

**Project Design Phase**  
**Proposed Solution**

Date	27 October 2025
Team ID	NM2025TMID05681
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 or unorganized methods for bookings, job tracking, customer updates, and inventory management. This leads to delays, miscommunication, misplaced records, and poor customer experience.
2.	Idea / Solution description	Implement a digital Garage Management System that automates service booking, job card creation, mechanic assignment, spare parts tracking, billing, and customer notifications — all in one unified platform.
3.	Novelty / Uniqueness	The solution integrates all garage operations end-to-end, replacing multiple disconnected manual processes. It provides real-time service status, automated alerts, digital records, and analytics — features rarely found in small to mid-level garages.
4.	Social Impact / Customer Satisfaction	Enhances transparency and trust by keeping customers informed about service progress, billing clarity, and timely delivery. Mechanics and garage owners benefit from reduced workload, better planning, and improved service quality, leading to higher retention and satisfaction.
5.	Business Model (Revenue Model)	Can be offered as a SaaS subscription model for garages with monthly, quarterly, or yearly plans. Add-on revenue through premium modules (inventory module, analytics, customer loyalty program, multi-branch version).
6.	Scalability of the Solution	Can scale from a single-garage solution to multiple branches with centralized control. Additional modules like insurance claims, vendor management, towing services, or vehicle history tracking can be integrated as the business grows.

# Conclusion

Digitizing garage operations through Garage Management System (GMS) addresses operational inefficiencies in vehicle servicing and parts management. Technicians spend less time waiting, all technicians are informed with digital job assignments and inventory, leading to improved service quality, and it moves faster invoicing and payment processes. Enhancing garage transparency reduces wait times, fosters positive customer relationships. Customers receive timely growth in revenues over optimizing revenues over time. It also creates digital employment workflows for mechanics and service staff.

Reference: Infographic created using MidJourney for the Garage Management System.

## Solution Description:

To streamline garage operations and eliminate manual errors, a digital Garage Management System is implemented to automate key processes such as service booking, job assignment, repair tracking, inventory usage, and billing. The system keeps all records centralized and ensures that every vehicle service activity is tracked from check-in to delivery. It provides real-time updates to mechanics, managers, and customers, reducing miscommunication and delays. The solution uses a user-friendly interface with automated alerts, digital job cards, and service history tracking, eliminating reliance on paper-based processes. This approach improves operational efficiency, enhances customer experience, and ensures transparency and accountability throughout the service lifecycle.