

Project Design Phase

Proposed Solution

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| Date | 06 November 2025 |
| Team ID | F529277D47452DB9E7447BD087E08E5E |
| Project Name | Medical inventory Management |
| Maximum Marks | 2 Marks |

To address the challenges of manual tracking, data inconsistency, and inefficient stock management in healthcare facilities, the proposed solution is to develop a **Medical Inventory Management System** that automates and streamlines all inventory-related operations.

Key Features:

1. **Automated Inventory Tracking** – Real-time monitoring of medicines, equipment, and consumables to prevent shortages and overstocking.
2. **Barcode/QR Code Integration** – Easy product identification and quick stock updates through scanning.
3. **Expiry Date Alerts** – Automatic notifications for items nearing expiration to reduce wastage.
4. **Purchase Order Management** – Simplified order creation, approval, and tracking to maintain consistent supply.
5. **Supplier & Vendor Management** – Maintain detailed supplier profiles and performance tracking.
6. **Reports & Analytics** – Generate insights on stock usage, demand trends, and cost analysis.
7. **User Role Management** – Secure system access with role-based permissions for admins, pharmacists, and staff.

Expected Outcomes:

- Improved efficiency in inventory control.
- Reduced human errors and expired stock losses.
- Enhanced transparency in purchase and usage data.

- Faster decision-making with real-time analytics.
- **Proposed Solution**
- The proposed **Medical Inventory Management System** is designed to automate and streamline the process of tracking, ordering, and maintaining medical supplies within healthcare institutions. It will provide **real-time updates** on stock levels, **automated notifications** for low inventory or upcoming expiries, and an **easy-to-use dashboard** for managing purchases and supplier data. By integrating technologies such as **barcode scanning, cloud storage, and analytics dashboards**, the system ensures accuracy, reduces human error, and supports efficient decision-making. The platform will also allow authorized users to access inventory details securely from any device, improving coordination between departments.

Conclusion :

Inventory management software for hospitals can help to automate the process and also provide a more accurate count. This type of software for hospitals can also help with other areas such as supply chain and materials management. All you need is to [hire a mobile app developer in India](#) to get started with inventory management in hospitals.

The software would handle the inventory, keeping track of what is on hand, what needs to be ordered, and when it needs to be ordered. It will even alert you if any supplies are running low or if there are any excess supplies that need to be discarded or sold off.