

Loyalty Points System - Project Work Plan

Project Overview

The loyalty system rewards customers with points for each transaction. Points can be redeemed for discounts or offers, helping increase customer retention and engagement.

Core Features

- Authentication & Authorization (JWT for backend)
- Customer Management (profile, history, points)
- Points System (earn, redeem, expire)
- Reward Management (custom offers, point thresholds)
- Transaction Logging (track purchases and redemptions)
- Reporting & Analytics (points summary, activity logs)
- Notifications (email/SMS/push - optional)
- React Frontend with responsive UI and admin panel

Technical Stack

- Frontend: React + Tailwind CSS or Chakra UI
- Backend: NestJS + Prisma ORM
- Database: PostgreSQL (via Prisma)
- Auth: JWT, bcrypt (role-based access)
- Deployment: Docker, Vercel/Render/Heroku

Team Collaboration

The team consists of two members working concurrently:

- Backend Developer (NestJS + Prisma): API, logic, and DB integration
- Frontend Developer (React): UI, state management, API integration

Timeline (Concurrent Work)

Week 1:

- Backend: Auth setup, DB schema (Prisma), customer module
- Frontend: Project setup, login/register UI, dashboard layout

Week 2:

- Backend: Transaction logic, point calculation, reward system

- Frontend: Customer dashboard, transaction UI, reward views

Week 3:

- Backend: Reporting endpoints, admin logic, notifications
- Frontend: Admin panel, reports, final UI adjustments

Week 4:

- Backend: Testing, final fixes, deployment (Docker/Render)
- Frontend: Integration testing, final UI polish, deployment

Project Milestones

M1: Authentication and customer management APIs

M2: Points system (earn/redeem) with transaction tracking

M3: Fully functional admin and customer dashboards

M4: Reporting system and final deployment