

Project Title

GARAGE MANAGEMENT SYSTEM

Team leader NM ID:

C2B04BBCB6A6148941048E4C5F50050B

Team Members NM ID:

6E0DC01D8F14EEBAF2D4E542EF9DFB69

DC91AF5E0D8A11D919C42B5C40C270EC

FB4A3DE7A13274C9692470BA4DA1ED73

GARAGE MANAGEMENT SYSTEM

1. Project Overview

The Garage Management System is a comprehensive solution designed to streamline automotive repair operations, enhance service efficiency, and improve customer satisfaction through effective resource management and automation.

2. Objectives

Business Goals:

1. **Streamline Operations:** Automate and simplify day-to-day garage tasks, including scheduling, invoicing, and inventory management.
2. **Enhance Customer Satisfaction:** Provide timely updates and improve transparency to build trust and loyalty with customers.

Specific Outcomes:

1. **Centralized Management System:** A user-friendly platform for managing appointments, services, customer details, and inventory in one place.
2. **Automated Notifications:** Enable automated reminders and updates for customers about service status and completion.
3. **Salesforce Key Features and Concepts Utilized**

3. Salesforce Mobile App

1. **On-the-Go Management:** Allow managers and staff to monitor operations, access records, and make updates anytime, anywhere.
2. **Role-Based Access Control:** Ensure data privacy by granting access only to authorized personnel.
3. **Audit Trail:** Track changes in records to maintain accountability and compliance.

4. Detailed Steps to Solution Design

It requires addressing multiple aspects such as functionality, user experience, technology stack, and security.

Requirement Gathering

1. **Vehicle management:** Add, edit, and remove vehicle records (e.g., make, model, registration number, owner).
2. **Service management:** Schedule services (e.g., oil change, tire repair), manage service history, track service progress.
3. **Inventory management:** Track parts and tools inventory (e.g., parts availability, stock levels).
4. **Billing & Payments:** Generate invoices, handle customer payments, record payments.

5. Testing and Validation

1. Unit Testing:

Unit testing focuses on testing individual components (Apex classes, triggers, and business logic) of the system. The goal is to ensure that each part of the code functions as expected, providing confidence that the system behaves correctly when integrated as a whole.

2. User Interface (UI) Testing

UI testing ensures that the user-facing components of the Garage Management System are functional, intuitive, and free from defects. This testing covers the various ways users will interact with the system, such as through forms, tables, and dashboards.

6. Key Scenarios Addressed by Salesforce in the Implementation Project

In implementing a **Garage Management System (GMS)** using Salesforce, there are several key scenarios and challenges that Salesforce addresses to ensure the system meets business needs and provides a robust, user-friendly solution.

1. Customer and Vehicle Management

Managing customer and vehicle data effectively.

2. Service Scheduling and Management

Scheduling and managing service appointments efficiently.

3.Custom Reports and Dashboards: Design custom reports and dashboards to track key metrics like service times, customer satisfaction, and revenue per service.

Appointment:

← → ↺ adhiparasakthiengineeri-23a-dev-ed.develop.lightning.force.com/lightning/o/Appointment__c/list?filterName=00BNS000006WKEg2AO 🔍 ☆ 🏠 🌐 📱 12 🧑

🔍 Search...

Garage Managem... Customer Details ▾ Appointments ▾ Service records ▾ Billing details and feedback ▾ Reports ▾ Dashboards ▾ 🖋

Appointments All ▾ 📅

New Import Change Owner Printable View Assign Label

15 items • Sorted by Appointment Name • Filtered by All appointments • Updated a few seconds ago 🔍 Search this list... ⚙️ 📄 🔄 ✎ 📊 🔍

	<input type="checkbox"/> Appointment Name ↑ ▾	<input type="checkbox"/> Appointment Date ▾	<input type="checkbox"/> Created Date ▾	<input type="checkbox"/> Customer Details ▾	<input type="checkbox"/> Service Amount ▾	
1	<input type="checkbox"/> app-001	12/11/2024	13/11/2024, 8:11 pm	Julie	₹7,000	▾
2	<input type="checkbox"/> app-003	16/11/2024	13/11/2024, 8:44 pm	sri	₹10,000	▾
3	<input type="checkbox"/> app-005	10/11/2024	13/11/2024, 8:50 pm	Julie	₹2,000	▾
4	<input type="checkbox"/> app-006	06/11/2024	13/11/2024, 10:43 pm	sri ✎	₹10,000	▾
5	<input type="checkbox"/> app-008	10/11/2024	13/11/2024, 10:45 pm	Jeev	₹3,000	▾
6	<input type="checkbox"/> app-010	08/11/2024	13/11/2024, 11:42 pm	Julie	₹3,000	▾
7	<input type="checkbox"/> app-012	10/11/2024	13/11/2024, 11:43 pm	sri	₹8,000	▾
8	<input type="checkbox"/> app-016	12/11/2024	13/11/2024, 11:44 pm	Julie	₹5,000	▾
9	<input type="checkbox"/> app-018	05/11/2024	14/11/2024, 10:19 am	sri	₹5,000	▾

Customer details:

adhiparasakthiengineeri-23a-dev-ed.develop.lightning.force.com/lightning/o/Customer_Detail__c/list?filterName=__Recent

Search...

Garage Manageme... Customer Details Appointments Service records Billing details and feedback Reports Dashboards

Customer Details
Recently Viewed

New Import Change Owner Assign Label

6 items • Updated a few seconds ago

Search this list...

	<input type="checkbox"/> Customer Name	
1	<input type="checkbox"/> Jackie	▼
2	<input type="checkbox"/> Jack	▼
3	<input type="checkbox"/> John	▼
4	<input type="checkbox"/> Jeev	▼
5	<input type="checkbox"/> sri	▼
6	<input type="checkbox"/> Julie	▼

Service Records:

adhiparasakthiengineeri-23a-dev-ed.develop.lightning.force.com/lightning/o/Service_record__c/list?filterName=__Recent

Search...

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Service records
Recently Viewed

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3 items • Updated a few seconds ago

Search this list...

	<input type="checkbox"/> Service record Name	
1	<input type="checkbox"/> ser-001	▼
2	<input type="checkbox"/> ser-005	▼
3	<input type="checkbox"/> ser-008	▼

Reports:

← → ↻ adhiparasakthiengineeri-23a-dev-ed.develop.lightning.force.com/lightning/r/Report/000NS00000312R32AI/view?queryScope=userFolders

Search...

Garage Manage... Customer Details ▾ Appointments ▾ Service records ▾ Billing details and feedback ▾ Reports ▾ Dashboards ▾ View profile

Report: Service information
New Service information Report

Enable Field Editing 🔍 📄 ⏴ ⏵ Edit ▾

Total Records: 3 Total Payment Paid: ₹11,500

Service information
Rating for service

Details (3 Rows) ⓘ Click an intersection in the table above to filter details. ✕

	Customer Name ▾	Appointment Date ▾	Service Status ▾	Payment Paid ▾
1	Julie	07/11/2024	Completed	₹3,000
2	Jeev	10/11/2024	Completed	₹3,500
3	Jeev	10/11/2024	Completed	₹5,000

Row Counts ☒ Detail Rows ☒ Grand Total ☒ Stacked Summaries ☒

Dashboard Output:

← → ↻ adhiparasakthiengineeri-23a-dev-ed.develop.lightning.force.com/lightning/r/Dashboard/01ZNS000001Uey22AC/view?queryScope=userFolders

Search...

Garage Manage... Customer Details ▾ Appointments ▾ Service records ▾ Billing details and feedback ▾

Dashboard
Customer review
As of 17-Nov-2024, 2:03 pm Viewing as Jeevitha G

New Service information Report

Sum of Payment Paid

Payment Status
Completed ➔

Rating for service

View Report (New Service information Report)

Jeevitha G
adhiparasakthiengineeri-23a-dev-ed.devel...
[Settings](#) [Log Out](#)

DISPLAY DENSITY

✓ Comfy
Compact

OPTIONS

[Switch to Salesforce Classic ⓘ](#)
[Add Username](#)

86°F Haze Search ENG IN 17:00 17-11-2024

7. Conclusion :

The successful implementation of the Garage Management System (GMS) has resulted in the optimization of key operational areas within the garage, leading to improvements in efficiency, customer satisfaction, and business scalability.