





A Garage Management System (GMS) Application

1. Project Overview

This project aims to streamline and automate the operations of automotive repair facilities through a Garage Management System (GMS). It is designed to address inefficiencies in managing customer appointments, repair tasks, inventory, and billing, delivering a scalable and user-friendly solution. GMS empowers garages to enhance operational efficiency, deliver topnotch service, and build lasting customer relationships, aligning with long-term objectives to thrive in a competitive market while ensuring a seamless and satisfying experience for both customers and staff.

2. Objectives

Business Goals:

- Increase operational efficiency in garage management.
- Enhance customer satisfaction through a streamlined repair process.
- Ensure accurate tracking of inventory, repair history, and billing.

Specific Outcomes:

- Centralized database for customer details, repair history, and inventory management.
- Automated workflows for appointment scheduling, task allocation, and reminders.
- Real-time dashboards to monitor garage performance and inventory usage.

3. Salesforce Key Features and Concepts Utilized

- **Customer Management:** Efficiently handle customer records, service history, and communication.
- Appointment Scheduling: Automated booking system with reminders.
- **Billing and Invoicing:** Simplified and accurate billing processes.
- Reports and Dashboards: Insights into operational metrics, inventory trends, and customer satisfaction.







4. Detailed Steps to Solution Design

- **Data Models:** Define custom objects for customers details, appointments, and service records and billing and feedback. Establish relationships between these objects to ensure data integrity. Establish relationships between these entities to maintain data integrity.
- **User Interface:** Create intuitive layouts and pages for managing appointments, repairs, and dashboards. Include visual aids for seamless navigation.
- **Business Logic:** Implement workflows and automation to handle repair task assignments, overdue notifications, and inventory updates efficiently.

5. Testing and Validation

- **Unit Testing:** Validate the system's logic and automated processes to ensure they meet business requirements.
- **User Interface Testing:** Test all pages and features for seamless functionality across devices.

6. Key Scenarios Addressed by Salesforce in the Implementation Project

Customer Service:

- Centralized customer details for seamless management of contact information, vehicle history, and preferences.
- Automated appointment scheduling linked with service records, ensuring smooth communication and task allocation.
- Integrated feedback collection to measure customer satisfaction and address concerns promptly.

Appointments:

- Streamlined scheduling process with automated reminders sent to customers and staff.
- Clear linkage between appointments and service records, enabling efficient planning and resource allocation.







Service Records:

- Comprehensive tracking of past and ongoing repair tasks, ensuring transparency and accountability.
- Easy access to vehicle history for staff, allowing better diagnostics and service recommendations.

• Inventory Updates:

- Real-time management of parts and tools usage linked to service records, reducing downtime and ensuring availability.
- Alerts for low stock, enabling timely reordering and avoiding delays.

• Billing:

- Simplified and accurate billing process directly linked to service records and inventory usage.
- Clear and detailed invoices generated automatically, enhancing customer trust and reducing errors.

• Feedback Management:

- Feedback collection integrated into the system, allowing customers to provide input post-service.
- Reports generated from feedback data to identify areas for improvement and boost overall service quality.

Data Accuracy:

- Robust validation processes across customer details, service records, billing, and feedback, ensuring reliable and error-free information.
- Centralized database structure to eliminate data redundancy and discrepancies.

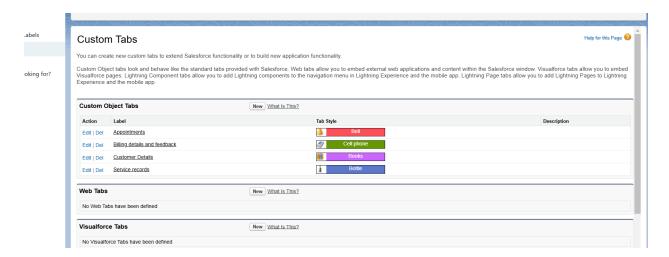
7. Conclusion

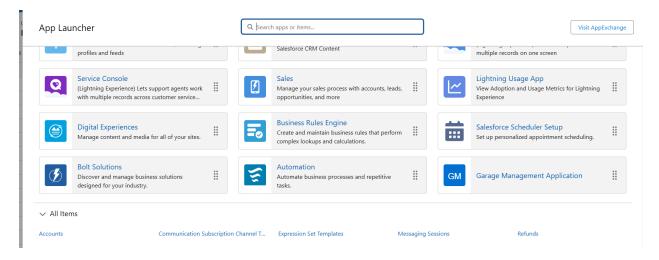
Summary of Achievements: The Garage Management System successfully automates the management of automotive repair facilities, offering centralized data management, automated workflows, and enhanced customer communication. These features collectively contribute to improved operational efficiency and customer satisfaction, laying the foundation for scalable growth in the automotive service industry.

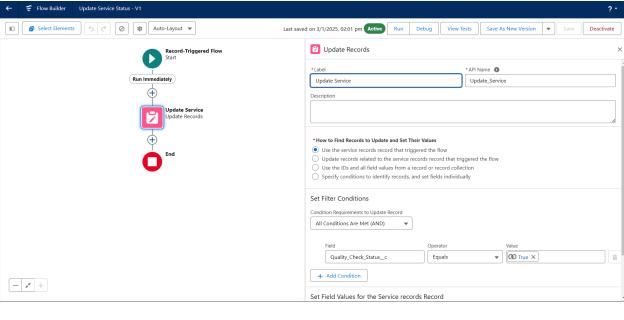












```
Code Coverage: None + API Version: 62 -
  1 v public class AmountDistributionHandler {
 4
5 ▼
          public static void amountDist(list<Appointment__c> listApp){
  6
               list<Service_records__c> serList = new list <Service_records__c>();
  10
  11 •
              for(Appointment_c app : listApp){
  13 ▼
                   if(app.Maintenance_service__c == true && app.Repairs__c == true && app.Replacement_Parts__c == true){
  14
  15
                        app.Service_Amount__c = 10000;
  17
  18
 19 ▼
                   else if(app.Maintenance_service__c == true && app.Repairs__c == true){

        Logs
        Tests
        Checkpoints
        Query Editor
        View State
        Progress
        Problems

                     Application
                                           Operation
                                                              Time ▼ Status
File ▼ Edit ▼ Debug ▼ Test ▼ Workspace ▼ Help ▼ <
 Code Coverage: None ▼ API Version: 62 ▼
  1  trigger AmountDistribution on Appointment_c (before insert, before update) {
          if(trigger.isbefore && trigger.isinsert || trigger.isupdate){
               AmountDistributionHandler.amountDist(trigger.new);
  8
 10
 11
 13
 14 }
```

