Medical Inventory Management

Project Design Phase

Proposed Solution

Date	1 NOV 25
Team ID	NM2025TMID04716
Project Name	Medical Inventory Management System

Proposed Solution Template

S.No.	Parameter	Description
1.	Problem Statement	Hospitals and pharmacies face challenges in maintaining accurate medical stock records, managing suppliers, and tracking expiry dates. Manual or spreadsheet-based methods often result in stock mismatches, delayed procurement, and expired medicines being used.
2.	Idea / Solution Description	The proposed Salesforce-based Medical Inventory Management System automates the entire inventory process. It manages suppliers, products, purchase orders, and stock transactions through custom objects and automation tools like Flows, Validation Rules, and Apex Triggers. The system provides real-time updates, expiry alerts, and dashboard-based analytics to ensure accuracy and efficiency.
3.	Novelty / Uniqueness	The system leverages Salesforce's cloud capabilities to create a customized, integrated, and fully automated platform for medical inventory management. Unlike traditional systems, it uses intelligent workflows to reduce manual entry errors, prevent expired stock usage, and enhance decision-making with real-time reports.

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4.	Social Impact / Customer Satisfaction	The solution directly benefits healthcare organizations by ensuring timely access to safe medicines, reducing waste, and improving data reliability. It increases staff efficiency, ensures patient safety, and promotes accountability in inventory operations.
5.	Business Model (Revenue Model)	The system can be offered as a subscription-based or cloud-hosted service for hospitals, clinics, and pharmacies. By saving time and reducing manual errors, it helps organizations cut operational costs and improves service quality — leading to better financial efficiency.
6.	Scalability of the Solution	The solution is highly scalable. It can be expanded to support multi-location hospitals, integrate with hospital ERP systems, or include advanced features like barcode scanning, automated reordering, and predictive analytics for stock management.

Solution Description

The Medical Inventory Management System provides a comprehensive digital framework to automate and manage all aspects of medical inventory control.
Developed on Salesforce, it streamlines supplier and purchase order management, monitors product stock and expiry, and offers real-time reports through dashboards.

This solution eliminates the drawbacks of manual systems by ensuring accurate data entry, faster procurement cycles, and transparent inventory tracking. Automation using Flows, Validation Rules, and Apex Triggers ensures that every transaction — from supplier creation to product delivery — is recorded accurately and updated instantly.

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The system improves operational reliability, reduces resource wastage, and enhances accountability across departments. By providing healthcare institutions with real-time access to inventory data, the solution ensures that medical supplies are always available, safe, and efficiently managed.