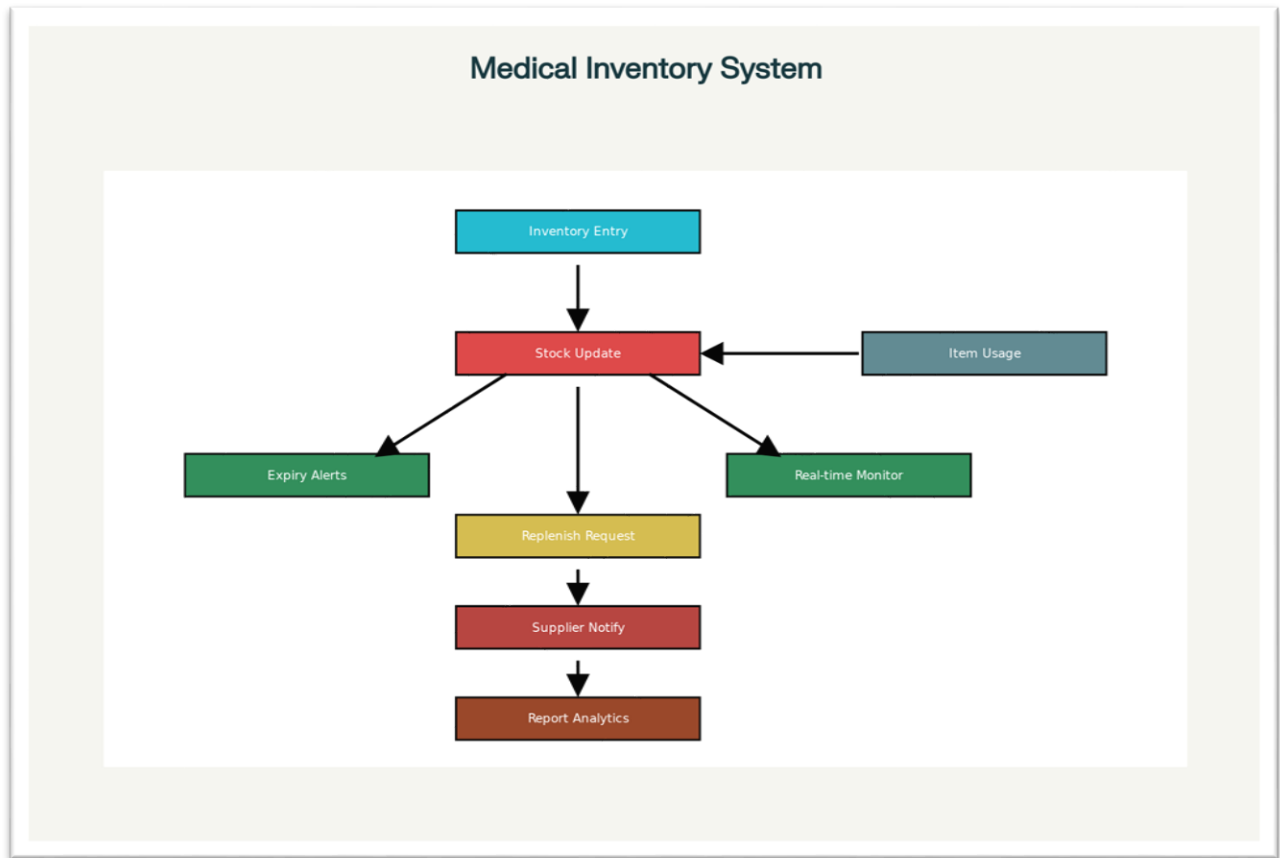


DEFINE PROBLEM STATEMENT

Date	23 October 2025
Team ID	NM2025TMID08036
Project Name	Medical Inventory Management
Maximum Marks	2 Marks

Problem Statement:

In today's fast-paced healthcare environment, many hospitals, clinics, and pharmacies continue to rely on manual processes for managing their medical inventory. This leads to inefficiencies such as overstocking, expired medicines, stockouts, and inaccurate tracking of medical supplies. Medical staff often face challenges in locating essential drugs or equipment when needed, leading to treatment delays and patient dissatisfaction. Similarly, administrators struggle to maintain real-time visibility of stock levels, supplier details, and consumption patterns, which can result in financial losses and regulatory non-compliance. The absence of an integrated system also limits their ability to forecast demand, analyze usage trends, and plan timely replenishment. Therefore, there is an urgent need for a centralized, automated Medical Inventory Management System that ensures accurate tracking, timely replenishment, and optimal utilization of medical resources. This system will streamline inventory operations, reduce wastage, and enhance overall hospital efficiency.



The primary problem faced by healthcare facilities today is the lack of an integrated and automated system to manage medical inventory efficiently. Most organizations still depend on manual or spreadsheet-based tracking methods that are prone to errors, data loss, and inefficiency. As a result, monitoring stock levels, managing expiry dates, and tracking supplier performance become time-consuming and unreliable. Additionally, the absence of a centralized database leads to poor coordination between departments such as pharmacy, procurement, and administration, causing shortages or surplus of critical medicines and equipment. Manual billing and reporting further complicate financial management and compliance tracking. These issues highlight the need for a digital solution that can automate routine inventory tasks, provide real-time access to stock data, and improve accuracy and

efficiency. The Medical Inventory Management Project aims to address these challenges by developing a cloud-based, user-friendly application that centralizes inventory operations, automates tracking, and supports data-driven decision-making for better healthcare resource management.