

Ideation Phase – Empathize & Discover

Date : 09/11/2025

Team ID : NM2025TMID02283

Project Name : Medical Inventory Management

Maximum Marks : 4 Marks

1. Empathize & Discover Stage

Empathize & Discover stage is the first step of the **Design Thinking process** used in software development.

Its goal is to **understand the users' needs, pain points, emotions, and environment** before designing the system.

In the context of **Medical Inventory Management**, this means interacting with:

- Pharmacists
- Hospital administrators
- Nurses
- Procurement officers
- Inventory managers

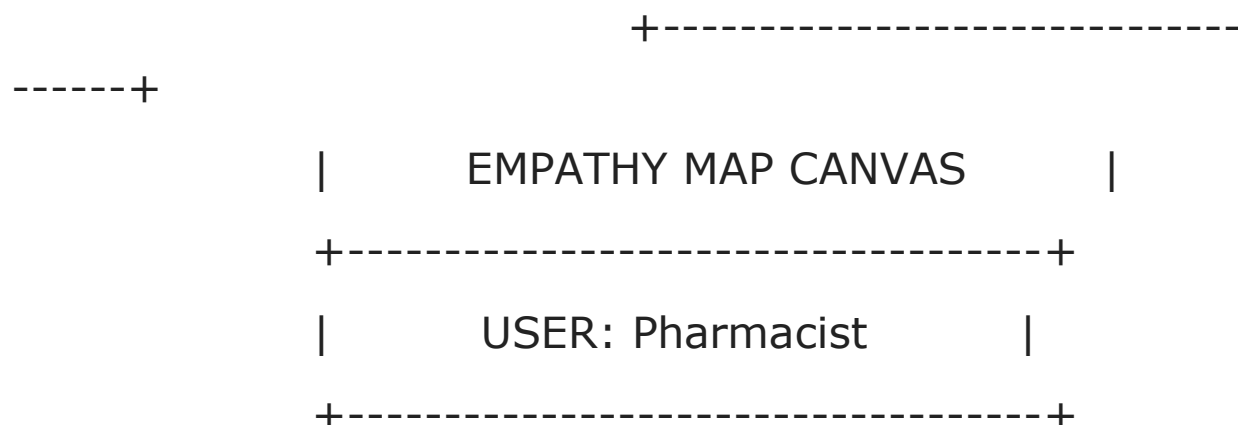
2. Key Findings (Discovery Insights)

During interviews and observations, the following problems were identified:

- Manual stock entry causes frequent **errors** and **duplication**.
- Staff often forget to check **expiry dates**, leading to **wastage**.
- There is **no real-time update** between pharmacy, stores, and wards.
- **Emergency shortages** occur because staff are unaware of low stock levels.
- **Reporting and audits** are time-consuming.

🔗 Empathy Map Canvas Diagram (Example)

Below is a simple structure for the **Empathy Map Canvas** diagram you can include in your project:



THINKS:	
"Need accurate data."	
"Must avoid stockouts."	
+-----+	
FEELS:	
Frustrated, stressed, responsible	
+-----+	
SAYS:	
"The system is slow and manual."	
"We waste medicines often."	
+-----+	
DOES:	
Manually records stock, checks	
expiry dates, requests supplies	
+-----+	
PAINS:	
Errors, delays, expired stock	
+-----+	
GAINS:	
Real-time alerts, automation, data	
+-----+	

4. Example Analogy: Food Ordering & Delivery Application

To better understand the concept, let's compare **Medical Inventory Management** with a **Food Ordering & Delivery App**:

Aspect	Food Delivery App	Medical Inventory Management System
User	Customer ordering food	Pharmacist or hospital staff managing supplies
Need	Fast food delivery	Timely supply of medicines
Process	User places order → Restaurant prepares → Delivery updates → Delivered	Department requests medicine → Inventory updates → Procurement → Restocked
Pain Point	Delayed delivery, wrong order	Stockouts, expired medicines
Solution	Real-time order tracking	Real-time inventory monitoring
Outcome	Customer satisfaction	Improved patient care & resource use

The **Empathize & Discover** phase in developing a **Medical Inventory Management System** focuses on:

- Understanding user pain points and workflow challenges
- Mapping user emotions, actions, and needs through empathy maps
- Discovering opportunities for automation and efficiency

This phase ensures that the software is **human-centered**, addressing real-world problems faced by healthcare professionals and improving **accuracy, speed, and patient safety**.