

SOLUTION REQUIREMENTS

Date	23 October 2025
Team ID	NM2025TMID08036
Project Name	Medical Inventory Management
Maximum Marks	4 Marks

Functional Requirements:

- **Medicine & Equipment Management:** Allow users to add, update, and delete medicine or equipment records with details such as Item Name, Batch Number, Supplier, Manufacture Date, Expiry Date, Quantity, and Price.
- **Supplier Management:** Maintain supplier profiles with contact details and automate reordering when stock reaches minimum levels.
- **Inventory Tracking:** Display real-time stock levels, auto-update quantities after transactions, and generate low-stock/expiry alerts using Salesforce Flow or Process Builder.
- **Procurement and Purchase Orders:** Create, manage, and track purchase orders, send notifications to suppliers, and monitor delivery status.

- **Salesforce Automation Features:** Use Flow, Validation Rules, and Approval Processes for tasks like stock updates, expiry alerts, and high-value approvals.
- **User Roles & Access Control:** Define Admin, Pharmacist, Store Manager, and Procurement Officer roles with permissions set using Salesforce Profiles and Permission Sets.
- **Reports & Dashboards:** Create dashboards for stock summary, consumption trends, supplier performance, and expiry history using Salesforce Reports.
- **Billing & Audit Management:** Track all transactions, auto-generate billing data, and maintain audit logs for compliance and accountability.

Non-Functional Requirement:

- **Scalability:** Handle increased data (medicines, suppliers, transactions) without performance degradation.
- **Security:** Enforce Salesforce Shield, Field-Level Security, and Two-Factor Authentication for data protection.
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- **Performance:** Ensure record operations complete within 2 seconds and dashboards load in under 5 seconds for large datasets.
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- **Availability:** Maintain 99.9% uptime using Salesforce's cloud reliability and perform automatic data backups.

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- Usability: Provide an intuitive Lightning-based UI that is responsive and easy for non-technical users.
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- Integration: Connect with Hospital Management and Billing Systems using Salesforce REST APIs and Communication APIs.
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- Maintainability: Support updates to workflows, fields, and validations without downtime; maintain proper documentation.
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- Data Integrity & Accuracy: Prevent invalid or duplicate data entries with validation rules and ensure correct expiry and stock tracking.