

Ideation Phase

Define the Problem Statements

Date	28 October 2025
Team ID	NM2025TMID05681
Project Name	Garage Management System
Maximum Marks	2 Marks

Customer Problem Statement Template:

Customers experience inconvenience when trying to track the progress of their vehicle once it is submitted for servicing. The lack of real-time service updates leaves them unsure about the current stage of repair or expected completion time. This creates frustration and forces customers to repeatedly call or visit the garage for information. The uncertainty affects customer trust and overall satisfaction with the service.

Customers need a clear and transparent way to monitor the status of their vehicle throughout the service lifecycle, ensuring timely communication and reduced follow-ups. Real-time notifications, status updates, or a customer service tracking portal would provide visibility and confidence. Implementing such a solution would enhance customer experience, streamline communication, and strengthen service reliability.

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

Reference: <https://miro.com/templates/customer-problem-statement/>

Example:

Problem Statement (PS)	I am (Customer)	I'm trying to	But	Because	Which makes me feel
PS-1	A Vehicle Owner	Book a service appointment	I can't track my service status	there is no real-time update or notification system	Uncertain and ignored
PS-2	A Mechanic	View repair tasks clearly	the job details are unclear or incomplete	customer issues are not recorded properly during job intake	Confused and stressed

Problem Statement PS 1:

As a vehicle owner, I am trying to book a service appointment and stay informed about the progress of my vehicle servicing, but the system does not provide real-time updates or notifications regarding the service status. This lack of visibility makes me feel uncertain and ignored because I have no clarity on whether my vehicle is being diagnosed, repaired, or delayed.

It affects my planning and creates unnecessary follow-ups, as I need to call or visit the garage multiple times just to check on the service progress. I need a better way to track live service status with timely notifications to stay informed and assured without the hassle of constant manual follow-ups.

Problem Statement PS 2:

As a mechanic, I want to clearly understand the repair tasks assigned to me so I can perform the correct service efficiently. However, the current system often provides incomplete or unclear job details because customer complaints and service requirements are not properly recorded during job intake.

This causes confusion, rework, and delays in the repair process, making my job stressful and inefficient. Miscommunication not only affects service quality but also increases the time taken to complete each task. A structured job card with complete issue details, customer notes, and required checks would help me perform repairs more accurately, reduce errors, and improve service delivery.