Project Design Phase

Proposed Solution

Date	2 November 2025
Team ID	NM2025TMID00728
Project Name	Medical Inventory Management System
Maximum Marks	2 marks

Proposed Solution Template:

S.No.	Parameter	Description
1.	**Problem Statement**	Manual inventory management in hospitals and medical stores often leads to inaccurate stock records, unnoticed product expiries, delayed purchase orders, and poor supplier coordination. These issues cause operational inefficiencies and can affect patient safety.
2.	**Idea / Solution Description**	The Medical Inventory Management System is a Salesforce-based application designed to automate supplier tracking, product cataloging, purchase order management, and expiry monitoring. It maintains real-time data visibility through custom objects, validation rules, and automated workflows using flows and triggers.
3.	**Novelty / Uniqueness**	The solution integrates all inventory functions—supplier, product, and purchase order—within Salesforce's cloud environment, enabling real-time synchronization, expiry alerts, and interactive dashboards. Its use of automation through triggers and flows makes it highly efficient and user-friendly.

4.	Social Impact / Customer Satisfaction	By ensuring the timely availability of medical supplies and preventing the use of expired products, this system promotes patient safety, reduces medical waste, and enhances trust in healthcare operations. It also simplifies reporting and decision-making for management.
5.	Business Model (Revenue Model)	Hospitals, clinics, and pharmaceutical suppliers can adopt the system through a SaaS subscription or license-based model. It reduces costs related to stock wastage, manual errors, and delayed procurement, making it a sustainable and cost-efficient digital solution.
6.	Scalability of the Solution	The system can be easily scaled by adding modules for pharmacy billing, supplier performance analytics, and hospital department-level tracking. It can also integrate with ERP or healthcare record systems for broader organizational use.

💡 Conclusion

The **Medical Inventory Management System (MIMS)** successfully addresses the critical issues of manual errors, stock wastage, and delayed procurement within healthcare settings. By leveraging the Salesforce cloud platform, MIMS establishes a unified, real-time system for managing suppliers, products, purchase orders, and essential expiry monitoring. This solution dramatically improves operational efficiency, minimizes the risk of administering expired products, and ensures the timely availability of vital medical supplies. Its scalable, subscription-based model provides a sustainable, cost-efficient path to enhanced patient safety, reduced waste, and greater trust in healthcare operations.

Solution Description

The Medical Inventory Management is a Salesforce-powered platform that digitizes and automates medical inventory management processes. It enables healthcare organizations to efficiently handle supplier information, purchase orders, stock levels, and product expiry dates through a unified system. Custom objects, validation rules, and automated flows.

Real-time dashboards and reports allow administrators to monitor stock levels, analyze supplier performance, and make informed decisions. Additionally, triggers and expiry alerts help prevent out-of-stock situations and expired product usage. This scalable and user-friendly system enhances operational efficiency, transparency, and patient safety across healthcare facilities.