

## Project Design Phase

### Problem – Solution Fit Template

DATE	1.11.2025
TEAM ID	NM2025TMID04006
PROJECT TITLE	Garage Management System
MARKS	2 MARKS

#### Problem – Solution Fit Template:

The Problem–Solution Fit refers to identifying a real customer problem and providing an effective, practical solution that addresses their needs. In the context of a Garage Management System (GMS), this fit ensures that the system truly solves the operational challenges faced by garages and automotive repair centers, leading to better efficiency, transparency, and customer satisfaction.

#### Purpose:

- Solve complex garage management issues like job tracking, customer communication, and billing management efficiently.
- Enable faster service delivery by organizing tasks, mechanics, inventory, and repair schedules in one integrated platform.
- Enhance transparency and accountability between the garage owner, employees, and customers.
- Improve business growth through data-driven insights and service history tracking.
- Reduce manual errors and paperwork by automating service records, invoicing, and customer reminders.

#### Problem Statement:

Traditional garage operations rely heavily on manual record keeping, resulting in:

- Mismanagement of service requests and repairs.
- Difficulty tracking job status, parts usage, and mechanic assignments.
- Delays in billing and poor communication with customers.
- Lack of a centralized database for vehicle service history and customer details.

These inefficiencies lead to lower productivity, poor customer experiences, and potential financial loss.

#### Proposed Solution:

The Garage Management System provides a digital platform that streamlines and automates garage operations. The solution includes modules for:

- Customer & Vehicle Management – storing detailed records and service histories.
- Job Card Creation & Tracking – assigning and monitoring repair tasks in real time.

- Inventory Management – tracking spare parts and materials availability.
- Billing & Invoicing – automated generation of bills with accurate cost calculation.
- Notifications & Reminders – alerting customers about service completion and maintenance schedules.

By implementing this system, garages can enhance operational efficiency, reduce human error, and ensure better customer satisfaction through transparent and organized workflows.

### **Expected Outcome:**

- Improved accuracy and speed of service operations.
- Centralized data access for all employees.
- Increased customer retention due to improved communication.
- Real-time status tracking of repair jobs.
- Reduced manual workload and improved business insights.

### **References:**

1. <https://www.ideahackers.network/problem-solution-fit-canvas/>
2. <https://medium.com/@epicantus/problem-solution-fit-canvas-aa3dd59cb4fe>