Anna Mitra

Food Redistribution Platform - Project Status Report

Team: EcoVision (Group 6)　　**Report Date:** October 14, 2025　　**Submission:** November 20, 2025

Executive Summary

Anna Mitra is a web-based food redistribution platform designed to connect surplus food donors (restaurants, events, households) with verified NGOs and volunteers to combat food waste and hunger. The project has successfully completed 4 weeks of development (Sept 15 - Oct 12) with significant progress in database architecture, backend API development, frontend UI implementation, and authentication systems. The platform is currently 70% complete with core donation lifecycle functionality operational and role-based dashboards under active development.

Team Structure & Roles

Team Leader & Scrum Master
Mohit Pipaliya

Product Owner
Kashish Sorathiya

Solution Architect
Anirudh Lohiya

DevOps Engineer
Mohit Pipaliya

UI/UX Designers
Rajvi Dhameliya, Kashish Khubchandani

Business Analyst
Kashish Khubchandani

Frontend Developers
Honey Patel, Bhumi Vyas

Backend Developers
Hardip Muliyashiya, Aakash Odedara, Kashish Sorathiya

Technical Writer

Rajvi Dhameliya

Development Progress (Weeks 1-4)

Week 1 (Sept 15-21): Foundation Setup ✓

- Finalized MongoDB database schema (User, Donation, NGO, Volunteer, Proof, Feedback)
- Configured Node.js + Express backend environment
- Established basic API endpoint structure

Week 2 (Sept 22-28): UI/UX Design ✓

- Created wireframes for Home, About, Contact, and role-based dashboards
- Developed static frontend pages using React and Tailwind CSS
- Defined routing structure for public and private routes

Week 3 (Sept 29-Oct 5): Core Features ✓

- Implemented Donation model, controller, and CRUD operations
- Built donor functionality (create, update, view donations)
- Developed NGO donation request and claim system

Week 4 (Oct 6-12): Authentication & Integration ✓

- Integrated Passport.js local strategy for authentication
- Implemented role-based access control (Donor/NGO/Volunteer/Admin)
- Connected frontend with live backend APIs
- Finalized login/signup and dashboard UI screens

Technical Implementation Status

Backend (80% Complete)

- ✓ RESTful API architecture
- ✓ MongoDB database integration
- ✓ Authentication & authorization
- ✓ Donation lifecycle APIs
- Notification system (pending)

Frontend (65% Complete)

- ✓ React + Tailwind CSS setup
- ✓ Public pages (Home/About/Contact)
- ✓ Login/Signup interface
- Role dashboards (in progress)
- Map integration (pending)

Database (100% Complete)

- ✓ Schema design finalized
- ✓ MongoDB collections created
- ✓ Mongoose ODM integration
- ✓ Data relationships established

Documentation (90% Complete)

- ✓ SRS document
- ✓ System design document
- ✓ UML diagrams (Use Case, Class, Activity)
- ✓ API documentation
- Testing documentation (pending)

Challenges Encountered & Resolutions

Database Relationship Complexity

Resolved by creating clear junction tables and using Mongoose populate() for many-to-many relationships between Donors, NGOs, and Donations.

Multi-Role Dashboard Layout

Addressed through component-based architecture with role-specific routing and reusable UI components for consistency.

Passport.js Integration Issues

Fixed session handling problems by configuring express-session properly and implementing custom serialization logic for role-based access.

CORS & API Connectivity

Resolved by configuring CORS middleware with proper origin whitelisting and credential support for cross-origin requests.

Remaining Tasks (Weeks 5-8)

Week 5 (Oct 13-19)

- UI polish & validation
- Firebase notification system
- User testing with dummy accounts
- NGO feature completion

Week 6 (Oct 20-26)

- Functional & integration testing
- Performance optimization
- Bug fixing
- Screenshots & video demo

Week 7 (Oct 27-Nov 2)

- Final documentation preparation
- Presentation materials
- Internal review meeting
- UI/UX feedback implementation

Week 8 (Nov 3-20)

- Final build submission
- Presentation rehearsals
- Quality assurance
- Submission (Nov 20)

Project Health Assessment

Overall Progress	Schedule Status	Risk Level
70%	**On Track ✓**	**Low**

The Anna Mitra platform is progressing well with all major milestones achieved on schedule. Core functionality is operational, and the team is confident in delivering a fully functional food redistribution platform by November 20, 2025.