Data Flow Diagram & User Stories

Date	25 JUNE 2025
Team ID	LTVIP2025TMID31275
Project Name	Garage Management System
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 \
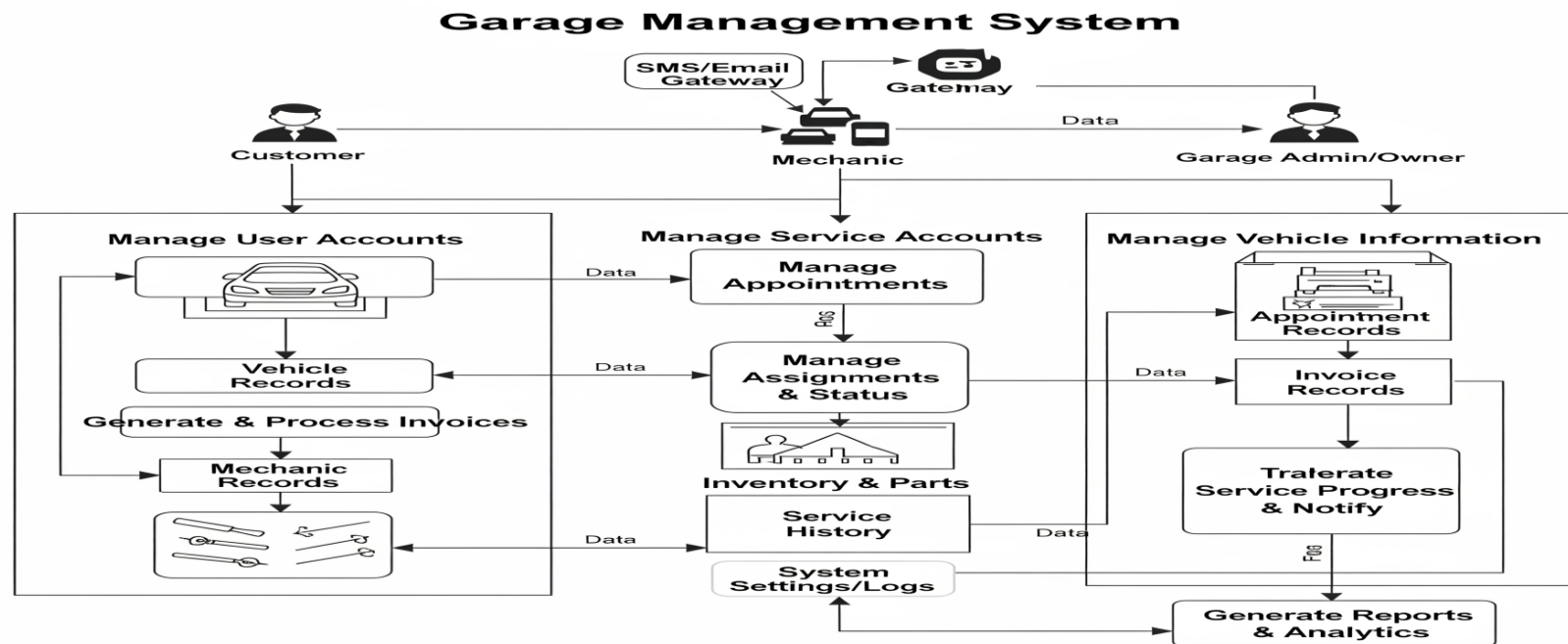
User Stories for Garage Management System (GMS)

Here's a comprehensive list of user stories for your GMS product, broken down by user type and functional epic.

Customer (Mobile User / Web User)

User Type	Functional Requirement (Epic)	User Story Number	User Story / Task	Acceptance Criteria	Priority	Release
Customer	Registration	USN-1	As a user, I can register for the application by entering my email, password, and confirming my password.	I can access my account / dashboard.	High	Sprint-1
Customer	Registration	USN-2	As a user, I will receive a confirmation email once I have registered for the application.	I can receive a confirmation email & click confirm to activate my account.	High	Sprint-1
Customer	Registration	USN-3	As a user, I can register for the application through Facebook.	I can register & access the dashboard with Facebook Login.	Low	Sprint-2
Customer	Registration	USN-4	As a user, I can register for the application through Gmail.	I can register & access the dashboard with Gmail Login.	Medium	Sprint-1

User Type	Functional Requirement (Epic)	User Story Number	User Story / Task	Acceptance Criteria	Priority	Release
Customer	Login	USN-5	As a user, I can log into the application by entering email & password.	I can successfully log in and access my dashboard.	High	Sprint-1
Customer	Login	USN-6	As a user, I can reset my password if I forget it.	I receive an email with a password reset link, and I can set a new password.	High	Sprint-2
Customer	Dashboard	USN-7	As a customer, I can view my upcoming service appointments on my dashboard.	I see a clear list of my scheduled appointments with date, time, and service type.	High	Sprint-2
Customer	Dashboard	USN-8	As a customer, I can view my vehicle's past service history on the dashboard.	I can access a chronological list of all services performed on my vehicle(s).	High	Sprint-3
Customer	Vehicle Management	USN-9	As a customer, I can add new vehicle details (make, model, year, VIN) to my profile.	My new vehicle appears in my list of registered vehicles.	High	Sprint-1
Customer	Vehicle Management	USN-10	As a customer, I can view and edit my registered vehicle details.	I can update details like mileage or color for my vehicle(s).	Medium	Sprint-2

User Type	Functional Requirement (Epic)	User Story Number	User Story / Task	Acceptance Criteria	Priority	Release
Customer	Service Booking	USN-11	As a customer, I can browse available service types and their descriptions.	I see a list of services (e.g., oil change, brake check) and what they include.	High	Sprint-2
Customer	Service Booking	USN-12	As a customer, I can select a specific service for my vehicle.	The chosen service is associated with my selected vehicle.	High	Sprint-2
Customer	Service Booking	USN-13	As a customer, I can choose a preferred date and time for my service appointment from available slots.	I receive immediate confirmation that my preferred slot is reserved.	High	Sprint-2
Customer	Service Booking	USN-14	As a customer, I can receive a confirmation for my service booking via email/SMS.	I get a notification with appointment details and a booking ID.	High	Sprint-2
Customer	Service Tracking	USN-15	As a customer, I can receive real-time status updates on my vehicle's service progress.	I get SMS/email notifications when my vehicle enters service, is being worked on, and is ready for pickup.	High	Sprint-3

User Type	Functional Requirement (Epic)	User Story Number	User Story / Task	Acceptance Criteria	Priority	Release
Customer	Invoicing & Payments	USN-16	As a customer, I can view my detailed invoice after service completion.	The invoice displays all services, parts, costs, and taxes clearly.	High	Sprint-3
Customer	Invoicing & Payments	USN-17	As a customer, I can download my invoice as a PDF.	A PDF copy of the invoice is downloaded to my device.	Medium	Sprint-4
Customer	Invoicing & Payments	USN-18	As a customer, I can make online payments for my service.	My payment is processed securely, and my invoice status updates to "Paid."	High	Sprint-4
Customer	Feedback	USN-19	As a customer, I can submit feedback or rate my service experience.	My feedback is submitted, and I receive a confirmation of submission.	Medium	Sprint-4

Garage Staff (Customer Care Executive / Mechanic)

User Type	Functional Requirement (Epic)	User Story Number	User Story / Task	Acceptance Criteria	Priority	Release
Customer Care Executive	Appointment Management	USN-20	As a Customer Care Executive, I can view all upcoming service appointments.	I see a clear list of all scheduled appointments with customer, vehicle, and service details.	High	Sprint-2
Customer Care Executive	Appointment Management	USN-21	As a Customer Care Executive, I can book a service appointment for a customer.	A new appointment is created, and the customer receives a confirmation.	High	Sprint-2
Customer Care Executive	Appointment Management	USN-22	As a Customer Care Executive, I can reschedule or cancel a customer's appointment.	The appointment details are updated, and the customer receives a notification of the change.	High	Sprint-3
Customer Care Executive	Customer Management	USN-23	As a Customer Care Executive, I can search for a customer by name, email, or phone number.	I can quickly find a customer's profile and associated vehicles/appointments.	High	Sprint-2
Customer Care Executive	Service Status Update	USN-24	As a Customer Care Executive, I can update the status of a vehicle's service.	The status (e.g., "In Progress," "Ready for Pickup") is updated, and the customer is notified.	High	Sprint-3

User Type	Functional Requirement (Epic)	User Story Number	User Story / Task	Acceptance Criteria	Priority	Release
Mechanic	Work Assignment	USN-25	As a Mechanic, I can view my daily assigned service tasks.	I see a clear list of vehicles assigned to me for the day, with service details.	High	Sprint-3
Mechanic	Service Execution	USN-26	As a Mechanic, I can mark a service task as "started" and "completed."	The system updates the service status, triggering customer notifications.	High	Sprint-3
Mechanic	Service Execution	USN-27	As a Mechanic, I can record parts used during a service.	Used parts are logged against the service and deducted from inventory.	High	Sprint-4
Mechanic	Service Execution	USN-28	As a Mechanic, I can add notes or observations to a service record.	My notes are saved as part of the vehicle's service history.	Medium	Sprint-4
Mechanic	Vehicle Diagnostics	USN-29	As a Mechanic, I can access a vehicle's past service history and notes.	I can review previous repairs and issues before starting new work.	High	Sprint-3

Administrator / Garage Owner

User Type	Functional Requirement (Epic)	User Story Number	User Story / Task	Acceptance Criteria	Priority	Release
Administrator	User Management	USN-30	As an Administrator, I can add, edit, and deactivate staff accounts (e.g., Mechanics, Customer Care Executives).	I can control system access for all garage personnel.	High	Sprint-1
Administrator	Service Management	USN-31	As an Administrator, I can define and update the list of available services and their default costs.	The service catalog in the booking system reflects my changes.	High	Sprint-2
Administrator	Inventory Management	USN-32	As an Administrator, I can add new parts to the inventory.	The new part appears in the inventory list with its initial stock level.	High	Sprint-3
Administrator	Inventory Management	USN-33	As an Administrator, I can view current stock levels and receive alerts for low stock.	I am notified when a part's quantity falls below a predefined reorder point.	High	Sprint-3
Administrator	Reporting & Analytics	USN-34	As a Garage Owner, I can view a dashboard of daily revenue and service count.	The dashboard displays key financial and operational metrics in real-time.	High	Sprint-4

User Type	Functional Requirement (Epic)	User Story Number	User Story / Task	Acceptance Criteria	Priority	Release
Administrator	Reporting & Analytics	USN-35	As a Garage Owner, I can generate reports on mechanic productivity.	I can see which mechanics completed how many services and associated revenue within a period.	Medium	Sprint-4
Administrator	Notifications	USN-36	As an Administrator, I can configure automated customer notifications (e.g., service reminders, feedback requests).	The system sends scheduled notifications based on my configurations.	Medium	Sprint-4