SOLUTION REQUIREMENTS

Date	2 November 2025
Team ID	NM2025TMID02665
Project Name	Medical Inventory Management
Maximum Marks	4 Marks

Functional Requirements:

These define the specific capabilities and features of the system. The functional requirements such as Inventory Management Core, Procurement and Reordering, Expiry and Quality Control, User and Access Management, Reporting and Analytics. These features ensure efficient workflow automation andaccurate record handling within the Medical Inventory Management using salesforce Tools.

S.No	UserRole	Description / Acceptance criteria
1.	Inventory Management Core	The systemmustallowreal-timetrackingofallinventory items by ItemID,Location(e.g.,MainStore,WardA), and QuantityonHand.Thesystemmustsupporttracking of multipleLotNumbersforasingleitem.
2.	Procurement and Reordering	The systemmustallowsettingaReorderPoint (Minimum Stock Level) and a Maximum Stock Level for every item.Thesystemmustautomaticallytriggera "Low StockAlert"whenthequantityonhandfallstoor below theReorderPoint.
3.	Expiry andQuality Control	The systemmustcaptureandstoretheExpirationDate for every receivedlot.Thesystemmustissueacritical "Expiry Alert"foritemswithanexpirationdatewithina configurable window (e.g., 90 days).
4.	User andAccess Management	~~The systemmustsupportrole-basedaccesscontrol~~ (RBAC) for roles such as Administrator, Inventory Manager, and Nurse/Department Staff. The system must maintain an unalterable Audit Log of every transaction (creation, edit, deletion, movement, usage) with a timestamp and User ID.
5.	Reporting andAnalytics	The systemmustgenerateaStockValuationReport showing thecurrentquantity,cost,andtotalvalueof inventory. The system must generate a detailed Item Usage Reportfilterablebydaterange,department,and item category.

SOLUTION REQUIREMENTS

Non-Functional Requirements:

The non-functional requirements focus on quality attributes and constraints of the solution such as Performance**,** Security, Usability, Reliability, Integration. They ensure the Medical Inventory Management Project runsreliably, protects data, and remains adaptable to future business growth whilemaintaining a smoothuser experience.

S.No	Requirements	Description
1.	Performance	The system must load critical inventory screens and process transactions (e.g., issuing an item) in under 3 seconds during peak usage hours.
2.	Security	All sensitive data, including cost information and patient linkage (if any), must be encrypted both in transit and at rest.
3.	Usability	The interface for core functions (scanning, issuing) must be mobile-friendly and require no more than three clicks to complete a transaction.
4.	Reliability	The system must have a scheduled daily data backup and a documented disaster recovery plan to ensure an uptime of at least 99.9%.
5.	Integration	The system must provide an API for potential future integration with the hospital's Electronic Health Record (EHR) and financial systems.