

Requirement Analysis Phase

Solution Requirements (Functional & Non-functional)

Date	1 November 2025
Team Id	NM2025TMID04221
Project Name	Medical Inventory Management System
Maximum Marks	4 Marks

Functional Requirements :

The following are the functional requirements of the proposed Salesforce-based Medical Inventory Management System.

FR No.	Functional Requirement (Epic)	Sub Requirement (Story / Sub-Task)
FR-1	Supplier Management	Maintain detailed supplier information such as name, contact details, and address. Track supplier performance and purchase history.
FR-2	Product Management	Add and update product details including name, batch number, description, and category. Maintain real-time stock levels and reorder thresholds.
FR-3	Purchase Order Management	Create and manage purchase orders linked with suppliers. Track order status (Pending, Delivered, Canceled).
FR-4	Expiry Tracking	Record manufacturing and expiry dates for each batch. Generate automated alerts before expiry.

FR-5	Inventory Transactions	Track stock inflow (purchases) and outflow (usage or dispatch). Ensure quantity and expiry validation during each transaction.
FR-6	Reports and Dashboards	Generate reports for supplier performance, purchase orders, and stock levels. Display real-time dashboards with expiry alerts and reorder recommendations.
FR-7	Access Control & Roles	Provide role-based access for Admin, Inventory Manager, and Purchase Officer. Restrict sensitive operations to authorized users only.
FR-8	Notifications & Alerts	Send system notifications or emails for low stock, pending orders, and upcoming expiries.

Non-Functional Requirements :

The following are the non-functional requirements ensuring performance, security, and reliability of the proposed system.

NFR No.	Non-Functional Requirement	Description
NFR-1	Usability	The system interface should be intuitive and user-friendly for medical and administrative staff.
NFR-2	Security	Only authenticated users can access or modify inventory records. Sensitive data such as supplier and product details should be secured.

NFR-3	Reliability	The system should ensure data consistency during purchase order creation and inventory updates.
NFR-4	Performance	The system should process transactions, reports, and alerts without noticeable delays.
NFR-5	Availability	The application should remain available 24/7 to support continuous medical operations.
NFR-6	Scalability	The system should support an increasing number of suppliers, products, and users as the organization expands.
NFR-7	Maintainability	The system should allow easy updates for adding new features, products, or compliance requirements.
NFR-8	Data Integrity	Every transaction and product update must be accurately recorded to ensure traceability and compliance.

