**ZOOM**

**Inventory Management System**

Tech Stack (MERN)

# Technicalities:

### Frontend

* React
* Product listing (with filters by brand, category)
* Inventory Managing Control (for the Inventory Module)
* Add to cart/sale (for the e-commerce Module)
* Add service request (for the service Module)
* Dashboard with metrics and alerts

### Backend

* Node/Express
* CRUD APIs for all collections
* PDF/Invoice generation
* Role-based access

### MongoDB Collections

* + Users
  + Products
  + MainCategories
  + SubCategories
  + Suppliers
  + Customers
  + Sales
  + Services
  + Quotes
  + Rentals (optional)
  + PurchaseOrders

# Core Features

## 1. User Roles

* **Admin**:
  + Full users operations
  + Full inventory operations
  + Full reporting access
* **Salesperson**:
  + View stock
  + Create invoices (for the e-commerce)
  + Pull Sales Reports
* **Inventory** **Manager**:
  + Handles stock intake
  + Restocking
  + Pull Inventory Reports

## 2. Product Categories

### Cameras:

* + DSLR / Mirrorless
  + Film
  + Instant &bDisposable
  + Action Camera
  + Vintage Camera for Decor

### Lenses:

* + Adapters
  + Lenses
  + Zoom

### Uncategorized

### Accessories:

* + Slider
  + Follow Focus
  + Triggers
  + InstantCameras
  + LCD Protectors
  + Speedlite-modifiers
  + Rotatables
  + Lens Mugs
  + Capture Cards & Video Mixers
  + Cleaning Kit
  + Monitors
  + GOPRO Accessories
  + Projectors, Calibrations & Accuracy
  + Mobile & Action Cam Accessories
  + Filters & Caps
  + Wireless remote, trigger & tether
  + Plates, Cages, Straps & L-Brackets
  + Light Stands
  + Tripods & Heads
  + Grips, Batteries & Charger
  + Bags & Cases
  + Photo – Video Props
  + Brackets & Connectors
  + Wires, Adapters & Cables
  + Memory & Storage
  + Filters

### Lights:

* + Modifiers
  + Studio Flash
  + Wireless Flash
  + On Camera LED
  + Ringlighs & Vlogging
  + Speedlite
  + LED Tubes / LED Sticks
  + LED Panels
  + LED Strobes
  + LED lights / Flash lights
  + Strobes & Continuous lights

### Studio Gear:

* + Umbrellas
  + Softboxes
  + Backdrops

### Gimbals:

* + Camera Gimbals
  + Phone Gimbals
  + Accessories

### Audio:

* + Intercoms
  + USB Microphones
  + Audio Recorder
  + On Camera Mics
  + Wired Mics
  + Microphones
  + Accessories
  + Wireless Microphones

## 3. Inventory Tracking

* + SKU/Barcode per item
  + Quantity in stock
  + Cost price & selling price
  + Warranty info

## 4. Supplier Management Module:

* + Track multiple suppliers per item
  + Purchase orders

## 5. Sales Management Module:

* + Sales deduct stock
  + Log customer info
  + Generate receipts/invoices
  + Create quotations (generate PDF file, send through email or whatsApp)
  + Follow up with quotations

## 6. Services Module

* Create Service Request
* Update/Close Service Request
* Schedule follow up alerts
* Track Service Request

# Advanced Features

## Enable Mobile Version

## Rental Module

* + Track rented items
  + Rental periods, deposits
  + Auto-alerts for overdue returns

## Low Stock & Expiry Alerts

* + Get alerts on batteries, cleaning kits, film rolls nearing expiry or low stock

## Reports

* + Top selling items
  + Inventory value
  + Profit margins
  + Supplier performance

## Warranty Tracker

* + Warranty expiration per item
  + Link to customer record

# ERD & Schema Design:

## Products

* (PK) id
* Name
* Selling Price
* Buying Price
* Key Features
* Status [in-stock, out-of-stock, pre-order]
* Quantity Available
* Inventory Minimum Balance
* SKU
* Tags
* Pictures
* Options
* (F.K) Category
* (F.K) Supplier
* (F.K) Entered By

## Users

* (P.K) id
* Name
* Email
* Password
* User-Role [Admin, Salesperson, Inventory Staff]
* Status [Active, Inactive]

## MainCategories

* (P.K) id
* Name

## SubCategories

* (P.K) id
* Name
* (F.K) MainCategory

## Suppliers

* (P.K) id
* Name
* Address
* Phone
* Fax
* Email
* (F.K) Product

## Customers

* (P.K) id
* Name
* Address
* Phone
* Mobile
* Email
* (F.K) Entered by

## Sales:

* (P.K) id
* Description:
  + Product
  + Quantity
  + Price
* Total Price
* Discount
* (F.K) Customer
* (F.K) Salesperson

## PurchaseOrders

* (P.K) id
* Description
* Total Price
* Discount
* (F.K) Supplier
* (F.K) Inventory Staff

## ServiceRequests

* (P.K) id
* (F.K) customer
* Issue Details
* Due Date
* Follow up Description
* (F.K) salesperson

## Quotes

## Rentals (optional)