

Ideation Phase

Brainstorm & Idea Prioritization

Template

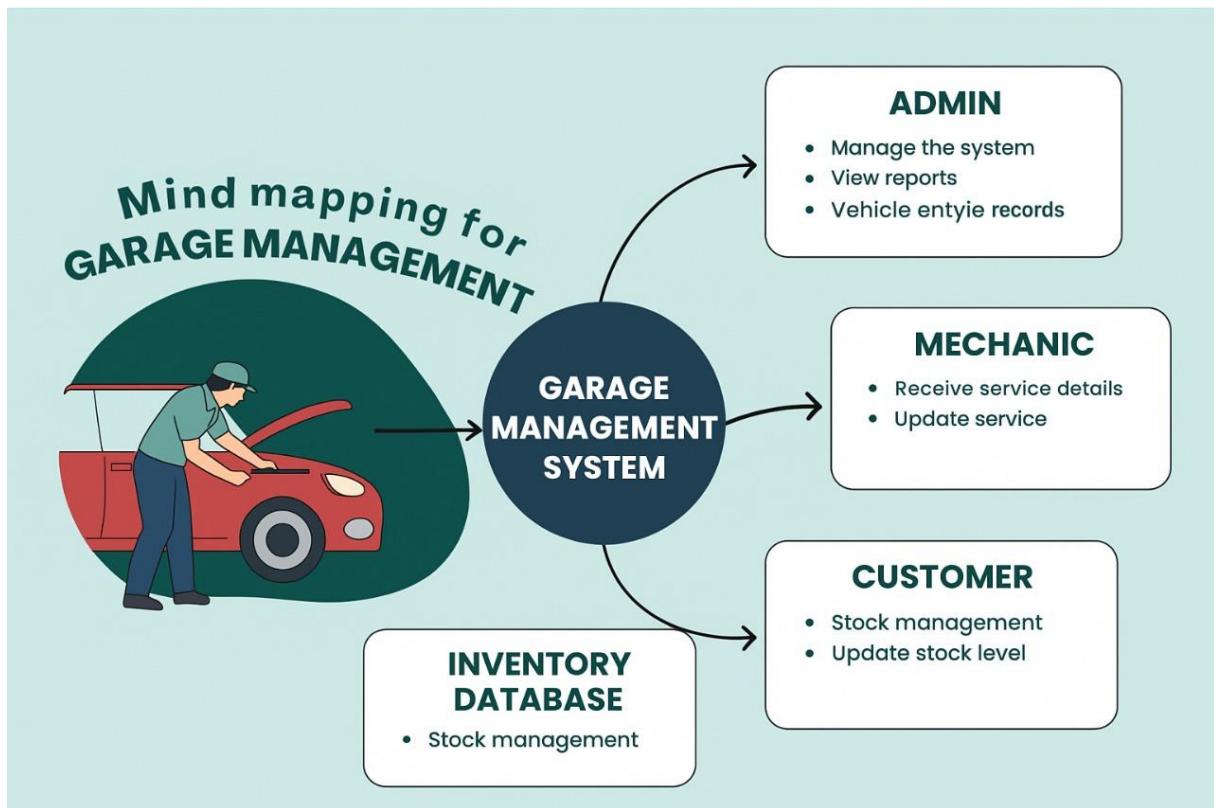
Date	27 OCTOBER 2025
Team ID	NM2025TMID05681
Project Name	Garage Management System
Maximum Marks	4 Marks

Garage Management System :

This guided project focuses on designing and implementing a **Garage Management System (GMS)** to streamline and automate the operations of an automotive service garage. The project begins by setting up the core modules required to manage customer information, vehicle records, service requests, and mechanic assignments. Sample data is created for customers, vehicles, mechanics, and service jobs to simulate realistic workshop operations. The system aims to replace manual record-keeping with an organized digital platform that enhances efficiency, accuracy, and customer satisfaction.

As part of the project, workflows and business rules are developed to ensure smooth handling of service operations. Key features include job allocation to mechanics, spare parts and inventory tracking, service billing, and maintenance history management. A validation rule is also implemented to prevent deletion of mechanic profiles if they are assigned to ongoing service tasks, ensuring data consistency and preventing accidental data loss. Finally, test scenarios are conducted to verify system behavior—first by attempting to delete a mechanic with assigned work to ensure the restriction works, and then deleting a mechanic with no assignments to confirm the system allows valid deletions. This guided approach helps students or administrators understand system design, build business logic, and implement data integrity safeguards within a Garage Management System.

Step-1: Team Gathering, Collaboration and Select the Problem Statement:



Reference: <https://www.mural.co/templates/brainstorm-and-idea-prioritization>

Step-2: Brainstorm, Idea Listing and Grouping:

Brainstorm:

Team members discuss common garage challenges—such as customer wait times, inventory shortages, billing inefficiencies, and job scheduling—to generate a wide range of ideas for improving garage operations without criticism.

Idea Listing:

All proposed suggestions—like digital job tracking, automated service reminders, spare parts inventory alerts, mechanic assignment, and customer portals—are recorded to ensure every contribution is captured for review.

Grouping:

The collected ideas are sorted into categories such as Customer Service, Inventory Management, Job Workflow, Billing & Payments, and Reporting & Analytics to identify key focus areas and streamline solution evaluation.

Action Planning:

Selected improvement ideas are converted into actionable tasks—for example:

- Implement a digital job card system (assigned to Software Team, due in 3 weeks)
- Set up spare-parts stock tracking with low-stock alerts (assigned to Inventory Lead, due in 2 weeks)
- Introduce automated SMS updates for customers (Marketing & IT, due in 1 week)

Step-3: Idea Prioritization:

Idea prioritization in a Garage Management System helps break down the overall project into clear, manageable focus areas. It allows the team to identify which features will deliver the most value in improving service efficiency, customer experience, and operational flow. By prioritizing ideas, the system can first address core functions such as job scheduling, digital service records, and inventory tracking before moving to additional enhancements. This approach separates essential garage operations from secondary or advanced features, making development structured and goal-driven. It also ensures that resources are used effectively, preventing delays and unnecessary complexity. Each prioritized feature becomes easier to plan, assign, and implement in phases. Visual tools like feature maps or priority grids can make decisions clearer for stakeholders. Overall, idea prioritization enhances clarity, ensures a smooth development lifecycle, and supports a more successful system implementation.