

## Ideation Phase

### Brainstorm & Idea Prioritization

#### Template

Date	7 Nov 2025
Team ID	NM2025TMID02158
Project Name	Garage Management System
Maximum Marks	4 Marks

#### Garage Management System Template:

This guided project demonstrates how to design and implement a Garage Management System (GMS) that helps automate and organize daily garage operations. The system focuses on managing customer details, vehicle information, service records, billing, and inventory in a single integrated platform.

The GMS ensures efficient workflow between mechanics, service advisors, and customers by maintaining real-time updates on vehicle service status and inventory availability. It reduces manual paperwork, prevents scheduling conflicts, and improves overall service quality.

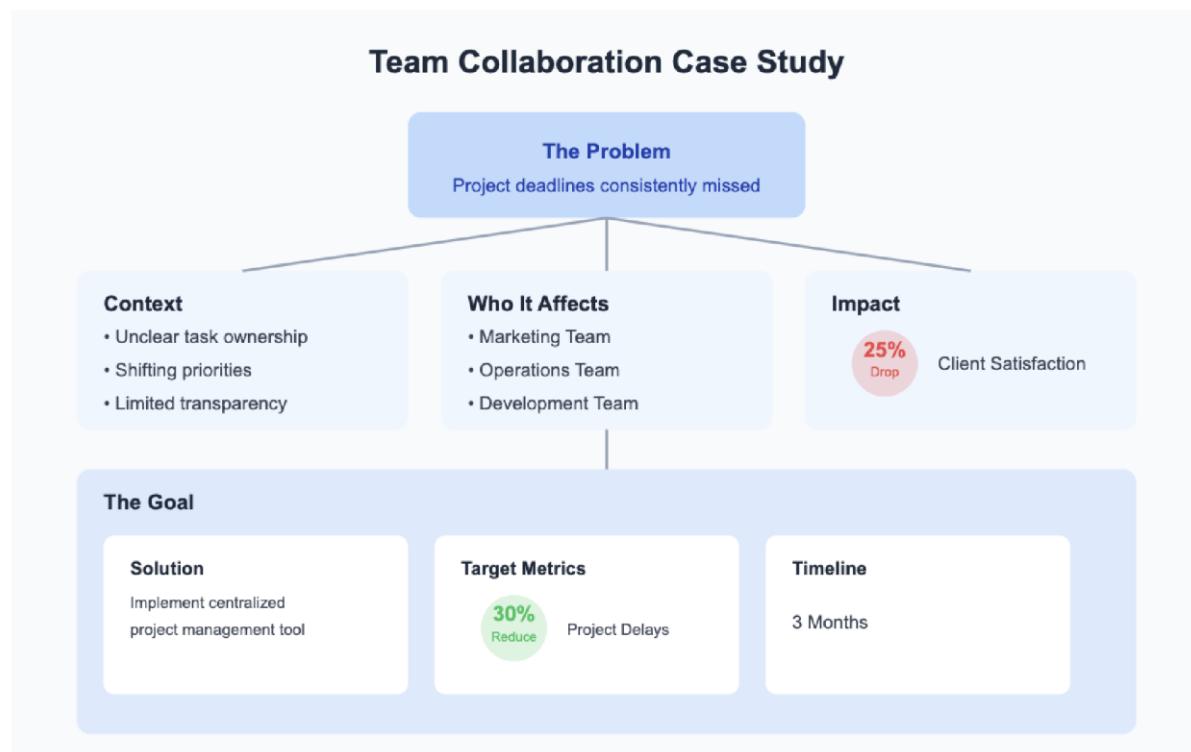
The workflow also includes test scenarios such as adding new customer records, assigning vehicles for servicing, and generating invoices. This ensures that every module of the system—customer management, vehicle tracking, and service scheduling—works smoothly together. The system ultimately helps garage owners improve productivity, maintain accurate records, and deliver better customer satisfaction.

The screenshot shows the SH GARAGE MANAGEMENT SYSTEM dashboard. On the left, there's a sidebar with navigation links for Dashboard, Repair Orders, Counter Sale, Inventory, Accounts, Reports, Employee, Vendor, Item Master, Users, Reset Password, Manage Profile, Settings, and Logout. A Google Play button is also present. The main area has a header with 'GARAGE MENU' and 'SH GARAGE MANAGEMENT SYSTEM'. It displays six cards: 'CREATED 17' (blue), 'IN PROGRESS 3' (orange), 'COMPLETED 94' (green), 'PAYMENT DUE (68) 49147.48' (red), 'TOTAL EXPENSE 0.00' (grey), and 'TOTAL INCOME 0.00' (dark grey). Below these are sections for 'ONGOING REPAIRS ORDERS' and a table of repair orders. The table columns include STATUS, INVOICE NUMBER, INVOICE DATE, VEHICLE NUMBER, BRAND - MODEL, CUSTOMER NAME, TOTAL AMOUNT, PAID AMOUNT, DUE AMOUNT, and ACTION. The table shows 20 entries, with the last entry being INV134 from 21 Oct 2020 for a Hyundai HD 68. A footer at the bottom indicates 'Showing 1 to 10 of 20 entries' and 'Go to Settings to act on Windows'.

## **Step-1: Team Gathering, Collaboration, and Selecting the Problem Statement :**

The team collaborated to identify common issues faced in garage operations such as inefficient record management, loss of service data, and poor customer follow-up. After group discussions and idea comparison, the team selected the Garage Management System as the primary problem statement to address these inefficiencies using a structured digital solution.

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



## **Step-2: Brainstorm, Idea Listing, and Grouping :**

**Brainstorm:** Team members freely contributed ideas on improving garage operations — from online booking systems and service tracking to automated billing and reminders.

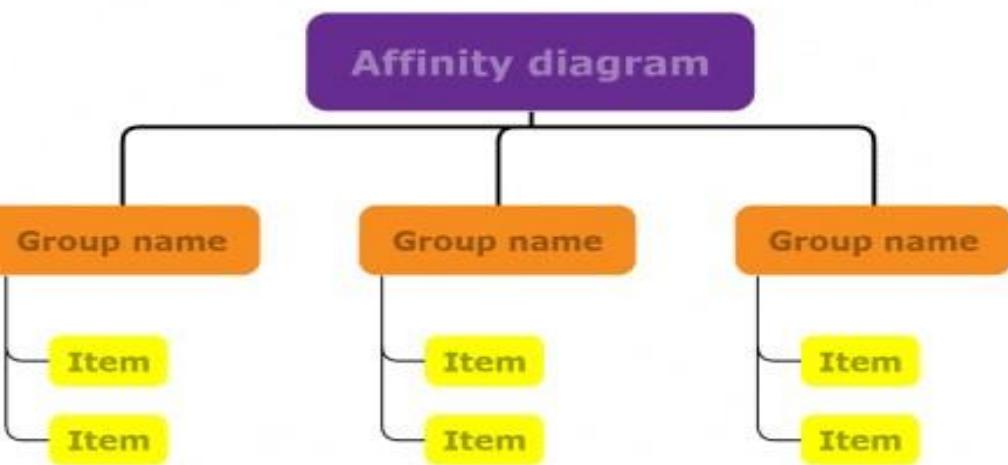
**Idea Listing:** All proposed ideas were documented, including:

- Vehicle service history tracking
- Digital invoicing system
- Mechanic performance monitoring
- Real-time service status updates
- Customer feedback integration

**Grouping:** Ideas were grouped under key modules:

- Customer Management
- Service Scheduling
- Inventory Control
- Billing & Payment
- Reports & Analytics

**Action Planning:** Each module was assigned to team members with clear goals and deadlines for implementation and testing.



### Step-3: Idea Prioritization :

Idea prioritization helps break down the Garage Management System into focused, manageable modules. The main goal is to ensure all vehicle and customer records are centralized, making garage operations transparent and efficient. Prioritizing features such as service scheduling and digital billing ensures that critical functionalities are developed first.

The screenshot shows the 'Garage Management System Menu' window. At the top, there are five buttons: 'Add Vehicle', 'Update Vehicle Status', 'Make Action', 'Print By Vehicle Status', and 'View Full Vehicle Details'. Below the menu bar is a search form with various dropdowns and input fields for vehicle details like Plate Number, Type, Model, License Type, Engine Type, Engine Capacity, Number of wheels, Wheels' Manufacturer, Wheels' Air Pressure, Number Of Doors, Color, Status, Fuel Type, Client Name, and Client Phone. A large 'Submit' button is located at the bottom right of the form area.

#### By prioritizing ideas effectively, the team can:

- Streamline workflow between mechanics and customers
- Improve data integrity and tracking accuracy
- Enhance user experience through automation