Product Requirements Document (PRD)

Product Name: SmartStock360

Owner: Brian (Founder)

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Version: v1.0 (MVP)

1. Overview

SmartStock360 is a smart stock management and customer loyalty platform designed for supermarkets and small retail shops. It combines real-time inventory tracking, restocking alerts, and a loyalty system that incentivizes purchases — especially for overstocked or expiring products.

2. Goals & Objectives

- • Help supermarkets monitor stock levels in real-time
- • Reduce stockouts and overstocking
- • Automate restocking alerts for staff/managers
- • Offer customer-facing loyalty rewards based on stock data
- • Collect analytics for smarter purchasing and forecasting

3. Target Users

A. Supermarket Staff/Manager

 - Add/update inventory
 - Scan items on shelves
 - Get alerts for low-stock/out-of-stock
 - View reports

B. Customer

 - Join loyalty program
 - Receive promotions/offers
 - Get notified when favorite items are restocked

4. Key Features (MVP Phase)

Inventory Tracking Module

- • Dashboard showing item name, quantity in stock, and stock status
- • Manual entry or barcode scan to update stock
- • Staff can add new products with fields: Name, SKU/Barcode, Quantity, Expiry date (optional)

Restocking Alerts

- • Automatically triggers alerts if quantity is below a set minimum level
- • Sends notifications to store manager via app dashboard, SMS, or email

Loyalty Program (Customer Side)

- • Simple customer sign-up (phone number-based)
- • Earn points based on purchases
- • Points multipliers for overstocked or near-expiry items
- • Redeem points for store discounts

Basic Analytics Dashboard

- • Shows fast-moving products, slow movers, items expiring soon, and daily stock changes

5. User Flow Summary

Staff Flow:

1. Login
2. View stock dashboard
3. Scan items or search manually
4. Update quantity
5. Receive alerts
6. Export report

Customer Flow:

1. Signup using phone number
2. Earn points via purchases
3. Get loyalty offers
4. Redeem points in-store

6. Technical Requirements

Frontend:

- Mobile-first web app or Android app

- Barcode scan support
- Clean, simple UI

Backend:
- Inventory database
- User account system
- Notification system
- Dashboard + reporting

Optional Integration (Phase 2):
- POS system connection
- Supplier notification system
- AI demand forecasting

7. Nice to Have Later (Not for MVP)

- • AI forecasting for stock trends
- • Customer app with store locator
- • QR-based loyalty cards
- • Integration with mobile money (e.g. M-PESA)

8. Feedback & Support

Supermarket managers should have a way to send suggestions or support requests. An internal chat/help desk is optional.