

# PROJECT MILESTONES AND ACTIVITY

Date	01 November 2025
Team ID	NM2025TMID08021
Project Name	Garage Management System – Digitalization of Garage Operations

## MILESTONE 1 : OBJECT

Objects are the foundation of Salesforce data architecture. They represent real-world entities such as customers, appointments, services, and billing details. In this project, custom objects were created to capture and relate these entities seamlessly. This ensures structured data management and easy reporting for garage operations.

### ACTIVITY 1: Create Customer Details Object

#### Objective:

To store essential customer information and maintain a master list of all customers in the system.

#### Process:

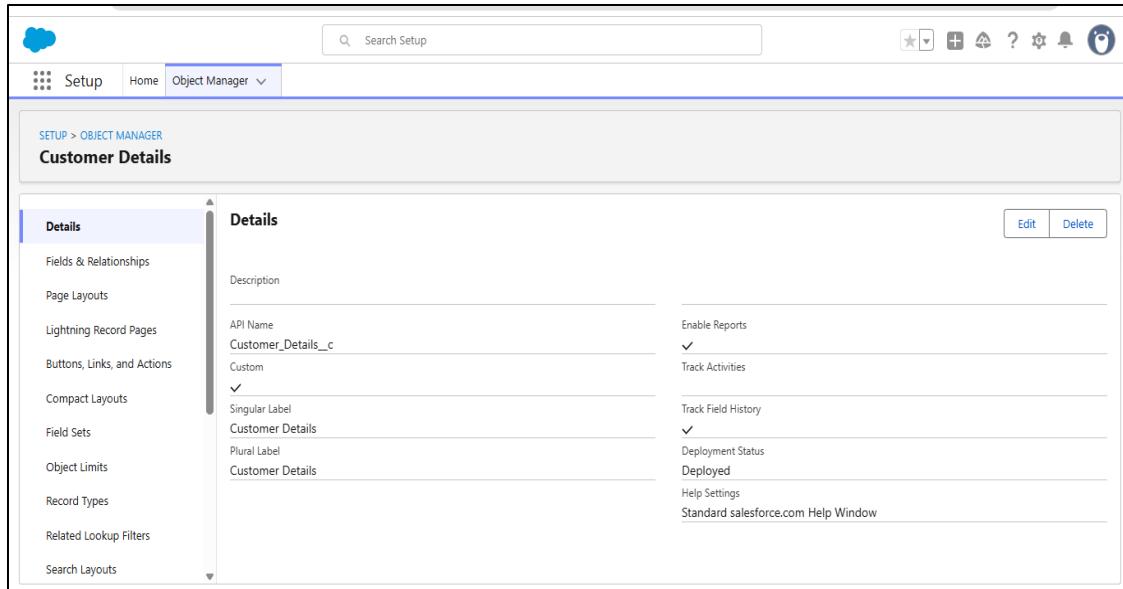
- Navigate to Setup → Object Manager → Create → Custom Object.
- Enter the Label as “Customer Details” and the API Name as Customer\_Details\_\_c.
- Choose Text as the Record Name field type and name it Customer ID.

- Enable important options like Allow Reports, Allow Activities, and Track Field History.
- Save and Deploy the object.

Attribute	Value
Label	Customer Details
API Name	Customer_Details__c
Record Name	Customer ID (Text)
Options Enabled	Reports, Activities, Field History
Status	Deployed

### Description:

This object holds all core customer details such as name, contact number, and address. It serves as the parent record for related objects like Appointments and Billing, ensuring that each customer's interactions and transactions can be traced efficiently.



## ACTIVITY 2: Create Appointment Object

### Objective:

To manage and record customer bookings for vehicle servicing or repairs.

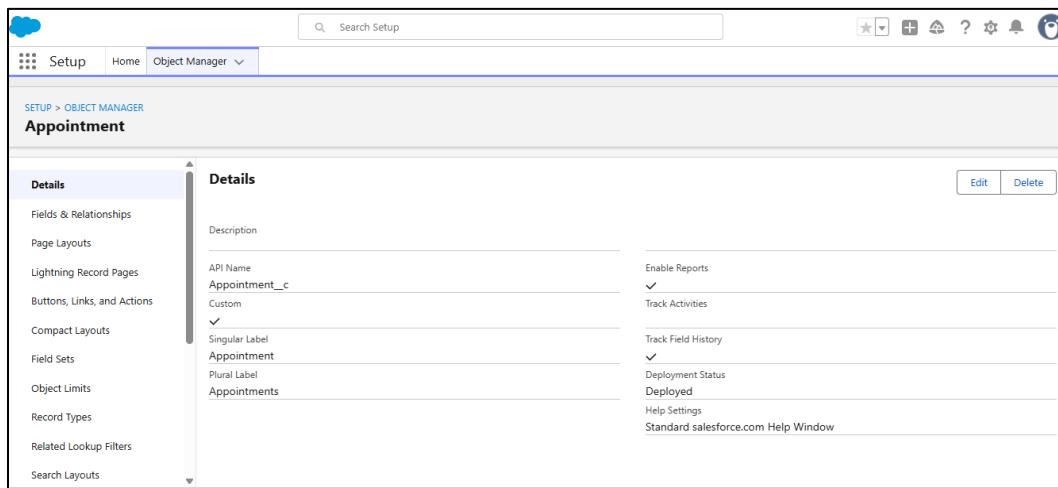
### Process:

- Go to Setup → Object Manager → Create → Custom Object.
- Set Label as “Appointment” and API Name as Appointment\_\_c.
- Choose Auto Number for Record Name with format APP-{000}.
- Enable Allow Reports and Allow Activities.
- Create a Lookup Relationship with Customer Details to link appointments with customers.
- Save the object.

Attribute	Value
Label	Appointment
API Name	Appointment__c
Record Name	Auto Number (APP-{000})
Lookup Relationship	Customer Details
Status	Deployed

### Description:

This object tracks customer appointments, including date, time, and services requested. It connects directly to customer records, giving a complete history of interactions.



## ACTIVITY 3: Create Service Records Object

### Objective:

To maintain a log of services performed during each appointment.

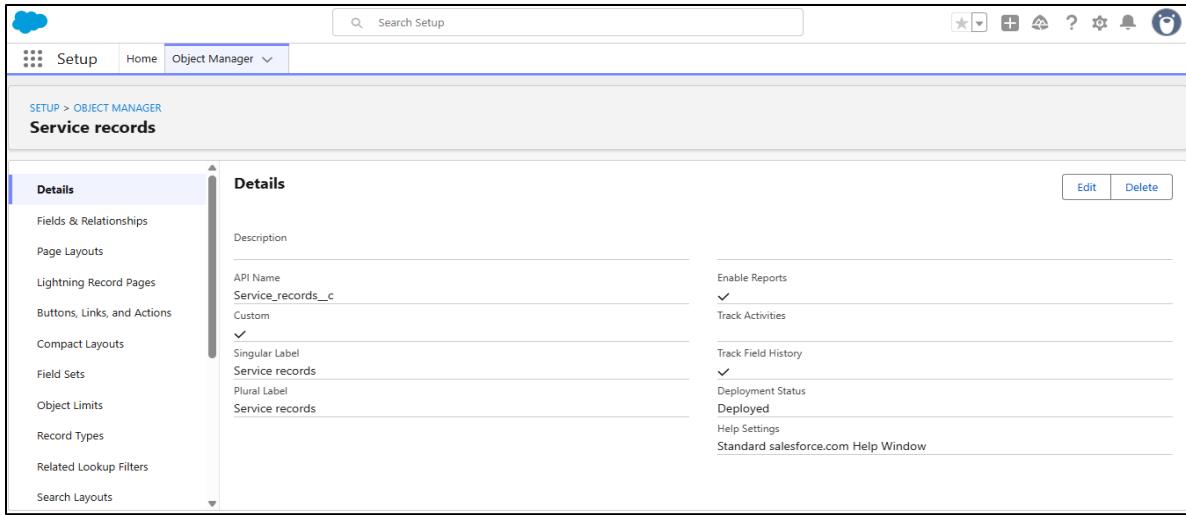
**Process:**

- Create a custom object named Service Records.
- Choose Auto Number for the Record Name as SER-{000}.
- Enable Reports and Field History Tracking.
- Add a Lookup Relationship to Appointment so each service links to a booked appointment.
- Save the object.

Attribute	Value
Label	Service Records
API Name	Service_Records__c
Record Name	Auto Number (SER-{000})
Lookup Relationship	Appointment
Options	Reports, Field History Tracking

**Description:**

Each service record provides details on the work done, parts replaced, and the inspection results. It acts as the operational backbone, showing what the garage delivered for each appointment.



## ACTIVITY 4: Create Billing Details and Feedback Object

### Objective:

To record payment details and capture post-service feedback from customers.

### Process:

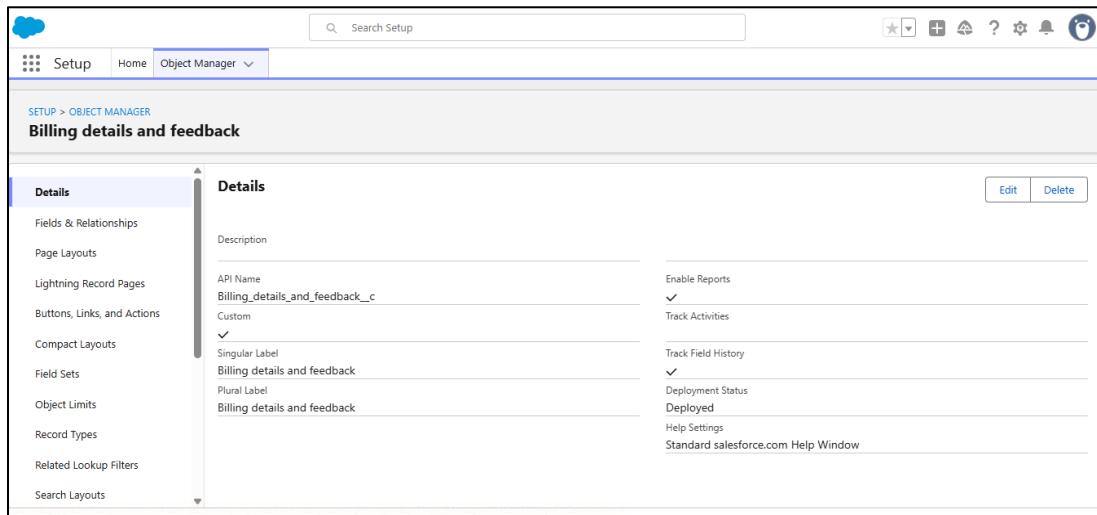
- Create an object labeled Billing Details and Feedback.
- Use Auto Number as Record Name (BILL-{000}).
- Add a Lookup Relationship to Service Records to link billing with completed services.
- Enable Reports and Activities for better tracking.
- Save and deploy.

Attribute	Value
Label	Billing Details and Feedback
API Name	Billing_Details_Feedback__c
Record Name	Auto Number (BILL-{000})

Lookup Relationship	Service Records
Options	Reports, Activities

## Description:

This object finalizes the workflow — connecting services to payments and feedback. It helps in analyzing service quality and managing garage revenue efficiently.



## MILESTONE 2: TABS CREATION

Tabs give users easy access to objects directly from the Salesforce app interface. By creating tabs for each object, we made the system more accessible and user-friendly.

## Process:

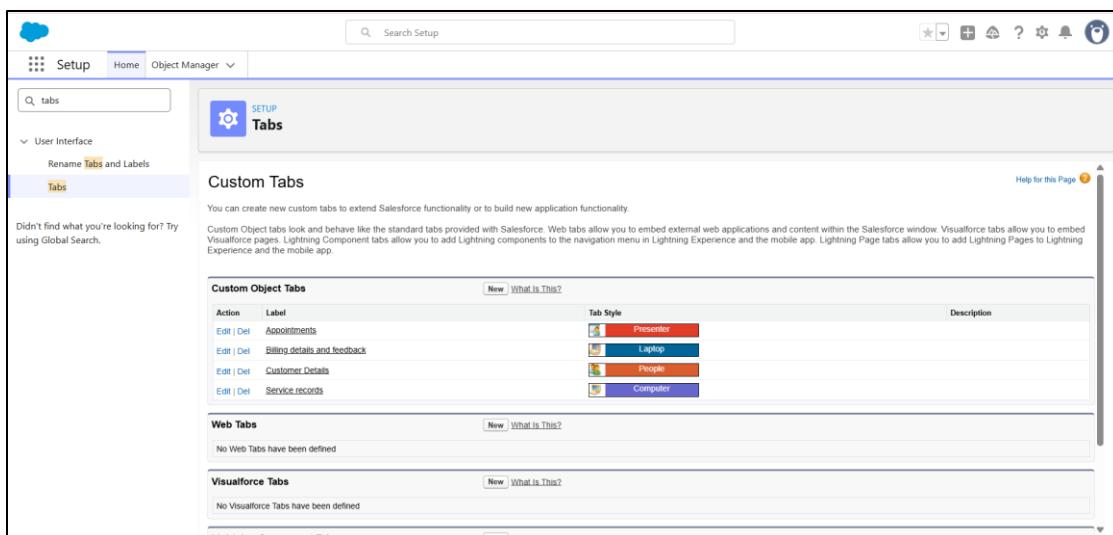
- Go to Setup → Tabs → New Custom Object Tab.
- Select each custom object one by one.

- Choose suitable icons (like user, wrench, or dollar).
- Assign access to all profiles to ensure everyone can view relevant data.
- Save each tab.

Object	Tab Created	Icon	Access Granted
Customer Details	Yes	User Icon	All Profiles
Appointment	Yes	Calendar Icon	All Profiles
Service Records	Yes	Wrench Icon	All Profiles
Billing Details & Feedback	Yes	Dollar Icon	All Profiles

## Description:

These tabs act as navigation links on the Salesforce app menu, enabling users to quickly create, edit, and manage records without needing to go through setup pages.



## MILESTONE 3: LIGHTNING APPLICATION

### Objective:

To build a centralized and branded workspace containing all key tabs, reports, and dashboards.

### Process:

- Navigate to Setup → App Manager → New Lightning App.
- Enter the app name as Garage Management Application.
- Add a custom icon for branding.
- Include all relevant tabs (Customer Details, Appointment, Service Records, Billing & Feedback).
- Assign visibility to System Administrator, Manager, and Sales Person profiles.
- Save and deploy the app.

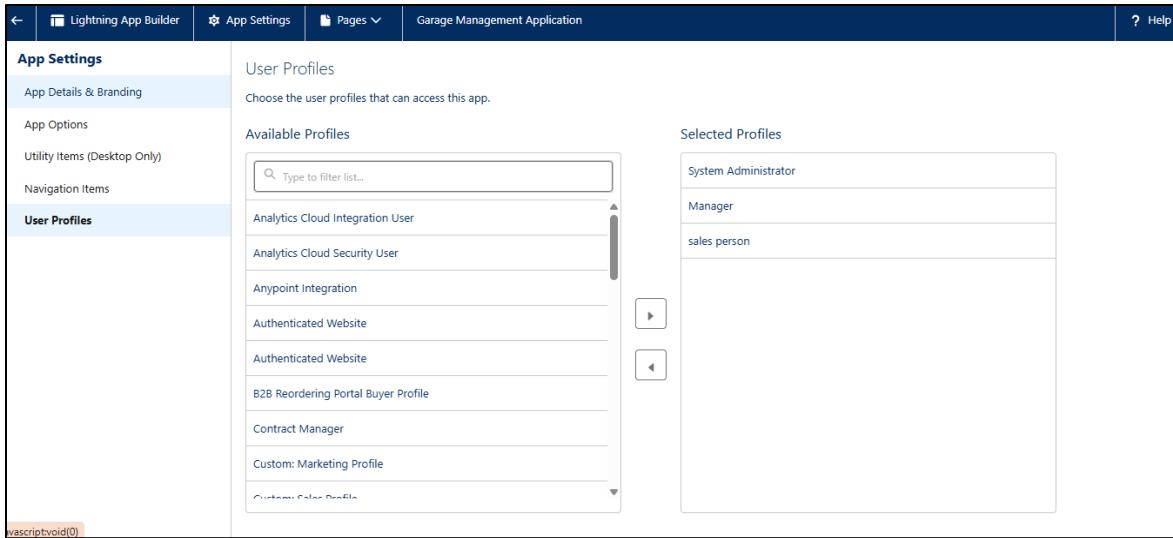
Configuration	Details
App Name	Garage Management Application
Tabs Added	Customer, Appointment, Service, Billing & Feedback
Profiles	System Admin, Manager, Sales Person
Type	Lightning App

## Description:

This app serves as a unified workspace where different user roles can manage customer records, track services, and analyze performance using dashboards — all in one interface.

The screenshot shows the 'App Details & Branding' section of the Lightning App Builder. On the left, a sidebar lists 'App Settings' with 'App Details & Branding' selected. The main area contains fields for 'App Name' (Garage Management Application), 'Developer Name' (Garage\_Management\_Application), and a 'Description' input field. To the right, there's an 'Image' upload section with a preview thumbnail showing a blue square with 'GM' and the text 'Garage Management Appl...'. Below this is an 'Org Theme Options' checkbox. At the bottom, there's a preview of the app launcher with the 'GM' icon and the app name.

The screenshot shows the 'Navigation Items' configuration section. The left sidebar has 'App Settings' selected. In the main area, the 'Available Items' list includes 'Accounts', 'Action Hub', 'All Sites', 'Alternative Payment Methods', 'Analytics', 'App Launcher', 'Appointment Categories', and 'Appointment Invitations'. The 'Selected Items' list on the right contains 'Customer Details', 'Appointments', 'Service records', 'Billing details and feedback', 'Reports', and 'Dashboards'. Navigation arrows between the two lists allow items to be moved.



## MILESTONE 4: FIELDS CREATION

Creating appropriate fields ensures that every necessary detail is captured accurately in each record.

### ACTIVITY 1: Fields for Customer Details

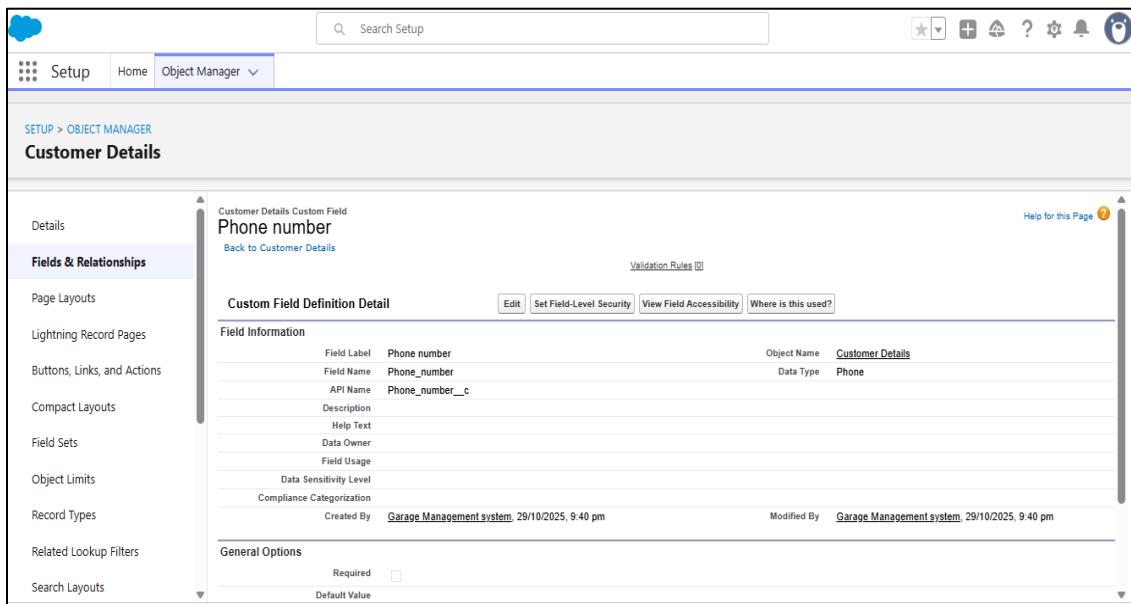
#### Process:

- Open the Customer Details object in Object Manager.
- Click Fields & Relationships → New.
- Create fields:
  - Phone Number (Data Type: Phone)
  - Gmail (Data Type: Email)
  - Set both fields as required.
  - Save and verify.

Field Label	Data Type	Description
Phone Number	Phone	Customer's contact number
Gmail	Email	Email ID for communication

## Description:

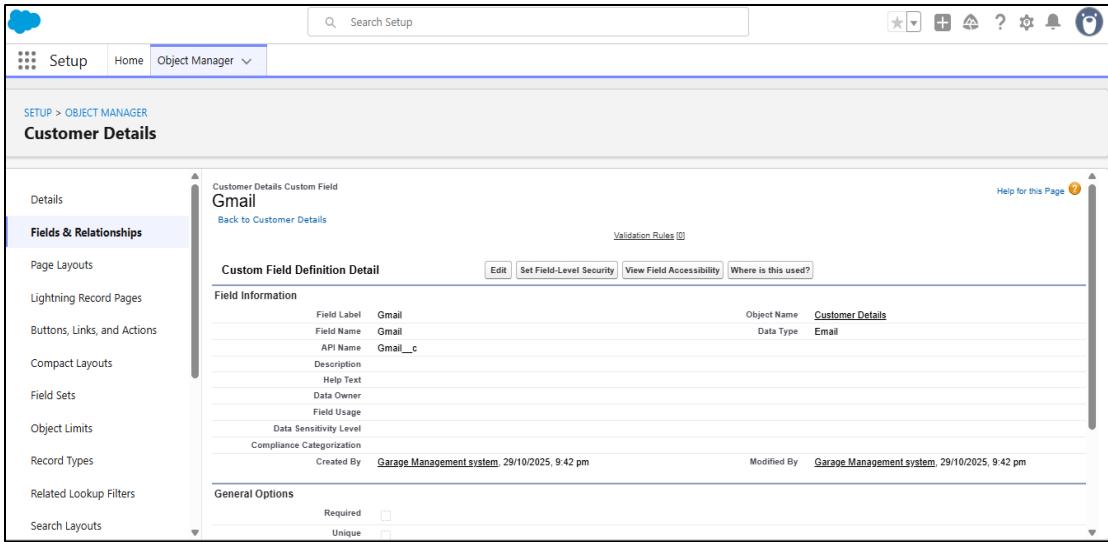
These fields make communication easier and enable marketing or follow-up campaigns through phone or email.



The screenshot shows the Salesforce Object Manager interface for configuring a custom field named 'Phone number' on the 'Customer Details' object. The left sidebar lists various setup options like Page Layouts, Lightning Record Pages, and Field Sets. The main panel displays the 'Custom Field Definition Detail' for 'Phone number'. Key details shown include:

- Field Label:** Phone number
- Field Name:** Phone\_number
- API Name:** Phone\_number\_c
- Description:** Customer's contact number
- Data Type:** Phone
- Object Name:** Customer Details
- Created By:** Garage Management system, 29/10/2025, 9:40 pm
- Modified By:** Garage Management system, 29/10/2025, 9:40 pm

The 'General Options' section includes checkboxes for 'Required' and 'Default Value'.



## ACTIVITY 2: Lookup Relationships

### Process:

- Add lookup relationships to connect objects hierarchically:
- Appointment → Customer Details
- Service Records → Appointment
- Billing Details → Service Records
- Apply a filter: Appointment\_Date\_\_c < CreatedDate to ensure logical data flow.
- Save and verify.

Child Object	Parent Object	Relationship	Description
Appointment	Customer Details	Lookup	Links appointment to customer
Service Records	Appointment	Lookup	Connects service to appointment
Billing Details & Feedback	Service Records	Lookup	Connects billing to service

The screenshot shows the Salesforce Object Manager interface. The top navigation bar includes 'Search Setup', 'Setup', 'Home', and 'Object Manager'. The main area displays the 'Billing details and feedback' custom field under the 'Service records' object. The left sidebar lists various setup categories like 'Details', 'Fields & Relationships', 'Page Layouts', etc. The right pane shows the 'Custom Field Definition Detail' for 'Billing details and feedback'. Key details include:

- Field Information:**
  - Field Label: Service records
  - Field Name: Service\_records
  - API Name: Service\_records\_\_c
  - Description: Help Text
  - Data Owner: Field Usage
  - Data Sensitivity Level: Compliance Categorization
  - Created By: Garage Management system, 29/10/2025, 9:57 pm
  - Modified By: Garage Management system, 29/10/2025, 9:57 pm
- Relationships:**
  - Related To: Service records
  - Related List Label: Billing details and feedback
  - Child Relationship Name: Billing\_details\_and\_feedback

## ACTIVITY 3: Checkbox Fields

### Process:

- For Appointment: Create checkboxes for Maintenance Service, Repairs, and Replacement Parts.
- For Service Records: Add a checkbox Quality Check Status.
- Set default as unchecked.

Object	Field	Purpose
Appointment	Maintenance Service	Marks maintenance requirement
Appointment	Repairs	Identifies repair needs
Appointment	Replacement Parts	Tracks spare parts usage
Service Records	Quality Check Status	Marks completion of inspection

### Description:

These checkboxes simplify automation logic and are later used in triggers for service amount calculation.

The screenshot shows the Salesforce Setup interface for creating a custom field. The top navigation bar includes 'Search Setup', 'Setup' (selected), 'Home', and 'Object Manager'. The main title is 'Appointment Custom Field Maintenance service'. The left sidebar under 'Fields & Relationships' has 'Appointment' selected. The right panel displays the 'Custom Field Definition Detail' for 'Maintenance service'. Key details include:

Field Label	Maintenance service	Object Name	Appointment
Field Name	Maintenance_service	Data Type	Checkbox
API Name	Maintenance_service__c		
Description			
Help Text			
Data Owner			
Field Usage			
Data Sensitivity Level			
Compliance Categorization			

Created By: Garage Management system, 30/10/2025, 7:04 am Modified By: Garage Management system, 30/10/2025, 7:04 am

General Options: Default Value: Unchecked

The screenshot shows the Salesforce Setup interface for creating a custom field. The top navigation bar includes 'Search Setup', 'Setup' (selected), 'Home', and 'Object Manager'. The main title is 'Appointment Custom Field Repairs'. The left sidebar under 'Fields & Relationships' has 'Appointment' selected. The right panel displays the 'Custom Field Definition Detail' for 'Repairs'. Key details include:

Field Label	Repairs	Object Name	Appointment
Field Name	Repairs	Data Type	Checkbox
API Name	Repairs__c		
Description			
Help Text			
Data Owner			
Field Usage			
Data Sensitivity Level			
Compliance Categorization			

Created By: Garage Management system, 30/10/2025, 7:05 am Modified By: Garage Management system, 30/10/2025, 7:05 am

General Options: Default Value: Unchecked

**Custom Field Definition Detail**

**Field Information**

Field Label	Replacement Parts
Field Name	Replacement_Parts
API Name	Replacement_Parts__c
Description	
Help Text	
Data Owner	
Field Usage	
Data Sensitivity Level	
Compliance Categorization	

Object Name: Appointment  
Data Type: Checkbox

Created By: Garage Management system, 30/10/2025, 7:05 am  
Modified By: Garage Management system, 30/10/2025, 7:05 am

**General Options**

Default Value: Unchecked

**Field Dependencies**

No dependencies defined.

**Validation Rules**

No validation rules defined.

Always show me ▾ more records per related list

**Service records Custom Field**

**Quality Check Status**

Back to Service records

**Custom Field Definition Detail**

**Field Information**

Field Label	Quality Check Status
Field Name	Quality_Check_Status
API Name	Quality_Check_Status__c
Description	
Help Text	
Data Owner	
Field Usage	
Data Sensitivity Level	
Compliance Categorization	

Object Name: Service records  
Data Type: Checkbox

Created By: Garage Management system, 30/10/2025, 7:06 am  
Modified By: Garage Management system, 30/10/2025, 7:06 am

**General Options**

Default Value: Unchecked

Validation Rules (0)

Help for this Page

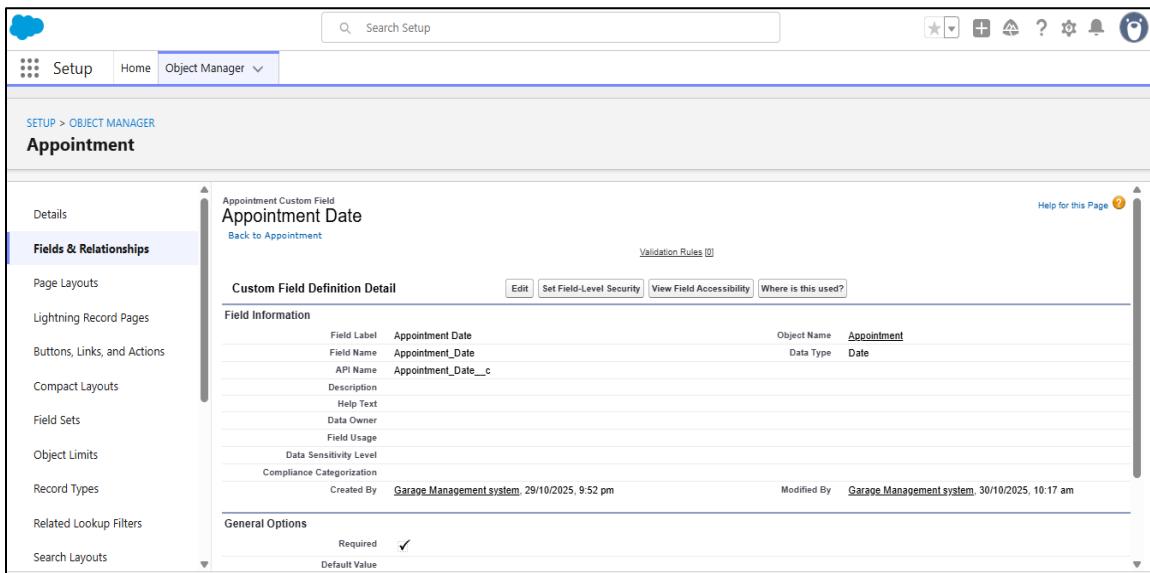
## ACTIVITY 4: Date Field

### Process:

- Create a field in Appointment named Appointment Date with Date type.
- Mark as Required for validation.

### Description:

This ensures every appointment is properly dated and helps in reporting service timelines.



## ACTIVITY 5: Currency Fields

### Process:

- Add Service Amount (Currency, Read-Only) in Appointment.
- Add Payment Paid (Currency) in Billing Details and Feedback.
- Save and verify.

## Description:

These fields enable the garage to maintain financial clarity by tracking service charges and payments.

The screenshot shows the Salesforce Setup interface under the Object Manager. A sidebar on the left lists various setup categories like Details, Fields & Relationships, Page Layouts, etc. The main content area displays the 'Appointment Custom Field Service Amount'. The field information includes:

Field Label	Field Name	Object Name	Data Type
Service Amount	Service_Amount	Appointment	Currency
	API Name		
	Description		
	Help Text		
	Data Owner		
	Field Usage		
	Data Sensitivity Level		
	Compliance Categorization		
	Created By	Garage Management system	30/10/2025, 10:18 am
	Modified By	Garage Management system	30/10/2025, 10:18 am
General Options	Required		
	Default Value		

The screenshot shows the Salesforce Setup interface under the Object Manager. A sidebar on the left lists various setup categories like Details, Fields & Relationships, Page Layouts, etc. The main content area displays the 'Billing details and feedback Custom Field Payment Paid'. The field information includes:

Field Label	Field Name	Object Name	Data Type
Payment Paid	Payment_Paid	Billing details and feedback	Currency
	API Name		
	Description		
	Help Text		
	Data Owner		
	Field Usage		
	Data Sensitivity Level		
	Compliance Categorization		
	Created By	Garage Management system	30/10/2025, 10:19 am
	Modified By	Garage Management system	30/10/2025, 10:19 am
General Options	Required		
	Default Value		

## ACTIVITY 6: Text and Picklist Fields

Object	Field Name	Type	Description
Appointment	Vehicle Number Plate	Text	Stores vehicle ID
Billing Details & Feedback	Rating for Service	Text	Customer satisfaction rating
Service Records	Service Status	Picklist	Values: Started, Completed
Billing Details & Feedback	Payment Status	Picklist	Values: Pending, Completed

### Description:

These fields help standardize data input, simplify record categorization, and make reports more accurate.

Setup Home Object Manager

SETUP > OBJECT MANAGER

## Appointment

Vehicle number plate

Custom Field Definition Detail

Field Label	Vehicle number plate	Object Name	Appointment
Field Name	Vehicle_number_plate	Data Type	Text
API Name	Vehicle_number_plate_c		
Description			
Help Text			
Data Owner			
Field Usage			
Data Sensitivity Level			
Compliance Categorization			
Created By	Garage Management system, 30/10/2025, 10:22 am	Modified By	Garage Management system, 30/10/2025, 10:22 am
General Options			
Required	<input checked="" type="checkbox"/>	Unique	<input checked="" type="checkbox"/>

Details Fields & Relationships Page Layouts Lightning Record Pages Buttons, Links, and Actions Compact Layouts Field Sets Object Limits Record Types Related Lookup Filters Search Layouts

Validation Rules [1] Help for this Page [?]

Setup Home Object Manager

SETUP > OBJECT MANAGER

## Billing details and feedback

Rating for service

Custom Field Definition Detail

Field Label	Rating for service	Object Name	Billing details and feedback
Field Name	Rating_for_service	Data Type	Text
API Name	Rating_for_service_c		
Description			
Help Text			
Data Owner			
Field Usage			
Data Sensitivity Level			
Compliance Categorization			
Created By	Garage Management system, 30/10/2025, 10:23 am	Modified By	Garage Management system, 30/10/2025, 10:23 am
General Options			
Required	<input checked="" type="checkbox"/>	Unique	<input type="checkbox"/>

Details Fields & Relationships Page Layouts Lightning Record Pages Buttons, Links, and Actions Compact Layouts Field Sets Object Limits Record Types Related Lookup Filters Search Layouts

Validation Rules [1] Help for this Page [?]

SETUP > OBJECT MANAGER

## Service records

Service records Custom Field  
**Service Status**

Back to Service records

Custom Field Definition Detail

Field Information

Field Label	Service Status	Object Name	Service records
Field Name	Service_Status	Data Type	Picklist
API Name	Service_Status__c		
Description			
Help Text			
Data Owner			
Field Usage			
Data Sensitivity Level			
Compliance Categorization			

Created By Garage Management system 30/10/2025, 10:26 am Modified By Garage Management system 30/10/2025, 10:26 am

General Options

Required  Default Value

Picklist Options

Restrict picklist to the values defined in the value set  Cross-section Field

Help for this Page

Fields & Relationships

- Page Layouts
- Lightning Record Pages
- Buttons, Links, and Actions
- Compact Layouts
- Field Sets
- Object Limits
- Record Types
- Related Lookup Filters
- Search Layouts
- List View Button Layout
- Restriction Rules
- Scoping Rules

SETUP > OBJECT MANAGER

## Billing details and feedback

Billing details and feedback Custom Field  
**Payment Status**

Back to Billing details and feedback

Custom Field Definition Detail

Field Information

Field Label	Payment Status	Object Name	Billing details and feedback
Field Name	Payment_Status	Data Type	Picklist
API Name	Payment_Status__c		
Description			
Help Text			
Data Owner			
Field Usage			
Data Sensitivity Level			
Compliance Categorization			

Created By Garage Management system 30/10/2025, 10:30 am Modified By Garage Management system 30/10/2025, 10:30 am

General Options

Required  Default Value

Picklist Options

Restrict picklist to the values defined in the value set  Cross-section Field

Help for this Page

Fields & Relationships

- Page Layouts
- Lightning Record Pages
- Buttons, Links, and Actions
- Compact Layouts
- Field Sets
- Object Limits
- Record Types
- Related Lookup Filters
- Search Layouts
- List View Button Layout
- Restriction Rules
- Scoping Rules

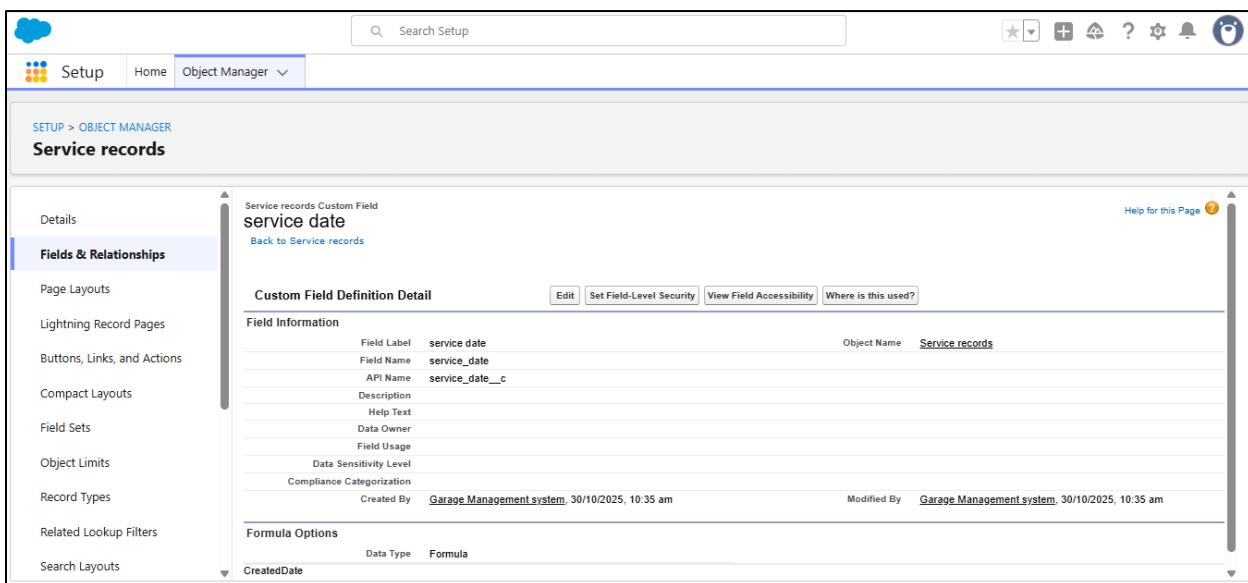
## ACTIVITY 7: Formula Field

### Process:

- Create a Formula Field in Service Records named Service Date.
- Set formula as CreatedDate.
- Type: Date.

### Description:

This automatically captures the creation date of each service record, ensuring consistent timestamping.



## **MILESTONE 5: VALIDATION RULES**

Validation rules are essential in Salesforce to maintain data integrity and prevent invalid or inconsistent records. In the Garage Management System, validation rules were implemented to ensure accurate record creation, logical data flow, and consistent customer feedback.

### **ACTIVITY 1: Appointment Object Validation**

#### **Objective:**

To ensure appointment dates and vehicle information are entered correctly.

#### **Process:**

- Navigate to Setup → Object Manager → Appointment → Validation Rules → New.
- Create the following validation rules:
  1. Appointment Date Validation
    - Formula: Appointment\_Date\_\_c > TODAY()
    - Error Message: “Appointment date cannot be greater than today.”
  2. Vehicle Number Validation
    - Formula: LEN(Vehicle\_Number\_Plate\_\_c) <> 10
    - Error Message: “Vehicle Number Plate must contain exactly 10 characters.”
- Activate both rules and test by creating records.

Validation Name	Formula	Error Message
Appointment Date Validation	Appointment_Date__c > TODAY()	Appointment date cannot be greater than today.
Vehicle Number Validation	LEN(Vehicle_Number_Plate__c) <> 10	Vehicle Number Plate must contain exactly 10 characters.

### Description:

These validations prevent future-dated appointments and enforce proper formatting for vehicle registration numbers, ensuring high-quality and realistic data entries.

The screenshot shows the Salesforce Object Manager interface for the 'Appointment' object. The left sidebar lists various setup options like Details, Fields & Relationships, Page Layouts, and Lightning Record Pages. The main content area displays the 'Appointment Validation Rule' configuration. The rule is named 'Vehicle' and is active. The error condition formula is set to NOT(REGEX( Vehicle\_number\_plate\_\_c , "[A-Z]{2}[0-9]{2}[A-Z]{2}[0-9]{4}"))). The error message is 'Please enter valid number'. The description is 'Vehicle'. The rule was created by 'Garage Management system' on 30/10/2025, 10:36 am, and modified by 'Garage Management system' on 01/11/2025, 10:31 pm.

## ACTIVITY 2: Billing Details & Feedback Validation

### Objective:

To ensure the service rating given by customers falls within a valid range (1 to 5).

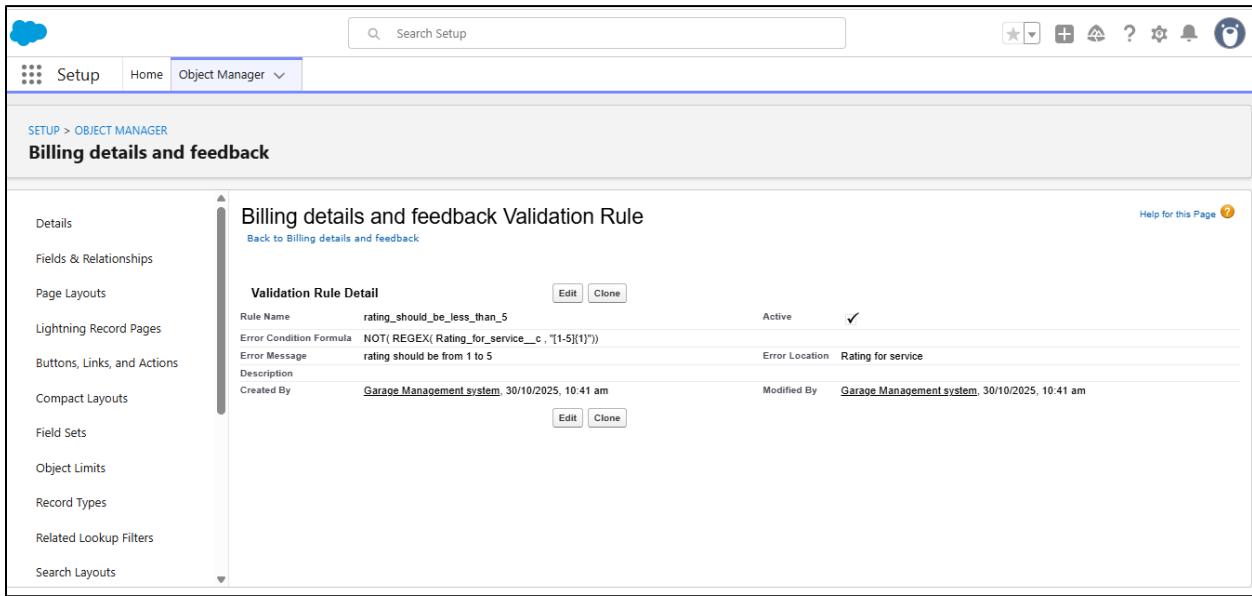
### Process:

- Navigate to Setup → Object Manager → Billing Details & Feedback → Validation Rules → New.
- Create the rule named rating\_should\_be\_less\_than\_5.
- Formula: OR(Rating\_\_c < 1, Rating\_\_c > 5)
- Error Message: “Rating should be between 1 and 5.”
- Activate the rule.

Validation Name	Formula	Error Message
Rating Validation	OR(Rating__c < 1, Rating__c > 5)	Rating should be between 1 and 5.

## Description:

This ensures customer feedback data remains accurate and prevents unrealistic entries like zero or ratings above five.



The screenshot shows the Salesforce Object Manager interface. The left sidebar lists various setup options: Details, Fields & Relationships, Page Layouts, Lightning Record Pages, Buttons, Links, and Actions, Compact Layouts, Field Sets, Object Limits, Record Types, Related Lookup Filters, and Search Layouts. The main content area is titled "Billing details and feedback Validation Rule". It displays the validation rule detail with the following information:

- Validation Rule Detail**: The rule is named "rating\_should\_be\_less\_than\_5".
- Error Condition Formula**: NOT( REGEX( Rating\_for\_service\_\_c , "[1-5]{1}" ))
- Error Message**: rating should be from 1 to 5
- Description**: (empty)
- Created By**: Garage Management system, 30/10/2025, 10:41 am
- Modified By**: Garage Management system, 30/10/2025, 10:41 am
- Active**: checked
- Error Location**: Rating for service

At the top of the page, there is a navigation bar with icons for Setup, Home, and Object Manager, along with a search bar and other standard Salesforce navigation tools.

## MILESTONE 6: DUPLICATE RULES

Duplicate rules help prevent data redundancy, ensuring that no two records store the same customer information.

### Objective:

To identify and stop creation of duplicate customer entries based on phone and email fields.

### Process:

- Go to Setup → Duplicate Management → Matching Rules.
- Create a Matching Rule for Customer Details Object using Phone and Email fields.
- Then, create a Duplicate Rule using this matching rule.
- Configure it to Alert User on duplication and Allow Save with Warning (optional).
- Test by entering duplicate records.

Rule Type	Object	Matching Criteria	Action
Matching Rule	Customer Details	Email, Phone	Identify duplicates
Duplicate Rule	Customer Details	Uses above rule	Alerts user on duplicate

## Description:

This rule ensures clean, reliable customer data, reducing confusion and maintaining a single source of truth for all client records.

The screenshot shows the Matching Rules page in the Salesforce Setup interface. The page title is "Matching Rules" under the "SETUP" tab. A matching rule named "Matching customer details" is displayed, which uses the "Customer Details" object and matches on "Gmail EXACT MatchBlank = FALSE" and "Phone\_number EXACT MatchBlank = FALSE". The rule is active and was created by "Garage Management system" on 30/10/2025, 10:46 am.

The screenshot shows the Duplicate Rules page in the Salesforce Setup interface. A duplicate rule named "Customer Detail duplicate" is displayed, which uses the "Customer Details" object and enforces sharing rules. It allows creating and editing records, with alert and report checkboxes checked. The rule is mapped to the "Matching customer details" matching rule. The rule was created by "Garage Management system" on 30/10/2025, 10:49 am.

## MILESTONE 7: PROFILES

Profiles in Salesforce define what users can see, do, and edit within the system. Custom profiles were created for the Manager and Sales Person roles to suit their daily operations.

### ACTIVITY 1: Manager Profile

#### Objective:

To provide the manager with complete control over all custom objects.

#### Process:

- Navigate to Setup → Profiles → Clone Standard User Profile.
- Rename the cloned profile as Manager Profile.
- Provide Create, Read, Edit, Delete permissions for all custom objects.
- Set Garage Management Application as the default app.
- Save and assign the profile to Manager users.

Profile	Base Profile	Access Level
Manager Profile	Standard User	Full CRUD on all custom objects

#### Description:

The Manager Profile allows managers to monitor and control all customer, appointment, and billing records for administrative oversight.

Custom App Settings					
	Visible	Default		Visible	Default
All Tabs (standard__AllTabSet)	<input checked="" type="checkbox"/>	<input type="radio"/>	Queue Management (standard__QueueManagement)	<input checked="" type="checkbox"/>	<input type="radio"/>
Analytics Studio (standard__Insights)	<input checked="" type="checkbox"/>	<input type="radio"/>	Sales (standard__LightningSales)	<input checked="" type="checkbox"/>	<input type="radio"/>
App Launcher (standard__AppLauncher)	<input checked="" type="checkbox"/>	<input type="radio"/>	Sales (standard__Sales)	<input type="checkbox"/>	<input checked="" type="radio"/>
Approvals (standard__Approvals)	<input checked="" type="checkbox"/>	<input type="radio"/>	Sales Cloud Mobile (standard__SalesCloudMobile)	<input checked="" type="checkbox"/>	<input type="radio"/>
Automation (standard__FlowsApp)	<input checked="" type="checkbox"/>	<input type="radio"/>	Sales Console (standard__LightningSalesConsole)	<input checked="" type="checkbox"/>	<input type="radio"/>
Bolt Solutions (standard__LightningBolt)	<input checked="" type="checkbox"/>	<input type="radio"/>	Salesforce Chatter (standard__Chatter)	<input checked="" type="checkbox"/>	<input type="radio"/>
Community (standard__Community)	<input checked="" type="checkbox"/>	<input type="radio"/>	Salesforce Scheduler Setup (standard__LightningScheduler)	<input type="checkbox"/>	<input type="radio"/>
Content (standard__Content)	<input checked="" type="checkbox"/>	<input type="radio"/>	Sample Console (standard__ServiceConsole)	<input type="checkbox"/>	<input type="radio"/>
Data Manager (standard__DataManager)	<input checked="" type="checkbox"/>	<input type="radio"/>	Service (standard__Service)	<input checked="" type="checkbox"/>	<input type="radio"/>
Digital Experiences (standard__SalesforceCMS)	<input checked="" type="checkbox"/>	<input type="radio"/>	Service Console (standard__LightningService)	<input checked="" type="checkbox"/>	<input type="radio"/>
Garage Management Application (Garage_Management_Application)	<input type="checkbox"/>	<input type="radio"/>	Site.com (standard__Sites)	<input checked="" type="checkbox"/>	<input type="radio"/>
Lightning Usage App (standard__LightningInstrumentation)	<input checked="" type="checkbox"/>	<input type="radio"/>	Subscription Management (standard__RevenueCloudConsole)	<input checked="" type="checkbox"/>	<input type="radio"/>

## ACTIVITY 2: Sales Person Profile

### Objective:

To restrict access while still allowing essential operations for sales users.

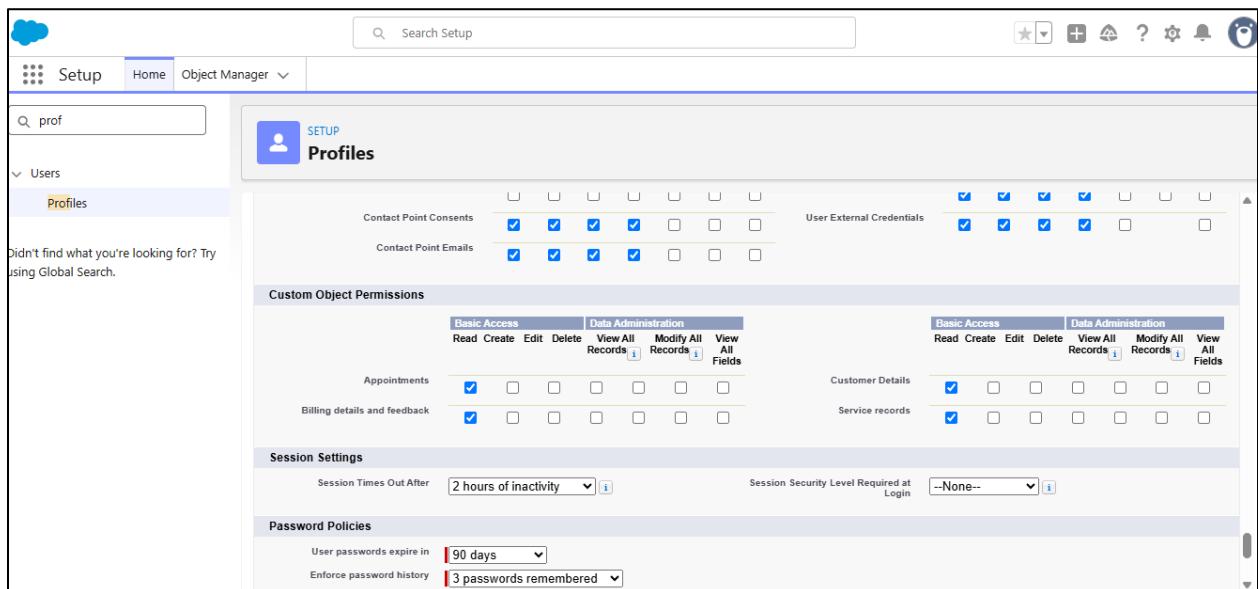
### Process:

- Clone Salesforce Platform User Profile and rename it Sales Person Profile.
- Grant Create and Edit permissions for Appointment, Service, and Billing objects only.
- Set Garage Management App as the default app.
- Save and assign to Sales team members.

Profile	Base Profile	Access Level
Sales Person Profile	Salesforce Platform User	Limited access – operational objects only

### Description:

This profile allows the sales team to focus on customer operations while restricting administrative permissions, maintaining system security.



## MILESTONE 8: ROLES & ROLE HIERARCHY

Roles determine record visibility and reporting structure. A simple hierarchy was designed to reflect the garage's chain of command.

### Process:

- Go to Setup → Roles → Set Up Roles → Add Role.
- Create the following hierarchy:
  - CEO (Top)
  - Manager (Reports to CEO)
  - Sales Person (Reports to Manager)

Role Name	Reports To	Visibility
CEO	—	Full org-wide
Manager	CEO	Can see subordinate records
Sales Person	Manager	Can see own records

### Description:

This hierarchy ensures that managers can view all records created by salespersons under them, promoting structured data sharing and accountability.

The screenshot shows the Salesforce Setup Roles page. The left sidebar has a search bar and navigation links for Users, Roles, Feature Settings, Sales, Service, and Case Teams. The main area is titled "Creating the Role Hierarchy" and displays a tree view of roles for "Alagappa Chettiar Government College of Engineering and Technology". The hierarchy includes CEO, CFO, COO, Manager, Salesperson, SVP.Customer.Service & Support, Customer.Support.International, Customer.Support.North America, and Installation & Repair Services. Each node has "Edit | Del | Assign" options. A "Help for this Page" link is at the top right.

## MILESTONE 9: USERS

### Objective:

To create user accounts reflecting real-world employees within the garage.

### Process:

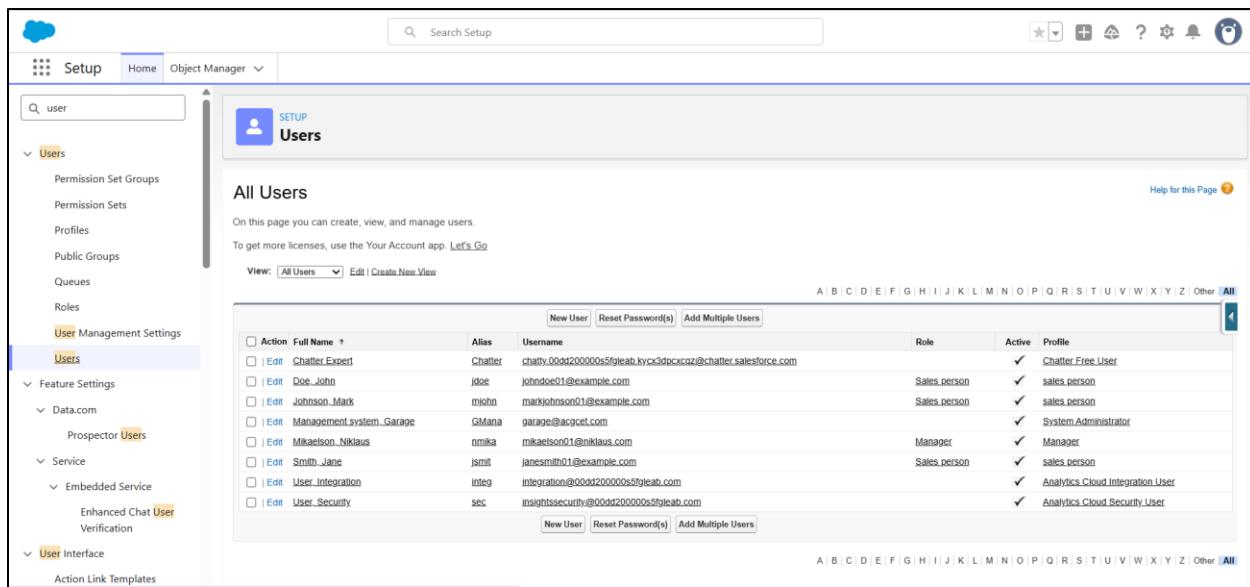
- Navigate to Setup → Users → New User.
- Enter details for each user, assign appropriate Role and Profile.

User Name	Role	Profile
Niklaus Mikaelson	Manager	Manager Profile

Jane Smith	Sales Person	Sales Person Profile
John Doe	Sales Person	Sales Person Profile
Mark Johnson	Sales Person	Sales Person Profile

## Description:

This user setup ensures a real-world simulation of organizational roles with accurate access permissions.



The screenshot shows the Salesforce Setup interface with the following details:

- Left Navigation Bar:** Shows the "Users" section under "User Management Settings". Other sections like "Feature Settings", "Data.com", "Prospector Users", "Service", "Embedded Service", and "User Interface" are also listed.
- Header:** Includes "Setup", "Home", "Object Manager", a search bar, and various icons.
- Page Title:** "SETUP Users" with a "All Users" link.
- Page Content:** "All Users" section with a table listing users. The table includes columns for Action, Full Name, Alias, Username, Role, Active, and Profile.
- Data in Table:**

Action	Full Name	Alias	Username	Role	Active	Profile
<input type="checkbox"/> Edit	Chatter.Expert	Chatter	chatty.00dd200000s5fgleab.kyc3dpcc0z@chatter.salesforce.com	Salesperson	<input checked="" type="checkbox"/>	Chatter Free User
<input type="checkbox"/> Edit	Doc_John	jdoe	johndoe01@example.com	Salesperson	<input checked="" type="checkbox"/>	Sales person
<input type="checkbox"/> Edit	Johnson_Mark	mjohn	markjohnson01@example.com	Salesperson	<input checked="" type="checkbox"/>	Sales person
<input type="checkbox"/> Edit	Management_system_Garage	GMania	garage@acpcet.com	System Administrator	<input checked="" type="checkbox"/>	System Administrator
<input type="checkbox"/> Edit	Mikaelson_Niklaus	nmikla	mikaelson01@niklaus.com	Manager	<input checked="" type="checkbox"/>	Manager
<input type="checkbox"/> Edit	Smith_Jane	jsmith	janesmith01@example.com	Salesperson	<input checked="" type="checkbox"/>	Sales person
<input type="checkbox"/> Edit	User_Integration	integ	integration@00dd200000s5fgleab.com	Analytics Cloud Integration User	<input checked="" type="checkbox"/>	Analytics Cloud Integration User
<input type="checkbox"/> Edit	User_Security	sec	insightssecurity@00dd200000s5fgleab.com	Analytics Cloud Security User	<input checked="" type="checkbox"/>	Analytics Cloud Security User

## MILESTONE 10: PUBLIC GROUPS

Public Groups simplify record sharing and collaboration by grouping users based on function or role.

### Process:

- Navigate to Setup → Public Groups → New.
- Name: Sales Team
- Add members: Jane Smith, John Doe, and Mark Johnson.
- Save the group.

Group Name	Members	Purpose
Sales Team	All Sales Person Users	For sharing and collaboration

### Description:

This group makes sharing rules and report access easier to manage for all sales personnel collectively.

**SETUP** Public Groups

**Sales team**

Group Label sales team  
Group Name sales\_team  
Grant Access Using Hierarchies ✓  
Description  
Created By Garage Management system, 30/10/2025, 10:52 am Modified By Garage Management system, 30/10/2025, 10:52 am

Name	Type
sales_person	Role

**View All Users**

Didn't find what you're looking for? Try using Global Search.

**SETUP** Roles

**Sales person**

Below is the list of users assigned to this role. Click Edit to modify the role name. Click Assign Users to Role to assign existing users to this role. Click New User to create a user for this role.

Hierarchy: Alagappa Chettiar Government College of Engineering and Technology > CEO > Manager > sales person

[Users in sales person Role \[3\]](#)

**Role Detail**

Label	Role Name
sales person	sales_person

This role reports to Manager  
Modified By Garage Management system, 30/10/2025, 10:45 am  
Opportunity Access  
Case Access

Role Name as displayed on reports  
Sharing Groups [Role](#) [Role and Internal Subordinates](#)

Users in this role can edit all opportunities associated with accounts that they own, regardless of who owns the opportunities  
Users in this role can edit all cases associated with accounts that they own, regardless of who owns the cases

**Users in sales person Role**

Action	Full Name	Alias	Username	Active
Edit	Mark Johnson	mjohn	markjohnson01@example.com	✓
Edit	John Doe	jdoe	johndoe01@example.com	✓

[Assign Users to Role](#) [New User](#)

[Users in sales person Role Help](#)

Didn't find what you're looking for? Try using Global Search.

## MILESTONE 11: SHARING SETTINGS

Sharing settings control record-level access. To secure service data while maintaining transparency for managers, selective sharing rules were configured.

### Process:

- Go to Setup → Sharing Settings.
- Set Service Records Object Organization-Wide Default (OWD) to Private.
- Create a Sharing Rule:
  - Criteria: Owned by Sales Person Role
  - Shared With: Manager Role
  - Access Level: Read/Write
- Save and test the rule.

Object	OWD Setting	Shared From	Shared To	Access
Service Records	Private	Sales Person Role	Manager Role	Read/Write

### Description:

This configuration ensures that while service data remains private to individual salespersons, their managers can still access and supervise all operations.

The Sharing Settings page in the Salesforce Setup interface. The left sidebar shows 'Security' with 'Sharing Settings' selected. The main content area is titled 'Sharing Settings' and contains two sections: 'User Provisioning Request' and 'Other Settings'. The 'User Provisioning Request' section lists various objects with sharing rules: Private (User Provisioning Request, Waitlist, Web Cart Document, Work Order, Work Plan, Work Plan Template, Work Step Template, Work Type, Work Type Group, Appointment, Billing details and feedback, Customer Details, Service records). The 'Other Settings' section includes 'Manager Groups' and a note about 'Sharing must user received access'.

The Roles page in the Salesforce Setup interface. The left sidebar shows 'Security' with 'Sharing Settings' selected. The main content area is titled 'Roles' and shows a 'Sales person' role. The 'Role Detail' section displays the role name 'sales person', reports to 'Manager', modified by 'Garage Management system' on 30/10/2025, 10:45 am, and has 'Opportunity Access' and 'Case Access'. Below this is a table titled 'Users in sales person Role' showing three users: Mark Johnson, John Doe, and Jane Smith, all marked as 'Active'.

## **MILESTONE 12: FLOWS**

Flows were built to automate repetitive tasks and improve efficiency.

### **ACTIVITY 1: Billing Amount Flow**

#### **Objective:**

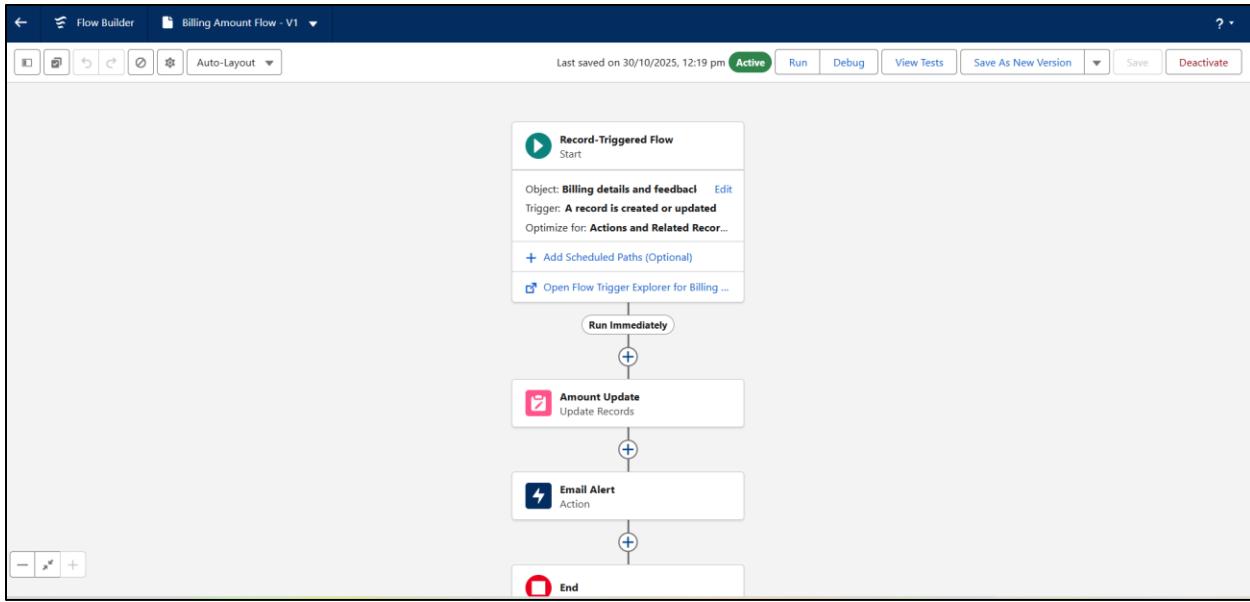
To automatically update payment details and send a confirmation email once payment is marked as completed.

#### **Process:**

- Navigate to Setup → Flow → New Flow → Record-Triggered Flow.
- Object: Billing Details & Feedback.
- Trigger: When a record is updated and Payment\_Status\_\_c = "Completed".
- Actions:
  1. Update field Payment\_Paid\_\_c with relevant amount.
  2. Send an email to the customer confirming payment.

#### **Description:**

This automation eliminates manual follow-up and enhances customer experience through instant confirmation.



## ACTIVITY 2: Update Service Status Flow

### Objective:

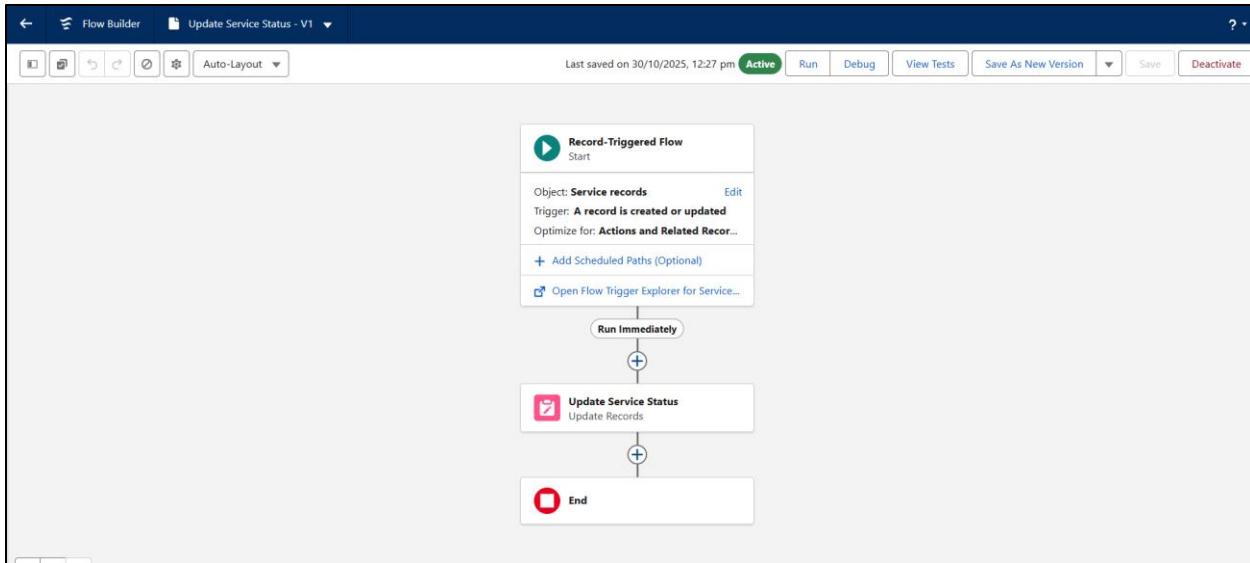
To auto-update service status when the quality check is completed.

### Process:

- Create another Record-Triggered Flow on Service Records.
- Trigger: When Quality\_Check\_Status\_\_c = TRUE.
- Action: Update Service\_Status\_\_c = "Completed".
- Save and activate.

### Description:

This automation ensures service stages are updated in real time, helping managers and staff track progress accurately.



## MILESTONE 13: APEX TRIGGER

### Objective:

To automatically calculate the total service cost based on selected service checkboxes.

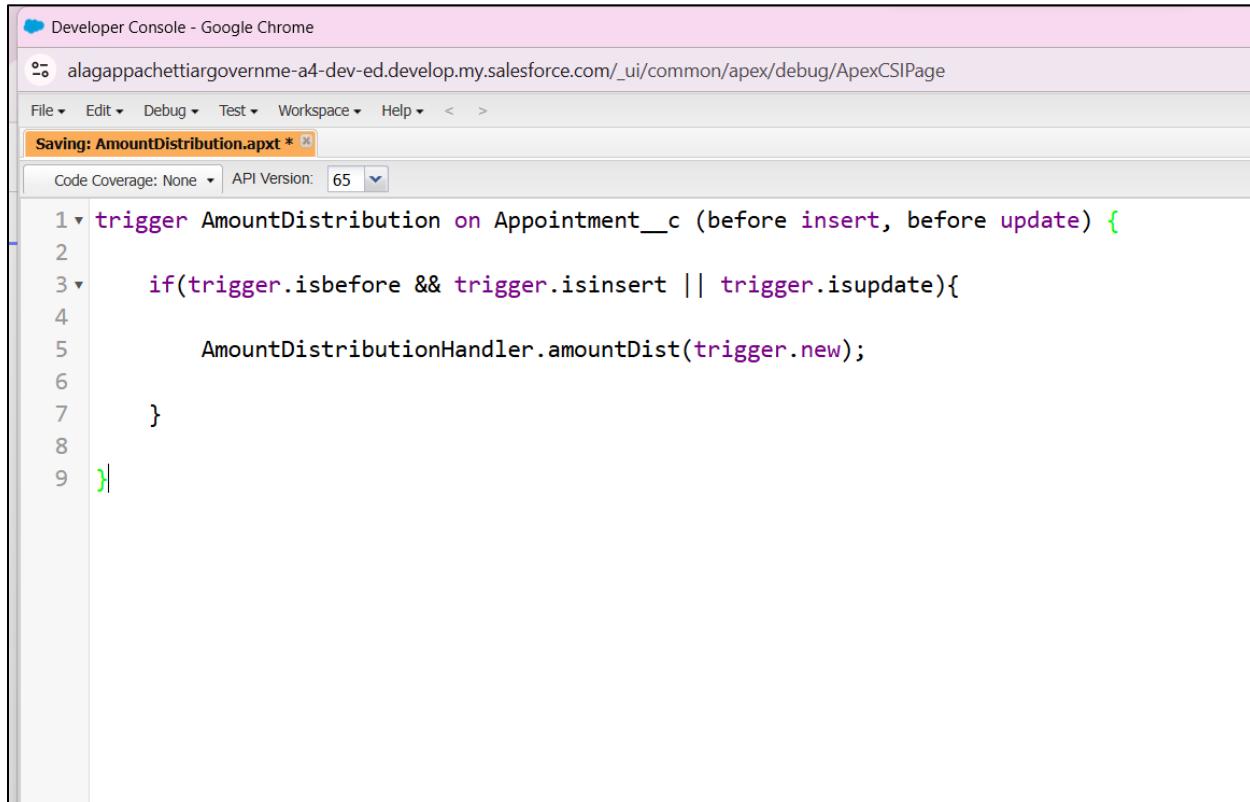
### Process:

- Created an Apex Trigger named AmountDistribution on the Appointment Object.
- Built a handler class AmountDistributionHandler containing business logic.
- When checkboxes (Maintenance, Repairs, Replacement Parts) are selected, the trigger sums predefined costs and updates the Service\_Amount\_\_c field automatically.
- Tested successfully for multiple records.

Trigger Name	Object	Function
AmountDistribution	Appointment	Calculates total service cost

### Description:

This trigger automates cost calculation, reducing manual work and ensuring accurate billing.



The screenshot shows the Salesforce Developer Console in Google Chrome. The URL is `alagappachettigovernme-a4-dev-ed.develop.my.salesforce.com/_ui/common/apex/debug/ApexCSIPage`. The trigger being edited is `AmountDistribution.apxt`. The code is as follows:

```

trigger AmountDistribution on Appointment__c (before insert, before update) {
    if(trigger.isbefore && trigger.isinsert || trigger.isupdate){
        AmountDistributionHandler.amountDist(trigger.new);
    }
}

```

## **MILESTONE 14: REPORTS**

### **Objective:**

To create visual reports summarizing service and payment data for business analysis.

### **Process:**

- Create a Report Folder named Garage Management Folder.
- Share the folder with the Manager Role.
- Create a Custom Report Type:
  1. Primary Object: Customer Details
  2. Related Objects: Appointment → Service Records → Billing Details
- Create a Report named New Service Information Report.
- Fields Displayed: Customer Name, Appointment Date, Service Status, Payment Paid.
- Group data by Payment Status and Rating.
- Add a Line Chart visualization.

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

Reports Recent 1 item

REPORTS Recent Created by Me Private Reports Public Reports All Reports FOLDERS All Folders Created by Me Shared with Me FAVORITES All Favorites

New Service information Report Garage Management Folder Garage Management system 1/11/2025, 6:27 am

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

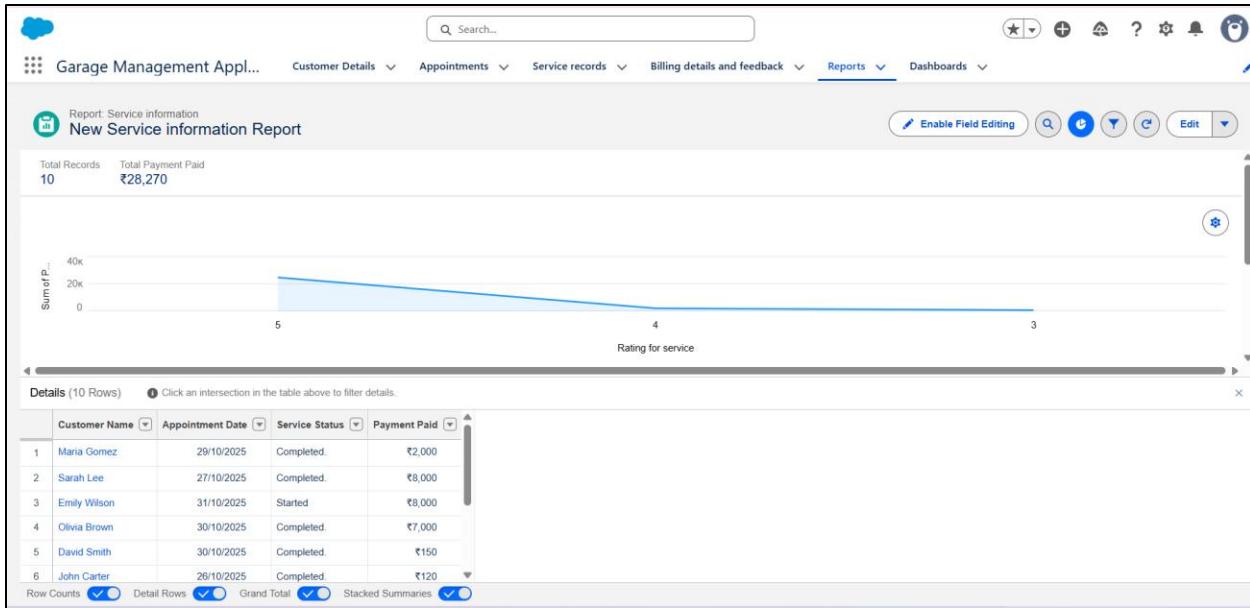
Report: Service information New Service information Report

Total Records Total Payment Paid  
10 ₹28,270

Rating for service	Payment Status	Pending	Completed	Total
5	Sum of Payment Paid Record Count	₹0 0	₹25,000 4	₹25,000 4
4	Sum of Payment Paid Record Count	₹270 2	₹2,000 1	₹2,270 3
3	Sum of Payment Paid Record Count	₹1,000 3	₹0 0	₹1,000 3
<b>Total</b>	Sum of Payment Paid Record Count	<b>₹1,270 5</b>	<b>₹27,000 5</b>	<b>₹28,270 10</b>

Details (10 Rows) Click an intersection in the table above to filter details.

Customer Name	Appointment Date	Service Status	Payment Paid
1 Maria Gomez	29/10/2025	Completed.	₹2,000
2 Sarah Lee	27/10/2025	Completed.	₹8,000
3 Emily Wilson	31/10/2025	Started	₹8,000
4 Olivia Brown	30/10/2025	Completed.	₹7,000
5 David Smith	30/10/2025	Completed.	₹150
6 John Carter	26/10/2025	Completed	₹120
Row Counts	Detail Rows	Grand Total	Stacked Summaries



## Description:

This report provides a clear overview of business performance, helping management assess service quality and financial outcomes.

## MILESTONE 15: DASHBOARDS

### Objective:

To visualize reports for management insights.

### Process:

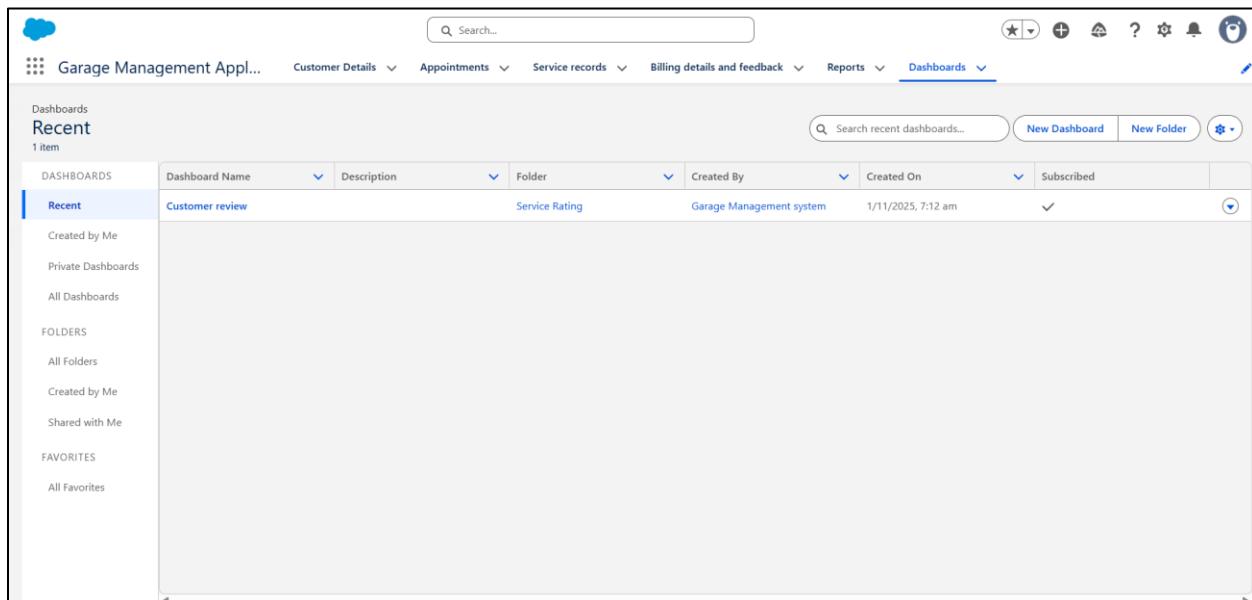
- Create a Dashboard Folder: Service Rating Dashboard.
- Add a dashboard: Garage Performance Dashboard.
- Add components from the Service Information Report.

- Schedule weekly email delivery (every Monday) to managers.

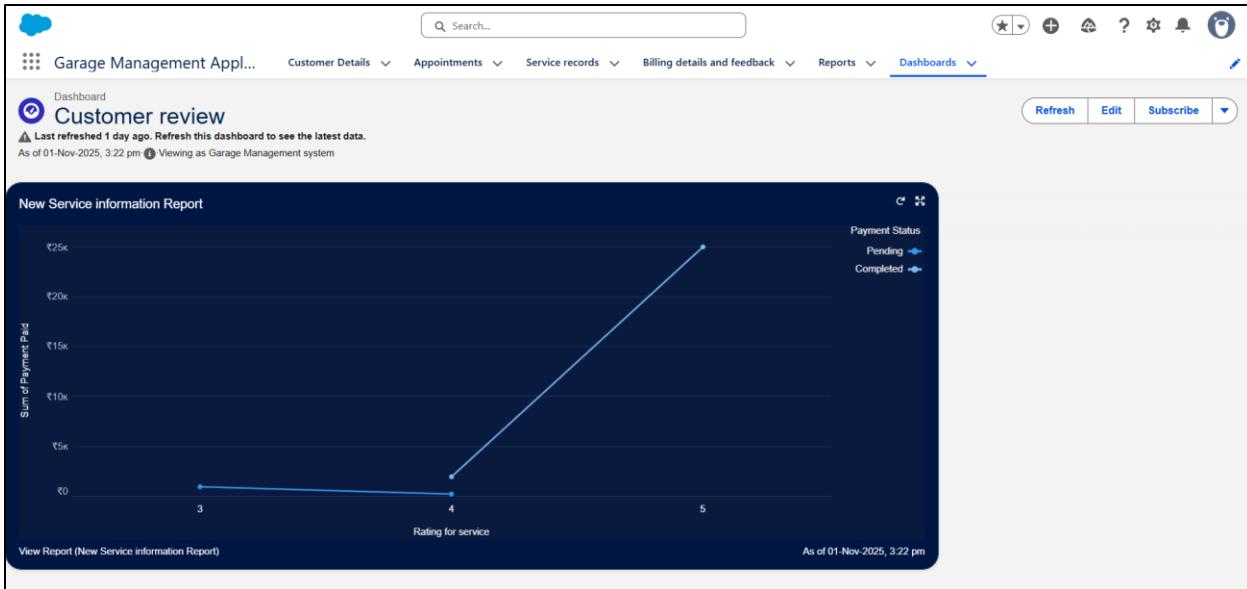
Dashboard	Source Report	Shared With	Frequency
Garage Performance Dashboard	New Service Information Report	Managers	Weekly (Monday)

### Description:

The dashboard enables management to review garage performance trends at a glance, improving strategic decision-making.



The screenshot shows the 'Dashboards' section of the Garage Management Application. The top navigation bar includes links for Customer Details, Appointments, Service records, Billing details and feedback, Reports, and Dashboards. The 'Dashboards' link is currently selected. On the left, a sidebar menu lists categories: Dashboards (Recent, Created by Me, Private Dashboards, All Dashboards), FOLDERS (All Folders, Created by Me, Shared with Me), and FAVORITES (All Favorites). The main content area displays a table of recent dashboards. The table has columns for Dashboard Name, Description, Folder, Created By, Created On, and Subscribed. One row is visible, showing 'Customer review' as the dashboard name, 'Service Rating' as the description, 'Garage Management system' as the created by, and '1/11/2025, 7:12 am' as the created on date. There are also search and filter options at the top of the table.



## MILESTONE 16: USER ADOPTION & TESTING

### Objective:

To verify that all workflows, automations, and relationships function correctly.

### Process:

- Created a Customer Record.
- Created an Appointment linked to the customer — trigger auto-calculated Service Amount.
- Created a Service Record — once Quality Check was checked, Service Status auto-updated via Flow.
- Created Billing Details — marking Payment Status “Completed” auto-updated Payment Paid and sent a confirmation email.

- Verified data flow across all objects.

New Customer Details

**Information**

\*Customer Name: John

Phone number: 555-1001

Gmail: mac@ggmail.com

Owner: Garage Management system

Cancel Save & New Save

New Appointment

**Information**

Appointment Name: Mac

Customer Details: Mac

\*Appointment Date: 28/10/2025

Maintenance service:

Repairs:

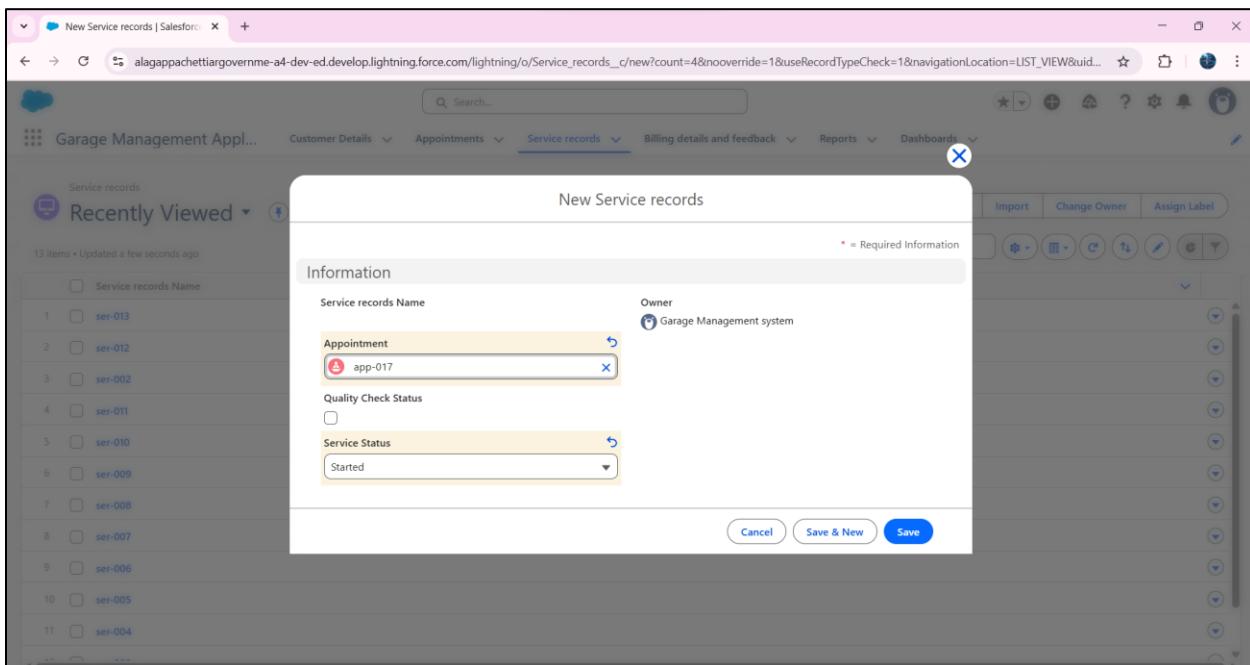
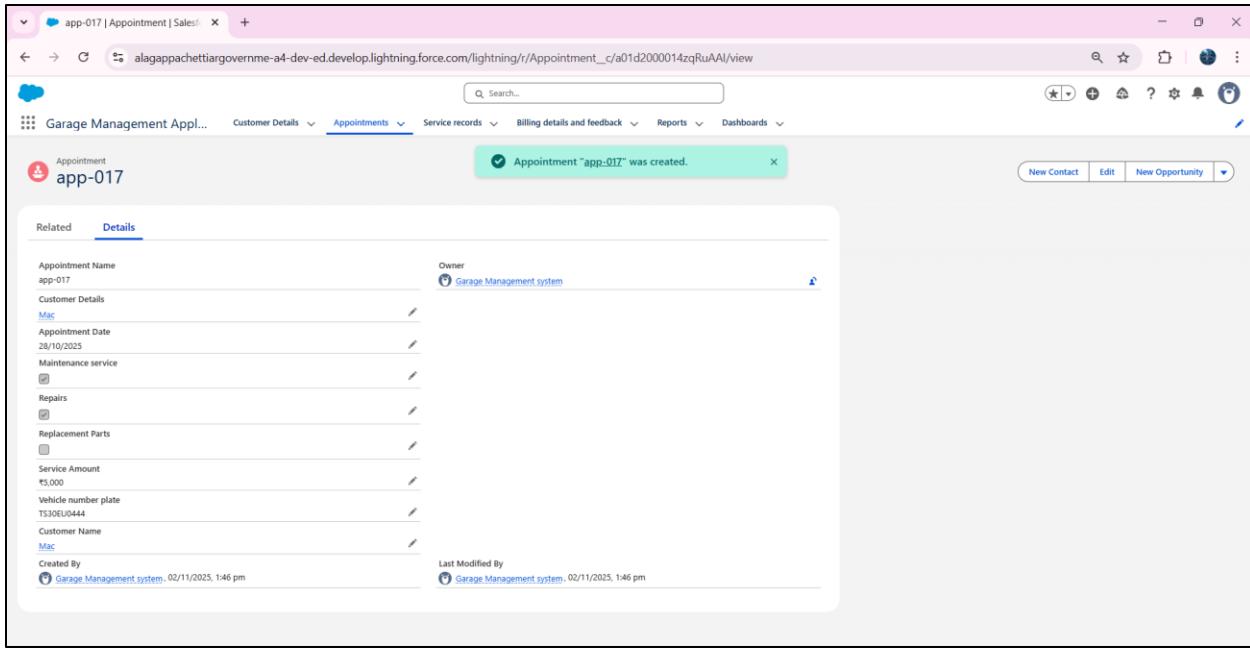
Replacement Parts:

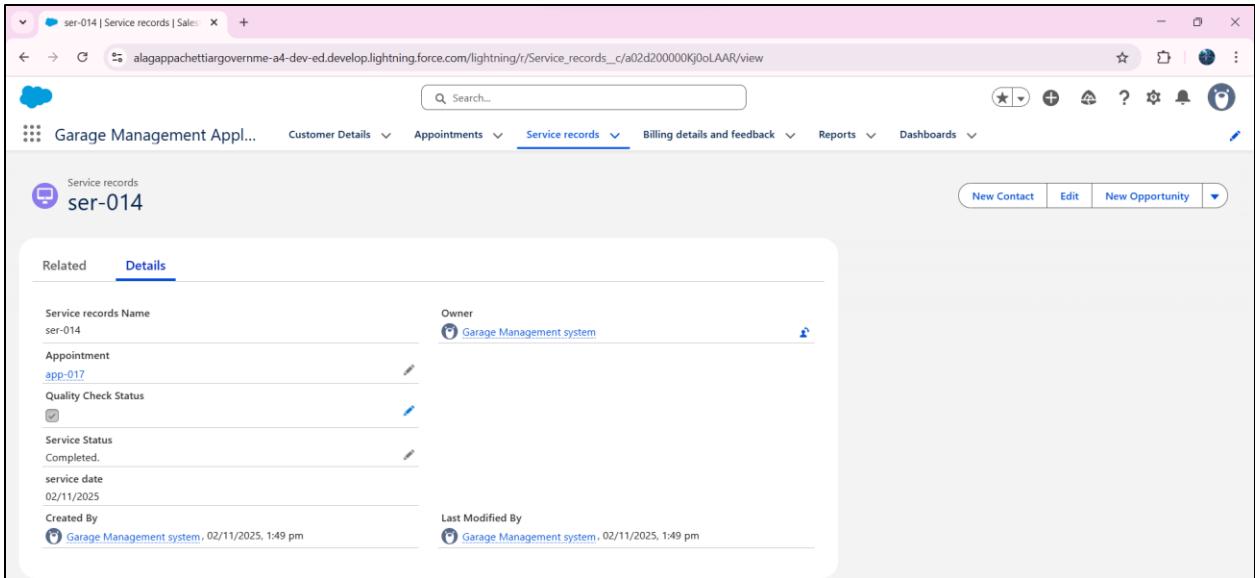
Service Amount:

\*Vehicle number plate: TS30EU0443

Customer Name: Mac

Cancel Save & New Save





## Description:

All automated processes worked seamlessly. Data linkage between objects was validated, and no errors were encountered, confirming system reliability and successful implementation.

## Conclusion

In conclusion, the Garage Management System (GMS) provides an efficient, reliable, and user-friendly solution for managing garage operations. It simplifies key processes such as vehicle service scheduling, inventory control, billing, and customer management. By automating daily tasks, the system reduces manual errors, improves time management, and enhances overall productivity. The successful implementation of this system demonstrates how technology can transform traditional garage operations into a more organized, data-driven, and customer-focused service environment.