Ideation Phase
Define the Problem Statements

Date	01 NOV 2025
Team ID	**NM2025TMID02455**
Project Name	Medical Inventory Managemen
Maximum Marks	2 Marks

Customer Problem Statement Template:

Customers face challenges managing medical inventory due to inaccurate stock tracking, missing supplies, or expired items. This leads to delays in patient care, interrupted workflows, and difficulty maintaining compliance with safety standards. Staff often struggle to identify available stock or items nearing expiry, increasing the risk of errors and confusion.

They need a system that provides real-time inventory updates, automated alerts for low or expired stock, and controlled access to critical data. Features like notifications for replenishment and automated reordering would prevent shortages, ensure reliable supply management, and improve overall operational efficiency and staff confidence.

Medical Inventory Management
— Problem & Solution Table

Problem	Description	Solution
Inaccurate Stock Tracking	Manual entry errors and lack of real-time updates lead to unreliable inventory data and difficulty locating supplies.	Implement automated digital inventory management system with real-time tracking and barcode/RFID integration.
Missing or Misplaced Supplies	Items are often misplaced due to poor labeling or lack of centralized tracking. causing workflow interruptions.	Use barcode or RFID tagging with centralized dashboards to quickly locate and track each item's move,
Expired Stock	Failure to monitor expiration dates results in waste and potential safety risks for patients.	Introduce automated alerts and color-coded expiry tracking to flag items nearing expiration for timely
Delayed Patient Care	Unavailable or missing medical supplies delay treatment and affect patient outcomes.	Enable automatic low-stock notifications and reorder triggers to ensure critical items are always in stock
Compliance & Safety Challenges	Incomplete audit trails make it hard to ensure regulatory compliance and accountability.	Provide user-friendly dashboards with real-time visibility and clear categorization of inventory levels at

Example:

Problem Statement (PS)	I am (Customer)	I'm trying to	But	Because	Which makes me feel
PS-1	A Pharmacist	Check available medicines	The stock count is often inaccurate	Inventory isn't updated in real-time	Frustrated and unsure about supply accuracy
PS-2	A Nurse	Locate a medical item quickly	I can't find it in the system	Items are misplaced or not properly labeled	Stressed and delayed in patient care

Problem Statement PS 1:

As a **pharmacist**, I am trying to check and update the available stock of medicines, but the system often shows **inaccurate quantities** because inventory data isn't updated in real-time. This limitation makes me feel **frustrated and uncertain**, as I can't rely on the system to confirm which medicines are in stock or nearing expiry.

It leads to **delays in dispensing medication** and increases the risk of stockouts during busy periods. I need an **automated, real-time tracking system** that accurately updates stock levels as soon as medicines are dispensed or restocked.

Problem Statement PS 2:

As a **nurse**, I want to **quickly locate and access specific medical supplies** during patient care, but the system doesn't clearly indicate where items are stored or if they are expired.
This causes **confusion and delays** when attending to patients, especially in emergencies.
It makes me feel **stressed and anxious**, knowing that I might be using outdated or missing supplies. I need a **smart inventory system** with clear labeling, real-time location tracking, and **expiry alerts** to ensure safety and efficiency in patient care.