Project Design Phase

Data Flow Diagram & User Stories

DATE	1.11.2025
TEAM ID	NM2025TMID04006
PROJECT NAME	GARGE MANAGEMENT SYSTEMS
MAXIMUM MARKS	4 MARKS

Data Flow Diagrams

A Data Flow Diagram (DFD) is a traditional visual representation of the information flows within a system. A neat and clear DFD can depict the right amount of the system requirement graphically. It shows how data enters and leaves the system, what changes the information, and where data is stored.

In the project 'Garage Management System', Data Flow Diagrams (DFDs) illustrate how service requests, vehicle information, billing, and customer data are processed within the system. The DFD shows the interaction between the customer, mechanic, admin, and the garage database to validate and manage each repair order efficiently. The system ensures service scheduling, billing accuracy, and inventory control for smooth operations.

Example Flow:

1. Customer logs in and creates a service request.
2. The system records vehicle and service details.
3. Mechanic reviews assigned service tasks.
4. Admin verifies completed work and generates a bill.
5. Customer makes payment and receives confirmation.
6. Data is stored in the system for future service history tracking.

User Stories

User stories define what different users need from the system in simple, goal-focused language. In this project, they help ensure that the system efficiently manages vehicle servicing, billing, and customer communication.

User Type	Functional Requirement (Epic)	User Story Number	User Story / Task	Acceptance Criteria	Priority / Release
Administrator	Service Management	USN-1	As an admin, I want to manage all garage operations, including assigning mechanics and tracking service status.	Admin can view all ongoing and completed services, assign staff, and generate performance reports.	High / Sprint-1
Mechanic	Task Handling	USN-2	As a mechanic, I want to view assigned repair jobs and update their status upon completion.	System updates service status once mechanic marks job as completed.	High / Sprint-1
Customer	Service Request & Billing	USN-3	As a customer, I want to book vehicle services online and make	System allows service booking, notifies on completion, and provides	Medium / Sprint-2

payments securely.	billing receipt.

Project Summary

The Garage Management System (GMS) is a valuable tool for automotive repair facilities, helping them deliver top-notch service, increase operational efficiency, and build lasting customer relationships. With its user-friendly interface and powerful features, GMS empowers garages to thrive in a competitive market while ensuring a seamless and satisfying experience for both customers and staff.