

## Ideation Phase

### Brainstorm & Idea Prioritization Template

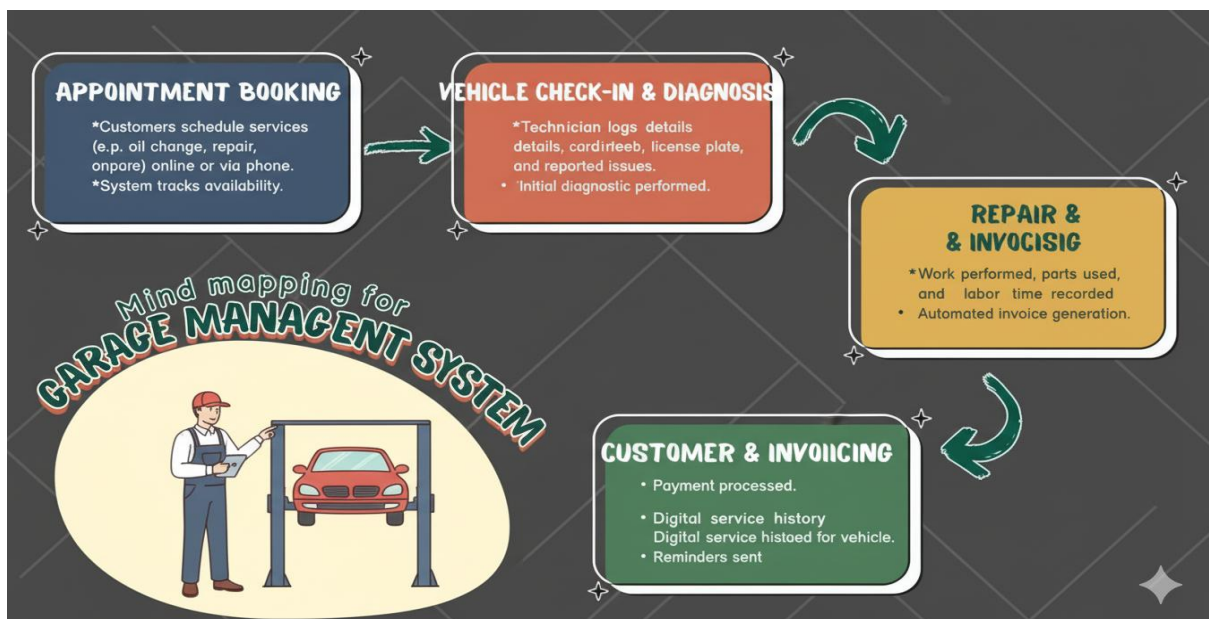
Date	05 NOV 2025
Team ID	NM2025TMID01008
Project Name	Garage Management System
Team Members	Arasu M Lokeshwaran M Jayabalan R Jaya Surya J

#### Garage Management System using Salesforce Template :

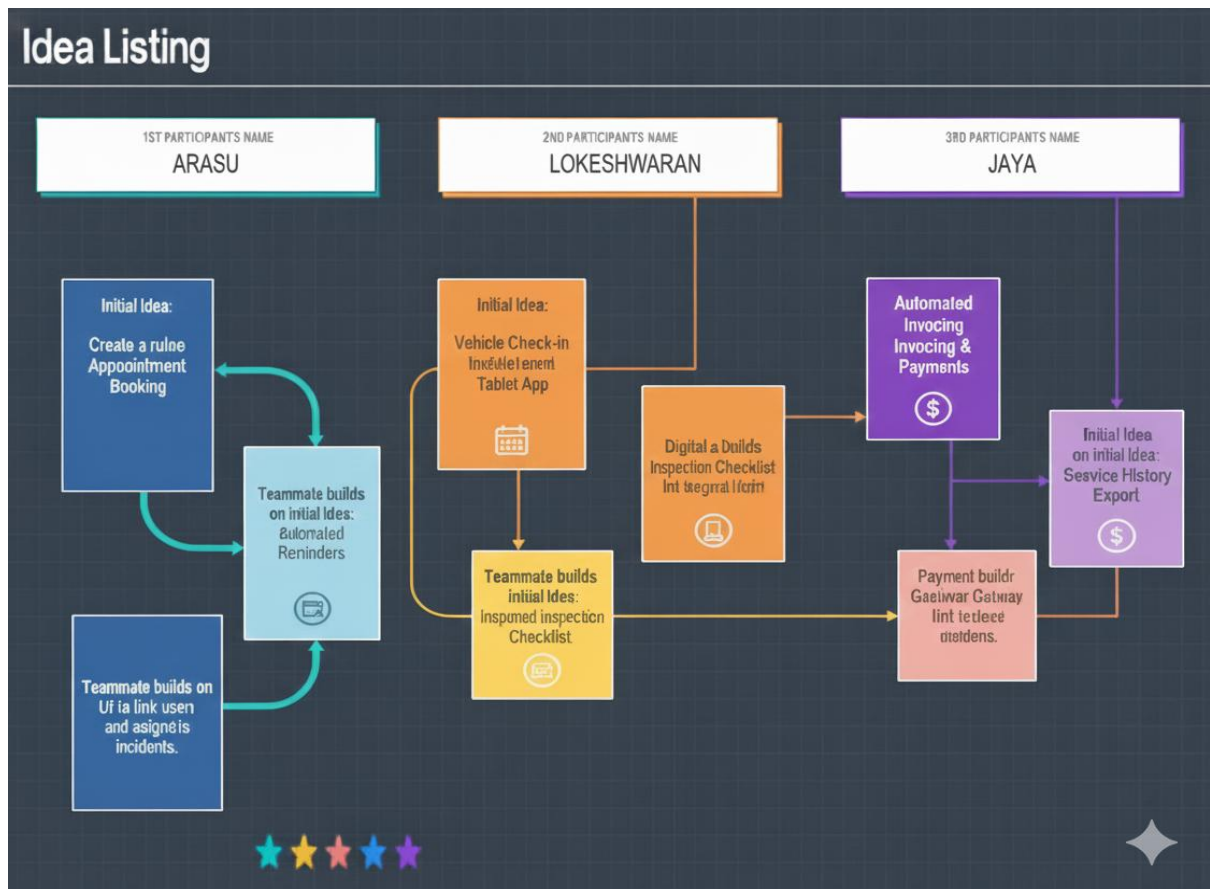
The **Garage Management System using Salesforce** project focuses on automating and organizing the daily operations of an automobile garage through Salesforce's cloud-based CRM tools. The system is designed to manage customer details, vehicle information, service requests, and billing in one unified platform. Custom objects are created for Customers, Vehicles, and Service Records, and relationships are established between them to maintain data consistency. Automation tools such as Process Builder and Flow are used to trigger actions like updating service status, generating invoices, and restricting the deletion of records that are still linked to active service requests.

This setup ensures that important service data is preserved, preventing accidental removal of linked customer or vehicle records. Test scenarios are used to validate the system's behavior — for example, allowing the deletion of unused records while blocking those with active assignments. By implementing these controls, the project demonstrates how Salesforce can be customized to build a secure, efficient, and user-friendly management system. It helps garage administrators maintain accurate data, improve workflow efficiency, and deliver better customer service.

#### Step-1: Team Gathering, Collaboration and Select the Problem Statement:



## Step-2: Brainstorm, Idea Listing and Grouping:



### Brainstorm:

The team discussed common challenges in traditional garage operations, such as manual record keeping, poor tracking, and lack of automation. Everyone shared ideas freely on how Salesforce could be used to solve these issues.

### Idea Listing:

All ideas were noted down, including customer and vehicle management, automated service tracking, and invoice generation, ensuring that every suggestion was captured.

### Grouping:

Similar ideas were grouped into key categories — Customer Management, Vehicle Management, Service Tracking, and Billing — to define the main modules of the system.

### Action Planning:

The best ideas were then turned into clear action steps. Tasks like creating custom objects, setting up relationships, and building automation flows were assigned to team members with specific timelines.

### Step-3: Idea Prioritization:



### Idea Prioritization:

Idea polarization helps break down complex projects into clear, focused components. In this project, the main goal is to prevent user deletion if the account is assigned to an active incident. This approach ensures that data integrity and accountability are maintained during critical workflows. By polarizing ideas, we can separate incident management processes from routine administrative tasks. It also helps in highlighting the importance of user account security and controlled access. Each step, from detection to restriction, becomes easier to plan and implement. Clear visual representations like diagrams and flowcharts can simplify communication. Overall, idea polarization strengthens project clarity and supports smooth execution.

# Ideation Phase

## Define the Problem Statements

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### Problem Statement :

Garage owners and service managers often face challenges in maintaining accurate records of customers, vehicles, and service requests. When vehicle or customer data is deleted while still linked to active service records, it can disrupt workflows and lead to incomplete service tracking. This causes confusion among staff, impacts billing accuracy, and reduces overall service efficiency.

There is a need for a system that prevents the deletion of customer or vehicle records if they are associated with ongoing service requests. Implementing such restrictions within Salesforce ensures data integrity, prevents accidental data loss, and maintains smooth operations. This solution will improve the reliability of the garage management process and enhance user confidence in the system.

Garage Management System Problem & Solution Table		
Problem	Description	Solution
Appointment Scheduling Conflict	Booking clashes, double-booking and manual scheduling errors leading to customer dissatisfaction.	Show warnings & alerts before confirming appointments.
Technician Workflow Hindrance	Lack of visibility into task assignments, progress tracking and realizing they have multiple history of open incidents.	Implement online booking & display a list of open incidents for each technician.
Parts Inventory Errors	Develop a clear task assignment, progress tracking and history of parts used in repairs.	Implement online booking with for task assignments and history of parts used in repairs.
Customer Communication Gap	Delayed tracking parts leads, & overcharges, and difficult to track history of parts used in repairs.	Integrate with ERP scanning, automated stock level alerts, & approvals and service recommendations.
Revenue Leakage	Missed billing for parts/labor, incorrect quotes, and lack of follow up with customer.	Utilize SMS/email updates, digital payment and follow up reminders.

### Example:

I am (Customer)	I'm trying to	But	Because	Which makes me feel
<b>PS-1:</b> Garage Administrator	Delete a customer or vehicle record	The system doesn't allow it	The record is still linked to an active service request	Confused and unsure why deletion is restricted
<b>PS-2:</b> Service Manager	Manage ongoing service assignments	Some records get deleted accidentally	There's no alert or automatic check for linked service records	Frustrated and concerned about data loss

### Problem Statement PS 1:

As a garage administrator, I am trying to delete a customer or vehicle record that is no longer needed, but the system prevents me from completing this action because the record is still linked to active service requests. This makes me feel confused and restricted, as I cannot maintain clean data or update records easily.

It interrupts the workflow and creates delays in managing service operations, especially when handling multiple customers or vehicles. I need a better way to identify and resolve such dependencies before deleting records to maintain smooth operations and data accuracy.

### Problem Statement PS 2:

As a service manager, I want to ensure that service requests are properly reassigned or closed when a customer or vehicle record is removed. However, if the system allows deletion without any warning or check, ongoing service requests may be left incomplete. This leads to confusion among staff, affects customer satisfaction, and disrupts service tracking. A built-in alert or automatic validation process would help prevent such errors, ensuring data consistency and accountability within the garage management workflow.

## Ideation Phase

### Empathize & Discover

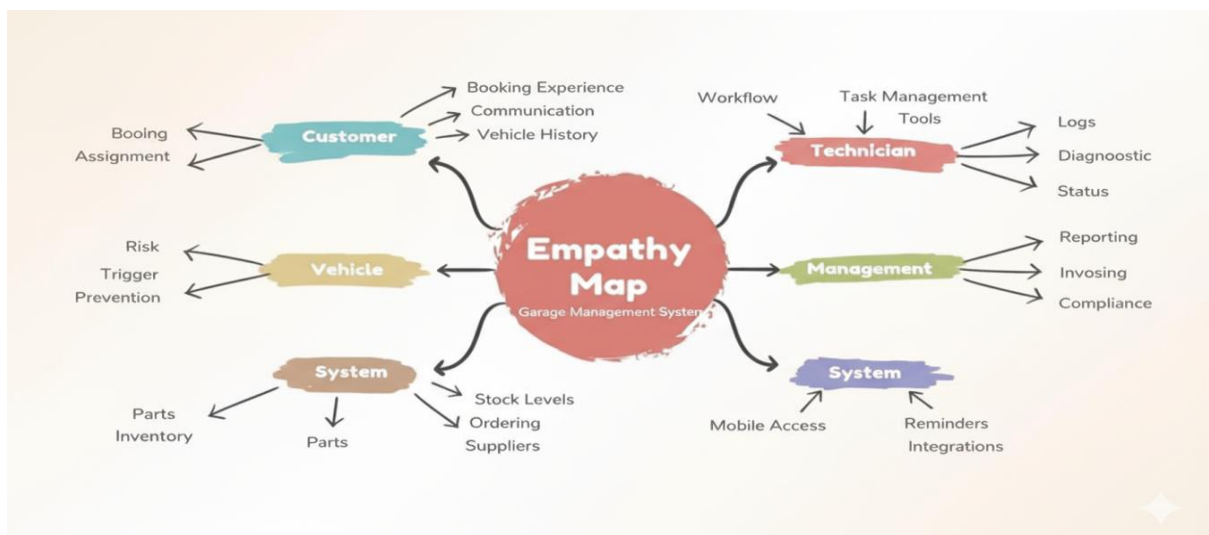
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### Empathize & Discover Phase :

In the Empathize & Discover phase, the team observed how garage administrators and service managers handle customer, vehicle, and service records within the system. Through observation and discussions, the team discovered that users often feel frustrated and confused when they try to delete customer or vehicle records that are still linked to active service requests. They found that this issue leads to workflow interruptions, data inconsistencies, and delays in managing service operations.

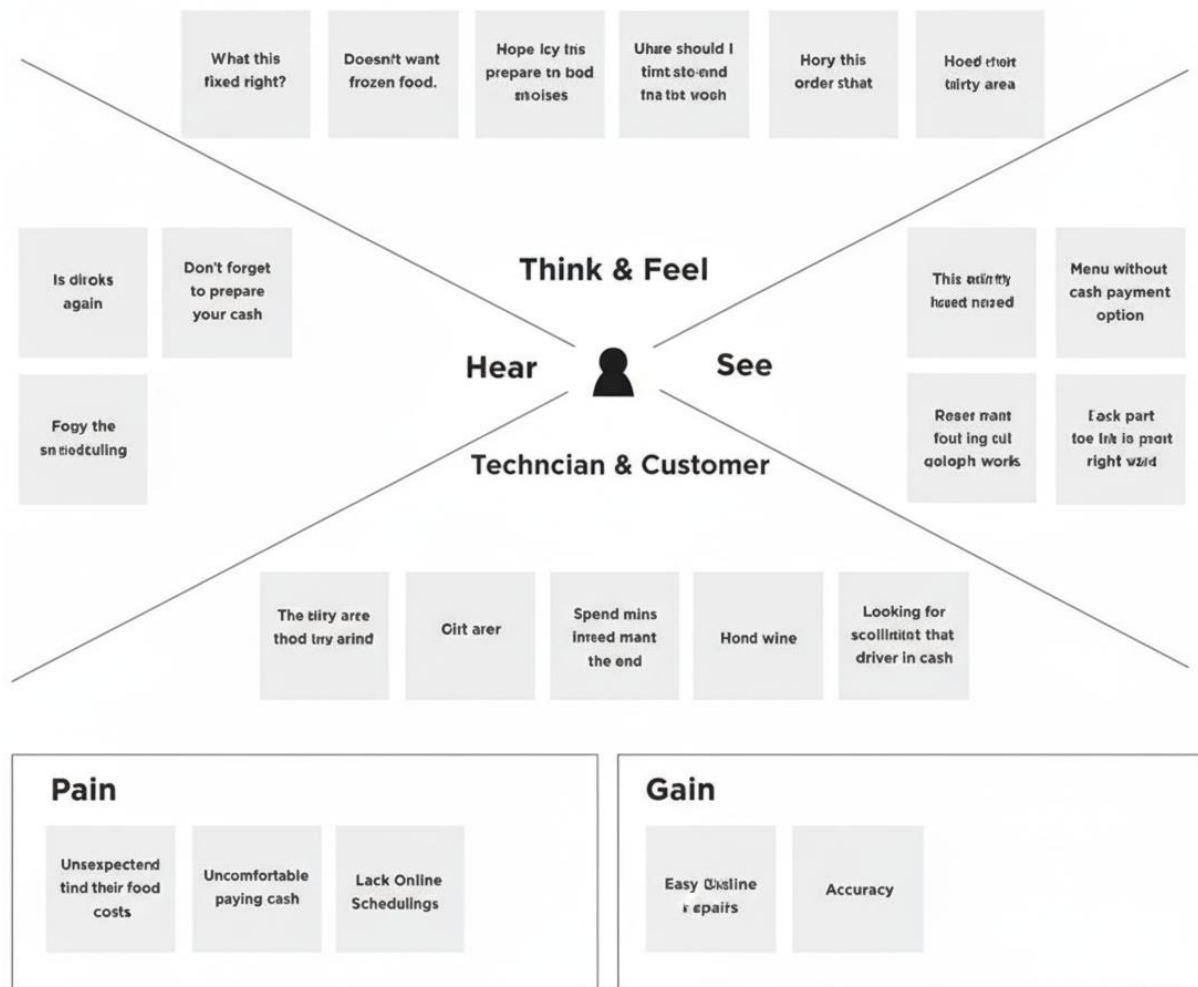
By interviewing garage staff and understanding their daily challenges, the team realized that maintaining accurate data while avoiding accidental deletions is a major concern. These insights highlighted the need for clear alerts, automated validations, and dependency checks within the Salesforce system. Understanding these pain points helped shape the design of a solution that is both practical and user-friendly, ensuring smoother operations and better data integrity in garage management.

### Example:





## Example - Garage administrators and service Application :



By deeply understanding the users through empathy mapping, the team identified the main challenges and frustrations faced by garage administrators and service managers in handling customer and vehicle data. The key pain points included the accidental deletion of records linked to active service requests, the lack of real-time alerts, and the absence of system safeguards to prevent data loss.

Based on these insights, the team designed a smarter and more secure Garage Management System in Salesforce that integrates validation rules, confirmation prompts, and automated dependency checks. These features ensure that no customer or vehicle record connected to an active service request can be deleted unintentionally. This approach enhances data accuracy, accountability, and user confidence, while improving the overall efficiency and reliability of garage operations.