

## Project Design Phase

### Proposed solution

Date	01 November 2025
Team ID	NM2025TMID02844
Project Name	Garage Management system
Maximum Marks	4 Marks

### Proposed Solution

#### Proposed Solution Template

S.No.	Parameter	Description
1.	<b>Problem Statement (Problem to be solved)</b>	Traditional garage operations involve manual entry of customer, appointment, and billing details, which often leads to data errors, delays, and inefficiencies in managing service records and payments. Managers struggle to maintain real-time visibility of service progress and accurate tracking of customer interactions.
2.	<b>Idea / Solution Description</b>	The <i>Garage Management System (GMS)</i> developed on <b>Salesforce</b> automates the complete garage workflow — from customer registration to billing and feedback. Using Salesforce's declarative tools such as <b>Flows, Validation Rules, and Apex Triggers</b> , the system automatically calculates service costs, validates inputs, sends email notifications, and updates service statuses. This ensures accuracy, transparency, and time efficiency.
3.	<b>Novelty / Uniqueness</b>	The project showcases how Salesforce's low-code cloud platform can be adapted beyond traditional CRM use to manage real-world garage operations. It leverages standard Salesforce tools to create a customized, fully automated business solution <b>without external software or plugins</b> .
S.No.	Parameter	Description

4.	<b>Social Impact / Customer Satisfaction</b>	The GMS ensures <b>faster service delivery, transparent billing, and real-time customer updates</b> through automated notifications. It builds trust between customers and garages, enhances data accuracy, and promotes digital transformation within small and medium automotive service businesses.
5.	<b>Business Model (Revenue Model)</b>	While primarily an automation project, the solution provides <b>significant cost savings</b> by reducing manual labor, minimizing errors, and improving customer retention. Garages adopting this system can offer premium service experiences and gain a competitive edge in the market.
6.	<b>Scalability of the Solution</b>	The system is highly scalable — new modules such as <b>Inventory Management, Mechanic Scheduling, or Online Payment Integration</b> can be added easily. The Salesforce cloud infrastructure ensures that the system can expand as the business grows without performance degradation.

## Conclusion

The **Garage Management System** provides a robust, end-to-end automation framework for managing customer details, appointments, service records, and billing activities. By integrating “custom objects, record-triggered flows, Apex trigger and dashboards, the system streamlines all garage operations into a unified cloud-based solution. This solution ensures data integrity, operational transparency, and customer satisfaction, demonstrating how Salesforce’s low-code tools can power smart business automation in the automotive service industry. The solution ensures data integrity, ensures accountability, and customer satisfaction, demonstrating how Salesforce’s low-code tools can

## **Solution Description**

The **Garage Management System (GMS)** on Salesforce provides a robust, end-to-end automation framework for managing customer details, appointments, service records, and billing activities.

By integrating **custom objects, record-triggered flows, Apex triggers, and dashboards**, the system streamlines all garage operations into a unified cloud-based solution.

When a customer books a service, the system validates the vehicle number, calculates the service cost using predefined logic, and updates payment details automatically upon completion. Managers can view analytics through Salesforce dashboards, while customers receive real-time notifications via email.

This solution ensures **data integrity, operational transparency, and customer satisfaction**, demonstrating how Salesforce's low-code tools can power smart business automation in the automotive service industry.