

Ideation phase

Define the problem statements

Date	25 October 2025
Team ID	NM2025TMID03988
Project Name	Garage Management System
Maximum Marks	2 Marks

Customer problem statement Template :

Garage owners and staff often face challenges when trying to delete customer or mechanic profiles that are still linked to active service jobs or repair orders. Deleting these profiles can lead to broken service records, incomplete job histories, and confusion among team members who depend on accurate data for billing, tracking, and reporting.

Garage Management System

Problem & Solution Table

Problem	Description	Solution
Inefficient Booking System	Manual booking process leads to double bookings and lost opportunities.	Implement an automated booking portal
Inventory Mismanagement	Difficulty tracking parts and tools leads to stockouts and excess inventory	Use real-time inventory tracking
Poor Customer Tracking	Lack of customer history hampers personalized service and follow-ups	Integrate customer relationship management (CRM) system
Maintenance Scheduling Errors	Overdue maintenance causes increased vehicle downtime and repairs	Set up automated maintenance reminders
Billing Inconsistencies	Errors in billing lead to disputes and delayed payments	Adopt digital invoicing

Example

Problem Statement (PS)	I am (Customer)	I'm trying to	But	Because	Which makes me feel
PS-1	a Garage Owner	manage daily service bookings efficiently	the current system uses manual registers and phone calls	there is no centralized booking platform	there is no centralized booking platform
PS-2	an Inventory Manager	track parts and tools availability	inventory records are updated manually and often inaccurate	there is no real-time tracking or low-stock alert system	anxious about delays in service due to missing parts

Problem Statement PS 1:

As a garage owner, I am trying to manage and update the list of customer service bookings efficiently, but the current system requires manual entry and phone confirmations. This process often leads to double bookings or missed appointments, especially during peak hours.

This limitation makes me feel frustrated and anxious, as I cannot maintain accurate schedules or track customer service timelines effectively. It also interrupts the workflow and affects overall customer satisfaction. I need a centralized, automated booking system that allows customers to schedule and manage appointments online, ensuring smooth coordination and better resource utilization.

Problem Statement PS 2:

As an inventory manager, I am trying to monitor and maintain spare parts availability, but the current method relies on manual stock checks and paper-based logs. This often results in incorrect stock levels, missing parts, and delayed repairs.

This limitation makes me feel anxious and inefficient, as I can't ensure timely service delivery or accurate order management. It also causes downtime and customer dissatisfaction when parts are unavailable. I need a real-time inventory tracking system with automatic low-stock alerts and purchase order integration.