Database (MySQL, SQL Server, Oracle, etc.) – Organizes, stores, and manages information efficiently.
* Real-time Sync on Microsoft 365 – Ensures multiple devices can update simultaneously, reducing wait times.
* OCR (Optical Character Recognition) Software – Scans passports or non-barcoded IDs.
* Export Functionality – Allows data to be exported to platforms such as Microsoft Excel.

## Phase 1 (Winter 2025): Initial Development

### 1. System Architecture Setup (Priority: HIGHEST)

* Set up backend environment and database connections.
* Initialize project structure and configure development environments.

Acceptance Criteria:

* Development environment is fully functional.
* Database connection was established successfully.
* PWA (Progressive Web App) is initialized with basic working features.

### 2. User Authentication System (Priority: HIGH)

* Implement secure username/password login.
* Develop OTP-based authentication for added security.
* Create admin controls for OTP management.
* Set up user role management (staff, providers, admins).

Acceptance Criteria:

* Secure login system is operational.
* OTP authentication works correctly.
* Role-based access control functions properly.

### 3. Registration Interface (Priority: HIGH)

* Develop a digital registration form.
* Integrate ID scanning functionality (barcode/OCR).
* Implement address verification.
* Build duplicate checking to prevent multiple registrations.

Acceptance Criteria:

* System captures all required registration details.
* Real-time ID verification functions correctly.
* Synchronization across multiple devices is seamless.

### 4. Service Provider Interface (Priority: HIGH)

* Develop the Home Page of the project.
* Implement a ticketing system to track the users who have been served.
* Create a service tracking system to monitor visits.

Acceptance Criteria:

* Homepage updates in real-time.
* The ticket validation system works Accurately.
* Service tracking maintains accurate records.

### 5. Admin Dashboard (Priority: MEDIUM)

* Develop a system for managing users' and users' data.
* Develop a system that will generate a report of the people. That has been served.
* Enable system monitoring for performance insights.

Acceptance Criteria:

* Full user management capabilities are available.
* Reporting system generates accurate insights.
* System monitoring tools function correctly.

## Phase 2 (Summer 2025): Enhancement & Testing

### 6. System Testing (Priority: HIGH)

* Test the integrity, performance, and security.

Acceptance Criteria:

* All test cases pass successfully with minimal errors.

### 7. System Optimization

* Improve overall system performance.
* Enhance UI/UX for a smoother user experience.
* Fix identified bugs and refine existing features.

Acceptance Criteria:

* System runs efficient and fast.
* User interface is more intuitive and user-friendly.
* Any identified bugs are resolved.

## Project Timeline (Gantt Chart)

## February 2025

### Week 1-2:

* Project setup, initial client meeting, requirements documentation.
* System architecture design finalized.

### Week 3-4:

* Database setup completed.
* User authentication system development starts.
* Client meeting to review progress.

## March 2025

### Week 1-2:

* Registration interface development.
* Continued authentication system improvements.
* Begin service provider interface.

### Week 3-4:

* Admin dashboard development.
* Requirements documentation refinement.
* Drafting initial poster for presentations.

## April 2025

### Week 1-2:

* System integration and initial testing.
* Client review and feedback session.

### Week 3-4:

* Phase 1 completion and deployment.
* Final presentations and handoffs.

## Summer 2025 (May-August)

- May:

Planning for enhancements and advanced testing.

- June:

Security improvements,

UI/UX refinements,

Integration testing.

- July:

Performance testing,

Bug fixes,

System optimization.

- August:

Final testing,

Documentation updates,

Production deployment.

## Technical Approach

* Frontend: Progressive Web App (PWA).
* Backend: Node.js.
* Database: MongoDB.
* Authentication: Username/Password + Daily OTP.
* User Roles:

1. Registration Staff
2. Service Providers
3. System Administrators

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Description automatically generated with medium confidence

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