**DOCUMENTAION**

**StockPilot: B2B Inventory and Order Management SaaS**

**🧠 What is this Project About?**

You're building a **web-based software product (SaaS)** for **wholesale businesses** (like distributors or wholesalers who sell to retailers). These businesses deal with **lots of stock, multiple customers, and varying prices**. They face problems like:

* **Tracking stock levels**
* **Managing customer details**
* **Handling orders**
* **Creating invoices**
* **Applying different prices for different customer types**

**🔧 You will solve these problems by creating:**

A **B2B Inventory + Order Management System**, where:

* B2B = Business to Business (you’re helping one business sell to another).
* Inventory Management = Tracking and updating stock.
* Order Management = Creating, viewing, and fulfilling customer orders.
* Pricing System = Selling at different prices based on customer type.
* SaaS = Others can use your software by signing up.

**🗃️ What Will This Software Do? (Features)**

**✅ For Admin (Owner of Wholesaler):**

1. Add or update products and their stock
2. Add suppliers
3. Add customers (Retail, Wholesale, Distributor)
4. Set different prices per customer type
5. See orders placed by staff or sales reps
6. Track low-stock alerts
7. Generate invoices (PDF)
8. View dashboard charts (top sales, revenue, low stock)

**✅ For Sales Team:**

1. Search for customers
2. Place orders for them
3. See past orders
4. Get price automatically based on customer type

**🔄 How the System Flows (in your app)**

1. **Admin logs in** 🧑‍💼
2. **Admin adds products** (like "Shampoo", "Soap", etc.)
3. **Admin adds customers** (e.g., Retailer A, Distributor B)
4. **Sales Rep logs in** 🧑‍💼
5. **Sales rep selects a customer**
6. **Sales rep selects products + quantity**
7. System **auto-calculates price** based on customer type
8. Sales rep **places order**
9. **Stock is updated**, and invoice is generated (PDF)
10. Admin sees everything on a dashboard 📊

**🧱 Project Modules (Building Blocks)**

| **Module** | **What it does** |
| --- | --- |
| **Auth System** | Register/Login users with roles (Admin, Sales) |
| **Product Manager** | Add/Edit/Delete products and their stock |
| **Customer Manager** | Create/edit customer profiles and pricing tier |
| **Order System** | Let sales reps create and view orders |
| **Pricing Logic** | Auto apply the right price per customer tier |
| **PDF Invoice** | Generate an invoice file on order confirmation |
| **Dashboard** | Show business analytics using charts |

**🛠️ Tools & Tech Stack**

| **Layer** | **Technology** |
| --- | --- |
| Frontend | React + Tailwind CSS |
| Backend | Node.js + Express.js |
| Database | MongoDB + Mongoose |
| Auth | JWT (JSON Web Tokens) |
| PDF Gen | jsPDF or Puppeteer |
| Charts | Recharts or Chart.js |
| Hosting | Vercel (Frontend), Render (Backend) |

**📊 Example Use Case**

**Let’s say**:  
You are building this for a wholesaler who sells **cosmetics** to different retailers. You help them by building this app.

They can:

* Add 100+ items to stock (facewash, lipstick, cream)
* Tag prices like:
  + ₹100 for Retailers
  + ₹90 for Wholesalers
  + ₹80 for Distributors
* Let sales reps log in and create orders from the field
* Track orders, stock, and print invoices

**🗓️ 2-Month Development Plan (Suggested)**

| **Week** | **Goal** |
| --- | --- |
| 1 | Setup project, install tools, design DB schema |
| 2 | Build User Login, Role-based Access |
| 3 | Build Product module |
| 4 | Build Customer module |
| 5 | Build Order module with pricing logic |
| 6 | Create invoice generation |
| 7 | Build Dashboard charts |
| 8 | Polish UI, test and deploy |

**👨‍💻 Final Outcome**

You’ll have a **professional-level software product** with:

✅ Full-stack skills (MongoDB + Node.js + React)  
✅ A business-ready use case  
✅ Clean code and deployment  
✅ Project you can showcase on GitHub and in interviews

**🧾 Resume Line**

Developed a scalable full-stack SaaS platform for wholesalers to manage inventory, pricing, and customer orders, using MongoDB, Node.js, React, and Tailwind. Implemented tiered pricing, PDF invoices, and real-time stock updates.