

## Project Design Phase

### Proposed Solution

Date	<b>02 November 2025</b>
Team ID	<b>NM2025TMID05082</b>
Project Name	<b>GARAGE MANAGEMENT SYSTEM</b>
Maximum Marks	<b>4 Marks</b>

### Proposed Solution Template:

S.No.	Parameter	Description
1.	<b>Problem Statement (Problem to be solved)</b>	In traditional garages, managing customer details, vehicle information, and service records manually leads to confusion, misplaced data, and delays in service. Lack of automation causes inefficiency in tracking job status, generating bills, and assigning mechanics.
2.	<b>Idea / Solution Description</b>	The proposed <b>Garage Management System</b> automates all garage operations including job assignment, service tracking, inventory management, and billing. The system links customers, vehicles, and mechanics in a single platform ensuring smooth workflow and accurate data management.
3.	<b>Novelty / Uniqueness</b>	The system provides a <b>digital platform</b> for garage operations with integrated modules for customers, vehicles, and services. It eliminates manual paperwork, ensures real-time updates, and provides automatic billing and service reminders.
4.	<b>Social Impact / Customer Satisfaction</b>	Customers receive timely updates and accurate service bills, improving transparency and satisfaction. Mechanics and managers can easily track work status, reducing delays and improving overall service quality.
5.	<b>Business Model (Revenue Model)</b>	The system can be offered as a <b>subscription-based software</b> for small and medium garages. It reduces administrative costs, improves efficiency, and enhances profitability through faster service management and reduced human errors.
6.	<b>Scalability of the Solution</b>	The architecture can be extended to support multiple branches, include spare parts management, online payment integration, access for bookings

## Conclusion:

The project “**Garage Management System**” provides an efficient and automated solution for managing daily operations in a garage. It replaces manual record-keeping with a smart digital process that integrates **customer, vehicle, mechanic, and service management** into a single platform.

By automating tasks such as **job allocation, billing, and service tracking**, it enhances accountability, improves productivity, and ensures data accuracy. The system also promotes better customer engagement through notifications and service reminders.

This solution not only supports smoother workflow and faster turnaround times but also lays the foundation for **scalable, data-driven garage management** suitable for modern businesses aiming for operational excellence.