

GARAGE MANAGEMENT SYSTEM

Project Design Phase-II

Solution Requirements (Functional & Non-functional)

DATE	3.11.2025
TEAM ID	NM2025TMID01428
PROJECT NAME	Garage Management system
MAXIMUM MARKS	4 MARKS

Introduction

The Garage Management System (GMS) is designed to help automotive repair facilities efficiently manage their operations. It provides a digital platform for handling customer details, vehicle information, job cards, service tracking, billing, and inventory management. The system enhances productivity, minimizes human error, and ensures timely service delivery.

Objectives

The main objectives of the Garage Management System are to:

- Streamline the workflow of vehicle repair and maintenance.
- Maintain detailed records of customers, vehicles, and services.
- Improve communication between garage staff and customers.
- Automate billing and inventory updates.
- Enhance customer satisfaction through transparency and service accuracy.

Functional Requirements

FR No.	Functional Requirement (Epic)	Sub Requirement (Story / Sub-Task)
FR-1	Customer Registration	Register customer details and vehicle information
FR-2	Job Card Management	Create, update, and track job cards for each service request

FR-3	Inventory Control	Monitor and manage spare parts and materials
FR-4	Billing System	Generate bills and receipts automatically after service completion
FR-5	Service Tracking	Track service status and completion timeline
FR-6	Notifications	Send reminders and updates to customers via email or SMS

Non-Functional Requirements

NFR No.	Non-Functional Requirement	Description
NFR-1	Usability	The system should be easy for staff to learn and operate.
NFR-2	Security	Customer and vehicle data must be securely stored and accessible only to authorized users.
NFR-3	Reliability	System operations should be stable and error-free under normal use.
NFR-4	Performance	The system should handle multiple users and transactions without lag.
NFR-5	Availability	The application should be available 24/7 for both staff and customers.
NFR-6	Scalability	The system should support additional features and more garages as it expands.

System Design

The following flow diagram illustrates the workflow of the Garage Management System:

[Flow Diagram Placeholder – represents the process flow from Customer Registration → Job Card Creation → Service → Billing → Feedback]

Conclusion

The Garage Management System simplifies garage operations by integrating various functions such as customer management, service tracking, and billing. It ensures faster, accurate, and transparent service management, thereby enhancing customer satisfaction and operational efficiency.