

Project Design Phase

Solution Requirement (Functional & Non-Functional)

DATE	1 NOVEMBER 2025
TEAM ID	NM2025TMID02682
PROJECT NAME	MEDICAL INVENTORY MANAGEMENT
MAXIMUM MARKS	4 MARKS

Functional Requirements

Following are the functional requirements of the proposed solution.

FR No.	Functional Requirement (Epic)	Sub Requirement (Story / Sub-Task)
FR-1	User and Role Management	Admin and Pharmacist login, role-based permissions
FR-2	Inventory Registration	Add new medicines with name, batch, expiry, quantity, and supplier details quantity, and supplier details
FR-3	Stock Monitoring	Real-time tracking of available stock and usage logs
FR-4	Expiry Tracking	System identifies near- expiry or expired medicines and notifies the admin
FR-5	Auto Reorder Alerts	Generate low-stock alerts and reorder suggestions automatically
FR-6	Reporting and Analytics	Generate monthly and custom inventory reports, visualize usage trends
FR-7	Audit and Traceability	Maintain a log of all stock updates, additions, deletions, and user actions

Non-Functional Requirements

Following are the non-functional requirements of the proposed solution.

NFR No.	Non-Functional Requirement	Description
NFR-1	Usability	Interface should be intuitive and easy for pharmacists and admins to use.
NFR-2	Security	Access must be restricted to authorized users with encrypted authentication.
NFR-3	Reliability	System should ensure accurate stock tracking and notifications.
NFR-4	Performance	System must process updates and alert checks quickly, even under heavy data loads.
NFR-5	Availability	The platform should be available 24/7 to support hospital operations.
NFR-6	Scalability	Should support multiple departments, hospitals, and supplier integrations.
NFR-7	Data Integrity	Must ensure accuracy and consistency in all stored inventory data.