

**Project Design Phase**  
**Proposed Solution**

<b>Date</b>	<b>1 Nov 2025</b>
<b>Team ID</b>	<b>NM2025TMID02085</b>
<b>Project Name</b>	<b>Garage Management system</b>

**Proposed Solution Template:**

<b>S.No</b>	<b>Parameter</b>	<b>Description</b>
1	Customer Record Management	Centralized storage with validation rules to prevent duplicates and ensure clean data including vehicle info.
2	Appointment Scheduling Automation	User-friendly interface with conflict detection, scheduling, updating, cancelling appointments, and automated reminders.
3	Service Progress Tracking	Real-time updates on service status and quality checks allowing efficient monitoring by technicians and managers.
4	Automated Billing & Payment Tracking	Auto-calculation of service charges with validation rules, invoice generation, and payment due notifications.
5	Feedback & Reporting	Integrated customer feedback collection and dynamic dashboards for service improvement and performance tracking.
6	Role-Based Access Control	Secure profiles and permissions limit access for managers, sales teams, and technicians as per business requirements.

7	Operational Benefits	Increases efficiency, improves customer experience, ensures data accuracy, and maintains security and compliance.
8	Implementation Outline	Custom objects and fields, automation with flows and Apex triggers, validation enforcement, security model configuration, dashboards.



## Solution Description

The Garage Management System integrates multiple core modules to digitize and automate traditional garage workflows effectively:

- **Customer Management:** Centralizes customer profiles with full vehicle details, improves data accuracy, and eliminates duplication.
- **Appointment Scheduling:** Offers a streamlined interface for booking, updating, and cancelling appointments with built-in conflict detection and automated reminders.
- **Service Tracking:** Provides real-time updates on service progress and mandatory quality checks ensuring accountability and transparency.
- **Billing Automation:** Automatically calculates charges, blocks manual errors, generates invoices, and tracks payment status with notifications.
- **Feedback Collection:** Captures customer feedback linked to service records, enabling performance analysis and continuous improvement.
- **Role-Based Security:** Strict access control via profiles and permissions ensures data privacy and appropriate visibility across staff roles.