

## Project Design Phase

### Proposed Solution

Date	30 October 2025
Team ID	NM2025TMID03420
Project Name	Garage Management System
Maximum marks	2 Marks

### Proposed Solution Template:

S.No.	Parameter	Description
1.	Problem Statement (Problem to be solved)	Most garages still use manual methods like registers or spreadsheets to manage vehicle services, technician tasks, and billing. This leads to inefficient operations, missing records.
2.	Idea / Solution Description	Develop a centralized <b>Garage Management System</b> that automates service bookings, job card creation, parts tracking, and invoicing.
3.	Novelty / Uniqueness	The system combines job scheduling, inventory tracking, and billing into one streamlined platform. It can also integrate with payment gateways and SMS/email APIs .
4.	Social Impact / Customer Satisfaction	The system improves garage efficiency, reduces wait times, and ensures transparent communication.
5.	Business Model (Revenue Model)	The solution can follow a subscription-based model (SaaS) for small garages or an enterprise license for larger workshops.
6.	Scalability of the Solution	The platform can scale to multiple branches or franchise garages, integrate with spare parts suppliers, and include

## Conclusion

Digitizing garage operations through Garage Management System (GMS) addresses operational inefficiencies in vehicle servicing and parts management. Technicians instantly turning, all technicians, informed with digital job instructions and inventory act up improved service quality, and it moves faster invoicing and payment processes. Enhancing garage transparency reducing wait times fosters positive customer relationships. Customers receive timely grows revenues over optimizing revenues over time. It also creates digital employment workflows for mechanics and service staff.

Reference: Infographic created using AI Workflow Design Tool.

### Solution Description:

The **Garage Management System** digitizes the entire vehicle service process — from customer booking to final delivery. It captures customer and vehicle information, automates service job creation, assigns tasks to technicians, tracks spare parts usage, and generates invoices automatically. The system enhances operational efficiency by reducing manual work, preventing data loss, and ensuring accurate service records. It improves transparency between customers and garage staff through real-time notifications and digital invoices. Scalable and customizable, this solution supports multiple garages, integrates payment gateways, and provides detailed performance analytics — leading to improved productivity, customer satisfaction, and profitability.