



STORE MANAGER: KEEP TRACK OF INVRNTORY

TEAM ID:NM2025TMID40116

TEAM DETAILS:

Team ID : NM2025TMID40116

Project Title : Store Manager: Keep Track Of Inventory

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Objective:

To develop a system that enables the store manager to efficiently track, monitor, and manage inventory by maintaining accurate stock records, updating stock levels in real time upon sales or purchases, preventing stockouts or overstocking, and ensuring smooth day-to-day operations of the store.

Platform:

- Web-based Application (accessible from browser across devices)
- Mobile Application (Android/iOS for on-the-go management)
- Desktop Application (optional, for offline store operations)

Technologies Used:

- Frontend (User Interface)
 - React.js (for dynamic and responsive UI)
 - HTML5, CSS3, JavaScript (basic web technologies)
 - TailwindCSS / Bootstrap (for styling and layout)
- Backend (Server-side)
 - Node.js with Express.js (lightweight and fast server framework)
 - OR Django / Flask (Python) if using Python stack
 - RESTful APIs / GraphQL (for communication ↑ between frontend and backend)
- Database (Inventory Data Storage)

- MySQL/PostgreSQL (relational database, structured inventory data)
- OR MongoDB (if flexible NoSQL structure is preferred)
- Authentication & Security
 - JWT (JSON Web Tokens) / OAuth2 (for user login & access control)
 - HTTPS & Data Encryption (to protect sensitive data)
- Deployment / Hosting
 - Cloud Platforms: AWS, Google Cloud, or Microsoft Azure
 - Containerization: Docker (for scalable deployment)
 - Version Control: Git + GitHub/GitLab
- Optional Add-ons
 - Barcode/QR Code Scanning (via mobile camera integration)
 - Inventory Alerts (Email/SMS/Push notifications for low stock)
 - Analytics & Reporting (using Chart.js, Recharts, or Power BI integration)

IMPLEMENTATION:

1. Requirement Analysis

- Identify store needs (e.g., stock monitoring, sales tracking, low-stock alerts).
- Define user roles: Store Manager, Staff, Admin.

2. System Design

- Database schema: Products, Categories, Sales, Purchases, Users.
- UI design: Dashboard for stock overview, Add/Update stock forms, Cart/Checkout module.
- APIs: REST/GraphQL for product management, sales, reporting.

3. Development

- Frontend: Build user-friendly UI using React.js (inventory tables, search, filters).
- Backend: Develop APIs in Node.js/Express or Django.
- Database: Configure MySQL/PostgreSQL (stock tables, sa logs).

4. Integration

- Connect frontend with backend using APIs.
- Enable barcode/QR scanning (optional).
- Implement real-time updates (e.g., stock reduces on sale).

5. Testing

- Unit testing of modules (Add stock, Checkout, Sales update).
- Integration testing (ensuring UI - API Database flow).
- User acceptance testing with store staff.

6. Deployment

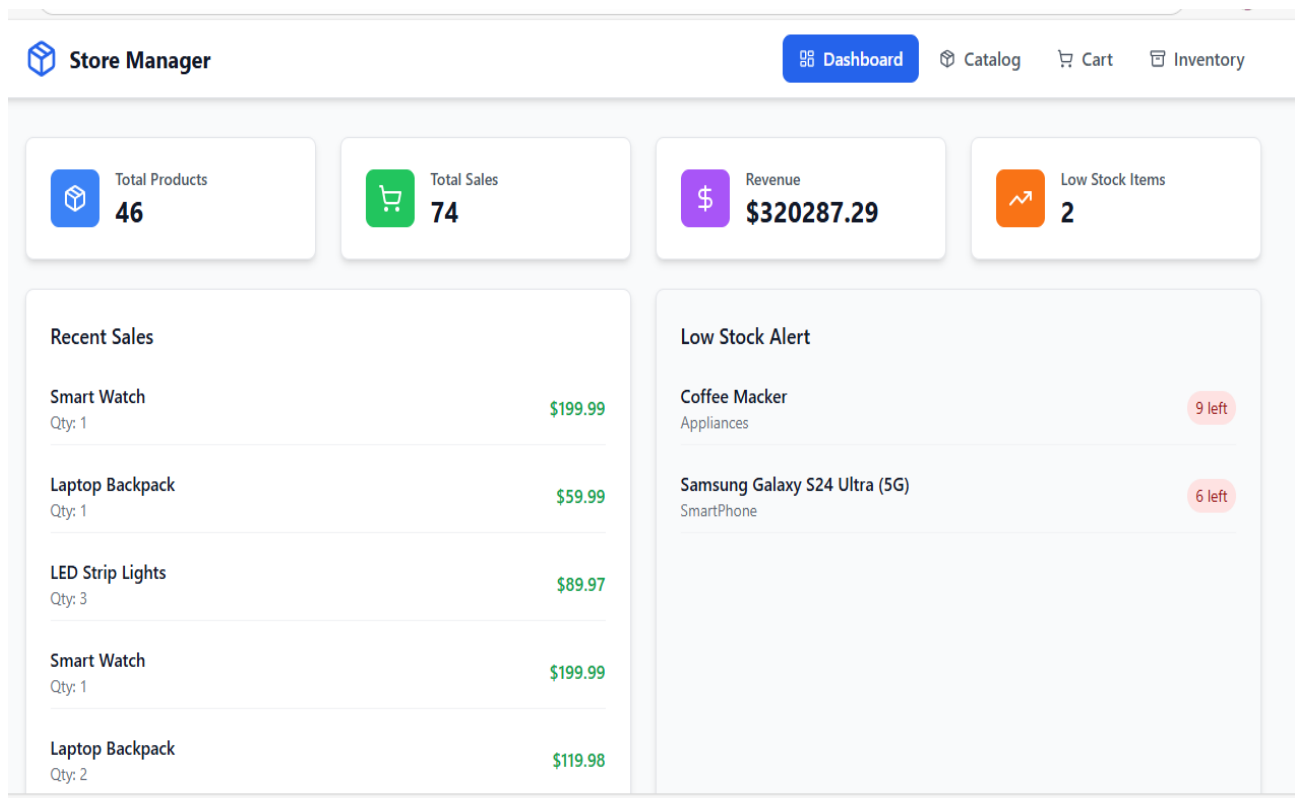
- monitoring of system performance.
- Deploy backend on AWS/Google Cloud.
- Host frontend on Netlify/Vercel.
- Use Docker for scalability.

7. Maintenance

- Regular updates for bug fixes & new features.
- Backup & recovery plan for database.
- Continuous

OUTPUT & RESULT:

DASHBOARD:




CATALOG:

Store Manager

DashboardCatalogCartInventory

Search products...

All




Wireless Headphones **\$89.99**

High-quality wireless headphones with noise cancellation

Electronics21 in stock

146 sold

Add to Cart



Smart Watch **\$199.99**


Advanced smartwatch with health monitoring features

Electronics25 in stock

107 sold

Add to Cart

Low Stock




Coffee Macker **\$129.99**

Programmable coffee maker with thermal carafe

Appliances9 in stock

70 sold

Add to Cart



Laptop Backpack **\$59.99**

Durable laptop backpack with multiple compartments

Accessories29 in stock

160 sold


Add to Cart

CART:

Store Manager

DashboardCatalogCart2Inventory


Shopping Cart



Coffee Macker
\$129.99

-1+

\$129.99



Laptop Backpack
\$59.99

-1+





\$59.99

Total: \$189.98

Process Sale







INVENTORY:

 Store Manager

 Dashboard  Catalog  Cart ²  Inventory

Inventory Management

[+ Add Product](#)

PRODUCT	CATEGORY	PRICE	STOCK	SALES	ACTIONS
 Wireless Headphones	Electronics	\$89.99	21	146	Edit Delete
 Smart Watch	Electronics	\$199.99	25	107	Edit Delete
 Coffee Macker	Appliances	\$129.99	9	70	Edit Delete
 Laptop Backpack	Accessories	\$59.99	29	160	Edit Delete
 Bluetooth Speaker	Electronics	\$79.99	22	203	Edit Delete
 Running Shoes	Footwear	\$119.99	28	134	Edit Delete