GARAGE MANAGEMENT SYSTEM

College Name: Pollachi college of arts and sciences

college code: bruaf

TEAM ID: NM2025TMID21311

TEAM MEMBERS:

TEAM LEADER NAME: SATHYA.M

EMAIL: 23nmcssathya@gmailk.com

Team member1: DHANALAKSHMI.A

EMAIL: 23nmcsdhanalakshmi@gmail.com

Team member2: PAVITHRA.V

EMAIL: 23nmcspavithra@gmail.com

Team member3: SANGEETHA.M

EMAIL: 23nmcssangeetha@gmail.com

Garage Management System

---

1. Project Overview

This project focuses on the development of a "Garage Management System"
using Salesforce. The solution addresses the challenges of organizing, managing, and streamlining operations in a garage or auto service center. The goal is to deliver a unified system that enhances operational efficiency, improves customer satisfaction, and provides real-time data-driven insights for decision-making.

Through this project, the aim is to:

Centralize vehicle service records.
Streamline booking and service processes.
Enable efficient inventory and workforce management.
Provide an improved customer interaction and feedback system.

2. Objectives

Business Goals:

1. Improve the efficiency of garage operations by at least 30%.
2. Increase customer retention by offering better service and engagement.
3. Reduce errors in inventory and billing through automation.

Specific Outcomes:

A user-friendly booking portal integrated into Salesforce.
Real-time service tracking and updates for customers.
Inventory management tools for parts and supplies.
Dashboards for operational and financial reporting.

3. Salesforce Key Features and Concepts Utilized

1. Salesforce Objects
    - Custom objects for Vehicles, Services, and Inventory.
    - Standard objects for Accounts, Contacts, and Cases to manage customer data.

2. Process Automation

- Flows for service booking and approval processes.
- Workflow Rules and Apex Triggers for inventory updates.

3. Customer Engagement Tools
   - Communities to enable customer self-service for booking and tracking.
   - Email and SMS integrations for notifications.
4. Reporting and Analytics
   - Dashboards for service analytics, inventory tracking, and financial reporting.

4. Detailed Steps to Solution Design
   1. Data Model Design:
      - Custom objects: Vehicles, Service History, Inventory.
      - Relationships between objects: A Vehicle can have multiple service records linked to a Contact or Account.
   2. User Interface:
      - Lightning App for Garage Management with custom pages for booking, service history, and inventory.
      - Mobile app design for technicians to update statuses on the go.
   3. Business Logic:
      - Automations for customer reminders, inventory updates, and service approvals.
      - Validation rules to ensure data accuracy (e.g., service date must be in the future).

5. Testing and Validation
   Unit Testing:

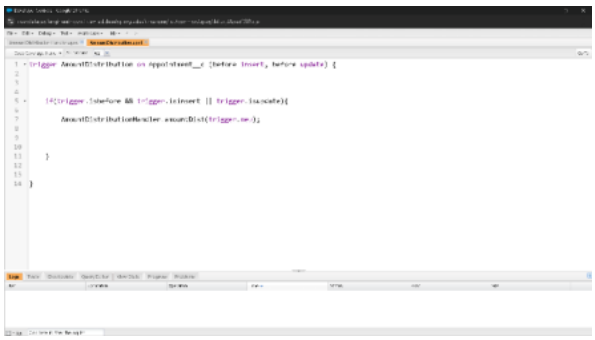
- Apex Classes and Triggers tested with >90% code coverage.

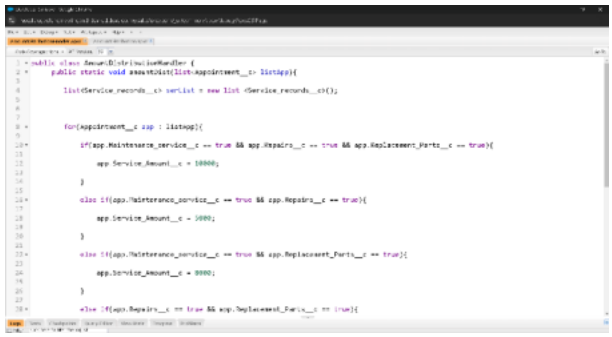
User Interface Testing:

- Validated UI components across desktop and mobile platforms.
- Tested workflows for booking, inventory updates, and reporting.

Integration Testing:

- Validated integrations with external systems like payment gateways and SMS services.





6. Key Scenarios Addressed by Salesforce in the Implementation Project

1. Customer Booking:
   - Customers can book services online and receive automated reminders.
2. Inventory Management:
   - Real-time updates to inventory upon part usage during services.
3. Service Tracking:
   - Technicians can update service status, and customers receive live updates.
4. Feedback Collection:
   - Customers can provide feedback directly linked to service records for continuous improvement.

7.Conclusion

The Garage Management System built on Salesforce enhances the operational efficiency of garages through process automation, improves customer experience with real-time updates, and provides actionable insights via dashboards and reports. This scalable and robust system aligns with modern business needs and can adapt to future demands.