

PROPOSED SOLUTION

Date	08 November 2025
Team ID	NM2025TMID00593
Project Name	Medical Inventory Management System
Maximum Marks	2 Marks

Proposed Solution Template :

S.no	Parameters	Description
1	Problem Statement	In traditional medical facilities, inventory management, supplier coordination, and stock updates are handled manually, leading to inefficiencies, stockouts, expiry losses, and inaccurate records. There is no centralized system to manage all medical supplies effectively..
2	Solution Description	The Medical Inventory Management System is a software-based solution that automates the entire process of handling medical supplies. It manages supplier details, stock levels, purchase entries, usage logs, billing, and expiry alerts through integrated modules, ensuring accuracy and operational efficiency.

Solution Description :

4	<i>Customer Satisfaction</i>	<p>The system ensures transparency and reliability by providing real-time stock information, expiry alerts, and usage analytics. It minimizes wastage, improves staff coordination, and ensures uninterrupted supply of essential medical items.</p>
5	<i>Business Model</i>	<p>Although developed for academic purposes, the system provides significant practical benefits by reducing manual effort, minimizing stock losses, and improving operational workflow, ultimately leading to cost efficiency and better resource management.</p>
6	<i>Scalability of the Solution</i>	<p>The system can be expanded to include advanced features such as automated supplier communication, patient-level medicine tracking, and integration with hospital billing systems. It can also support multiple branches or hospitals.</p>
3	<i>Uniqueness</i>	<p>The system utilizes low-code automation tools to streamline real-world healthcare inventory processes without requiring external dependency. Its modular design allows institutions to customize and extend functionalities based on their needs.</p>

The Medical Inventory Management System automates and centralizes the management of medical supplies in healthcare facilities. It allows easy monitoring of stock availability, purchases, and consumption patterns while ensuring compliance with expiry and safety standards. Automated notifications and real-time dashboards enhance decision-making, improve efficiency, and maintain uninterrupted availability of essential supplies.