Date	3/11/2025
Team ID	NM2025TMID04465
Project Title	Medical Inventory Management

1.Introduction

1.1 Purpose

The purpose of the Medical Inventory Management System (MIMS) is to automate and streamline the process of managing medical supplies, equipment, and medicines within healthcare facilities. The system will enable users to track inventory levels, manage stock replenishment, and ensure timely availability of essential medical products using Salesforce as the central platform.

1.2 Scope

MIMS will provide functionalities for:

- Tracking available medical stock and expiry dates.
- Managing supplier and purchase orders.
- Automating reorder notifications when stock falls below threshold levels.
- Generating reports and dashboards for inventory analytics.
- Supporting multi-location inventory management.

The system will serve **inventory managers, procurement officers, pharmacists, and administrators**.

1.3 Objectives

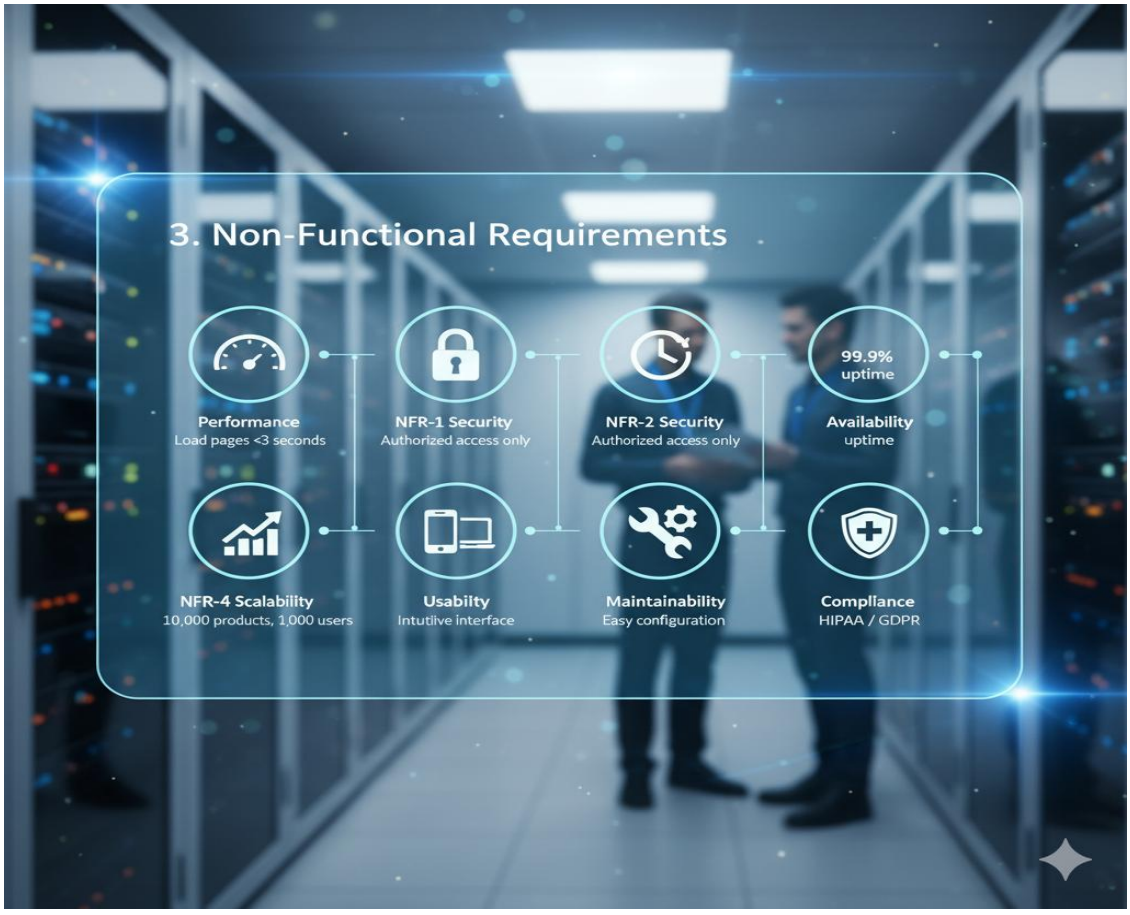
- Reduce manual inventory tracking errors.
- Ensure optimal stock levels and minimize wastage due to expired products.
- Improve procurement cycle efficiency.
- Provide real-time insights into inventory status and movement.

2. Functional Requirements

- FR 1: User Management - System should allow Admins to create and manage user roles and permissions.
- FR 2: Product Management - Users should be able to add, update, and delete medical products with attributes like name, batch number, category, supplier, quantity, and expiry date.
- FR 3: Inventory Tracking System - should display real-time stock levels and flag items below reorder threshold.
- FR-4: Purchase Order Management - Users should be able to create, approve, and track purchase orders from suppliers.
- FR-5: Notifications & Alerts - Automated email/SMS alerts when inventory reaches reorder level or products are near expiry.
- FR-6: Reporting & Dashboards - Generate reports such as Stock Summary, Expired Items, Supplier-wise Purchase Reports, etc

3. Non-Functional Requirements

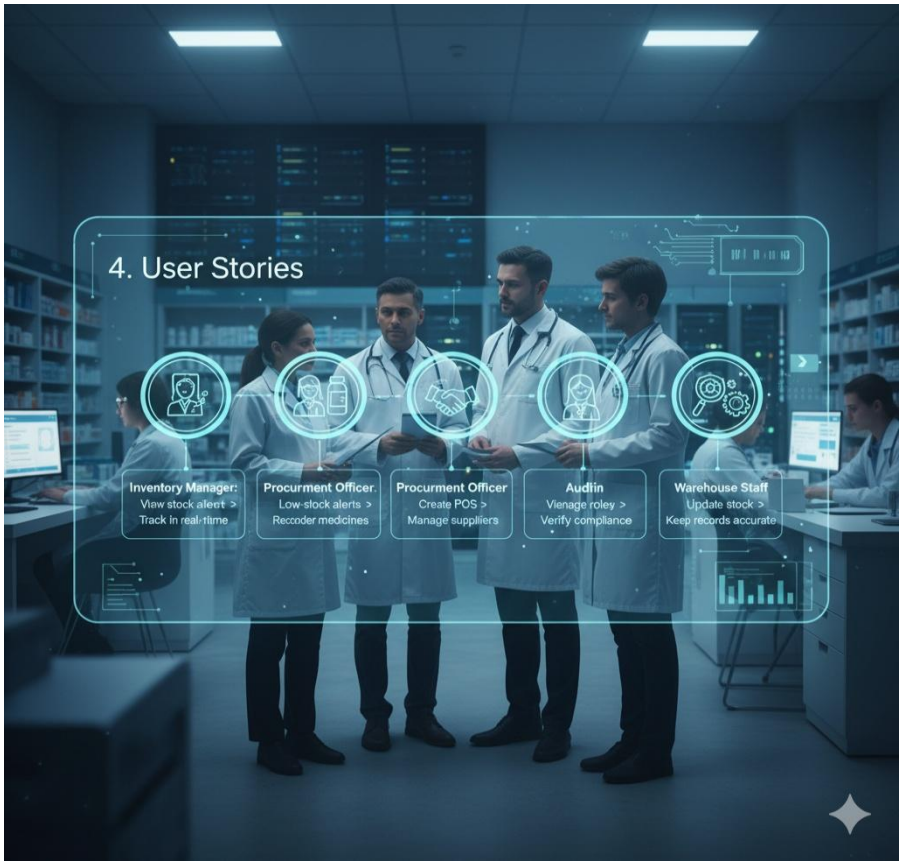
- NFR-1: Performance - The system should load pages and reports within 3 seconds.
- NFR-2: Security - Only authorized users should access specific modules and data.
- NFR-3: Availability - The system should be available 99.9% of the time.
- NFR-4: Scalability - The system should support up to 10,000 products and 1,000 users.
- NFR-5: Usability - The user interface should be intuitive and responsive across devices.
- NFR-6: Maintainability - The system should allow easy configuration and customization without major code changes.



4. User Stories

The Medical Inventory Management System is a comprehensive Salesforce application designed to streamline and manage various operational aspects of the medical inventory. It can efficiently maintain supplier details, manage purchase orders, track product details and transactions, and monitor expiry dates of products, thereby improving operational efficiency, data accuracy, and reporting capabilities.

- US-01: Inventory Manager - View available stock levels Track inventory status in real-time
- US-02: Pharmacist - Receive low-stock alertsReorder medicines before they run out
- US-03: Procurement Officer - Create purchase orders Manage supplier relationships efficiently



5.Acceptance Criteria

- Reports show total purchases, returns, and pending payments per supplier.
- Automated jobs execute without user intervention and generate status logs.
- Doctors can view medicine availability through integrated dashboards.
- Audit reports are downloadable in PDF and Excel formats.

6.Data Dictionary

Field Name	Object	Data Type	Description	Example
Medicine_ID	Medicine	Auto Number	Unique medicine id	MED-0001
Medicine_Name	Medicine	Text(100)	Name of the medicine	Paracetamol 500mg Tablet
SKU	Medicine	Text(50)	Stock Keeping Unit	SKU-PR500
Batch_no	Medicine	Text(150)	Unique batch number assigned by the manufacturer	BN-0924A
Expiry_Date	Medicine	Date	Expiration date of the medicine	2026-09-15
Quantity_On_Hand	Medicine	Number	Current available quantity in stock	39
Reorder_Level	Medicine	Number	Minimum threshold at which reorder alert is triggered	10

7. Constraints and Assumptions

Constraints

- The system must operate within Salesforce platform limits (e.g., governor limits, data storage).
- Integration with external systems (like ERP or pharmacy billing) depends on available APIs.
- Access limited to users with Salesforce licenses.

Assumptions

- Users have basic Salesforce training.
- All required data (product, supplier, etc.) will be provided before go-live.
- Internet access is available for all users.
- System roles and permissions are predefined and approved by management.

8.Traceability Matrix (Summary)

Requirement ID	**User Story ID**	**Test Case ID**	**Status**
FR-1	US-04	TC-01	Pending
FR-2	US-00	TC-02	Pending
FR-3	US-08	TC-07	Pending
FR-4	US-07	TC-03	Pending
FR-5	US-10	TC-09	Pending
FR-6	US-06	TC-01	Pending
FR-7	US-01	TC-06	Pending
FR-8	US-09	TC-05	Pending