Project Documentation

Store Manager: Keep track of inventory

1. Introduction

- **Project Title**: Store Manager: Keep track of inventory
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2. Project Overview

- **Purpose** The Store Manager – Keep Track of Inventory project is designed to help shop owners and staff maintain accurate, real-time records of products and stock levels.
  Its main goal is to reduce manual errors, prevent stockouts or over-ordering, and give the business a clear picture of inventory at any moment.
- **Features:**
  - Project posting and bidding
  - Secure chat system
  - Feedback and review system
  - Admin control panel

3. Architecture

a. **Frontend:** HTML/CSS/JavaScript (or react) user interface for viewing and managing products.
b. **Backend:** Node.js with Express handles API requests and business logic.
c. **Database:** MongoDB/MySQL stores product details, stock levels, and transactions.

4. Setup Instructions

a. Prerequisites:

- Install Node.js LTS from nodejs.org and verify with node -v / npm -v.
- Windows only: In PowerShell (Admin) run Set-ExecutionPolicy Unrestricted and confirm.
- Install Visual Studio Code or another code editor.
- Download and extract the Store Manager project code.

- **Installation Steps:**
  - Install Node.js LTS from nodejs.org and verify with node -v / npm -v.
  - (Windows only) In PowerShell (Admin) run Set-ExecutionPolicy

Unrestricted→ press Y.

- Download & Extract the Store Manager project folder.
- Open the folder in VS Code or terminal: cd store-manager.
- Run npm install to install dependencies.
- Start the app with npm start and open http://localhost:3000 in your browser.

5. Folder Structure

store-manager/

├─ package.json # Project info & dependencies

├─ README.md # Documentation

├─ public/ # Static assets (index.html, images, css)

├─ src/ # Frontend code (components, styles)

├─ server/ # Backend (app.js, routes, models, controllers)

└─ database/ # Seed or migration scripts

6. Running the Application

- Install Node.js & MongoDB.
- npm install
- Create .env with DB URL & POR
- npm start
- Open http://localhost:3000 in browser.

7. API Documentation

a. User:

- /api/user/register
- /api/user/login

b. Projects:

- /api/projects/create
- /api/projects/:id

c. Applications:

- /api/apply

d. Chats:

- /api/chat/send
- /api/chat/:userId

8. Authentication

- Register/Login Users using /auth/register and /auth/login endpoints with hashed passwords.
- Generate JWT Token on login for secure access.
- Protect Inventory Routes using middleware that verifies the JWT before allowing CRUD operations.

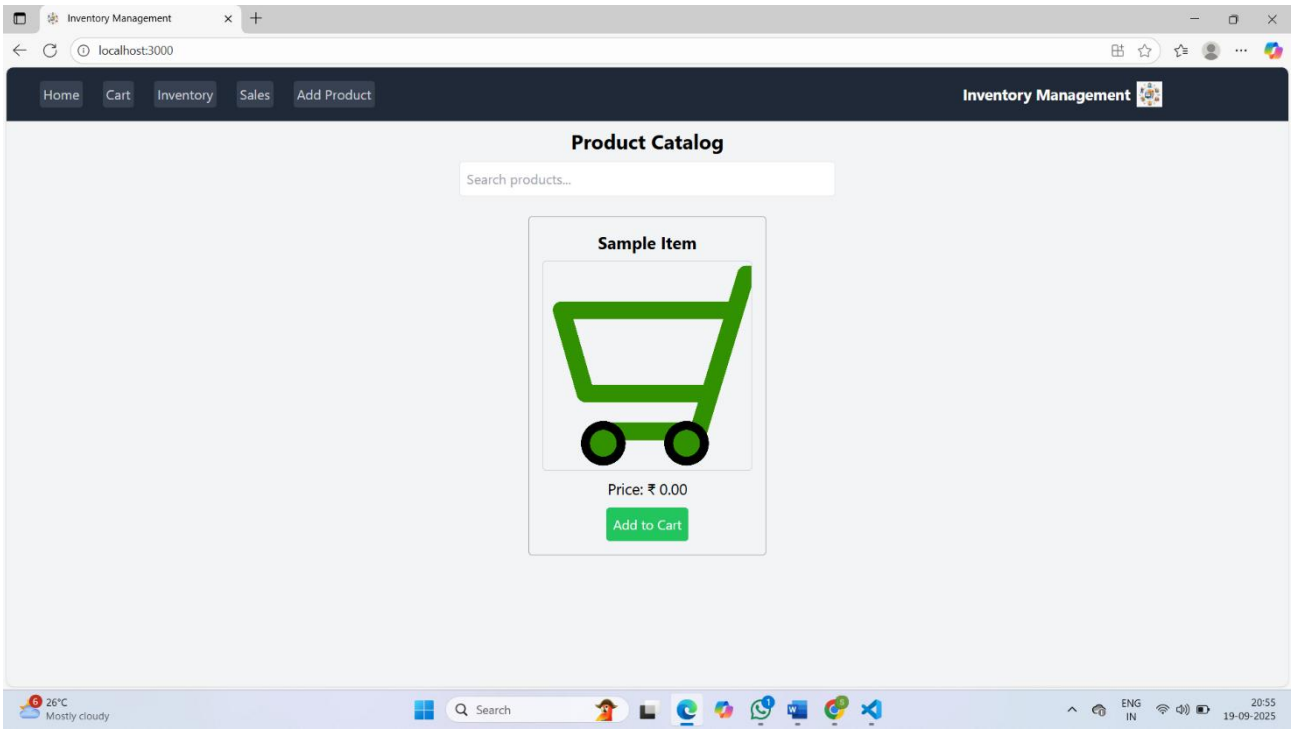
9. User Interface

- **Login Page**: Username, Password, Login button.
- **Dashboard**: Shows total items, low stock alerts, navigation menu.
- **Inventory Page**: Table of items with Edit/Delete, Add Item button.
- **Add/Edit Item Page**: Form for name, quantity, price.
- **Notifications**: Success/failure messages.

10. Testing

- Unit Tests: Test functions like add, update, delete items.
- API Tests: Verify endpoints, responses, and JWT auth using Postman.
- UI Tests: Check forms, buttons, and dashboard functionality manually or with Cypress.

11. Screenshots or Demo



12.Known Issues

- No role-based access control; all users have full permissions.
- Limited input validation; negative quantities or prices may be accepted.

13.Future Enhancements

- Add role-based access (admin/staff).
- Enable real-time stock alerts.
- Generate inventory reports.
- Make UI mobile-friendly.
- Support barcode/QR code scanning.