

## IDEATION PHASE

Team ID	NM2025TMID01548
Project Name	Medical Inventory Management System
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### Folder Reference:

Document/Ideation phase/

Includes:

- Brainstorming & Idea Generation
- Define Problem Statement
- Empathy Map Canvas
- Readme.md

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### 1. Introduction

Hospitals and healthcare centers depend on reliable access to medicines and equipment. Manual tracking often causes stockouts, overstocking, and expired materials. The **Medical Inventory Management System (MIMS)** is proposed to address these inefficiencies through digital automation, ensuring accurate, real-time control of medical inventory across all departments.

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## 2. Problem Statement

The current manual inventory systems lack efficiency, leading to:

- Mismanagement of critical supplies.
- Frequent stock shortages or surpluses.
- Expired drugs being overlooked.
- Time-consuming audits and reporting.

### Defined Problem:

Healthcare facilities need an automated, real-time, centralized inventory solution to optimize supply management, enhance transparency, and support data-driven decision-making.

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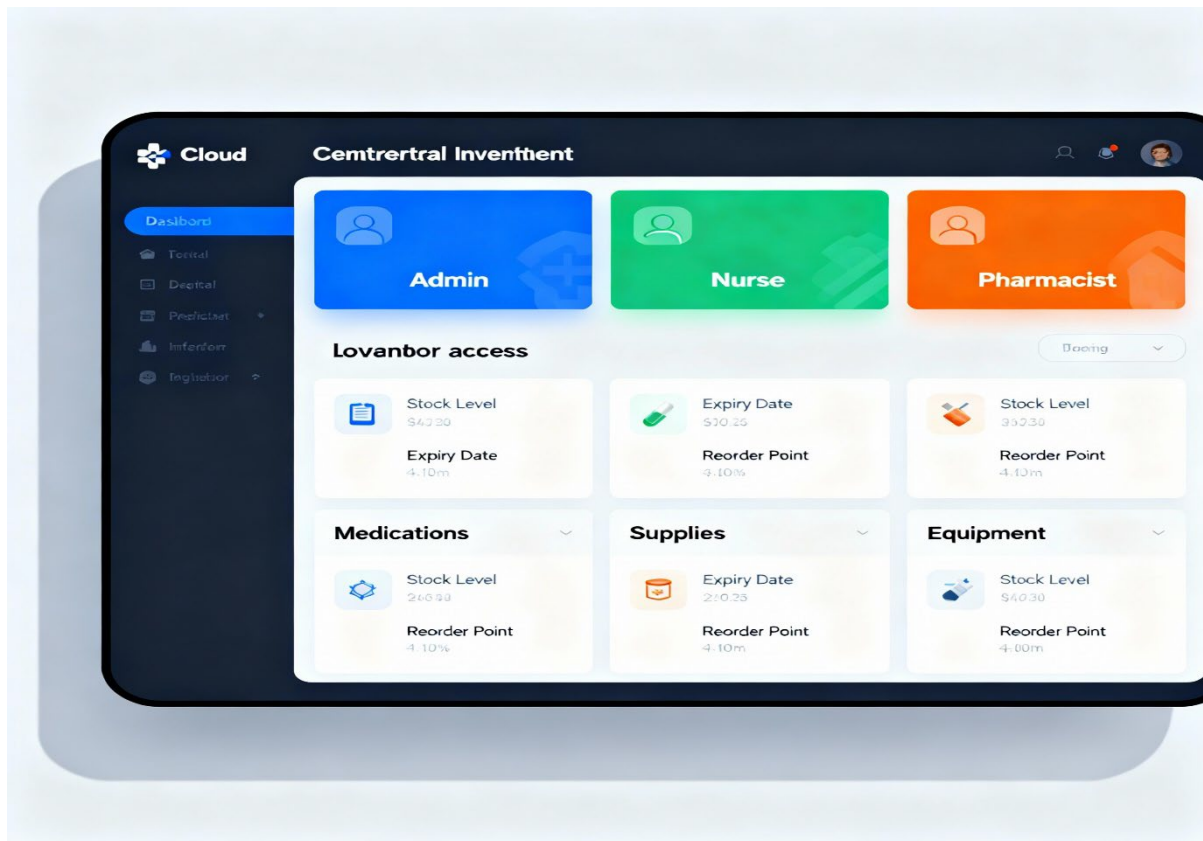
## 3. Empathy Map Canvas

### Perspective Insights

- Says**            “We often don’t know when stock runs out.”
- Thinks**        “Automation can prevent medical delays.”
- Does**            Tracks supplies manually in spreadsheets.
- Feels**            Overwhelmed during shortages and emergency requests.

### Conclusion:

Users want an intuitive, automated solution that ensures real-time stock visibility and smart reordering alerts.



## 4. Brainstorming & Idea Prioritization

### Generated Ideas:

1. QR/barcode tracking of medical items.
2. Centralized cloud dashboard for hospital-wide access.
3. Automatic reorder triggers.
4. Expiry-based sorting and disposal alerts.
5. Role-based access for admin, pharmacist, and doctor.

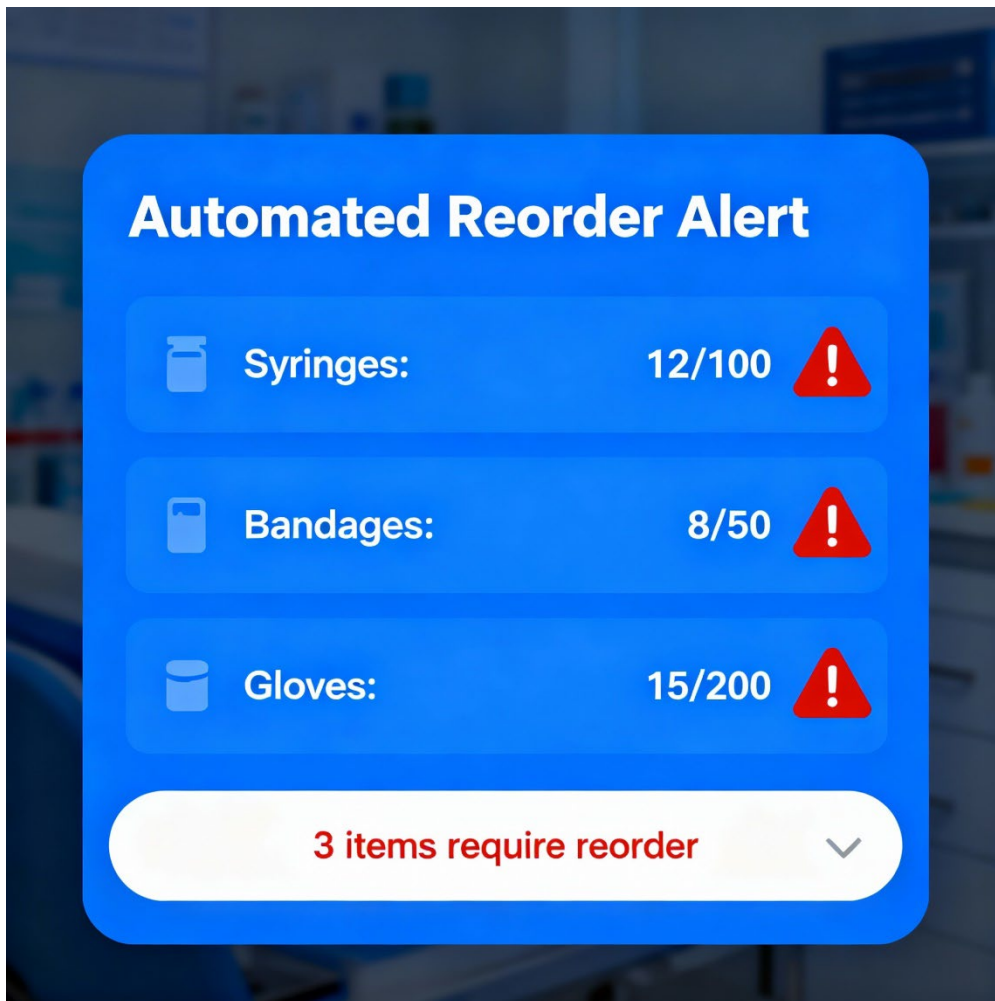
### Prioritization (Impact × Feasibility):

- High: Stock alerts, expiry tracking, barcode scanning.
- Medium: Predictive restocking and analytics.
- Low: ERP integration (future enhancement).



## 5. Objectives

- Digitize stock management.
- Enable low-stock and expiry alerts.
- Maintain supplier and purchase history.
- Improve audit accuracy and reduce waste.



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## 6. Expected Outcomes

- Faster, error-free inventory updates.
- Enhanced hospital readiness.
- Reduced operational cost through analytics.