

Ideation Phase

Define the Problem Statements

Date	1 Nov 2025
Team ID	NM2025TMID02085
Project Name	Garage Management system

Customer Problem Statement Template:

Garages face issues managing multiple manual processes, such as customer tracking, appointment scheduling, service recording, and billing. This leads to data inconsistencies, delayed service updates, and difficulty maintaining accurate records. Lack of automation causes duplicate work and errors, resulting in frustrated staff and dissatisfied customers.

Garages need a seamless, automated system to digitize these tasks, enforce data validations, and provide real-time service and billing updates. Clear workflows and prompt notifications are essential to avoid missed appointments and incorrect billing, improving overall operational efficiency and customer satisfaction.

Problem	Description	Solution
Manual Data Entry Errors	Cocorrect vehicle details or service records entered manually	Implement barcode scanning or digital forms for data input
Missed Appointments	Customers forget scheduled service times; staff fails to follow up	Automated SMS/email reminders with calendar integration
Billing Mistakes	Ccorrect service fees or tax calculations; payment discrepancies	Integrate accounting software with service pricing database
Service Tracking Gaps	Lack of real-time updates on vehicle service progress	Cloud-based service tracking system accessible to staff and customers
Poor Communication	Delays in relaying service updates to customers	Dedicated customer portal with chatbot and status notifications

Example :

Problem Statement (PS)	I am (Customer)	I'm trying to	But	Because	Which makes me feel
PS-1	a Garage Manager	manage customer appointments and service schedules	I must manually track and update records across multiple spreadsheets	track and update records across multiple spreadsheets	frustrated and overwhelmed
PS-2	a Service Technician	record service progress and quality checks	notifications about appointment updates or errors do not reach me timely	communication is fragmented and manual	stressed and behind schedule
PS-3	a Billing Administrator	process payments and feedback promptly	billing errors occur frequently due to manual calculations	automations and validations are lacking	anxious about delays

Problem Statement PS 1:

As a garage manager, I am trying to manage customer appointments and service schedules efficiently, but I must manually track and update records across multiple disconnected spreadsheets and paper files. This causes frustration and overwhelm, as it leads to frequent errors, missed appointments, and delays in service delivery.

Problem Statement PS 2:

As a service technician, I want to record service progress and conduct quality checks efficiently. However, notifications about appointment updates or errors do not reach me in time, causing delays and miscommunication. This makes me feel stressed and behind schedule.

Problem Statement PS 3:

As a billing administrator, I want to process payments and collect feedback promptly, but frequent billing errors arise from manual calculations and missing validations. This causes anxiety about payment delays and impacts customer satisfaction. I need built-in automations and validation rules to minimize errors and ensure accurate, timely billing.