

Shop Management System

1) Project Overview

Goal: A shop management web app to handle product selling, inventory/stock, purchases, customers/suppliers, and business reports.

Users: Owner/Manager, Cashier, Storekeeper (optional)

2) Core Modules

A) User & Role Management

- Login/logout
 - Roles:
 - **Admin/Owner** (full access)
 - **Cashier** (sales + customer + limited reports)
 - **Storekeeper** (stock + purchase + product)
 - Activity log (optional): who edited price/stock/sales
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B) Product Management

Product fields

- Product Name
- SKU/Barcode (optional)
- Category (e.g., Grocery, Cosmetics, Electronics)
- Brand (optional)
- Unit (pcs, kg, liter)
- Purchase Price
- Sale Price
- VAT/Tax (optional)
- Minimum Stock Alert level
- Product Image (optional)
- Status (Active/Inactive)

Features

- Create/Edit/Delete product
- Bulk import (Excel/CSV) (optional)

- Barcode printing (optional)
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C) Stock / Inventory

- Stock in/out tracking
 - Stock adjustments (damage, lost, manual correction)
 - Low stock alerts dashboard
 - Stock valuation report (optional)
 - Multi-warehouse (optional; if you have more than 1 store)
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D) Supplier & Purchase (Stock In)

- Supplier list: name, phone, address
 - Purchase entry:
 - Purchase date
 - Supplier
 - Product items (qty, purchase price)
 - Payment: paid, due
 - Purchase return (optional)
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E) Sales (POS)

Sales process

- Select customer (or “Walk-in”)
- Add products (search by name/SKU/barcode)
- Quantity + discount (item or invoice level)
- VAT/tax (optional)
- Payment method: cash, card, mobile banking
- Paid / due (credit sale)
- Print invoice (A4 / POS size)

Sales return (optional)

- Return by invoice
 - Restock item automatically
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F) Customer & Due Management

- Customer list: name, phone, address
 - Customer ledger:
 - Total purchase
 - Total paid
 - Current due
 - Due payment collection (partial payment support)
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3) Reports (Must Have)

- **Daily sales report** (total sales, profit estimate if enabled)
- **Sales by date range**
- **Top selling products**
- **Low stock report**
- **Stock summary** (opening, in, out, closing)
- **Purchase report** (supplier-wise, date-wise)
- **Due report** (customer due, supplier due)
- **Profit report (optional but useful):**
 - $\text{Profit} = (\text{Sale price} - \text{Purchase price}) * \text{qty} - \text{discounts}$

Export options:

- PDF + Excel for reports
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4) Dashboards

Owner dashboard:

- Today sales
 - This month sales
 - Low stock items count
 - Total due (customer)
 - Recent sales list
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5) Non-Functional Requirements

- Responsive UI (desktop + mobile)
- Fast search for products (important for POS)
- Data backup/export (optional)
- Audit trail for critical actions (price change, delete sale) (optional)

- Multi-language (Bangla/English) (optional)
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6) Suggested Tech (Laravel + Vue)

- Laravel 11/12 API + Sanctum auth
- Vue 3 + Vite + Pinia
- PostgreSQL/MySQL
- PDF invoice + report export