

Garage Management System

1. Introduction

The Garage Management System under Salesforce is a cloud-based application designed to automate and streamline garage operations. It helps in managing customer details, vehicle appointments, service records, and billing processes efficiently. Salesforce provides a powerful low-code environment, making it ideal for developing CRM-oriented business solutions.

2. About Salesforce

Salesforce is a leading Customer Relationship Management (CRM) platform that allows users to build and customize business applications on the cloud. It provides tools for automation, analytics, and collaboration. Salesforce operates through objects, fields, automation rules, and user management. It offers features like Lightning Experience, App Builder, and Flow automation.

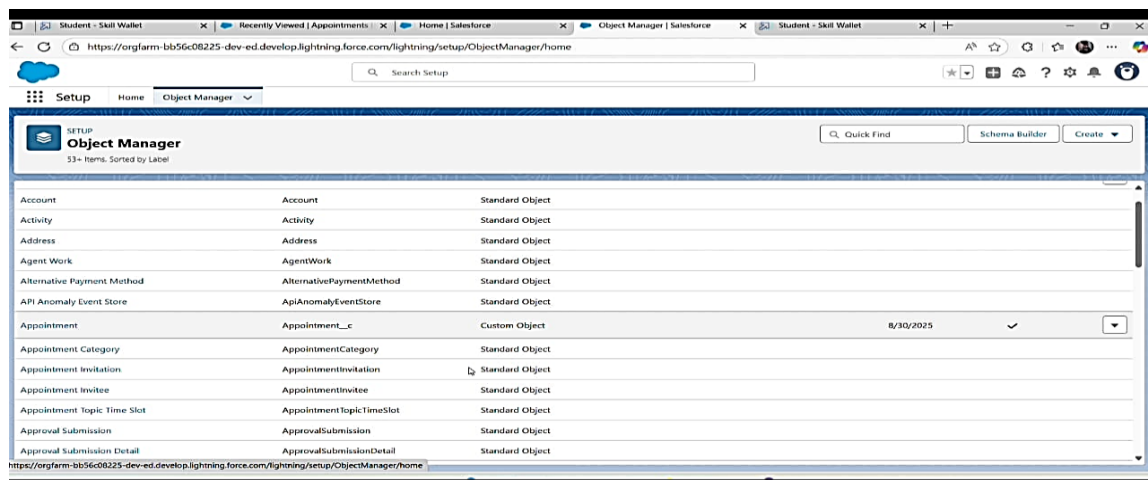
3. Creating a Salesforce Developer Account

A free Salesforce Developer Edition account was created through developer.salesforce.com. After registration, an activation link was sent to the email for verification. Once activated, the user can access the Developer Console, Setup page, and App Launcher to begin development.

4. Object Creation and Relationships

Custom objects were created for managing data entities related to the garage operations:

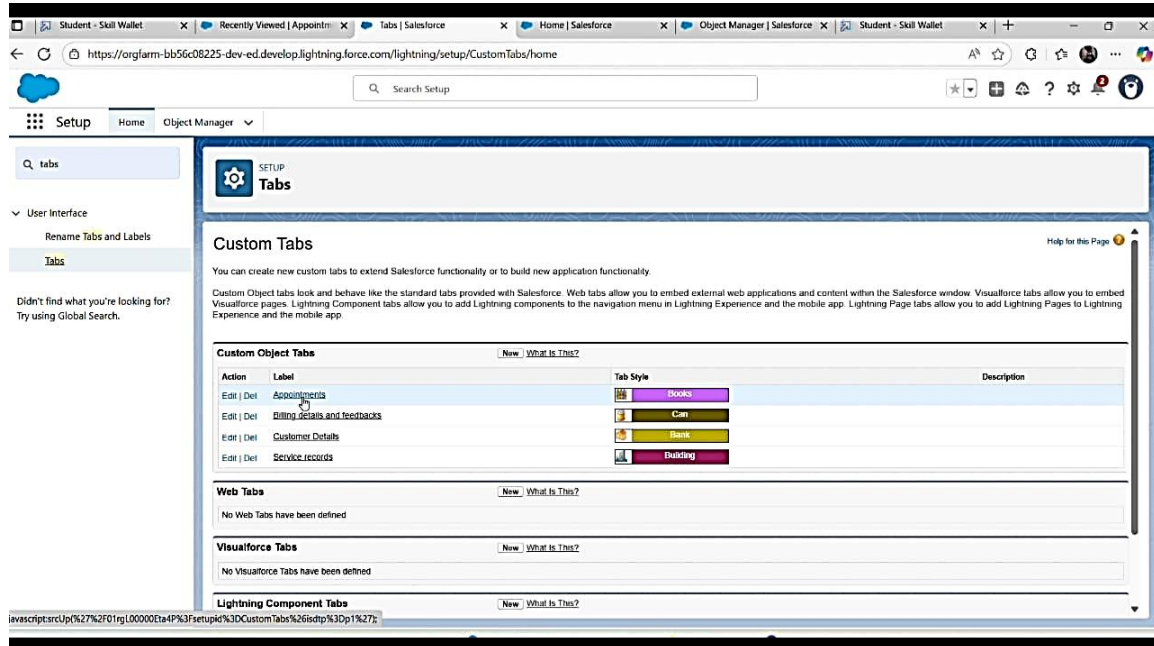
- Customer_c – stores customer details such as name, phone number, email, and address.
- Appointment_c – records appointment details including date, time, customer, and vehicle.
- Service_Record_c – contains details of services performed, assigned mechanic, and status.
- Billing_Details_c – maintains service charges, parts cost, total amount, and payment status.



Object Manager		
Object Name	Object Type	Created Date
Account	Standard Object	
Activity	Standard Object	
Address	Standard Object	
Agent Work	Standard Object	
Alternative Payment Method	Standard Object	
API Anomaly Event Store	Standard Object	
Appointment	Custom Object	8/30/2025
Appointment Category	Standard Object	
Appointment Invitation	Standard Object	
Appointment Invitee	Standard Object	
Appointment Topic Time Slot	Standard Object	
Approval Submission	Standard Object	
Approval Submission Detail	Standard Object	

5. Tabs and Custom Tabs

Tabs were created for each custom object to make navigation easier. These tabs allow the user to access and manage data records. Custom tabs were also added to the application for Service Records and Billing Details to enhance usability.



6. Creating a Lightning App

A new Lightning App named 'Garage Management System' was created using the App Manager in Salesforce. The app includes navigation items such as Customers, Appointments, Service Records, and Billing Details. The app was made visible to specific profiles like System Administrator and Garage Manager.

7. Field Creation

Custom fields were created in each object to capture relevant data. For example, in the Appointment object, fields such as Appointment Date, Vehicle Model, and Mechanic Assigned were added. In the Billing Details object, fields for Service Cost, Parts Cost, Total Amount, and Payment Mode were included.

8. Validation Rules

Validation rules ensure data accuracy and completeness. Examples include:

- On Appointment__c: Appointment Date must not be in the past.
- On Billing_Details__c: Total Amount should always equal Service Cost + Parts Cost.

These rules help maintain integrity and avoid data entry errors.

9. Duplicate Rules

Duplicate rules were configured to prevent the creation of duplicate customer records. The rule checks if the email or phone number already exists and alerts the user accordingly.

10. Profiles, Roles, and Hierarchies

Profiles define permissions for each user, such as read, edit, or delete access. Custom profiles like 'Garage Manager' and 'Mechanic' were created. Roles define reporting hierarchies; for example, Mechanics report to Garage Managers, who report to the System Administrator. This ensures proper data visibility and access control.

11. Public Groups and Sharing Settings

Public groups were created for different user sets like 'Billing Team' and 'Service Team.' Sharing rules were applied to allow certain users to access or edit specific records. Organization-wide default sharing was set to private to maintain security.

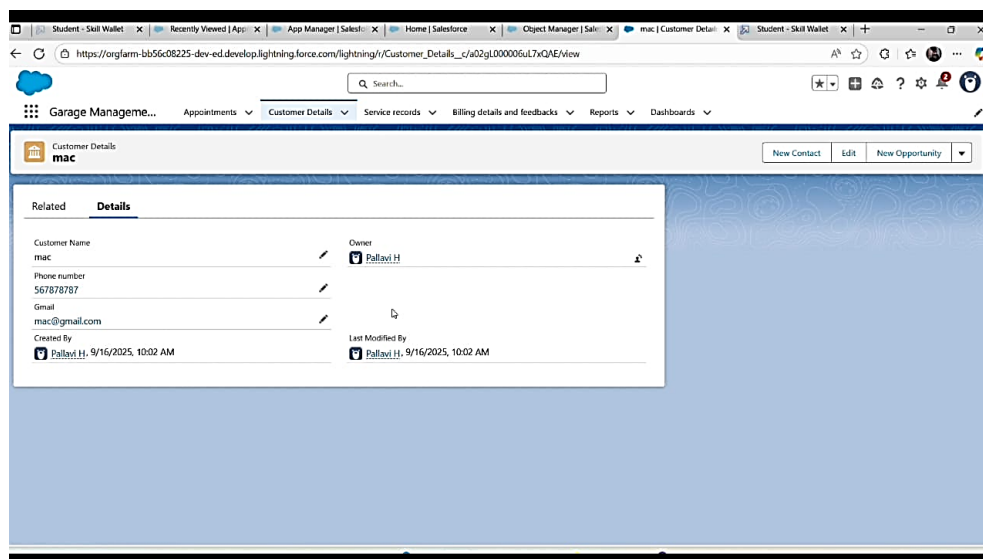
12. Automation: Flows, Apex, and Triggers

Automation was implemented using multiple tools:

- Flows: Used for automatically updating appointment status when service is completed.
- Apex: Custom logic was written to calculate total billing amounts dynamically.
- Triggers: Automatically create a billing record once a service record is marked as completed.

13. Reports and Dashboards

Reports were created to display data such as daily appointments, completed services, and monthly revenue. Dashboards were built to visualize these reports using charts and summary tables. This enables the garage management team to analyze business performance effectively.



14. Conclusion

The Garage Management System under Salesforce successfully automates garage operations and provides an integrated view of customer and service data. It enhances efficiency, accuracy, and decision-making. The project demonstrates the use of Salesforce objects, automation, and analytics features to develop a comprehensive management solution.