

GARAGE MANAGEMENT SYSTEM

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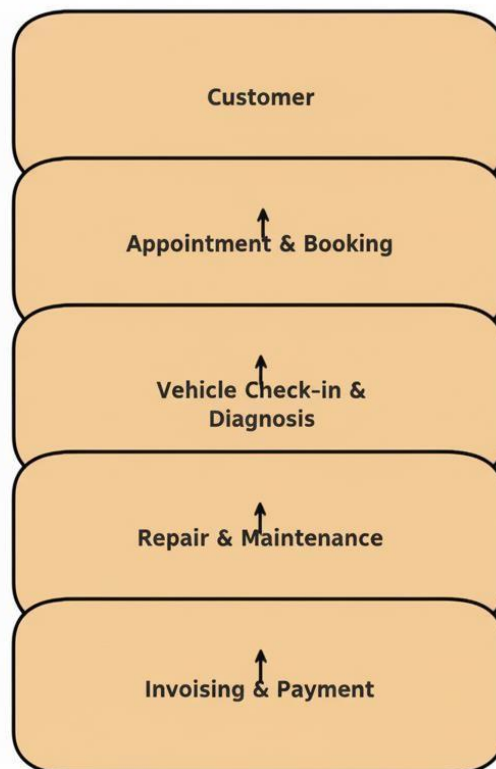
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1.INTRODUCTION

1.1.Project Overview

The Garage Management System is a valuable tool for automotive repair facilities, helping them deliver top-notch service, increase operational efficiency, and build lasting customer relationships. With its user-friendly interface and powerful features, GMS empowers garages to thrive in a competitive market while ensuring a seamless and satisfying experience for both customers and staff.

Simple Flow Chart - Garage Management System



1.2 Purpose

The purpose of the Garage Management System is to streamline and automate the day-to-day operations of automotive repair facilities. It ensures efficient handling of appointments, service tracking, billing, and customer interactions while minimizing manual errors. By providing better control over resources and enhancing transparency, the system helps improve customer satisfaction and supports garage staff and managers in delivering reliable and timely services.

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First name: Bindhuja ✓ Last name: B ✓

Job title: Student ✓ Work email: 23bsca115bindhujat ✓

Company: Skacas ✓ Country/Region: India ✓

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- **Created objects: Customer Details, Appointment, Service Records & Billings and feedback**

SETUP > OBJECT MANAGER

Customer Details

Details

Fields & Relationships

6 Items, Sorted by Field Label

FIELD LABEL	FIELD NAME	DATA TYPE	CONTROLLING FIELD	INDEXED
Created By	CreatedById	Lookup(User)		
Customer Name	Name	Text(80)		✓
Gmail	Gmail__c	Email		✓
Last Modified By	LastModifiedById	Lookup(User)		
Owner	OwnerId	Lookup(User:Group)		✓
Phone number	Phone_number__c	Phone		✓

orgfarm-fdc6753e32-dev-ed.develop.lightning.force.com/lightning/setup/ObjectManager/01lgK0000023uUL/Details/View

Setup Home Object Manager

SETUP > OBJECT MANAGER

Appointment

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

List View Button Layout

Restriction Rules

Scoping Rules

Details

Description

API Name
Appointment__c

Custom

Singular Label
Appointment

Plural Label
Appointments

Enable Reports
✓

Track Activities

Track Field History
✓

Deployment Status
Deployed

Help Settings
Standard salesforce.com Help Window

Edit Delete

orgfarm-fdc6753e32-dev-ed.develop.lightning.force.com/lightning/setup/ObjectManager/01lgK0000023ue1/Details/View

Setup Home Object Manager

SETUP > OBJECT MANAGER

Service records

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

List View Button Layout

Restriction Rules

Scoping Rules

Details

Description

API Name
Service_records__c

Custom

Singular Label
Service records

Plural Label
Service records

Enable Reports
✓

Track Activities

Track Field History
✓

Deployment Status
Deployed

Help Settings
Standard salesforce.com Help Window

Edit Delete

The screenshot shows the Salesforce Setup interface for the 'Billing details and feedback' object. The left sidebar contains a navigation menu with options like 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, and Scoping Rules. The main content area is titled 'Details' and includes a description, API Name (Billing_details_and_feedback_c), Custom checkbox, Singular Label (Billing details and feedback), Plural Label (Billing details and feedback), and a list of settings: Enable Reports (checked), Track Activities (checked), Track Field History (checked), Deployment Status (Deployed), and Help Settings (Standard salesforce.com Help Window). Edit and Delete buttons are visible in the top right corner.

• Configured fields and relationship :

The screenshot shows the 'Fields & Relationships' page for the 'Billing details and feedback' object. The left sidebar is the same as the previous screenshot. The main content area is titled 'Fields & Relationships' and shows a list of 8 items, sorted by Field Label. The table below lists the fields and their properties.

FIELD LABEL	FIELD NAME	DATA TYPE	CONTROLLING FIELD	INDEXED
Billing details and feedback Name	Name	Auto Number		✓
Created By	CreatedBy	Lookup(User)		
Last Modified By	LastModifiedBy	Lookup(User)		
Owner	OwnerId	Lookup(User,Group)		✓
Payment Paid	Payment_Paid__c	Currency(18, 0)		
Payment Status	Payment_Status__c	Picklist		
Rating for service	Rating_for_service__c	Text(1)		
Service records	Service_records__c	Lookup(Service records)		✓

orgfarm-fdc6753e32-dev-ed.develop.lightning.force.com/lightning/setup/ObjectManager/01gK0000023uJL/FieldsAndRelationships/view

Setup Home Object Manager

SETUP > OBJECT MANAGER
Appointment

Details

Fields & Relationships
11 Items, Sorted by Field Label

Quick Find New Deleted Fields Field Dependencies Set History Tracking

FIELD LABEL	FIELD NAME	DATA TYPE	CONTROLLING FIELD	INDEXED
Appointment Date	Appointment_Date__c	Date		
Appointment Name	Name	Auto Number		✓
Created By	CreatedById	Lookup(User)		
Customer Details	Customer_Details__c	Lookup(Customer Details)		✓
Last Modified By	LastModifiedById	Lookup(User)		
Maintenance service	Maintenance_service__c	Checkbox		
Owner	OwnerId	Lookup(User.Group)		✓
Repairs	Repairs__c	Checkbox		
Replacement Parts	Replacement_Parts__c	Checkbox		
Service Amount	Service_Amount__c	Currency(18, 0)		

orgfarm-fdc6753e32-dev-ed.develop.lightning.force.com/lightning/setup/ObjectManager/01gK0000023uNt/FieldsAndRelationships/view

Setup Home Object Manager

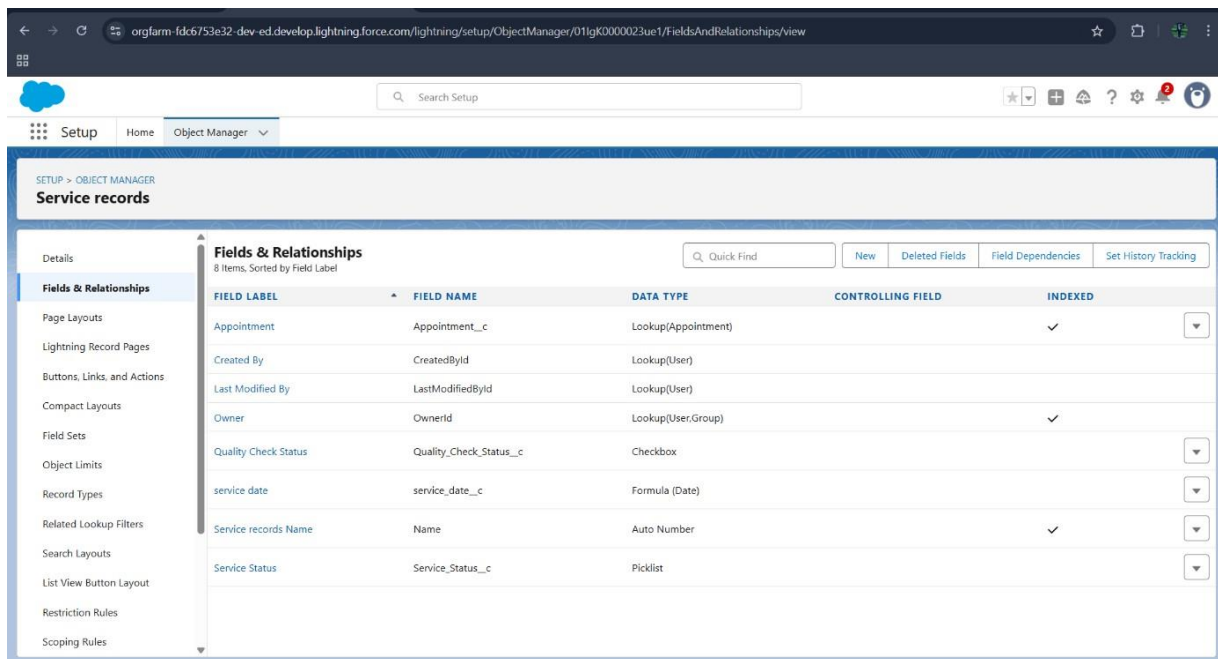
SETUP > OBJECT MANAGER
Customer Details

Details

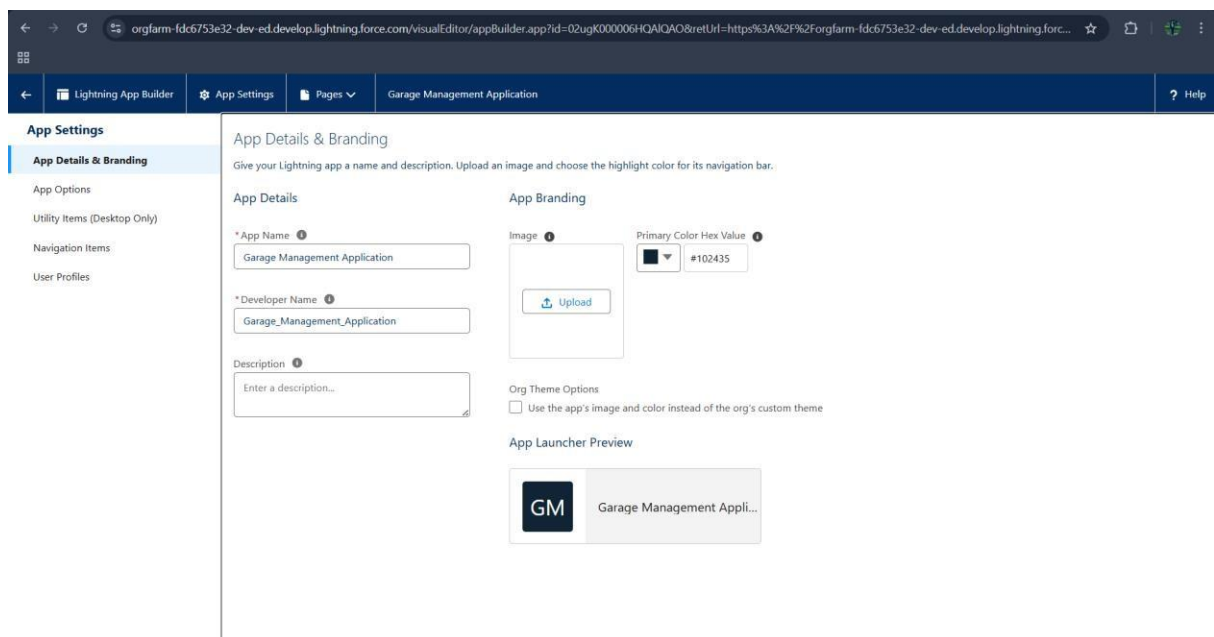
Fields & Relationships
6 Items, Sorted by Field Label

Quick Find New Deleted Fields Field Dependencies Set History Tracking

FIELD LABEL	FIELD NAME	DATA TYPE	CONTROLLING FIELD	INDEXED
Created By	CreatedById	Lookup(User)		
Customer Name	Name	Text(80)		✓
Gmail	Gmail__c	Email		
Last Modified By	LastModifiedById	Lookup(User)		
Owner	OwnerId	Lookup(User.Group)		✓
Phone number	Phone_number__c	Phone		



- Developed Lighting App with relevant tabs



orgfarm-fdc6753e32-dev-ed.develop.lightning.force.com/visualEditor/appBuilder.app?id=02ugK000006HQAIQAO&retUrl=https%3A%2F%2Forgfarm-fdc6753e32-dev-ed.develop.lightning.force...

Lightning App Builder App Settings Pages Garage Management Application Help

App Settings

- App Details & Branding
- App Options
- Utility Items (Desktop Only)
- Navigation Items
- User Profiles**

User Profiles

Choose the user profiles that can access this app.

Available Profiles

Search: Type to filter list...

- Analytics Cloud Integration User
- Analytics Cloud Security User
- Anypoint Integration
- Authenticated Website
- Authenticated Website
- B2B Reordering Portal Buyer Profile
- Contract Manager
- Custom: Marketing Profile
- Custom: Sales Profile
- Custom: Support Profile
- Customer Community Login User

Selected Profiles

- System Administrator
- Manager

Customer review | Salesforce Garage Management Application - Student

orgfarm-2f28e10bd8-dev-ed.develop.lightning.force.com/visualEditor/appBuilder.app?id=02ugL000006Cw1ZQAS&retUrl=https%3A%2F%2Forgfarm-2f28e10bd8-dev-ed.develop.lightning.forc...

Lightning App Builder App Settings Pages Garage Management Application Help

App Settings

- App Details & Branding
- App Options
- Utility Items (Desktop Only)
- Navigation Items**
- User Profiles

Navigation Items

Choose the items to include in the app, and arrange the order in which they appear. Users can personalize the navigation to add or move items, but users can't remove or rename the items that you add. Some navigation items are available only for phone or only for desktop. These items are dropped from the navigation bar when the app is viewed in a format that the item doesn't support.

Available Items

Search: Type to filter list...

- Accounts
- Activation Targets
- Activations
- All Sites
- Alternative Payment Methods
- Analytics
- App Launcher
- Appointment Categories
- Appointment Invitations
- Approval Requests

Selected Items

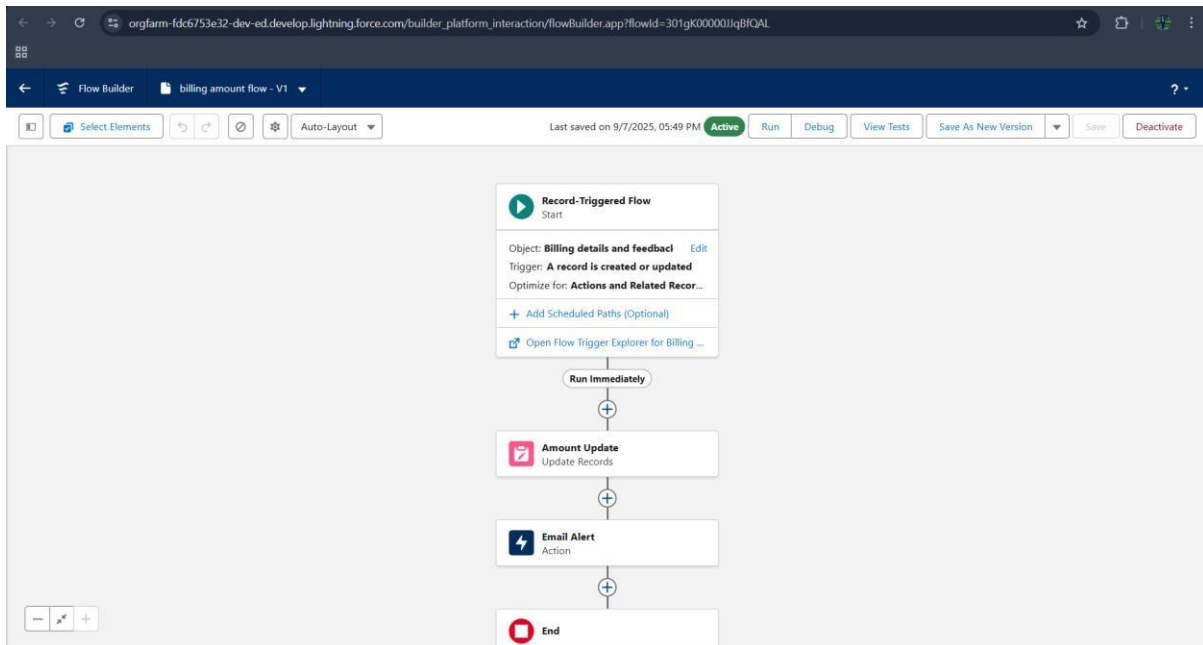
- Customer Details
- Appointments
- Service records
- Billing details and feedbacks
- Reports
- Dashboards

javascript:void(0)

Type here to search

11:21 AM 06-09-2025

- Implemented flow for billing and feedback and update amount :



- To create a validation rules for the objects :

The screenshot shows the Salesforce Setup page for 'Appointment' validation rules. The 'Validation Rule Edit' form is displayed, showing the rule name 'Vehicle', active status, and the error condition formula: `REGEX (Vehicle_number_plate__c , "[A-Z]{2}[0-9]{2}[A-Z]{2}[0-9]{4}")`. The formula is used to validate the 'Vehicle_number_plate__c' field. The 'Error Message' field is empty. The 'Functions' list on the right includes ABS, ACOS, ADDMONTHS, AND, ASCII, and ASIN.

• Profiles :

The screenshot shows the Salesforce Setup interface for the 'Profiles' section. The left sidebar contains a search bar with 'profil' and a list of users. The main content area is titled 'Profile Edit' and includes a 'Custom Profile' checkbox. Below this is the 'Custom App Settings' section, which is divided into two columns of settings. Each setting has a 'Visible' checkbox and a 'Default' radio button. A red banner at the top right of the settings section indicates '1 Required Information'.

App Setting	Visible	Default
All Tabs (standard__AllTabSet)	<input checked="" type="checkbox"/>	<input type="radio"/>
Analytics Studio (standard__Insights)	<input checked="" type="checkbox"/>	<input type="radio"/>
App Launcher (standard__AppLauncher)	<input checked="" type="checkbox"/>	<input type="radio"/>
Approvals (standard__Approvals)	<input checked="" type="checkbox"/>	<input type="radio"/>
Automation (standard__FlowsApp)	<input checked="" type="checkbox"/>	<input type="radio"/>
Bolt Solutions (standard__LightningBolt)	<input checked="" type="checkbox"/>	<input type="radio"/>
Community (standard__Community)	<input checked="" type="checkbox"/>	<input type="radio"/>
Content (standard__Content)	<input checked="" type="checkbox"/>	<input type="radio"/>
Data Cloud (standard__Audience360)	<input checked="" type="checkbox"/>	<input type="radio"/>
Data Manager (standard__DataManager)	<input checked="" type="checkbox"/>	<input type="radio"/>
Digital Experiences (standard__SalesforceCMS)	<input checked="" type="checkbox"/>	<input type="radio"/>
Garage Management Application (Garage_Management_Application)	<input type="checkbox"/>	<input type="radio"/>
Lightning Usage App (standard__LightningUsageApp)	<input checked="" type="checkbox"/>	<input type="radio"/>
My Service Journey (standard__MSJApp)	<input checked="" type="checkbox"/>	<input type="radio"/>
Queue Management (standard__QueueManagement)	<input checked="" type="checkbox"/>	<input type="radio"/>
Sales (standard__LightningSales)	<input checked="" type="checkbox"/>	<input type="radio"/>
Sales (standard__Sales)	<input type="checkbox"/>	<input checked="" type="radio"/>
Sales Cloud Mobile (standard__SalesCloudMobile)	<input checked="" type="checkbox"/>	<input type="radio"/>
Sales Console (standard__LightningSalesConsole)	<input checked="" type="checkbox"/>	<input type="radio"/>
Salesforce Chatter (standard__Chatter)	<input checked="" type="checkbox"/>	<input type="radio"/>
Salesforce Scheduler Setup (standard__LightningScheduler)	<input type="checkbox"/>	<input type="radio"/>
Sample Console (standard__ServiceConsole)	<input type="checkbox"/>	<input type="radio"/>
Service (standard__Service)	<input checked="" type="checkbox"/>	<input type="radio"/>
Service Console (standard__LightningService)	<input checked="" type="checkbox"/>	<input type="radio"/>
Site.com (standard__Sites)	<input checked="" type="checkbox"/>	<input type="radio"/>
Subscription Management (standard__SubscriptionManagement)	<input checked="" type="checkbox"/>	<input type="radio"/>

The screenshot shows the Salesforce Setup interface for the 'Profiles' section, specifically the 'Session Settings' and 'Password Policies' sections. The left sidebar is the same as the previous screenshot. The main content area has a table for permissions and two sections for session and password settings.

	Read	Create	Edit	Delete	View All Records	Modify All Records	View All Fields
Appointments	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Billing details and feedback	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Customer Details	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Service records	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Session Settings

Session Times Out After: 2 hours of inactivity

Session Security Level Required at Login: --None--

Password Policies

User passwords expire in: 90 days

Enforce password history: 3 passwords remembered

Minimum password length: 8

Password complexity requirement: Must include alpha and numeric characters

Password question requirement: Cannot contain password

Maximum invalid login attempts: 10

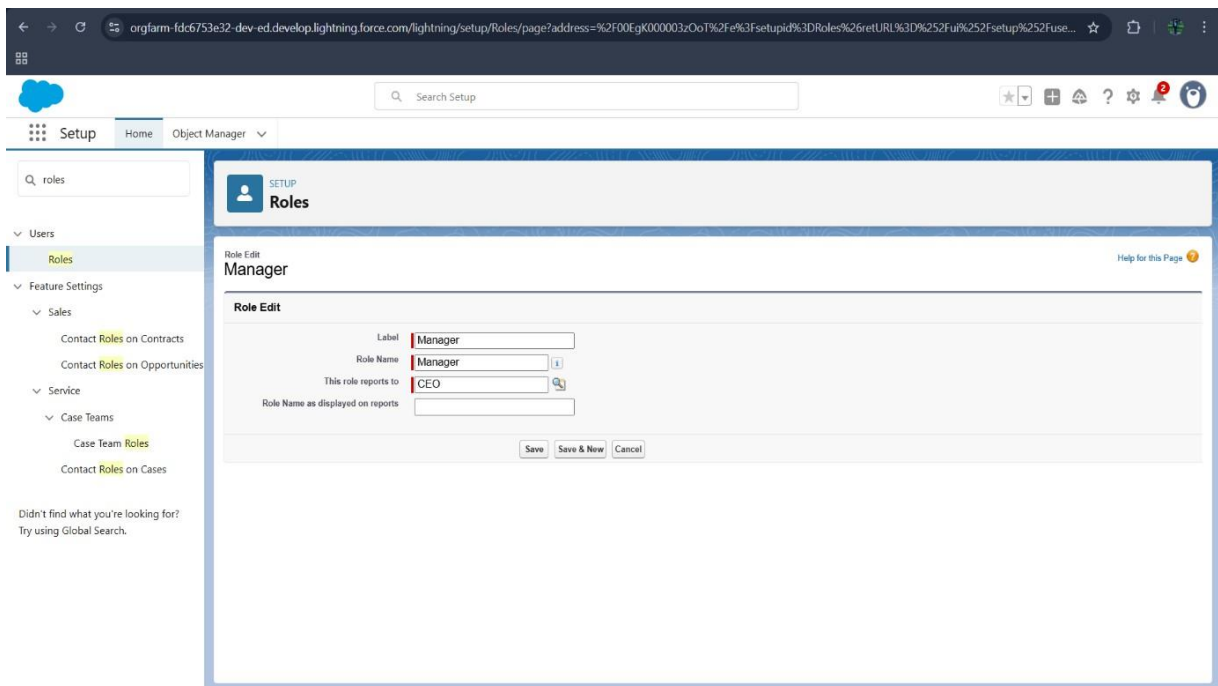
Lockout effective period: 15 minutes

Obscure secret answer for password resets: ☐

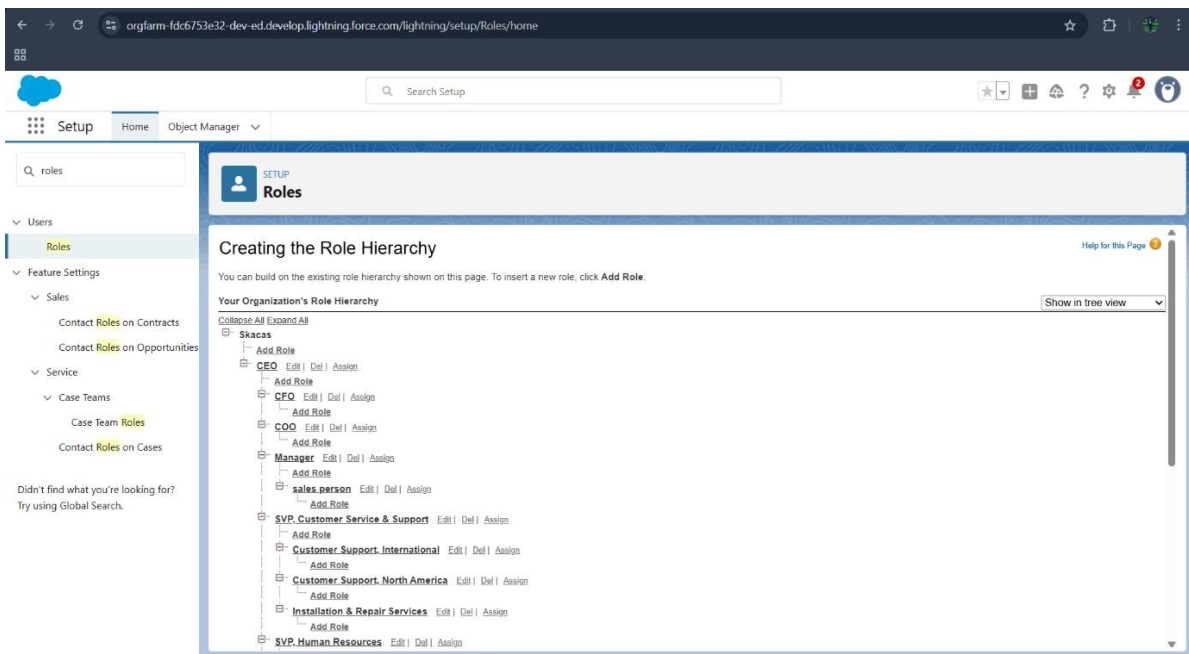
Require a minimum 1 day password lifetime: ☐

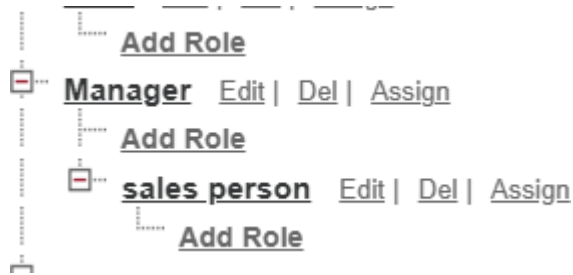
Don't immediately expire links in forgot password emails: ☐

• Roles :



The screenshot shows the Salesforce Setup interface with the 'Roles' page selected. The left sidebar contains a search bar with 'roles' and a navigation menu with categories like Users, Roles, Feature Settings, Sales, Service, and Case Teams. The main content area is titled 'Role Edit Manager' and contains a form for editing the 'Manager' role. The form fields are: Label (Manager), Role Name (Manager), This role reports to (CEO), and Role Name as displayed on reports (empty). At the bottom of the form are buttons for 'Save', 'Save & New', and 'Cancel'.





- **User**

The screenshot displays the Salesforce Setup interface for managing users. The left sidebar shows the navigation menu with 'Users' selected. The main content area shows the 'User Edit' form for a user named 'nova lite'. The form includes fields for General Information (First Name, Last Name, Alias, Email, Username, Nickname, Title, Company, Department, Division) and Role (Role, User License, Profile, Active, Marketing User, Offline User, Knowledge User, Flow User, Service Cloud User, Site.com Contributor User, Site.com Publisher User, WDC User, Data.com User Type, Data.com Monthly Addition Limit, Accessibility Mode (Classic Only), High-Contrast Palette on Charts).

orgfarm-fdc6753e32-dev-ed.develop.lightning.force.com/lightning/setup/ManageUsers/page?address=%2F005gK000007tva%2F%3FisUserEntityOverride%3D1%26retURL%3D%252F005gK0...

Setup Home Object Manager

Search Setup

user

Users

Permission Set Groups
Permission Sets
Profiles
Public Groups
Queues
Roles
User Management Settings
Users
Feature Settings
Data.com
Prospector Users
Service
Embedded Service
Messaging for In-App and Web User Verification
User Interface
Action Link Templates

User Edit
Niklaus Mikaelson

Save Save & New Cancel

General Information

First Name: Niklaus
Last Name: Mikaelson
Alias: nmika
Email: 23bsca115bindhujab@skac
Username: niklaus@mike.malu
Nickname: mike
Title:
Company:
Department:
Division:

Role: Manager
User License: Salesforce
Profile: Manager
Active: ☒
Marketing User: ☐
Offline User: ☐
Knowledge User: ☐
Flow User: ☐
Service Cloud User: ☐
Site.com Contributor User: ☐
Site.com Publisher User: ☐
WDC User: ☐
Data.com User Type: --None--
Data.com Monthly Addition Limit: 300
Accessibility Mode (Classic Only): ☐
High-Contrast Palette on Charts: ☐

1 Required Information

• Public Group :

orgfarm-fdc6753e32-dev-ed.develop.lightning.force.com/lightning/setup/PublicGroups/page?address=%2Fsetup%2Fown%2Fgroupedit.jsp%3Fid%3D000004t9d%26retURL%3D%...

Setup Home Object Manager

Search Setup

public

Users
Public Groups
Feature Settings
Salesforce Files
Content Deliveries and Public Links
Company Settings
Calendar Settings
Public Calendars and Resources

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

Public Groups

Group Information

Save Cancel

Edit Public Group

Label: sales team
Group Name: sales_team
Grant Access Using Hierarchies: ☒
Description:

Search: Roles for: Find

Available Members

- Role: CEO
- Role: CFO
- Role: COO
- Role: Channel Sales Team
- Role: Customer Support, International
- Role: Customer Support, North America
- Role: Director, Channel Sales
- Role: Director, Direct Sales
- Role: Eastern Sales Team
- Role: Installation & Repair Services
- Role: Manager
- Role: Marketing Team
- Role: SVP, Customer Service & Support
- Role: SVP, Human Resources

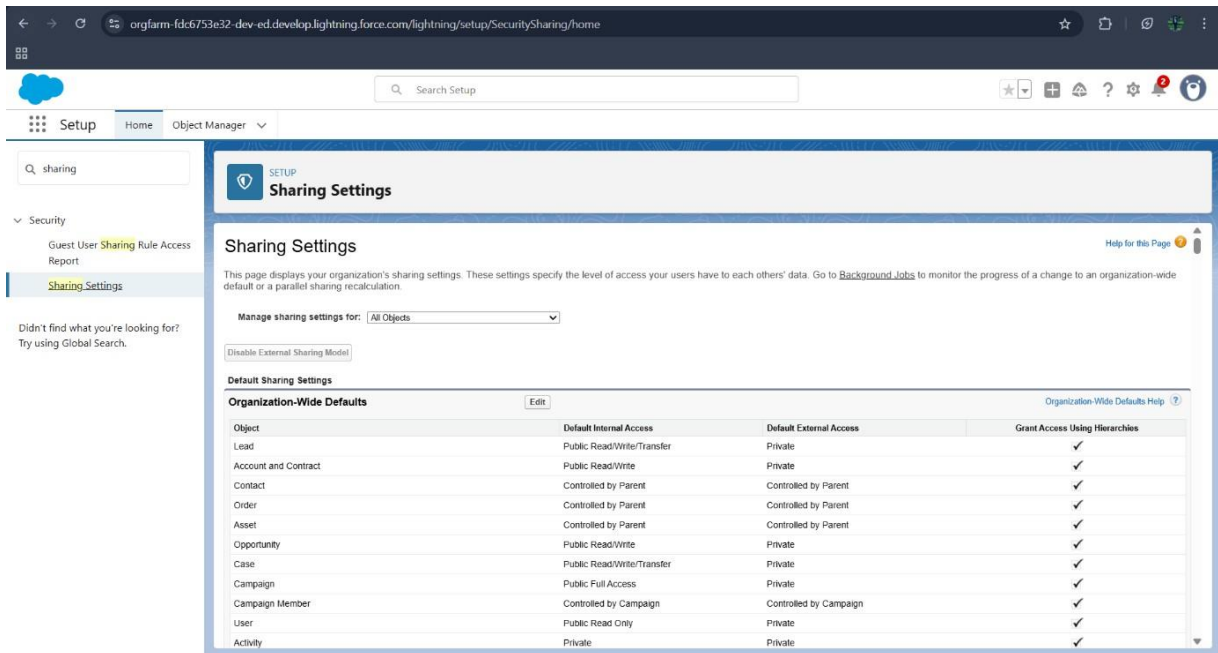
Add
Remove

Selected Members

- Role: sales person

Save Cancel

- **Share Setting**



Appointment	Public Read/Write	Private	✓
Billing details and feedback	Public Read/Write	Private	✓
Customer Detail	Public Read/Write	Private	✓
Service records	Private	Private	✓
Vehicle	Public Read/Write	Private	✓

- **Apex handler**

Code :

```
public class AmountDistributionHandler {

    public static void amountDist(list<Appointment__c> listApp){
```

```

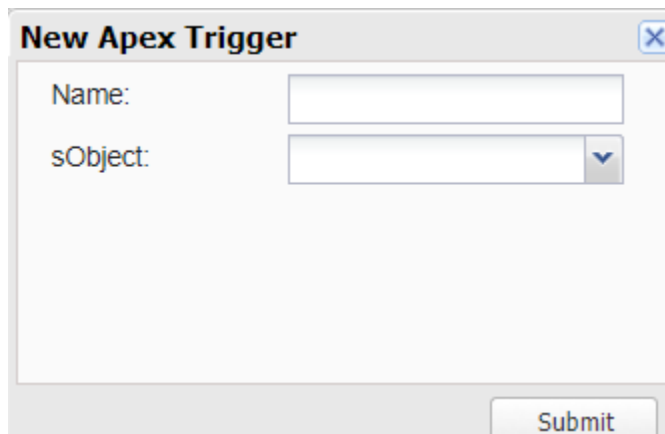
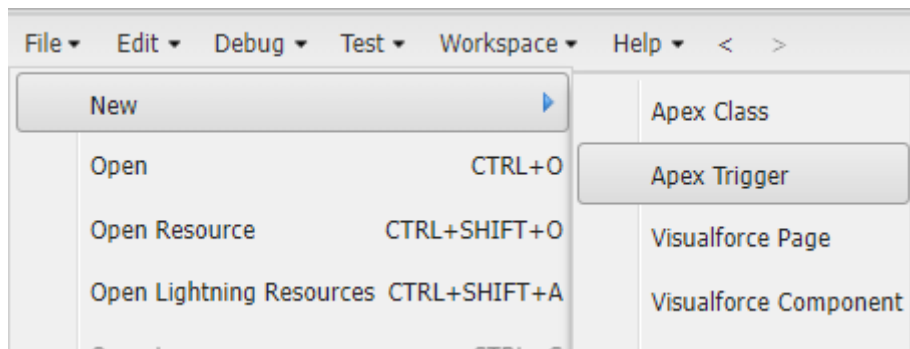
list<Service_records__c> serList = new list <Service_records__c>();

for(Appointment__c app : listApp){
    if(app.Maintenance_service__c == true && app.Repairs__c == true &&
app.Replacement_Parts__c == true){
        app.Service_Amount__c = 10000;
    }
    else if(app.Maintenance_service__c == true && app.Repairs__c == true){
        app.Service_Amount__c = 5000;
    }
    else if(app.Maintenance_service__c == true && app.Replacement_Parts__c == true){
        app.Service_Amount__c = 8000;
    }
    else if(app.Repairs__c == true && app.Replacement_Parts__c == true){
        app.Service_Amount__c = 7000;
    }
    else if(app.Maintenance_service__c == true){
        app.Service_Amount__c = 2000;
    }
    else if(app.Repairs__c == true){
        app.Service_Amount__c = 3000;
    }
    else if(app.Replacement_Parts__c == true){
        app.Service_Amount__c = 5000;
    }
}
}
}

```

How to create a new trigger :

1. While still in the trailhead account, navigate to the gear icon in the top right corner.
2. Click on developer console and you will be navigated to a new console window.
3. Click on File menu in the tool bar, and click on new? Trigger.
4. Enter the trigger name and the object to be triggered.
5. Name : AmountDistribution
6. sObject : Appointment__c



Syntax For creating trigger :

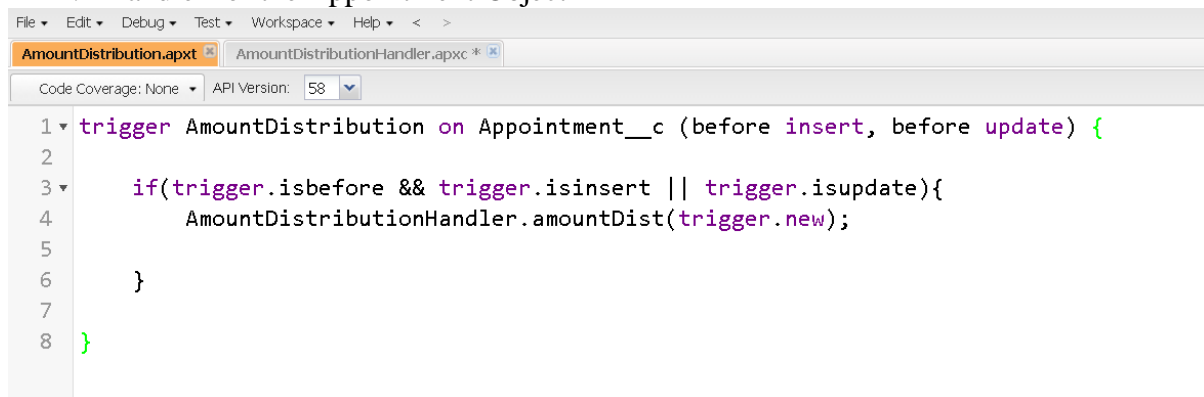
The syntax for creating trigger is :

Trigger [trigger name] on [object name](Before/After event)

```
{
}
```

In this project , trigger is called whenever the particular records sum exceed the threshold i.e minimum business requirement value. Then the code in the trigger will get executed.

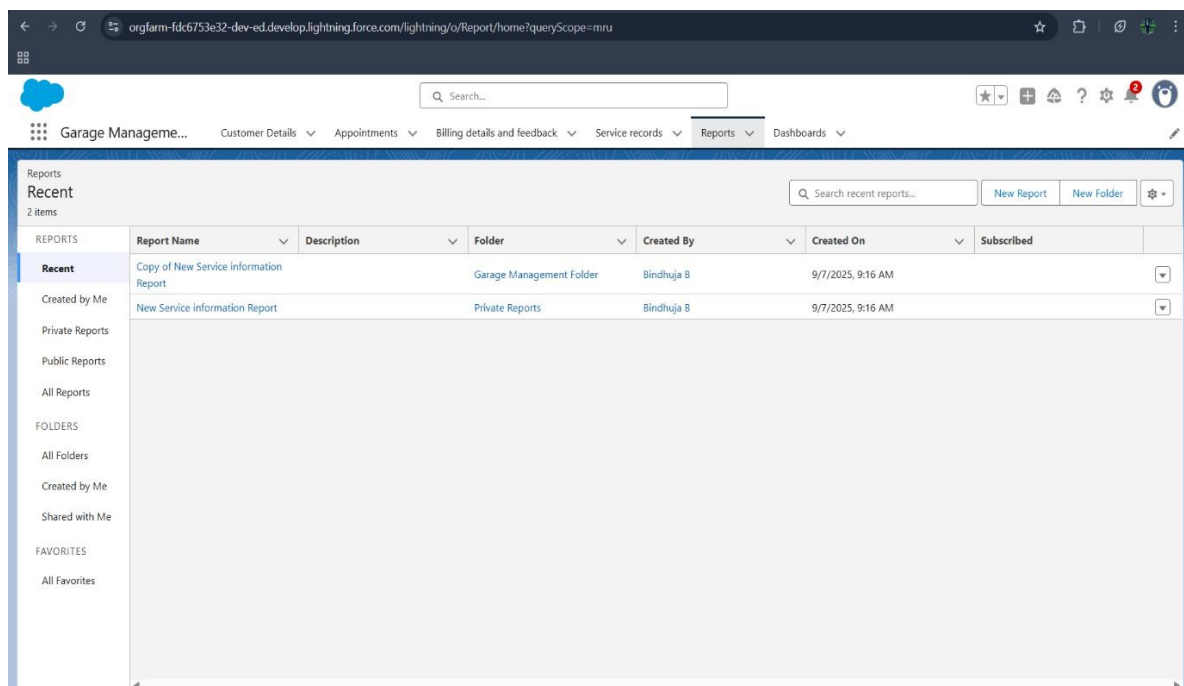
1. Handler for the Appointment Object



Code:

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

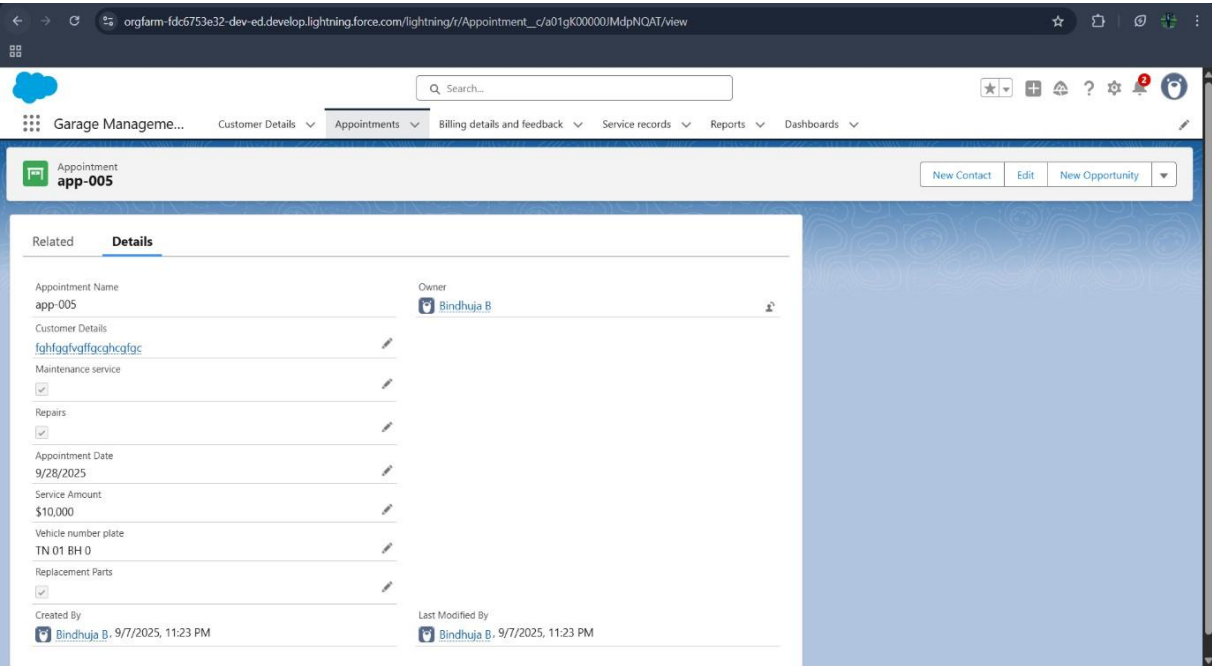
- **Reports :**



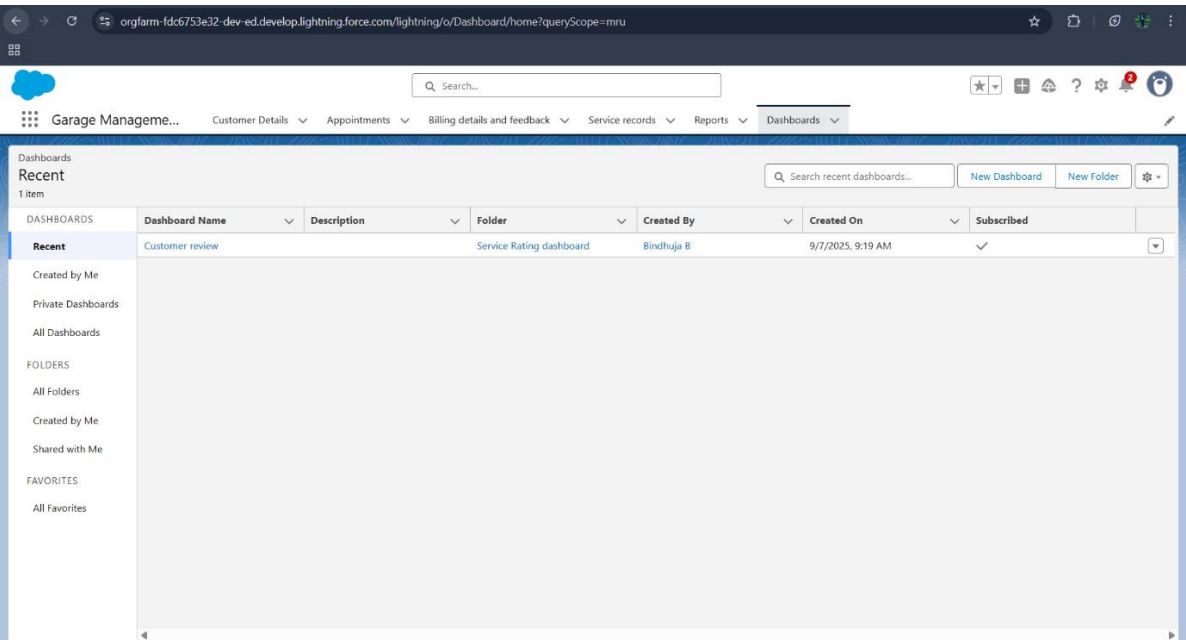
The screenshot displays the Salesforce Reports page. The top navigation bar includes the Salesforce logo, a search bar, and various utility icons. Below the navigation bar, the 'Reports' tab is selected, showing a list of recent reports. The left sidebar contains navigation links for 'Recent', 'Created by Me', 'Private Reports', 'Public Reports', 'All Reports', 'FOLDERS', 'All Folders', 'Created by Me', 'Shared with Me', 'FAVORITES', and 'All Favorites'. The main content area shows a table with the following data:

REPORTS	Report Name	Description	Folder	Created By	Created On	Subscribed
Recent	Copy of New Service Information Report		Garage Management Folder	Bindhuja B	9/7/2025, 9:16 AM	<input type="checkbox"/>
Created by Me	New Service information Report		Private Reports	Bindhuja B	9/7/2025, 9:16 AM	<input type="checkbox"/>

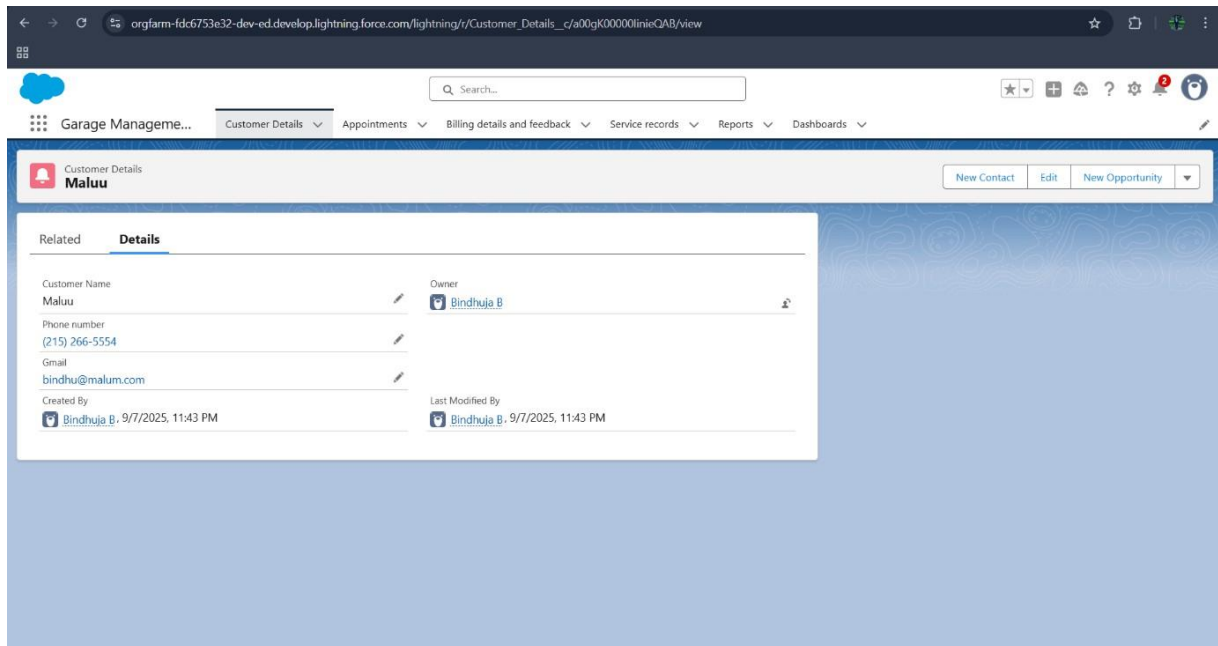
- **Appointments :**



- **Dashboards**



- ## User Adoption



Conclusion

In conclusion, the Garage Management System plays a vital role in modernizing garage operations by integrating key functions such as booking, service management, inventory control, and billing into a single platform. It not only boosts efficiency and reduces errors but also strengthens customer relationships through transparent and timely services. By adopting this system, garages can achieve higher productivity, improved service quality, and long-term business growth. Furthermore, it empowers staff with user-friendly tools to manage their tasks effectively, provides managers with valuable insights through reports and analytics, and ensures customers enjoy a seamless service experience. Ultimately, the Garage Management System serves as a comprehensive solution that helps garages remain competitive, adapt to changing market needs, and deliver consistent excellence.