

Project Design Phase
Proposed Solution

Date	1 NOV 2025
Team ID	NM2025TMID02866
Project Name	Medical Inventory Management
Maximum Marks	2 Marks

Proposed Solution Template:

S.No.	Parameter	Description
1)	Problem Statement (Problem to be solved)	Hospitals and healthcare institutions often struggle to manage their medical inventory efficiently. Manual recordkeeping of product details, suppliers, and expiry dates leads to stock mismatches, expired medicines, and costly procurement delays, affecting patient safety and operational flow.
2)	Idea / Solution Description	The Medical Inventory Management System is a Salesforce-based application that automates supplier management, purchase order tracking, product information storage, and expiry monitoring. Using Apex Triggers, Flows, and Validation Rules, it ensures data accuracy, automated total calculation, and timely delivery tracking.

3)	Novelty / Uniqueness	The system uniquely combines Salesforce's native automation tools to build a domain-specific solution for healthcare. It not only tracks stock and suppliers but also integrates expiry monitoring and delivery date validation—features often missing in standard inventory systems.
4)	Social Impact / Customer Satisfaction	This system enhances hospital efficiency and reduces risks associated with expired products. It ensures timely product availability, improves supplier accountability, and directly contributes to safer healthcare services and better resource utilization.
5)	Business Model (Revenue Model)	The solution can be deployed as a Software-as-a-Service (SaaS) product for hospitals, clinics, and pharmacies. Revenue can be generated through subscription plans, maintenance services, and customized module deployments.
6)	Scalability of the Solution	Built on the Salesforce cloud platform, the solution supports scalability across multiple hospital branches, departments, and locations. It can be extended with features such as predictive restocking, integration with supplier APIs, and AI-based expiry forecasting.

Conclusion

The Medical Inventory Management System is a full automation solution that helps hospitals manage their inventory well. It connects purchase orders, suppliers, and product management smoothly, making sure the data stays accurate and reliable. Using Salesforce tools like Flows and Triggers, the system improves how the hospital runs, reduces mistakes from doing things by hand, and makes healthcare services better.

Reference:

Infographic was made using Salesforce App Builder visualization and Flow Diagram.

Solution Description

To manage hospital inventory and supplier processes well, the Medical Inventory Management System offers a complete automated solution on the Salesforce platform.

The system keeps track of supplier details, product information, expiry dates, and purchase orders using custom objects and relationships. Salesforce Flows automatically update delivery schedules, and Apex Triggers calculate total order costs in real time. Validation rules help keep the data correct and stop people from entering wrong information, like delivery dates that are too far in the future.

By including reporting and dashboards, users get a clear view of supplier performance, inventory levels, and purchase costs. This automation cuts down on manual work, helps make better decisions, and ensures better healthcare by controlling inventory accurately and in real time.