

**Government Arts & Science College
Anthiyur – 638 501
Department of Computer Science**

**Sales Force Developer with Agent
Blazer Champion
Garage Management System**

Team Leader :
Thiruganasambanthar M

Team Members:

**Hariprakash K
Uthayakumar T
Vivekanandhan D**

PROJECT OVERVIEW

The Garage Management System (GMS) project on Salesforce is a CRM solution aimed at transforming the way automotive garages manage customer relationships, vehicle service records, and day-to-day operations. With centralized customer profiles, service histories, and appointment scheduling, the system empowers garages to deliver more personalized and efficient customer service. Automated reminders and service notifications help enhance customer engagement, ensuring regular maintenance and timely service updates to boost customer satisfaction.

In addition to customer management, the GMS CRM includes comprehensive vehicle tracking and work order management, allowing technicians and advisors to access detailed service histories, track service progress, and assign tasks seamlessly. An integrated parts inventory module ensures that essential components are in stock, with automated reordering for low-stock items to prevent service delays. Technicians can use mobile access to view work orders and inventory on the go, optimizing workflow and reducing downtime.

Finally, the GMS CRM supports billing and invoicing, providing a streamlined system for generating service estimates, digital invoices, and online payment options. With built-in analytics and reporting, managers gain insights into customer trends, revenue, and operational efficiency, enabling data-driven decisions for business growth. The system is designed to scale with the garage, offering robust data security and compliance, making it a future-proof solution for modern garage management needs.

OBJECTIVES

- **Enhance Customer Retention and Loyalty:** By providing personalized service reminders, streamlined appointment scheduling, and post-service follow-ups, the GMS CRM aims to build long-term customer relationships and increase repeat visits.

- **Optimize Resource Allocation & Technician Efficiency:** Efficient scheduling, real-time work order tracking, and inventory management help maximize technician productivity, reduce wait times, and ensure that resources are allocated effectively for each service job.
- **Increase Revenue through Data-Driven Upselling:** With insights into customer preferences and service history, the CRM enables garages to offer tailored service recommendations and upsell additional maintenance packages, driving revenue growth.
- **Reduce Operational Costs through Automation:** By automating routine tasks like appointment reminders, parts reordering, and invoicing, the GMS CRM minimizes manual workload, reduces errors, and cuts down operational costs.
- **Improve Business Insights and Strategic Planning:** Advanced reporting and analytics provide managers with valuable insights into service trends, technician performance, and financial metrics, supporting informed decision-making and strategic business growth.

KEY FEATURES

- **Customer details:**
 - Store and manage customer details including contact information, service history, and preferences.
 - Access comprehensive service records for customer insights and tailored service.
- **Appointment:**
 - Automated reminders and notifications to reduce no-shows.

- Integrated calendar to optimize working time.
- **Service records:**
 - Track detailed service information including service type, parts used, and associated costs.
 - Link service records to specific customer appointments for easy tracking and reference.
- **Billing details:**
 - Generate and manage billing details, linking them to service records.
 - Track payment status and send timely payment reminders.
 - Automated invoice generation and email notifications for a streamlined payment process.
- **Feedback:**
 - Collect and manage customer feedback post-service.
 - Track ratings and comments to enhance service quality.
 - Analyze feedback trends for continuous improvement.

DETAILED PROCESS

Activity – 1

Salesforce account Creation & Activation

- Create a Developer Account by providing all the required details and Activate the account.
- Go to <https://developer.salesforce.com/signup>.

Activity – 2

Object Creation

- Create all the required objects with the given label name and format.

- Customer details Object

- Enter the label name >> Customer Details
- Plural label name >> Customer Details
- Enter Record Name Label and Format
- Record Name >> Customer Name

- Data Type >> Text

The screenshot shows the 'Customer Details' object setup page. The left sidebar lists various configuration options: 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, and List View Button Layout. The main 'Details' tab is selected. The API Name is set to 'Customer_Details__c'. The Singular Label is 'Customer Details' and the Plural Label is 'Customer Details'. Under the 'Enable Reports' section, 'Track Activities' is checked. Deployment Status is set to 'Deployed'. Help Settings point to the 'Standard salesforce.com Help Window'.

- Appointment Object

- Enter the label name >> Appointment
- Plural label name >> Appointments
- Enter Record Name Label and Format
- Record Name >> Appointment Name
- Data Type >> Auto Number
- Display Format >> app-{000}
- Starting number >> 1

The screenshot shows the 'Appointment' object setup page. The left sidebar lists various configuration options, with 'Object Limits' currently selected. The API Name is set to 'Appointment__c'. The Singular Label is 'Appointment' and the Plural Label is 'Appointments'. Under the 'Enable Reports' section, 'Track Activities' is checked. Deployment Status is set to 'Deployed'. Help Settings point to the 'Standard salesforce.com Help Window'.

- Service records Object

- Enter the label name >> Service records
- Plural label name >> Service records
- Enter Record Name Label and Format
- Record Name >> Service records Name
- Data Type >> Auto Number
- Display Format >> ser-{000}
- Starting number >> 1

The screenshot shows the Salesforce Setup interface under 'Object Manager'. A new object named 'Service records' is being created. The 'Details' tab is selected, showing fields like API Name ('Service_records__c'), Singular Label ('Service records'), and Plural Label ('Service records'). On the right, object settings are listed: 'Enable Reports' (checked), 'Track Activities' (checked), 'Track Field History' (checked), 'Deployment Status' ('Deployed'), and 'Help Settings' ('Standard salesforce.com Help Window'). The left sidebar lists other configuration options: 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.

- Billing details & Feedback Object

- Enter the label name >> Billing details and feedback
- Plural label name >> Billing details and feedback
- Enter Record Name Label and Format
 - Record Name >> Billing details and feedback Name
 - Data Type >> Auto Number
 - Display Format >> bill-{000}
 - Starting number >> 1

The screenshot shows the Salesforce Setup interface under 'Object Manager'. A new object named 'Billing details and feedback' is being created. The 'Details' tab is selected, showing fields like API Name ('Billing_details_and_feedback__c'), Singular Label ('Billing details and feedback'), and Plural Label ('Billing details and feedback'). On the right, object settings are listed: 'Enable Reports' (checked), 'Track Activities' (checked), 'Track Field History' (checked), 'Deployment Status' ('Deployed'), and 'Help Settings' ('Standard salesforce.com Help Window'). The left sidebar lists other configuration options: 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.

Activity – 3

Custom Tabs Creation

- A tab is like a user interface that is used to build records for objects and to view the records in the objects.
- Create these Custom tabs for every Object by following below steps:

- Select Object(Customer Details) >> Select the tab style >> Next (Add to profiles page) keep it as default >> Next (Add to Custom App) uncheck the include tab .
- Make sure that the Append tab to users' existing personal customizations is checked.

The screenshot shows the Salesforce Setup interface with the 'Tabs' section selected. Under 'Custom Object Tabs', there is a table with four rows:

Action	Label	Tab Style	Description
Edit Del	Appointments	Alarm clock	
Edit Del	Billing details and feedback	Credit card	
Edit Del	Customer Details	Gears	
Edit Del	Service records	Books	

Below this, under 'Web Tabs', it says 'No Web Tabs have been defined'.

Activity – 4

Create a Lighting App

1.Fill the app name in app details as Garage Management Application >> Next >> (App option page) keep it as default >> Next >> (Utility Items) keep it as default >> Next.

The screenshot shows the 'New Lightning App' setup page. In the 'App Details' section, the 'App Name' field contains 'Name your app...'. In the 'App Branding' section, there is a 'Primary Color Hex Value' field set to '#0070D2'. At the bottom right, a red arrow points to the 'Next' button.

2. To Add Navigation Items:

The screenshot shows the 'Navigation Items' setup page. On the left, there is a list of 'Available Items' with a search bar. An item 'All Sites' is selected and highlighted with a red box. A red arrow points to the right arrow button next to the 'Selected Items' list. At the bottom right, a red arrow points to the 'Next' button.

3. Select the items (Customer Details,Appointments, Service records, Billing details and feedback, Reports and Dashboards) from the search bar and move it using the arrow button >> Next.

App Details & Branding

Give your Lightning app a name and description. Upload an image and choose the highlight color for its navigation bar.

App Details

* App Name

* Developer Name

Description

App Branding

Image

Primary Color Hex Value

Org Theme Options Use the app's image and color instead of the org's custom theme

App Launcher Preview

Garage Management Appli...

Activity – 5

Field Creation for every object:

Create fields for each and every object as per shown in below images.

- Customer details object

Customer Details

Fields & Relationships
8 Items, Sorted by Field Label

FIELD LABEL	FIELD NAME	DATA TYPE	CONTROLLING FIELD	INDEXED
Address	Address_c	Text Area(255)		
Created By	CreatedById	Lookup(User)		
Customer Name	Name	Text(80)		✓
Gmail	Gmail_c	Email		
Last Modified By	LastModifiedById	Lookup(User)		
Name	Name_c	Text(100)		
Owner	OwnerId	Lookup(User,Group)		✓
Phone number	Phone_number_c	Phone		

- Appointment object

SETUP > OBJECT MANAGER

Appointment

Fields & Relationships					
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)		✓
Customer Name		Customer_Name_c	Text(80)		
Last Modified By		LastModifiedById	Lookup(User)		
Maintenance service		Maintenance_service_c	Checkbox		
Owner		OwnerId	Lookup(User,Group)		✓

- Service records object

SETUP > OBJECT MANAGER

Service records

Fields & Relationships					
FIELD LABEL		FIELD NAME	DATA TYPE	CONTROLLING FIELD	INDEXED
Appointment		Appointment_c	Lookup(Appointment)		✓
Created By		CreatedById	Lookup(User)		
Last Modified By		LastModifiedById	Lookup(User)		
Owner		OwnerId	Lookup(User,Group)		✓
Quality Check Status		Quality_Check_Status_c	Checkbox		
service date		service_date_c	Formula (Date)		
Service records Name		Name	Auto Number		
Service Status		Service_Status_c	Picklist		

- Billing details & Feedback object

SETUP > OBJECT MANAGER

Billing details and feedback

Fields & Relationships					
FIELD LABEL		FIELD NAME	DATA TYPE	CONTROLLING FIELD	INDEXED
Billing details and feedback Name		Name	Auto Number		✓
Created By		CreatedById	Lookup(User)		
Last Modified By		LastModifiedById	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)		

Activity – 6

Validation Rules

For Appointment

- Enter the Rule name as “ Vehicle ”.
- Insert the Error Condition Formula as : -
- NOT(REGEX(Vehicle_number_plate__c , "[A-Z]{2}[0-9]{2}[A-Z]{2}[0-9]{4}"))

The screenshot shows the Salesforce Object Manager interface for the 'Appointment' object. On the left, a sidebar lists various setup options like Details, Fields & Relationships, Page Layouts, etc. The main area is titled 'Validation Rules' and shows one item: 'Vehicle' with 'Vehicle number plate' as the error location and 'Please enter valid number' as the error message. The rule is active and was modified by Pandeti Nikitha on 7/12/2025, 10:17 PM.

Rule Name	Error Location	Error Message	Active	Modified By
Vehicle	Vehicle number plate	Please enter valid number	✓	PANDETI NIKITHA, 7/12/2025, 10:17 PM

- For Billing details & Feedback

- Enter the Rule name as “ rating_should_be_less_than_5 ”.
- Insert the Error Condition Formula as : -
- NOT(REGEX(Rating_for_service__c , “[1-5]{1}”))
- Enter the Error Message as “rating should be from 1 to 5”, select the Error location as Field and select the field as “Rating for Service”.

The screenshot shows the Salesforce Object Manager interface for the 'Billing details and feedback' object. The sidebar and validation rules table are identical to the previous screenshot, showing a single validation rule named 'rating_should_be_less_than_5' with 'Rating for service' as the error location and 'rating should be from 1 to 5' as the error message.

Rule Name	Error Location	Error Message	Active	Modified By
rating_should_be_less_than_5	Rating for service	rating should be from 1 to 5	✓	PANDETI NIKITHA, 7/12/2025, 10:21 PM

Activity – 7

Duplication Rules

- Matching Rule:

- Give the Rule name : Matching customer details
- Unique name : is auto populated
- Define the matching criteria as:

	Matching Method
--	-----------------

Field	
1. Gmail	Exact
2. Phone Number	Exact

- Create a matching rule for the Customer details Object with the given criteria.

The screenshot shows the Salesforce Setup interface under the Data category, specifically the Matching Rules section. The page title is "Matching Rules". It displays a table of existing matching rules:

Action	Rule Name	Object	Status	Description	Last Modified Date	Last Modified By
Deactivate	Matching customer details	Customer Details	Active	Matching rule for account records. More info	7/12/2025	Var
Deactivate	Standard Account Matching Rule	Account	Active	Matching rule for contact records. More info	7/3/2025	QEPIC
Deactivate	Standard Contact Matching Rule	Contact	Active	Matching rule for lead records. More info	7/3/2025	QEPIC
Deactivate	Standard Lead Matching Rule	Lead	Active	Matching rule for lead records. More info	7/3/2025	QEPIC

The screenshot shows the "Matching Rule Detail" page for the rule named "Matching customer details". The page title is "Matching Rules" and the specific rule name is "Matching customer details". The "Matching Rule Detail" section contains the following information:

Object	Customer Details
Rule Name	Matching customer details
Unique Name	Matching_customer_details
Description	(Customer Details: Gmail EXACT MatchBlank = FALSE) AND (Customer Details: Phone_number EXACT MatchBlank = FALSE)
Matching Criteria	(Customer Details: Gmail EXACT MatchBlank = FALSE) AND (Customer Details: Phone_number EXACT MatchBlank = FALSE)
Status	Active
Created By	PANDETI NIKITHA, 7/12/2025, 10:25 PM
Modified By	PANDETI NIKITHA, 7/12/2025, 10:25 PM

-Duplicate Rules:

Create a duplicate rule for the same customer details object which allows the duplication in input fields.

Steps:

- Give the Rule name as : Customer Detail duplicate.
- Select the matching rule : Matching customer details.

Activity – 8

Creating Profiles

- Manager Profile

Select

the Custom App settings as default for the Garage management.

- Scroll down to Custom Object Permissions and Give access permissions for Appointments,Billing details and feedback , service records and customer details objects as mentioned in the below diagram.

Custom Object Permissions											
	Basic Access				Data Administration						
	Read	Create	Edit	Delete	View All	Modify All	Read	Create	Edit	Delete	View All
Appointments	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Billing details and feedback	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>								
Customer Details	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Environments	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Laptops	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Service records	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>								
SessionData	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

- Changing the session times out after should be “ 8 hours of inactivity”.
- Change the password policies as mentioned :
- User passwords expire in should be “ never expires ”.
- Minimum password length should be “ 8 ”.

The screenshot shows the Salesforce Setup interface under the Profiles section. It displays the Manager profile details, including Name (Manager), User License (Salesforce), and Description (Created By: PANDETI NIKITHA, 7/12/2025, 10:34 PM). It also shows the Profile Detail and Page Layouts sections.

Sales Person Profile

- Select the Custom App settings as default for the GArage management.
- Scroll down to Custom Object Permissions and Give access permissions for Appointments,Billing details and feedback , service records and customer details objects as mentioned in the below diagram.

Custom Object Permissions											
	Basic Access				Data Administration						
	Read	Create	Edit	Delete	View All	Modify All	Read	Create	Edit	Delete	View All
Appointments	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<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 checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Customer Details	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Environments	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Laptops	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Service records	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>				
SessionData	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

The screenshot shows the Salesforce Setup interface under the Profiles section. It displays the sales person profile details, including Name (sales person), User License (Salesforce Platform), and Description (Created By: PANDETI NIKITHA, 7/12/2025, 10:46 PM). It also shows the Profile Detail and Page Layouts sections.

Profiles

Action	Profile Name	User License	Custom
Edit Clone	Identity_User	Identity	<input checked="" type="checkbox"/>
Edit Del ...	Manager	Salesforce	<input checked="" type="checkbox"/>
Edit Clone	Marketing_User	Salesforce	<input type="checkbox"/>
Edit Clone	Minimum Access - API Only Integrations	Salesforce Integration	<input type="checkbox"/>
Edit Clone	Minimum Access - Salesforce	Salesforce	<input type="checkbox"/>
Edit Clone	Partner App Subscription User	Partner App Subscription	<input type="checkbox"/>
Edit Clone	Partner Community Login User	Partner Community Login	<input type="checkbox"/>
Edit Clone	Partner Community User	Partner Community	<input type="checkbox"/>
Edit Del ...	Read Only	Salesforce	<input checked="" type="checkbox"/>
Edit Del ...	sales_person	Salesforce Platform	<input checked="" type="checkbox"/>
Edit Del ...	Salesforce API Only System Integrations	Salesforce Integration	<input checked="" type="checkbox"/>

Activity – 9

Roles & Role Hierarchy

Manager Role:

-Click on Expand All and click on add role under whom this role works.

-Give Label as “Manager” and Role name gets auto populated.

Another Role:

-Click plus on CEO role, and click add role under manager.

-Give Label as “sales person” and Role name gets auto populated.

Creating the Role Hierarchy

```

graph TD
    Root[Annamacharya Institute Of Technology And Sciences] --> CEO[CEO]
    Root --> COO[COO]
    Root --> Manager[Manager]
    Root --> SalesPerson[sales_person]
    Root --> SVP[SVP, Customer Service & Support]
    Root --> CustomerSupport[Customer Support, International]
    Root --> NorthAmerica[Customer Support, North America]
    CEO --> CEOAdd[Add Role]
    COO --> COOAdd[Add Role]
    Manager --> ManagerAdd[Add Role]
    SalesPerson --> SalesPersonAdd[Add Role]
    SVP --> SVPAdd[Add Role]
    CustomerSupport --> CustomerSupportAdd[Add Role]
    NorthAmerica --> NorthAmericaAdd[Add Role]
  
```

Activity – 10

Users

anyone who logs in to Salesforce. Users are employees at your company, such as sales reps, managers, and IT specialists, who need access to the company's records.

Create Users:

Fill in the fields :

1. First Name : Niklaus
2. Last Name : Mikaelson
3. Alias : Give a Alias Name
4. Email id : Give your Personal Email id
5. Username : Username should be in this form: text@text.text
6. Nick Name : Give a Nickname
7. Role : Manager
8. User licence : Salesforce
9. Profiles : Manager

New User

User Edit Save Save & New Cancel

General Information

First Name	Niklaus
Last Name	Mikaelson
Alias	nmika
Email	
Username	Mikaelson@Niklaus
Nickname	nik
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

Create

Another Users:

Setup Home Object Manager

Search Setup

Users

All Users

On this page you can create, view, and manage users.

To get more licenses, use the Your Account app. [Let's Go](#)

View: All Users | Edit | Create New View

A | B | C | D | E | F | G | H | I | J | K | L | M | N | O | P | Q | R | S | T | U | V | W | X | Y | Z | Other | All

Action	Full Name	Alias	Username	Role	Active	Profile
<input type="checkbox"/>	Carrie_Nick	ncar	nickcarrie@gmail.com	sales person	✓	sales person
<input type="checkbox"/>	Chatter Expert	Chatty	chatty.00dgk000006jyonyaq.cb6kruckppb@chatter.salesforce.com	Chatter User	✓	Chatter Free User
<input type="checkbox"/>	EPIC_OrgFarm	OEPI	epic.2536c8c949e@orgfarm.salesforce.com	System Administrator	✓	System Administrator
<input type="checkbox"/>	Micheal_John	jmich	john@agent.com	sales person	✓	sales person
<input type="checkbox"/>	Mikaelson_Niklaus	nmika	mikaelson@agent.com	Manager	✓	Manager
<input type="checkbox"/>	NIKITHA_PANDETI	yar	varmanikitha595123@agentforce.com	System Administrator	✓	System Administrator
<input type="checkbox"/>	User_Integration	integ	integration@00dgk000006jyonyaq.com	Analytics Cloud Integration User	✓	Analytics Cloud Integration User
<input type="checkbox"/>	User_Security	sec	insightssecurity@00dgk000006jyonyaq.com	Analytics Cloud Security User	✓	Analytics Cloud Security User

Activity – 11

Public Groups

- Creating New Public Groups

a valuable tool for Salesforce administrators and developers to streamline user management, data access, and security settings.

Steps:

1. Give the Label as “sales team”.
2. Group name is autopopulated.
3. Search for Roles.
4. In Available Members select Sales person and click on add it will be moved to selected member.

The top screenshot shows the 'Edit Public Group' page for 'sales team'. It includes fields for Label ('Sales team'), Group Name ('sales_team'), and Grant Access Using Hierarchies (checked). The bottom screenshot shows the 'Public Groups' list page, which displays one record:

Action	Label	Group Name	Created By	Created Date
Edit	sales team	sales_team	NIKITHA_PANDETI	7/12/2025, 11:21 PM

Activity – 12

Sharing Settings: control how records are accessed and shared within your organization. These settings are crucial for maintaining data security and privacy.

Steps:

-Change the OWD setting of the Service records Object to private as shown in fig.

Scroll down a bit, Click new on Service records sharing Rules

1. Give the Label name as “ Sharing setting”
2. Rule name is auto populated.
3. In step 3 : Select which records to be shared, members of “ Roles ” >> “ Sales person”
4. In step 4: share with, select “ Roles ” >> “ Manager ”
5. In step 5 : Change the access level to “ Read / write ”.
6. Click on save.

Activity – 13

Flows: a powerful tool that allows you to automate business processes, collect and update data, and guide users through a series of screens or steps.

- **Record-Triggered Flow** Select the Record-triggered flow and Click on Create.

New Flow

Core All + Templates

- Screen Flow
- Record-Triggered Flow
- Schedule-Triggered Flow
- Platform Event—Triggered Flow
- Autolaunched Flow (No Trigger)
- Record-Triggered Orchestration

Create

- Select the Object as “Billing details and feedback” in the Drop down list.
- Select the Trigger Flow when: “A record is Created or Updated”.
- Select the Optimize the flow for: “Actions and Related Records” and Click on Done.

Flow Builder Billing Amount Flow - V1

Configure Start

Select Object: Billing details and feedback

Trigger the Flow When: A record is created or updated

Configure Trigger

Trigger the Flow When: A record is created or updated

Set Entry Conditions

If you create a flow that's triggered when a record is updated, we recommend first defining entry conditions. Then select the Only when a record is updated to meet the condition requirements option for When to Run the Flow for Updated Records.

Condition Requirements

- Amount Update Flow

- Field : Payment_Paid__c
- Value : {!\$Record.Service_records__r.Appointment__r.Service_Amount__c}

Flow Builder Billing Amount Flow - V1

Update Records

* Label: Amount Update

* API Name: Amount_Update

How to Find Records to Update and Set Their Values

Use the billing details and feedback record that triggered the flow

Set Filter Conditions

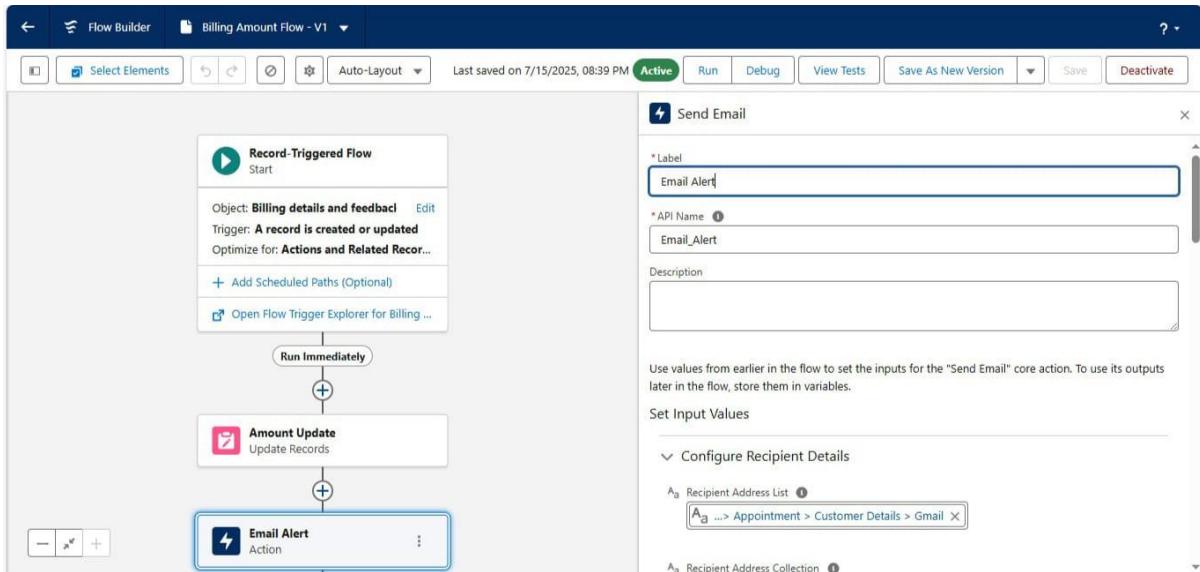
All Conditions Are Met (AND)

Field: Payment Status Operator: Equals Value: A Completed

- Email Alert Flow

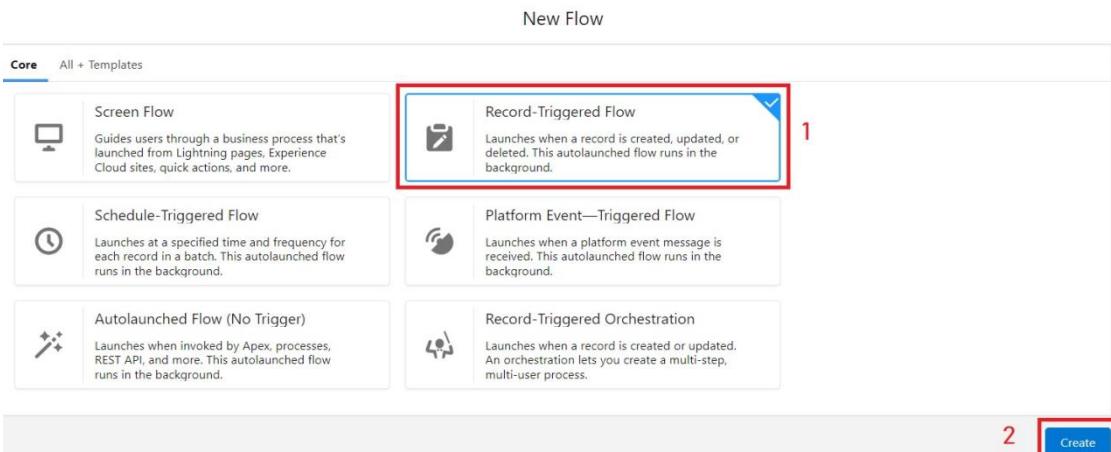
- RecipientAddressList:

```
{!$Record.Service_records__r.Appointment__r.Customer_Name__r.Gmail__c}
```

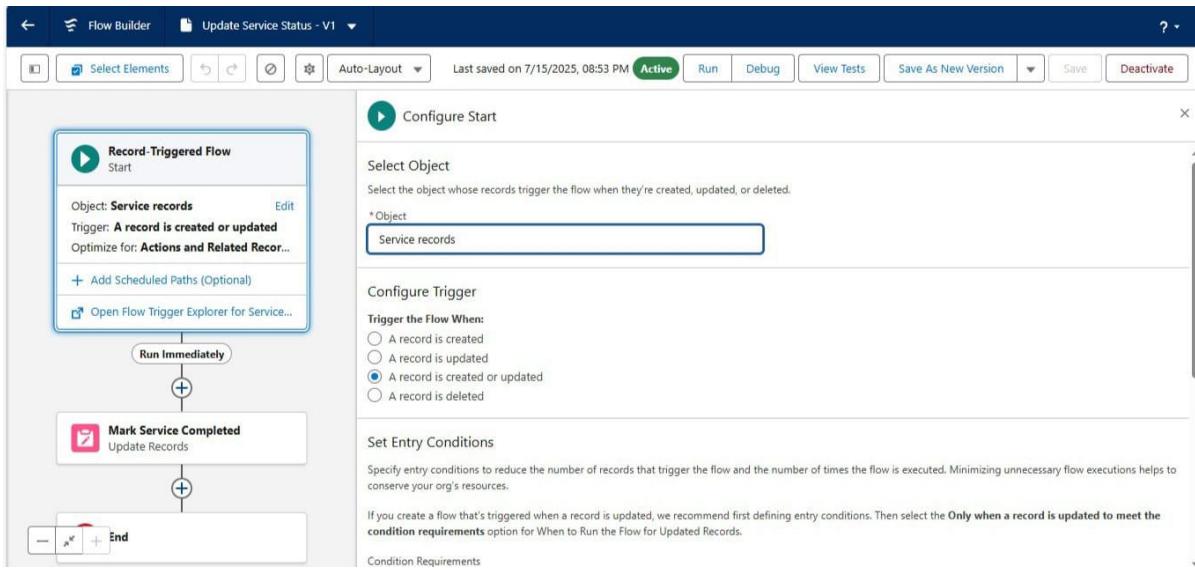


Create Another Flow:

1. Select the Record-triggered flow and Click on Create.

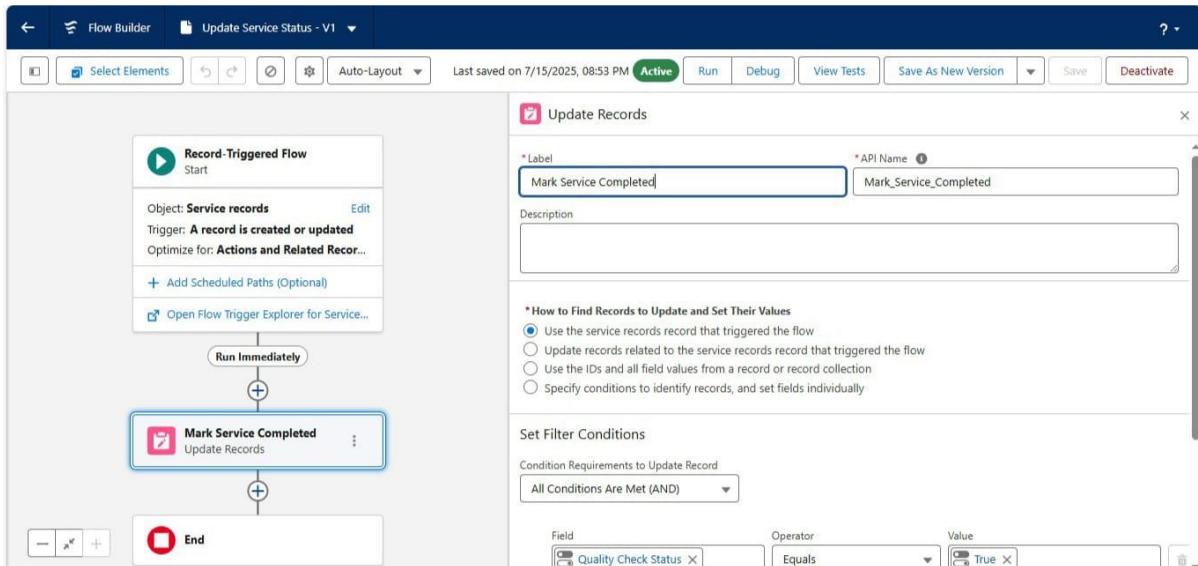


- 2.
3. Select the Object as “ Service records”in the Drop down list.
4. Select the Trigger Flow when: “A record is Created or Updated”.
5. Select the Optimise the flow for: “Actions and Related Records”



Set a filter condition : All Conditions are met(AND)

1. Field : Quality_Check_Status__c
2. Operator : Equals
3. Value : True
4. And Set Field Values for the Billing details and feedback Record
5. Field : Service_Status__c
6. Value : Completed



Activity – 14

Triggers

1. Name the class as “AmountDistributionHandler”.

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;
    }
}

}
}
}

```

Trigger Handler :

1. Name : AmountDistribution
2. sObject : Appointment__c

Code:

```

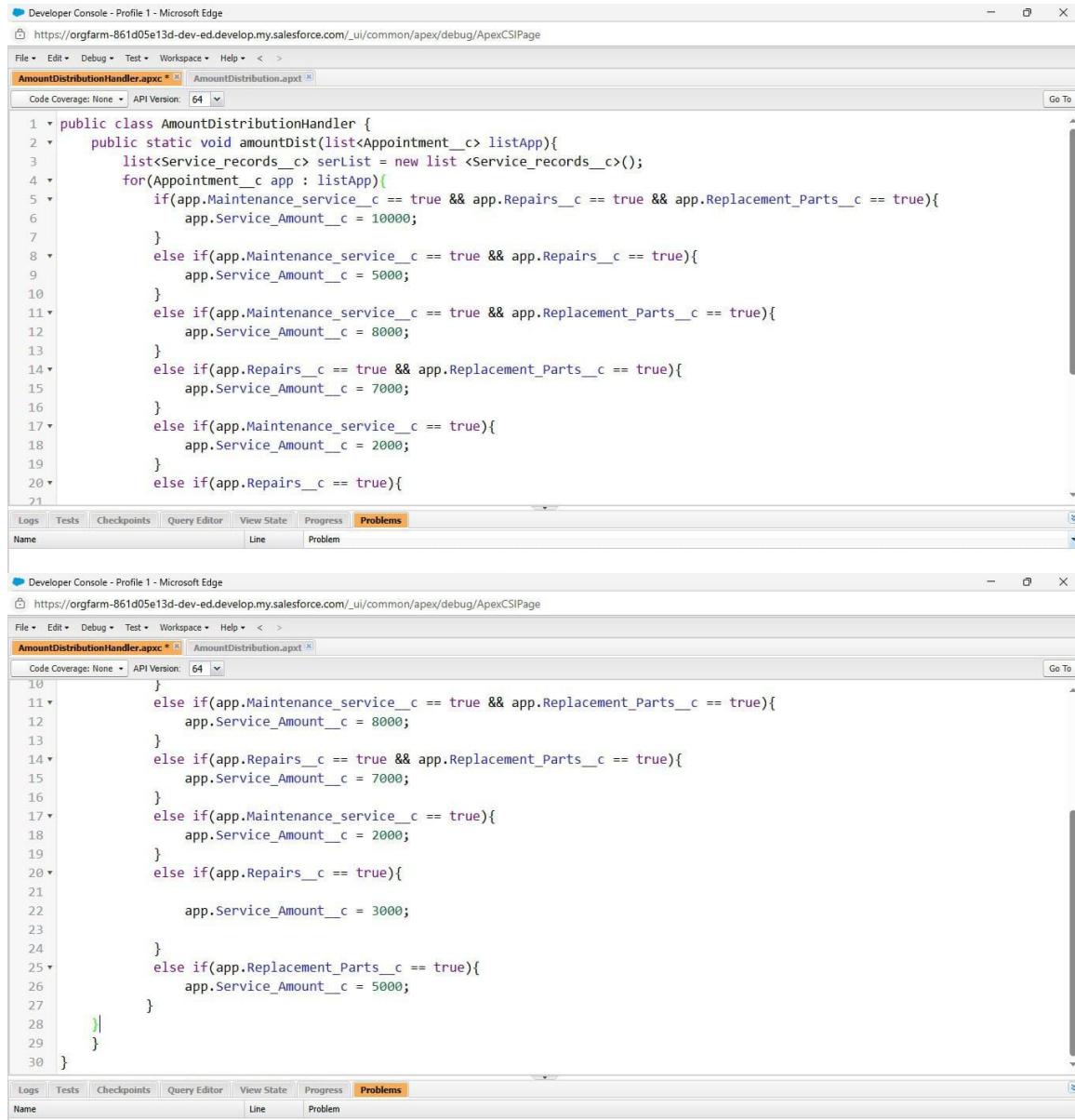
trigger AmountDistribution on Appointment__c (before insert, before update) {

if(trigger.isbefore && trigger.isinsert || trigger.isupdate){
    AmountDistributionHandler.amountDist(trigger.new);
}

}

```

- AmountDistributionHandler.apxc (Class)



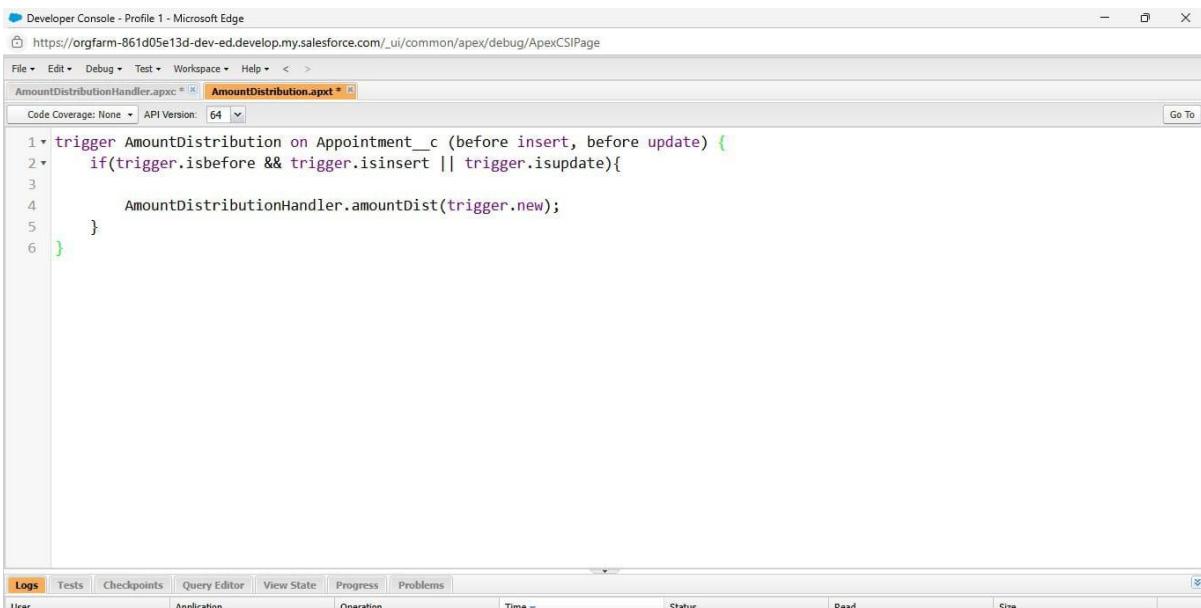
The screenshot shows the Salesforce Developer Console interface with two tabs open: 'AmountDistributionHandler.apxc' and 'AmountDistribution.apxt'. The 'AmountDistributionHandler.apxc' tab is active, displaying the following Apex code:

```
1 public class AmountDistributionHandler {
2     public static void amountDist(List<Appointment_c> listApp){
3         List<Service_records_c> serList = new List<Service_records_c>();
4         for(Appointment_c app : listApp){
5             if(app.Maintenance_service_c == true && app.Repairs_c == true && app.Replacement_Parts_c == true){
6                 app.Service_Amount_c = 10000;
7             }
8             else if(app.Maintenance_service_c == true && app.Repairs_c == true){
9                 app.Service_Amount_c = 5000;
10            }
11            else if(app.Maintenance_service_c == true && app.Replacement_Parts_c == true){
12                app.Service_Amount_c = 8000;
13            }
14            else if(app.Repairs_c == true && app.Replacement_Parts_c == true){
15                app.Service_Amount_c = 7000;
16            }
17            else if(app.Maintenance_service_c == true){
18                app.Service_Amount_c = 2000;
19            }
20            else if(app.Repairs_c == true){
21
22            }
23        }
24    }
25
26
27
28
29
30 }
```

The 'AmountDistribution.apxt' tab is also visible, showing the following Apex Trigger code:

```
1 trigger AmountDistribution on Appointment_c (before insert, before update) {
2     if(trigger.isbefore && trigger.isinsert || trigger.isupdate){
3
4         AmountDistributionHandler.amountDist(trigger.new);
5     }
6 }
```

- AmountDistribution.apxt (Trigger)



The screenshot shows the Salesforce Developer Console interface with two tabs open: 'AmountDistributionHandler.apxc' and 'AmountDistribution.apxt'. The 'AmountDistribution.apxt' tab is active, displaying the following Apex Trigger code:

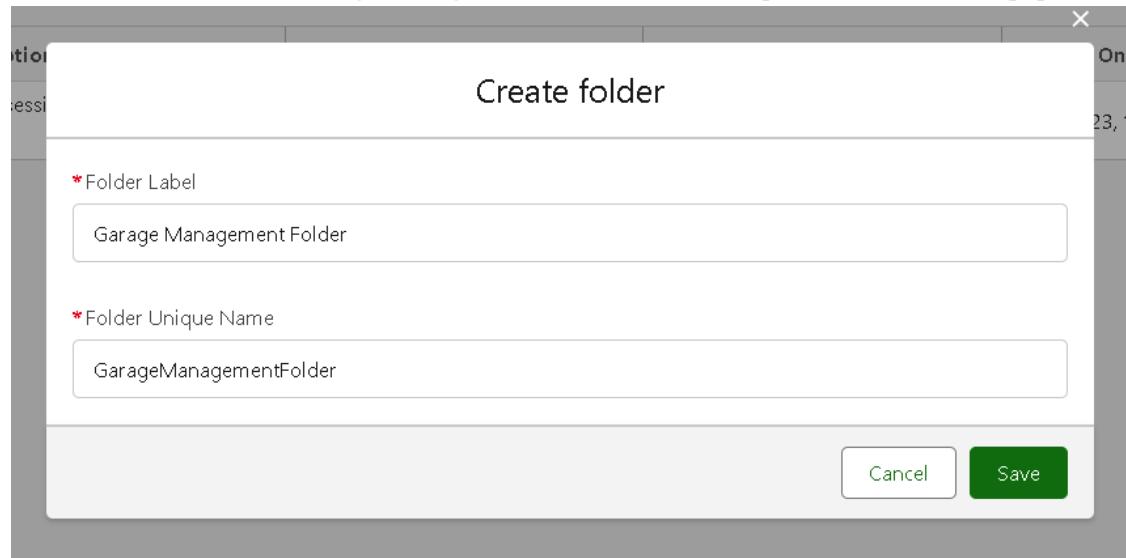
```
1 trigger AmountDistribution on Appointment_c (before insert, before update) {
2     if(trigger.isbefore && trigger.isinsert || trigger.isupdate){
3
4         AmountDistributionHandler.amountDist(trigger.new);
5     }
6 }
```

Activity – 15

Reports

- Report Folder Creation

- Give the Folder label as “Garage Management Folder”, Folder unique name will be auto populated.

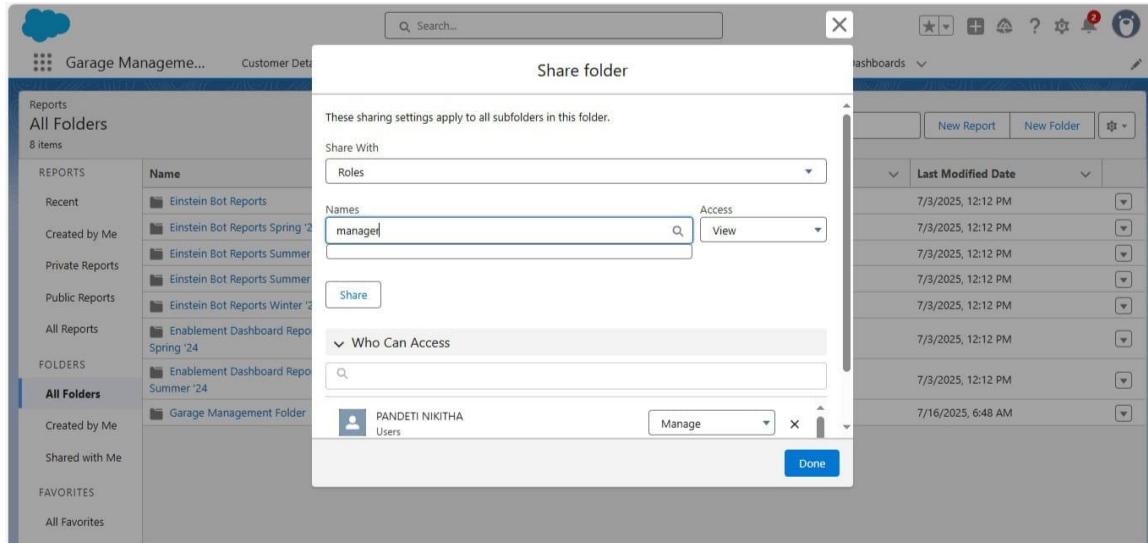


	Name	Created By	Created On	Last Modified By	Last Modified Date
REPORTS	Einstein Bot Reports	Automated Process	7/3/2025, 12:12 PM	Automated Process	7/3/2025, 12:12 PM
Recent	Einstein Bot Reports Spring '23	Automated Process	7/3/2025, 12:12 PM	Automated Process	7/3/2025, 12:12 PM
Created by Me	Einstein Bot Reports Summer '23	Automated Process	7/3/2025, 12:12 PM	Automated Process	7/3/2025, 12:12 PM
Private Reports	Einstein Bot Reports Summer '22	Automated Process	7/3/2025, 12:12 PM	Automated Process	7/3/2025, 12:12 PM
Public Reports	Einstein Bot Reports Winter '23	Automated Process	7/3/2025, 12:12 PM	Automated Process	7/3/2025, 12:12 PM
All Reports	Enablement Dashboard Reports Spring '24	Automated Process	7/3/2025, 12:12 PM	Automated Process	7/3/2025, 12:12 PM
FOLDERS	Enablement Dashboard Reports Summer '24	Automated Process	7/3/2025, 12:12 PM	Automated Process	7/3/2025, 12:12 PM
All Folders	Garage Management Folder	PANDETI NIKITHA	7/16/2025, 6:48 AM	PANDETI NIKITHA	7/16/2025, 6:48 AM

	Name	Description	Folder	Created By	Created On	Subscribed
REPORTS	New Service information Report		Garage Management Folder	PANDETI NIKITHA	7/17/2025, 7:24 AM	
Recent						
Created by Me						
Private Reports						
Public Reports						
All Reports						
FOLDERS						
All Folders						

- Sharing a folder:

- Select the share with as “roles”, in name field search for “manager”, give “view” as access for that role.



- Report Types:

1. Select the Primary object as “ Customer details” .
2. Give the Report type Label as “ Service information ”
3. Report type Name is autopopulated.
4. Keep the Description as same.
5. Select Store in Category as “ other Reports ”
6. Select the deployment status as “ Deployed ”, click on Next.

Report Type Focus

Specify what type of records (rows) will be the focus of reports generated by this report type.
Example: If reporting on "Contacts with Opportunities with Partners," select "Contacts" as the primary object.

Primary Object: Customer Details

Identification

Report Type Label: Service information
Report Type Name: Service_information
Description: Service information
Store in Category: Other Reports

Deployment

A report type with deployed status is available for use in the report wizard. While in development, report types are visible only to authorized administrators and their delegates.

Deployment Status: Deployed

- 7.
8. now , Click on Related object box.
9. Click on Select Object, choose Appointment Object as shown in fig.

New Custom Report Type
Service information

Step 2. Define Report Records Set

This report type will generate reports about Customer Details. You may define which related records from other objects are returned in report results by choosing a relationship to another object.

A Customer Details
Primary Object

B Select Object
--Select Object--
Activities
Appointments
Duplicate Record Items

Help for this Page

Step 2 of 2

Previous Save Cancel

Step 2. Define Report Records Set

This report type will generate reports about Customer Details. You may define which related records from other objects are returned in report results by choosing a relationship to another object.

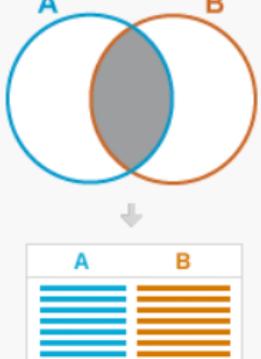
A Customer Details
 Primary Object

B Appointments

A to B Relationship:

- Each "A" record must have at least one related "B" record.
- "A" records may or may not have related "B" records.

(Click to relate another object)



- 11.
12. Again Click to relate another object.
13. And select the related object as “ service records”.
14. Repeat the process and select the related object as “ Billing details and feedback”.

SETUP Report Types

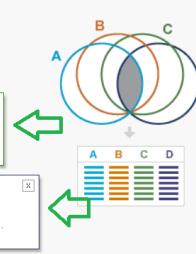
This report type will generate reports about Customer Details. You may define which related records from other objects are returned in report results by choosing a relationship to another object.

A Customer Details
 Primary Object

B Appointments

C Service records

D Billing details and feedback



Object Limit Reached
 You can associate up to four objects to a custom report type.

[Previous](#) [Save](#) [Cancel](#)

- 15.

The screenshot shows the Salesforce Setup interface. The top navigation bar includes the Salesforce logo, a search bar labeled "Search Setup", and various global buttons. The main menu on the left is expanded to show "Object Manager". The search bar on the left contains the query "repor". The main content area displays the "Service Information" object details. The "Details" section lists the following fields:

Display La...	Service information
API Name	Service_information
Description	Service information
Created By	PANDETI NIKITHA, 16/07/25, 7:30 pm
Store in C...	other
Deployme...	Deployed
Modified By	PANDETI NIKITHA, 16/07/25, 7:30 pm

The "Fields" section shows the included fields from other objects:

Source Object	Included Fields
Customer Details	11
Appointments	14
Service records	10
Billing details and feed...	10

The "Object Relationships" section illustrates relationships between Customer Details (A), Appointments (B), Service records (C), and Billing (D) using a Venn diagram. Below the diagram is a grid representing the combined fields.

New Service Information Report

- In column section.
 - o Customer name
 - o Appointment Date
 - o Service Status
 - o Payment paid
 - In GROUP ROWS section.
 - o Rating for Service
 - In GROUP COLUMN section.
 - o Payment Status
 - Click on Add Chart , Select the Line Chart.

REPORT ▾

New Service information Report

Service information

Fields >

Outline Filters 2

GROUP ROWS

Add group...

Rating for service

GROUP COLUMNS

Add group...

Payment Status

Columns

Add column...

Customer Name

Appointment Date

Service Status

Payment Paid

Rating for service

Payment Status

Completed

Total

Sum of Payment Paid

Record Count

\$20,000

2

2

Sum of Payment Paid

Record Count

\$10,000

1

1

Total

Sum of Payment Paid

Record Count

\$30,000

3

3

Previewing a limited number of records. Run the report to see everything.

Update Preview Automatically

Sum of Paym...

Rating for service

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

Customer Name Appointment Date Service Status Payment Paid

NickCarrie 7/16/2025 Completed \$10,000

Mikaelson 7/15/2025 Completed \$10,000

PANDETI NIKITHA 7/15/2025 Completed \$10,000

\$30,000

Row Counts Detail Rows Grand Total Stacked Summaries

Save & Run Save Close Run

Activity – 16

DashBoard: Dashboards help you visually understand changing business conditions so you can make decisions based on the real-time data you've gathered with reports.

Create DashBoard Folder:

- The folder label as “Service Rating dashboard”.

The screenshot shows the Garage Management software interface. At the top, there's a navigation bar with links for Customer Details, Appointments, Service records, Billing details and feedback, Reports, and Dashboards. Below the navigation is a search bar and a toolbar with various icons. The main area is titled "Dashboards" and "Recent". It lists one item: "Customer review" (Service Rating dashboard, created by PANDETI NIKITHA on 7/17/2025, 7:51 AM). On the left sidebar, there are sections for DASHBOARDS (Recent), FOLDERS (All Folders), and FAVORITES (All Favorites).

Create Dashboard:

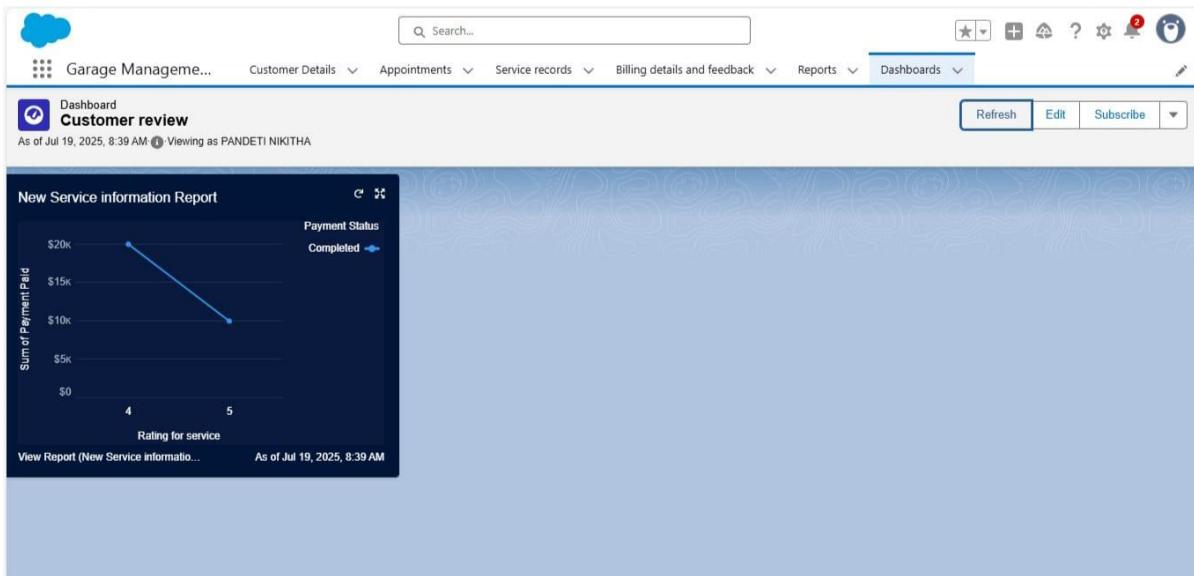
1. Give a Name and select the folder that created, and click on create.

The screenshot shows the "New Dashboard" dialog box. It has fields for "Name" (Customer review), "Description" (empty), "Folder" (Service Rating), and "Select Folder" (button). At the bottom are "Cancel" and "Create" buttons, with "Create" highlighted in green.

3. Select add component.

The screenshot shows the "Add Component" dialog box in the Employee Management software. It has tabs for Home, Employees, Assets, Asset Services, Projects, ProjectTasks, Reports, and Dashboards. The "Dashboards" tab is selected. A red box highlights the "+ Component" button. Other buttons include "+ Filter", "Save", and "Done".

4. Select a Report and click on select.
5. Select the Line Chart. Change the theme.



6. Set the Frequency as “ weekly ”.
7. Set a day as monday.

Edit Subscription

Schedule dashboard refreshes and subscribe to receive results.

Settings

Frequency

Daily Weekly Monthly

Days

Sun Mon Tue Wed Thu Fri Sat

Time

3:00 pm

Recipients

Receive new results by email when dashboard is refreshed. (i)

Send email to

Me

Activity – 17

User Adoption:-

-Creating Records

- Contact Details:

1. Click on the app launcher located at the left side of the screen.

2. Search for “Garage Management” and click on it.
3. Click on the “Consumer details tab”.
4. Click on new and fill the details as shown below figs, and click save.

Customer Details
Recently Viewed

Customer Name: Mikaelson

Owner: PANDETI NIKITHA

Phone number: 09764234567

Gmail: mikael@gmail.com

Name: Mikaelson

Address: London

Created By: PANDETI NIKITHA, 7/17/2025, 8:04 AM

Buttons: Cancel, Save & New, Save

- Appointment Details:

1. Click on the “Appointment tab”.
2. Enter the customer details as created, while entering Appointment Date enter the date less than the created date.
3. Match the validation while entering the vehicle number plate.
4. Select the services you need.
5. Click on save to see the Service Amount.

Appointments
Recently Viewed

Appointment Name: app-006

Owner: PANDETI NIKITHA

Maintenance service:

Repairs:

Service Amount: \$10,000

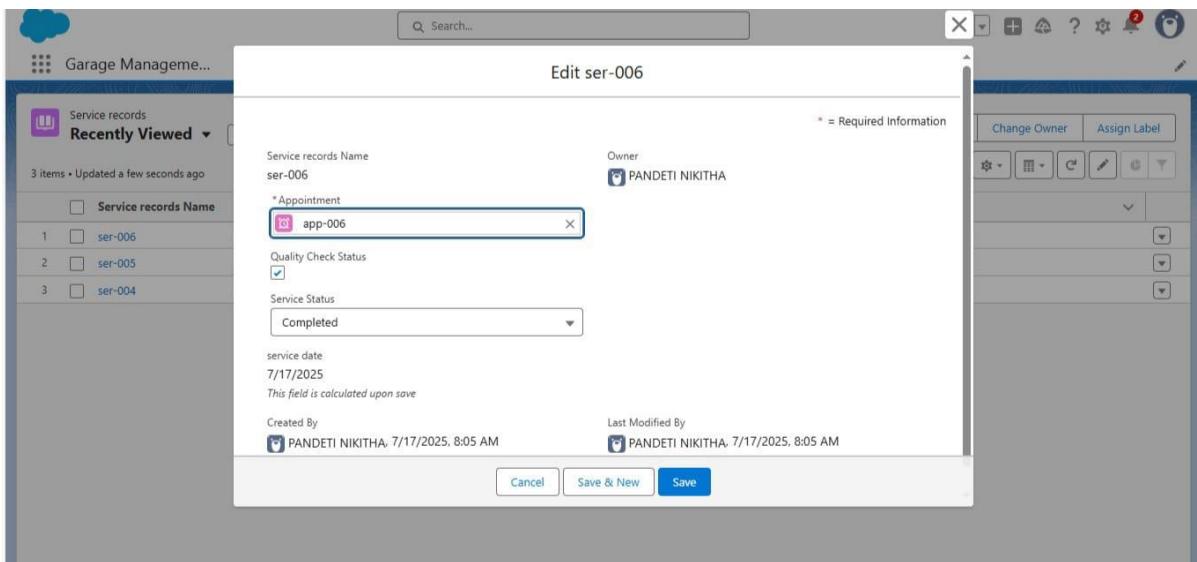
*Vehicle number plate: AP12AB1234

Buttons: Cancel, Save & New, Save

- Service Record Details:

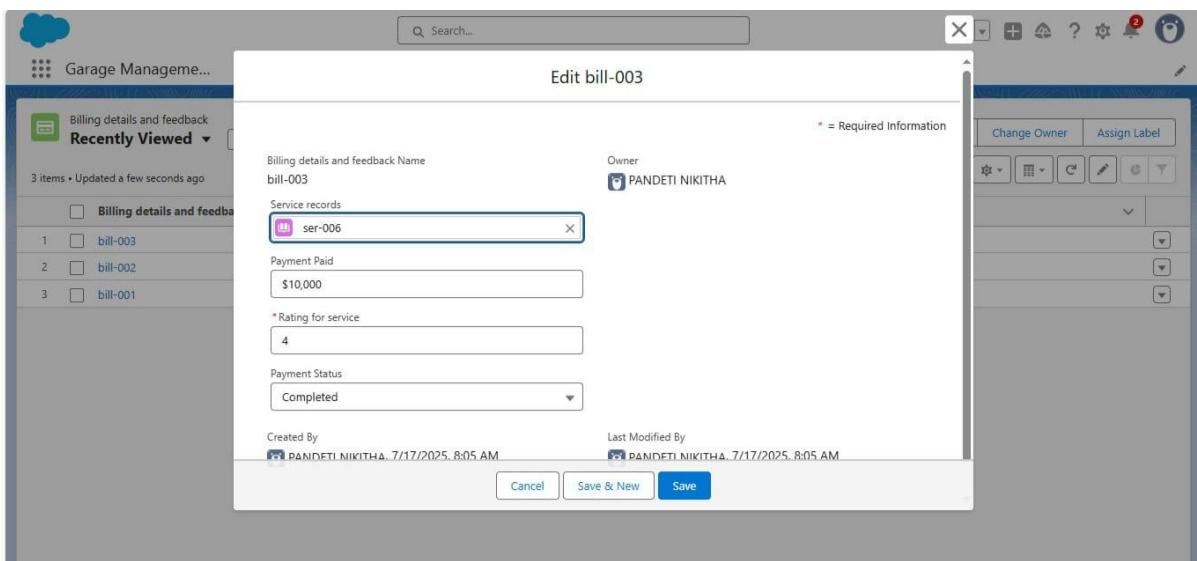
1. Click on the “Service record tab”.
2. Enter the Appointment, and started is selected as default.

3. Click on save.

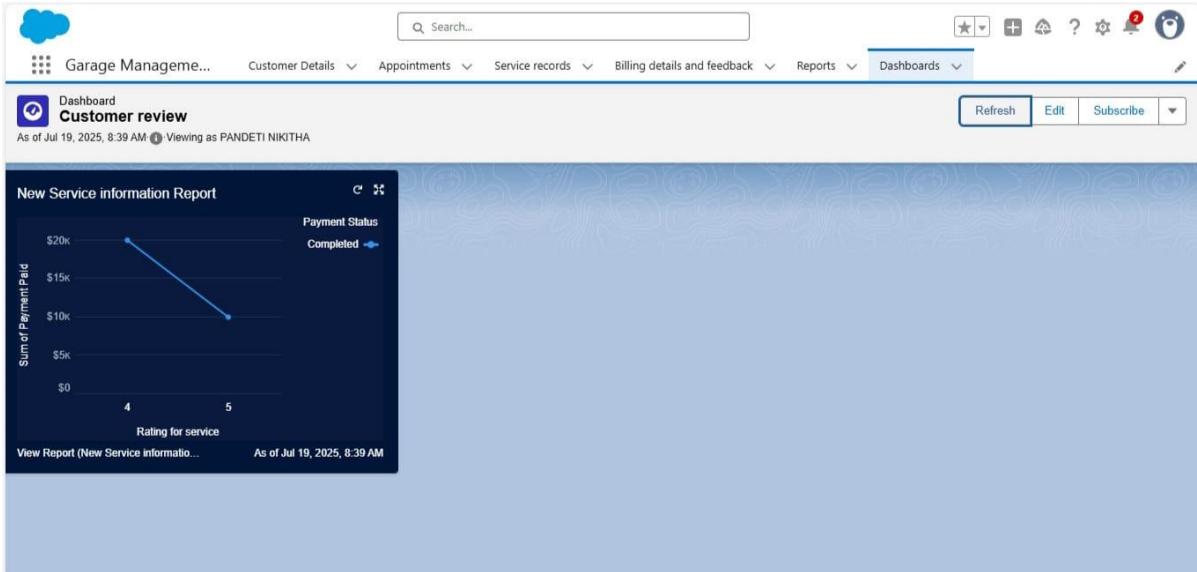


- Billing&Feedback Details:

1. Open the record and click on Quality check status as true.
2. Click on save.



Final Output:



CONCEPTS UTILIZED

(FOR OUR PROJECT IMPLEMENTATION)

- **What is SALESFORCE?**

Salesforce is like a digital hub that helps businesses stay connected with their customers. Imagine having a central place where a company can keep track of every conversation, email, and sale, so no detail slips through the cracks. It's built to bring together sales, customer support, and marketing efforts, so everyone is on the same page.

With Salesforce, businesses can customize tools to fit their needs, automate repetitive tasks, and use built-in AI to get insights on what customers want. It's essentially a smart assistant for companies to build stronger, more personalized customer relationships.

- **Objects**

Objects are database tables that permit you to store data that is specific to an organization.

Types:-

1. Standard Objects
 - Provided by salesforce
2. Custom Objects
 - Created by users as per their requirements and flexibilities.

- **Tabs**

Tabs are navigation links that give users quick access to different objects, features, or data, like accounts, contacts, or dashboards, within the platform.

- **Lightning App**

A Lightning App in Salesforce is a tool that lets users build easy-to-use, interactive apps to streamline work and improve how they interact with data.

- **Fields**

Fields in Salesforce are like labelled blanks in a form where you fill in specific details like a person's name, phone number, or Gmail, so that all relevant information is organized and easy to find.

- **Validation & Duplication Rules**

- Validation rules in Salesforce are conditions that ensure data entered meets specific criteria before being saved, helping maintain data quality and accuracy.
- Duplication rules in Salesforce are settings that help prevent or manage duplicate records by identifying and blocking or alerting users about potential duplicates during data entry.

- **Profiles**

Profiles define what a user can see and do within the platform, acting like "permission sets" for different roles.

- **Role & Role Hierarchy**

Roles define a user's level of access to data and functions, creating a hierarchy that helps organizations manage who can see and edit information, ensuring everyone has the right permissions while still promoting collaboration across teams.

- **Users**

Users are people who can log in to the platform to manage customer information, track sales, and work with their teammates, helping them do their jobs better.

- **Public Groups**

Public groups in Salesforce are like team huddles that bring users together, making it easier to share information and collaborate on projects seamlessly.

- **Sharing Settings**

Sharing settings determine how and with whom you share data within your organization, ensuring the right people have access to the right information to collaborate effectively.

- **Flows**

Flows are powerful tools that allow users to automate complex business processes by visually designing step-by-step workflows that guide users or update records without needing to write code.

- **Apex Triggers**

APEX Triggers are custom pieces of code that automatically execute before or after specific events occur in the database, helping businesses automate tasks and enforce rules without needing manual input.

- **Reports**

Reports are tools that help businesses visualize and analyse their data, making it easier to understand trends and track performance at a glance.

- **Dashboard**

Dashboards are visual displays that summarize key metrics and data, helping businesses quickly see their performance and make informed decisions at a glance.

TEST AND VALIDATION

- **Approach to Testing:**

For the Garage Management System, our testing strategy ensures everything works smoothly and meets user needs. We'll combine both automated and manual testing methods, including:

1. Functional Testing
2. Integration Testing
3. User Acceptance Testing (UAT)
4. Performance Testing

- **Unit Testing (Apex Classes & Triggers):**

Unit testing will focus on individual components, like Apex classes and triggers, to ensure they function correctly. Key elements include:

1. **Positive Tests:** To confirm expected functionality under normal conditions.
2. **Negative Tests:** To check how the system handles errors or unexpected inputs.
3. **Bulk Tests:** To ensure the system can handle large amounts of data without issues.

CONCLUSION

In conclusion, the Salesforce Garage Management System is a powerful tool that makes running a service centre easier and more efficient. It combines features like online appointment scheduling, real-time updates on car repairs, and smart inventory management, all in one place. This means customers get faster service and clear communication, which helps keep them happy. For the staff, it reduces confusion and makes their jobs smoother. Plus, the system gives managers valuable insights into performance, allowing them to spot trends and improve the business. Overall, this system helps garages provide excellent service and build strong relationships with their customers.

Thank You

