

# ■ Store Management System — Development Plan

## Project Overview:

A modern store management system designed for a shop owner handling both wholesale and retail sales, including credit tracking, accounting, and product management. The app integrates camera-based item entry, WhatsApp reminders, OTP login, and billing. It also features a customer portal (like Blinkit) for retail/wholesale orders with admin approval and online/offline shop listings.

## Phase 1 — Planning & Architecture

- Define roles: Admin, Staff, Retail Customer, Wholesale Customer.
- Tech stack: Flutter (frontend), PHP (backend APIs), Firebase (database & auth).
- Setup Firebase for OTP login, Firestore database, storage for receipts/images.
- Setup WhatsApp API via Twilio or 360Dialog for reminders.
- UI theme: modern, blue-based color palette, responsive for mobile and tablet.

## Phase 2 — Authentication & User Profiles

- Login/Signup using Firebase phone authentication (OTP).
- Role selection during registration: Retail/Wholesale/Staff.
- Admin approval for wholesale accounts.
- Profile section like Blinkit: Name, Shop Name, Address, GST (optional), Purchase History.
- Admin panel to verify and approve accounts.

## Phase 3 — Product & Inventory Management

- Add products manually or by camera scan (OCR from bill or label).
- Auto-fill product name, price, quantity, and tax.
- Categorize products (grocery, electronics, etc.).
- Real-time stock update after each sale.
- Option for online visibility toggle (Online/Offline Shop).

## Phase 4 — Sales, Billing & Credit System

- Create bills for retail and wholesale customers.
- Option for cash, UPI, or credit sale.
- Maintain customer credit ledger with history.
- Generate PDF bills with store name and GST.
- WhatsApp reminders for credit dues (automated via API).
- Backup all credit data to Firebase Cloud Storage weekly.

## Phase 5 — Dashboard & Reports

- Daily/Monthly sales graph.
- Customer credit summary.
- Top products and suppliers overview.
- Downloadable Excel/PDF reports for accounting.
- Data caching for faster load time and offline access.

## Phase 6 — Admin Panel & Online Shop

- Admin verifies wholesale/retail customers.
- Approve which products appear on the online store.
- Manage stock, customers, and pricing.
- Role-based dashboard (Admin vs Staff).
- Option for online ordering and in-store pickup.

## Phase 7 — Backup, Sync & Notifications

- Firebase automatic backup of credit and sales records.
- Local cache via Hive for offline operation.
- WhatsApp and email notifications for pending dues and low stock.
- Sync on reconnect when internet resumes.
- Cloud backup schedule every 7 days.

## Estimated Cost Breakdown (Development & Monthly)

| Feature                      | One-Time Cost     | Monthly Cost  |
|------------------------------|-------------------|---------------|
| Flutter App Development      | ■25,000 – ■40,000 | —             |
| PHP Backend + API            | ■10,000 – ■15,000 | —             |
| Firebase Hosting + Firestore | Free – ■1,000     | ■300 – ■800   |
| WhatsApp Business API        | ■1,000 setup      | ■200 – ■800   |
| OTP Login (Firebase)         | Free up to 10K    | ■0 – ■2,000   |
| Total (Approx.)              | ■35,000 – ■55,000 | ■500 – ■2,500 |

## Final Notes:

- App will be built with scalability and offline-first design.
- All credit & sales data automatically backed up to Firebase weekly.
- Admin can monitor user activities, approve customers, and view analytics.
- The UI will use Flutter Material 3 for a professional and modern feel.
- Future versions can add barcode scanning, supplier portal, and GST filing integration.