

TITLE: GARAGE MANAGEMENT SYSTEM

Date	07 NOVEMBER 2025
Team ID	NM2025TMID04015
Project Name	Garage Management system

Category: Salesforce Developer

Skills Required:

Salesforce Admin, Salesforce Developer

Project Description:

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.

Phase 1: Ideation

Problem Statement:

In automotive service centers and garage businesses, managing customer vehicles, service appointments, mechanic assignments, and billing manually often leads to inefficiencies, data inaccuracies, and poor customer experience. The lack of an integrated system makes it difficult to track service histories, manage resources, and ensure timely communication with customers. There is a need for a centralized digital platform that automates job tracking, approvals, and notifications to enhance productivity and accuracy.

Proposed Solution:

The **Garage Management System** built on **Salesforce** provides a unified platform to manage vehicles, customers, service requests, and billing efficiently. By leveraging Salesforce automation tools such as **Flows, Approval Processes, Validation Rules, and Email Alerts**, the system streamlines garage operations, reduces manual effort, and provides real-time insights through **reports and dashboards**.

Objectives:

- Digitize and automate the **entire service lifecycle**—from appointment creation to delivery and invoicing.
- Maintain **vehicle, customer, mechanic, and service records** in one centralized system.
- Use **Salesforce automation features** (Flows, Triggers, and Approval Processes) to reduce manual tasks.
- Enable **service managers** to review and approve job estimates through an automated approval flow.
- Send **automatic email or SMS notifications** for service updates, job completions, and payment reminders.

Expected Outcome:

A **fully automated, user-friendly Salesforce application** that simplifies garage operations, enhances transparency, reduces administrative burden, and delivers real-time insights for improved decision-making and customer satisfaction.

Phase 2: Requirement Analysis

Milestone 1: Salesforce Account

Introduction:

Are you new to Salesforce? Not sure exactly what it is, or how to use it? Don't know where you should start on your learning journey? If you've answered yes to any of these questions, then you're in the right place. This module is for you.

Welcome to Salesforce! Salesforce is game-changing technology, with a host of productivity-boosting features, that will help you sell smarter and faster. As you work toward your badge for this module, we'll take you through these features and answer the question, "What is Salesforce, anyway?" .

What Is Salesforce?

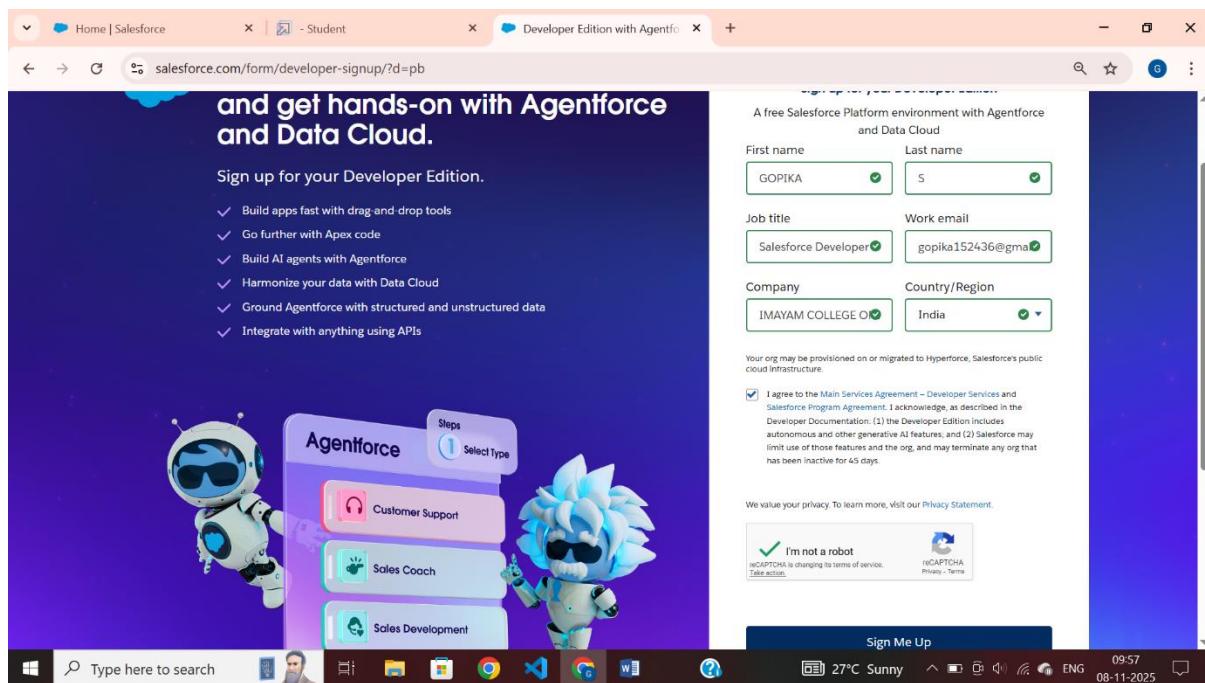
Salesforce is your customer success platform, designed to help you sell, service, market, analyze, and connect with your customers.

Salesforce has everything you need to run your business from anywhere. Using standard products and features, you can manage relationships with prospects and customers, collaborate and engage with employees and partners, and store your data securely in the cloud. So what does that really mean? Well, before Salesforce, your contacts, emails, follow-up tasks, and prospective deals might have been organized something like this:
<https://youtu.be/r9EX3IGde5k>

Activity 1: Creating Developer Account

Creating a developer org in salesforce.

1. Go to <https://developer.salesforce.com/signup>
2. On the sign up form, enter the following details :



1. First name & Last name
2. Email
3. Role : Developer
4. Company : College Name
5. County : India
6. Postal Code : pin code
7. Username : should be a combination of your name and company

This need not be an actual email id, you can give anything in the format:
username@organization.com
Click on sign me up after filling these.

Activity 2: Account Activation:

1. Go to the inbox of the email that you used while signing up. Click on the verify account to activate your account. The email may take 5-10mins.
- 2.

Change Your Password

Enter a new password for lead@sb.oom..
Make sure to include at least:

- ✓ 8 characters
- ✓ 1 letter
- ✓ 1 number

* New Password

..... Good

* Confirm New Password

..... Match

Security Question

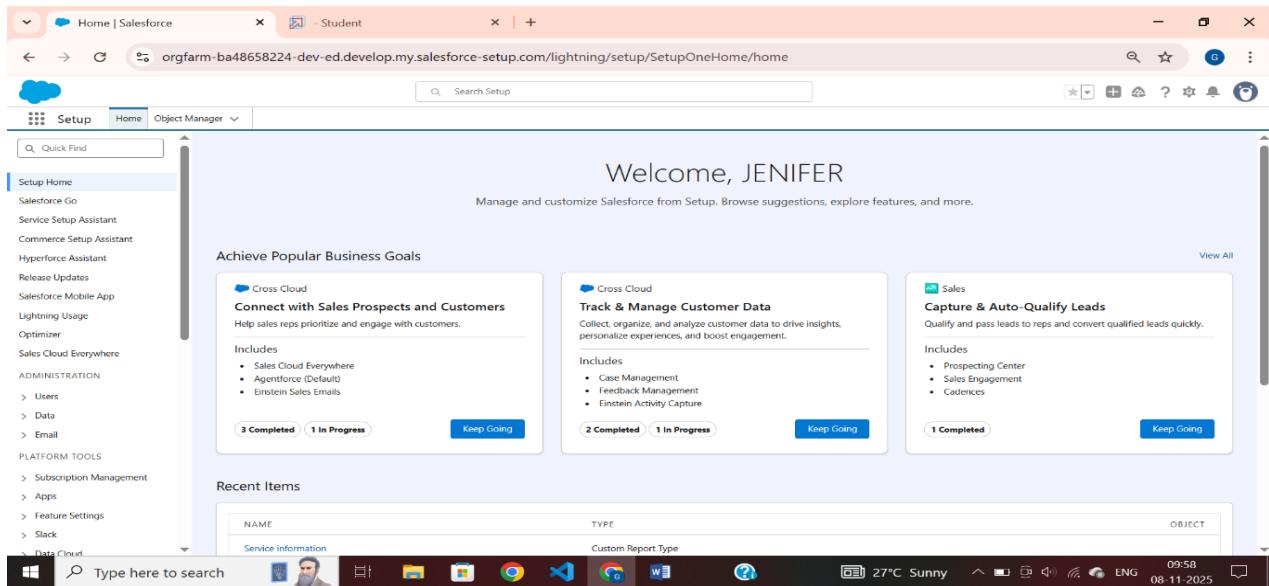
In what city were you born?

* Answer

asdfghjkl

Change Password

1. Click on Reset Password
2. Give a password and answer a security question and click on change password.
3. Give a password and answer a security question and click on change password.
4. Then you will redirect to your salesforce setup page.



Milestone 2: Object

What Is an Object?

Salesforce objects are database tables that permit you to store data that is specific to an organization. What are the types of Salesforce objects

Salesforce objects are of two types:

1. **Standard Objects:** Standard objects are the kind of objects that are provided by salesforce.com such as users, contracts, reports, dashboards, etc.
2. **Custom Objects:** Custom objects are those objects that are created by users. They supply information that is unique and essential to their organization. They are the heart of any application and provide a structure for sharing data.

To Navigate to Setup page:

Click on gear icon ? click setup.

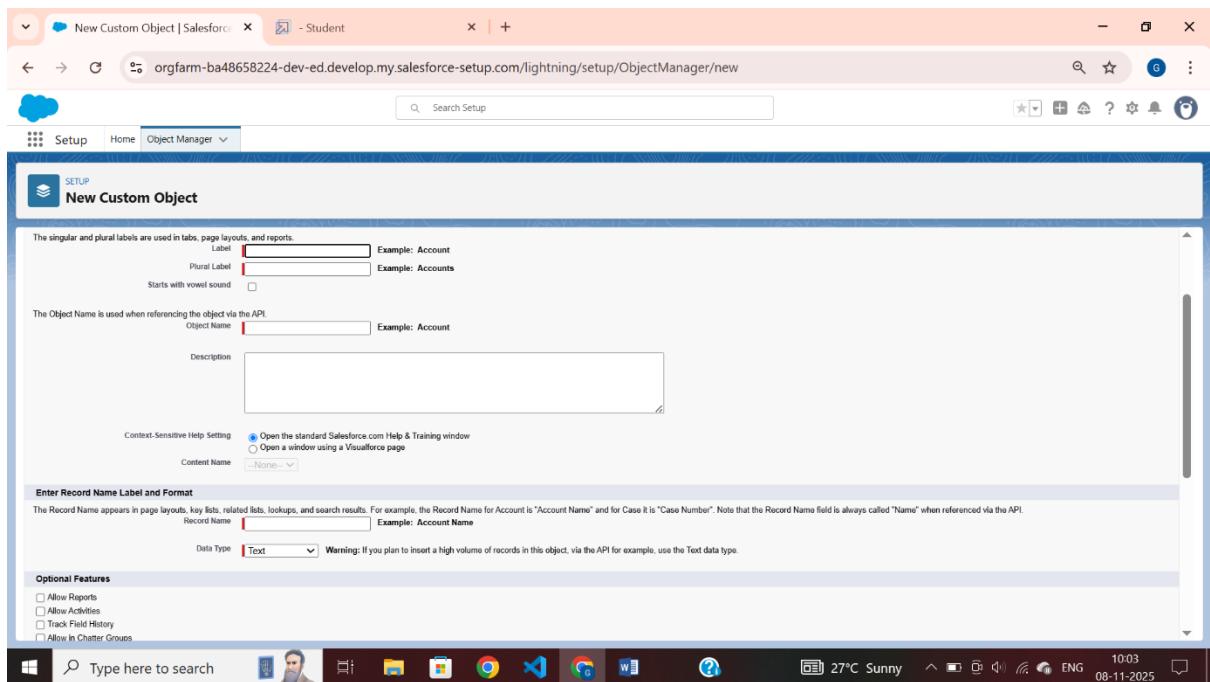
The screenshot shows the Salesforce Setup Home page. On the left, there's a sidebar with links like Setup Home, Salesforce Go, Service Setup Assistant, etc. The main area features a "Welcome, JENIFER" message and sections for "Achieve Popular Business Goals" and "Recent Items". The "Achieve Popular Business Goals" section includes cards for "Cross Cloud Connect with Sales Prospects and Customers", "Cross Cloud Track & Manage Customer Data", and "Sales Capture & Auto-Qualify Leads". The "Recent Items" section shows a table with columns for NAME, TYPE, and OBJECT.

To create an object:

3. From the setup page ? Click on Object Manager ? Click on Create ? Click on Custom Object.

The screenshot shows the Salesforce Object Manager page. It lists various objects such as Account, Activity, Address, Agent Work, etc., with columns for Label, API Name, Type, Description, and Last Modified. A "Create" button is visible at the top right, and a "Custom Object" link is shown in the top right corner of the table header.

4. On Custom object defining page:
5. Enter the label name, plural label name, click on Allow reports, Allow search.

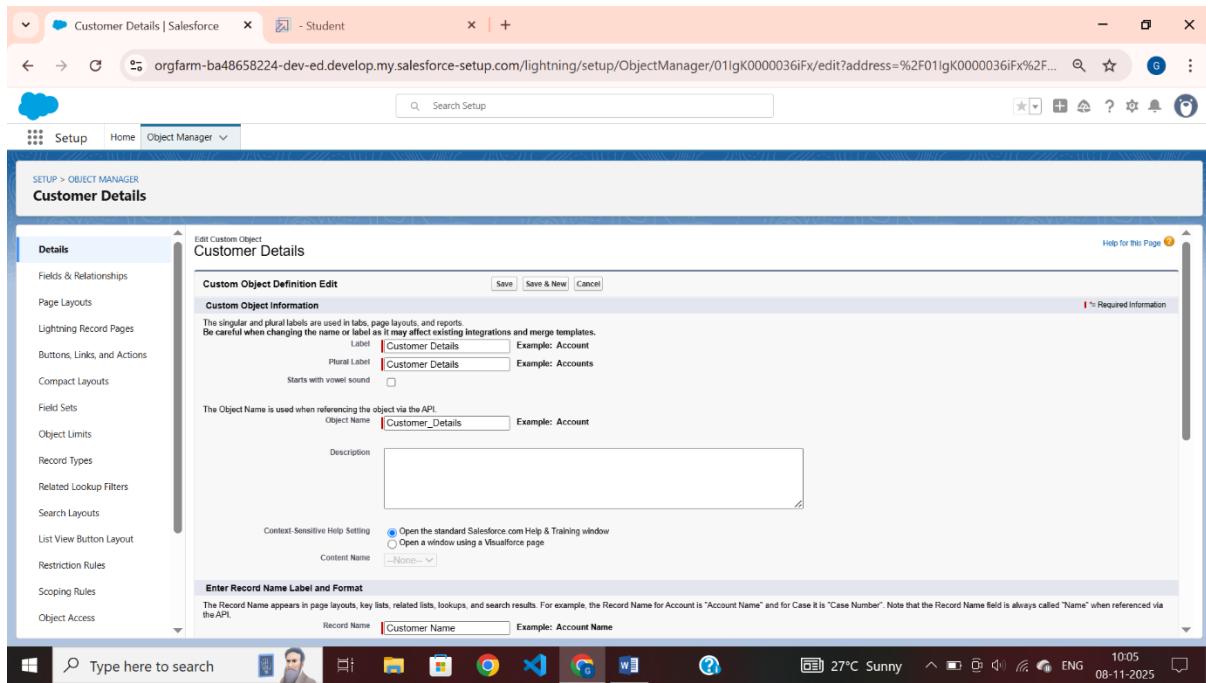


6. Click on Save.

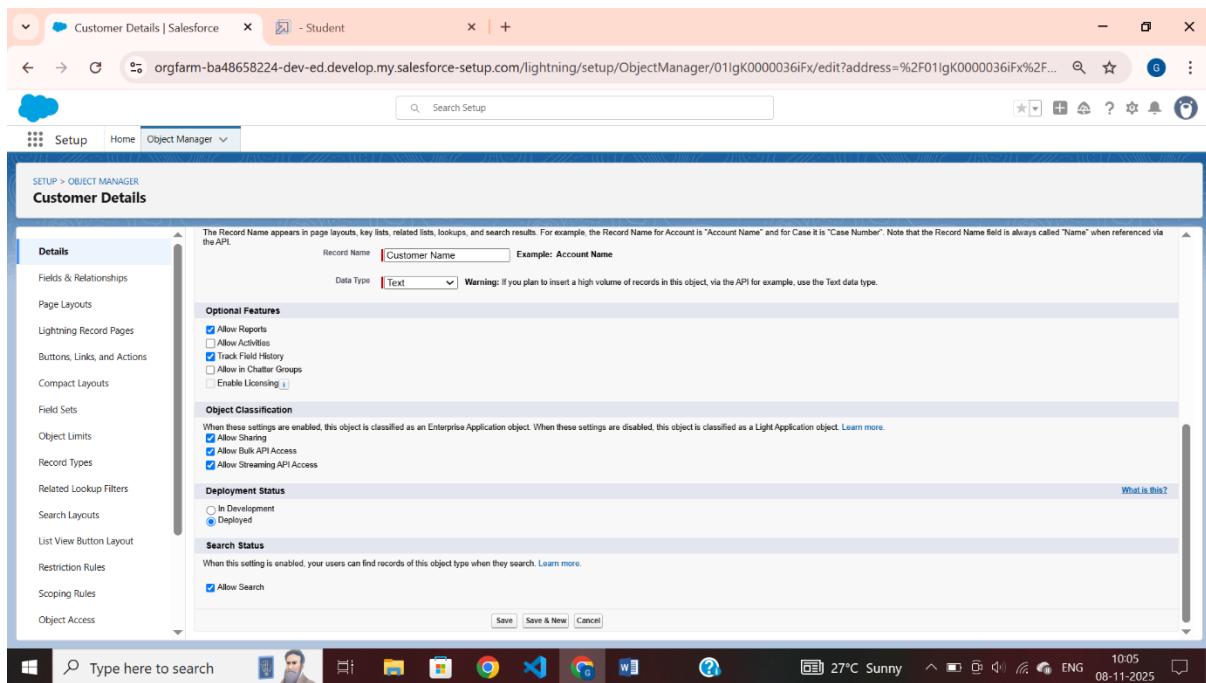
Activity 1: Create Customer Details Object

To create an object:

1. From the setup page >> Click on Object Manager >> Click on Create >> Click on Custom Object.
 1. Enter the label name >> Customer Details
 2. Plural label name >> Customer Details
 3. Enter Record Name Label and Format
 - Record Name >> Customer Name
 - Data Type >> Text



2. Click on Allow reports and Track Field History,
3. Allow search >> Save.

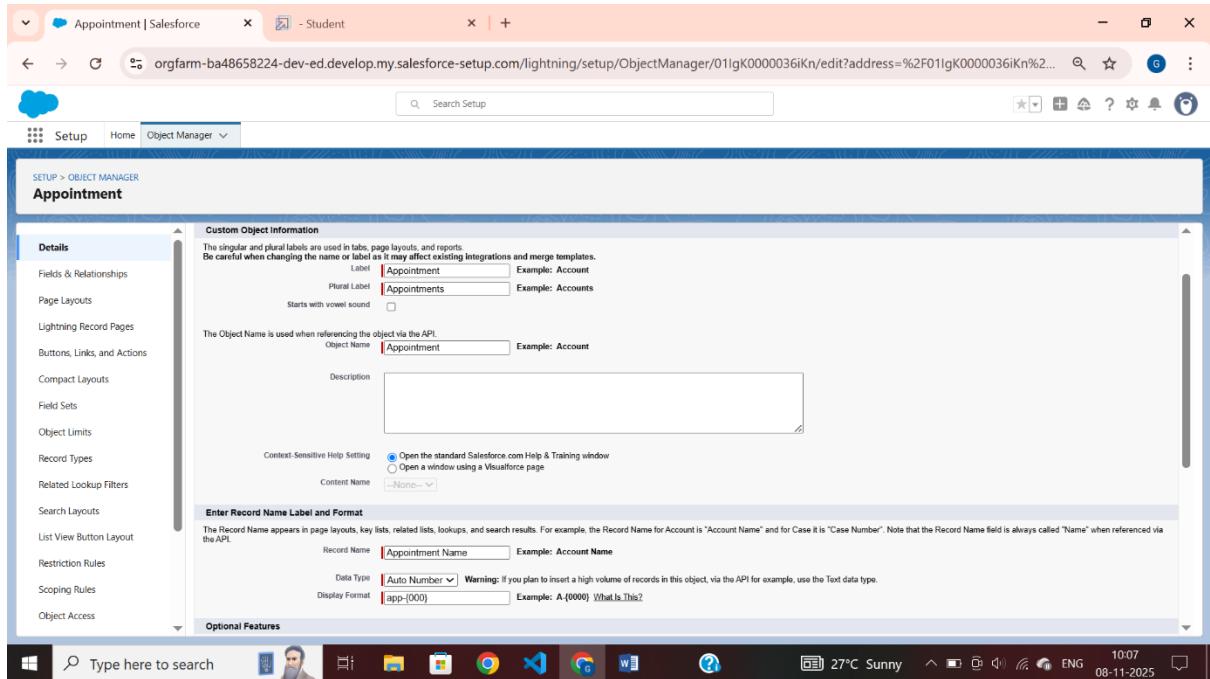


Activity 2: Create Appointment Object

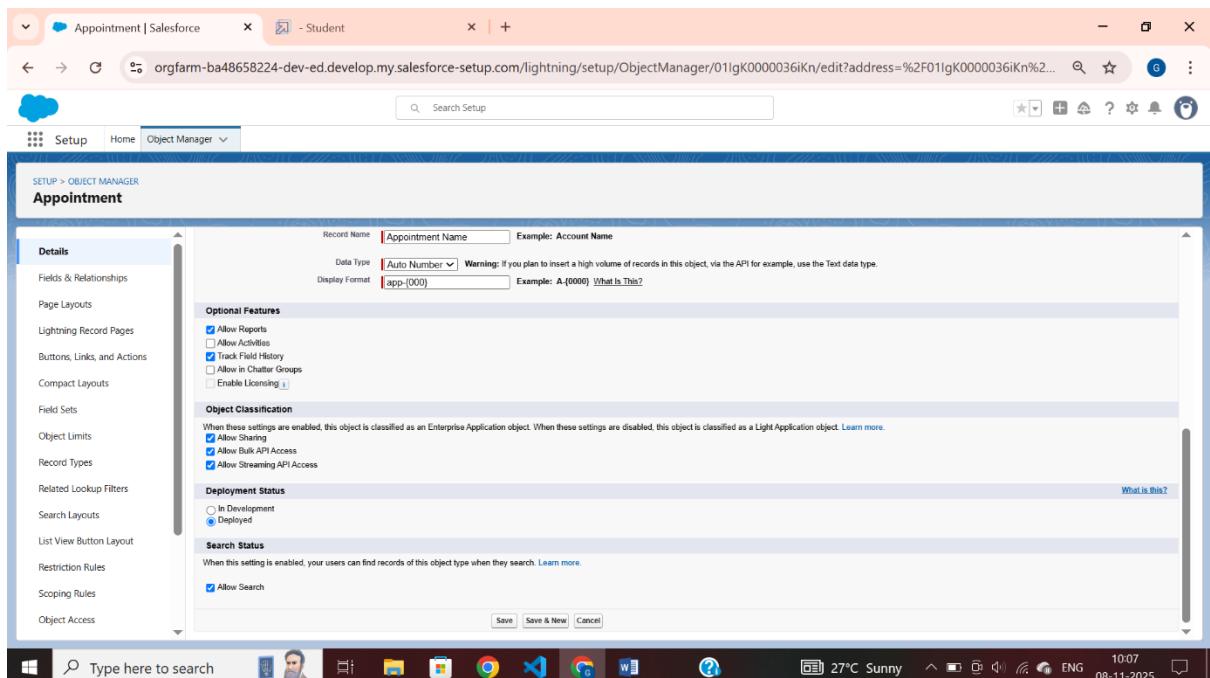
To create an object:

1. From the setup page >> Click on Object Manager >> Click on Create >> Click on Custom Object.
1. Enter the label name >> Appointment
2. Plural label name >> Appointments
3. Enter Record Name Label and Format

- Record Name >> Appointment Name
- Data Type >> Auto Number
- Display Format >> app-{000}
- Starting number >> 1



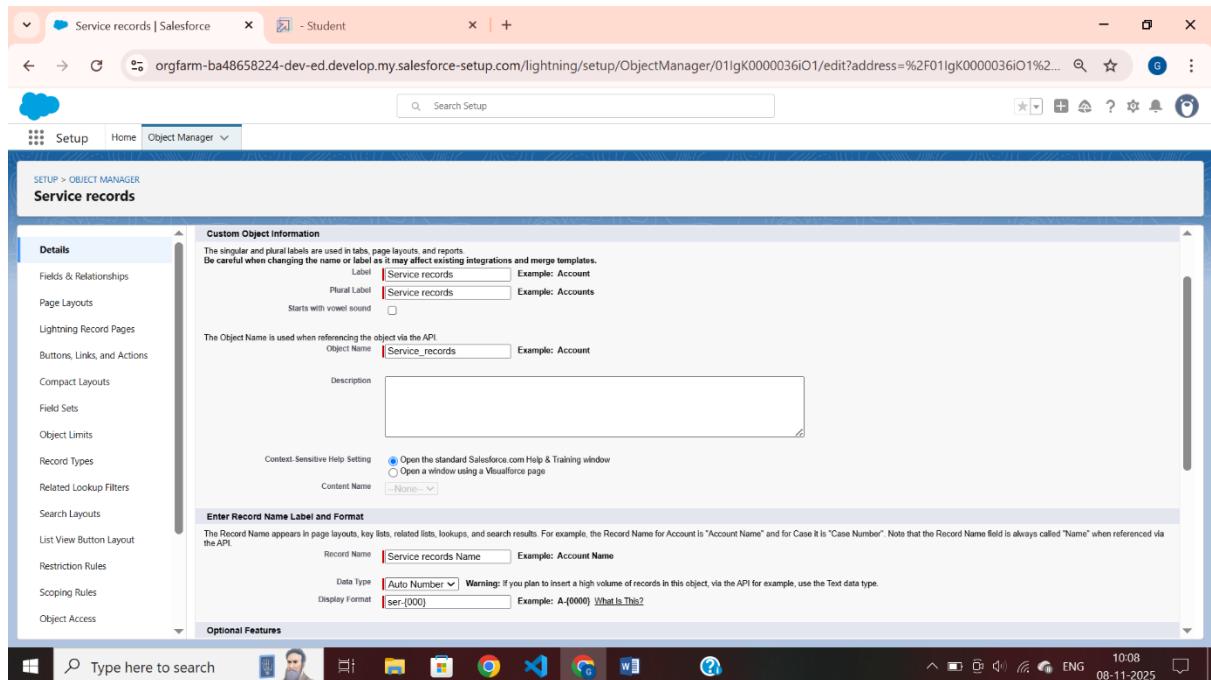
2. Click on Allow reports and Track Field History,
3. Allow search >> Save.



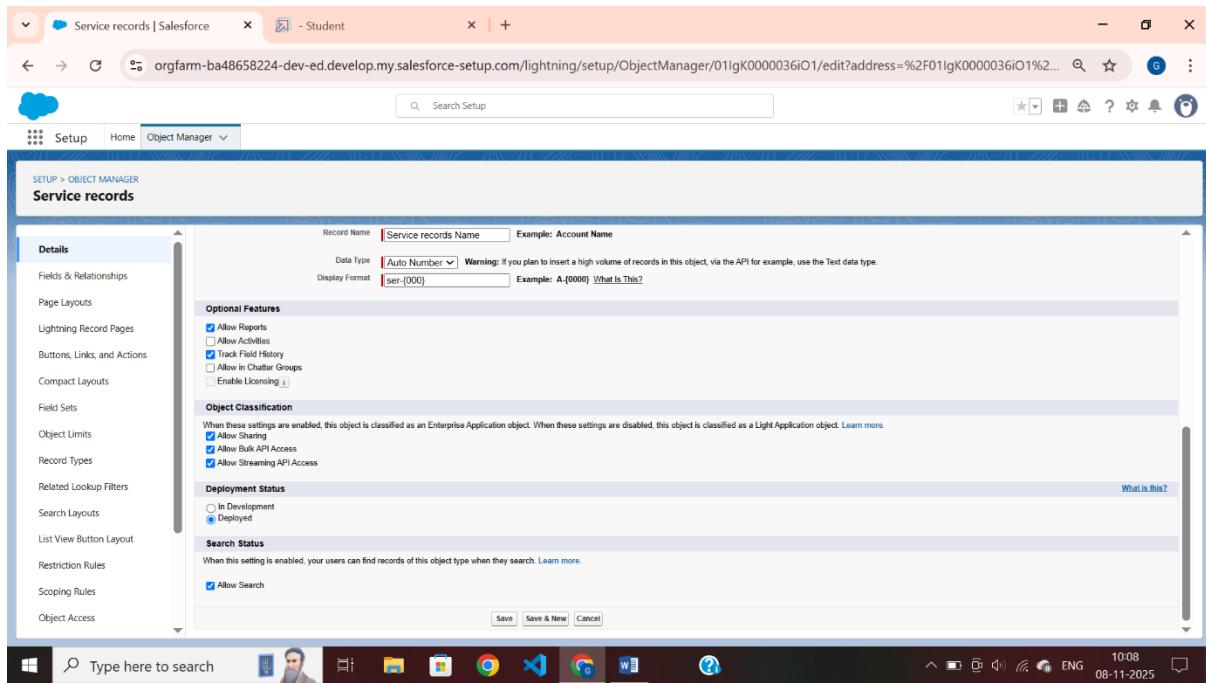
Activity 3: Create Service Records Object

To create an object:

1. From the setup page >> Click on Object Manager >> Click on Create >> Click on Custom Object.
 1. Enter the label name >> Service records
 2. Plural label name >> Service records
 3. Enter Record Name Label and Format
 - Record Name >>Service records Name
 - Data Type >> Auto Number
 - Display Format >> ser-{000}
 - Starting number >> 1



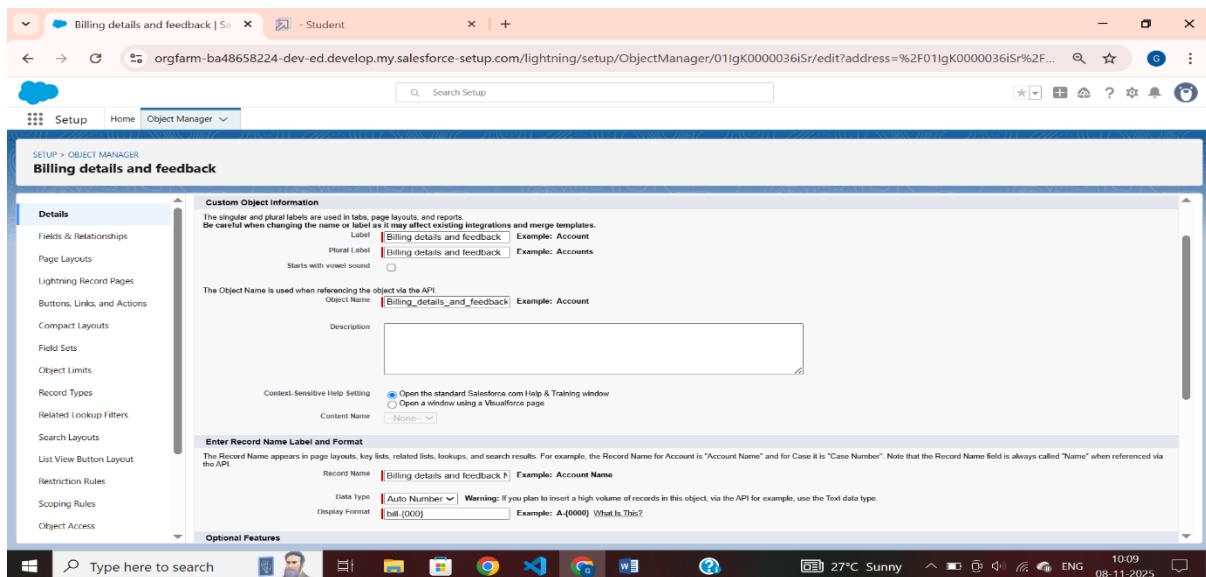
2. Click on Allow reports and Track Field History,
3. Allow search >> Save.



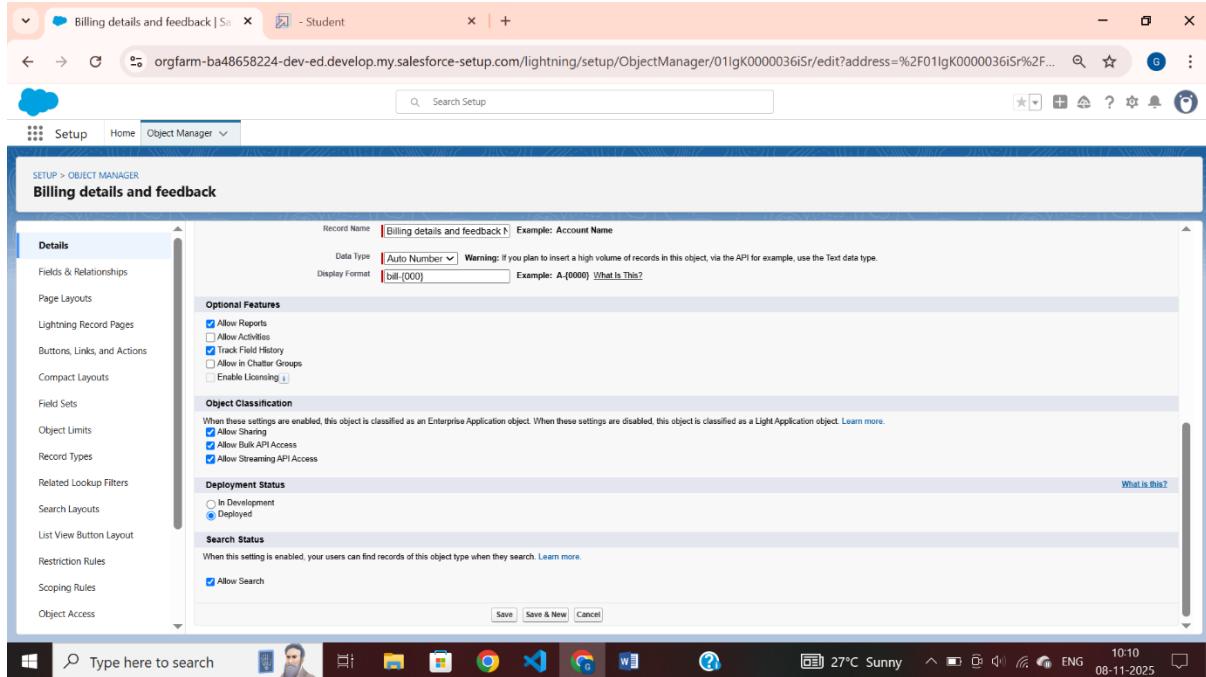
Activity 4: Create Billing Details And Feedback Object

To create an object:

1. From the setup page >> Click on Object Manager >> Click on Create >> Click on Custom Object.
1. Enter the label name >> Billing details and feedback
2. Plural label name >> Billing details and feedback
3. Enter Record Name Label and Format
 - Record Name >> Billing details and feedback Name
 - Data Type >> Auto Number
 - Display Format >> bill-{000}
 - Starting number >> 1



2. Click on Allow reports and Track Field History,
3. Allow search >> Save.

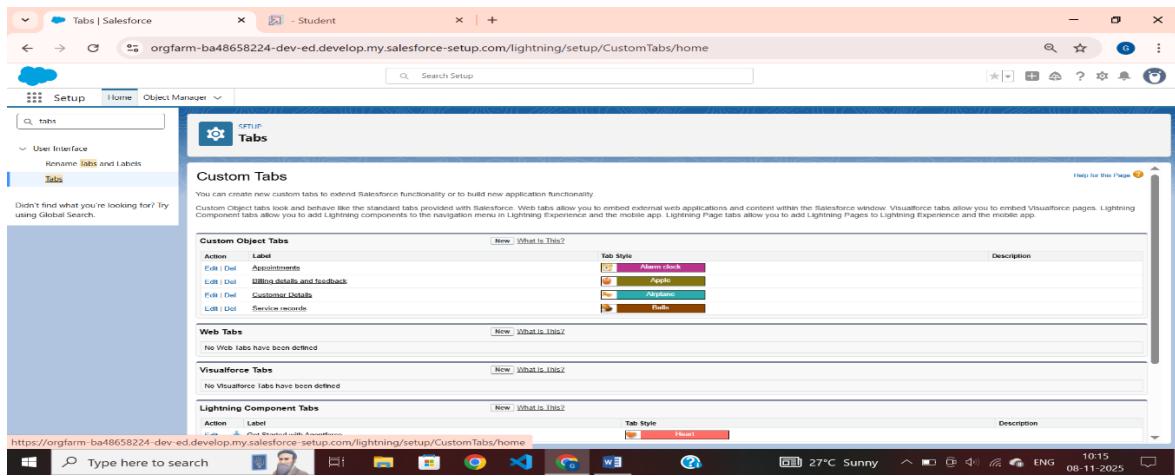


Milestone 3: Tabs

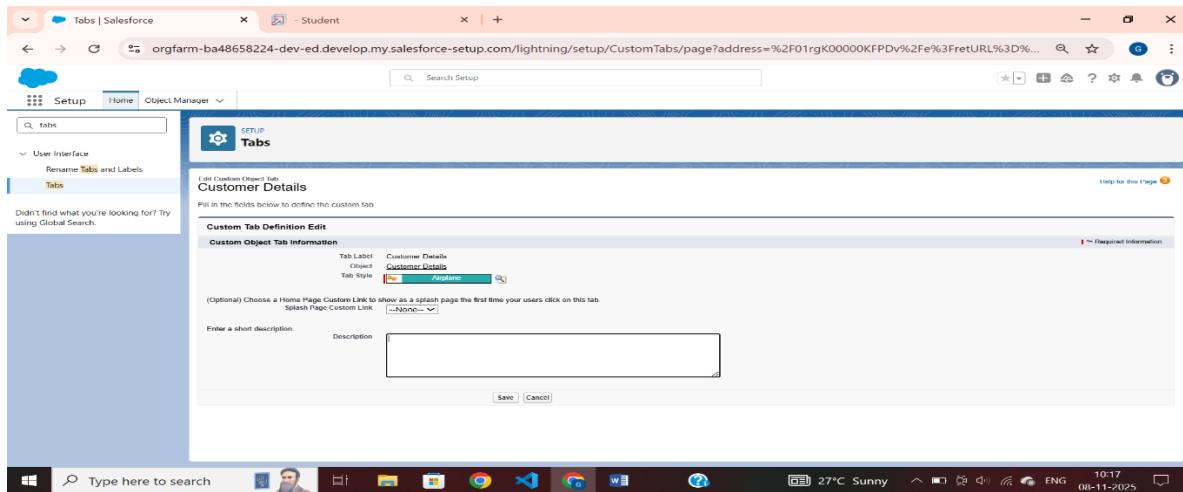
Activity 1: Creating A Custom Tab

To create a Tab:(Customer Details)

1. Go to setup page >> type Tabs in Quick Find bar >> click on tabs >> New (under custom object tab)



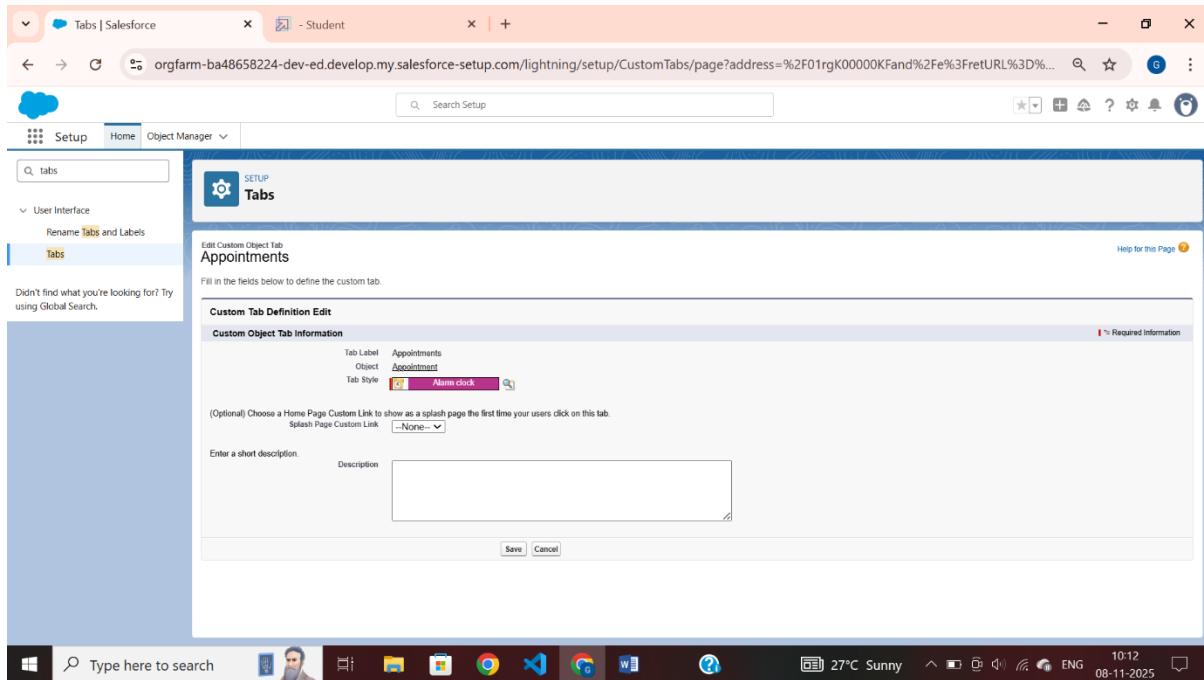
2. Select Object(Customer Details) >> Select the tab style >> Next (Add to profiles page) keep it as default >> Next (Add to Custom App) uncheck the include tab .
3. Make sure that the Append tab to users' existing personal customizations is checked.
4. Click save.



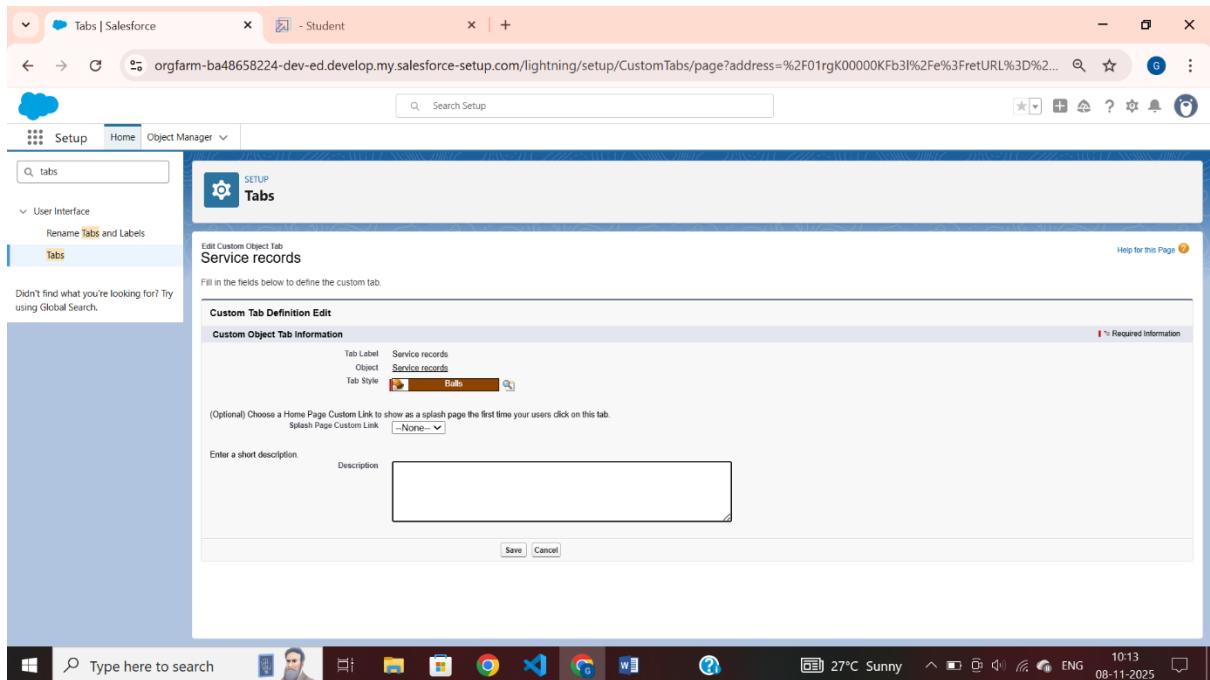
Activity 2: Create Remaining Tabs

1. Now create the Tabs for the remaining Objects, they are “ Appointments, Service records,Billing details and feedback”.
2. Follow the same steps as mentioned in Activity -1

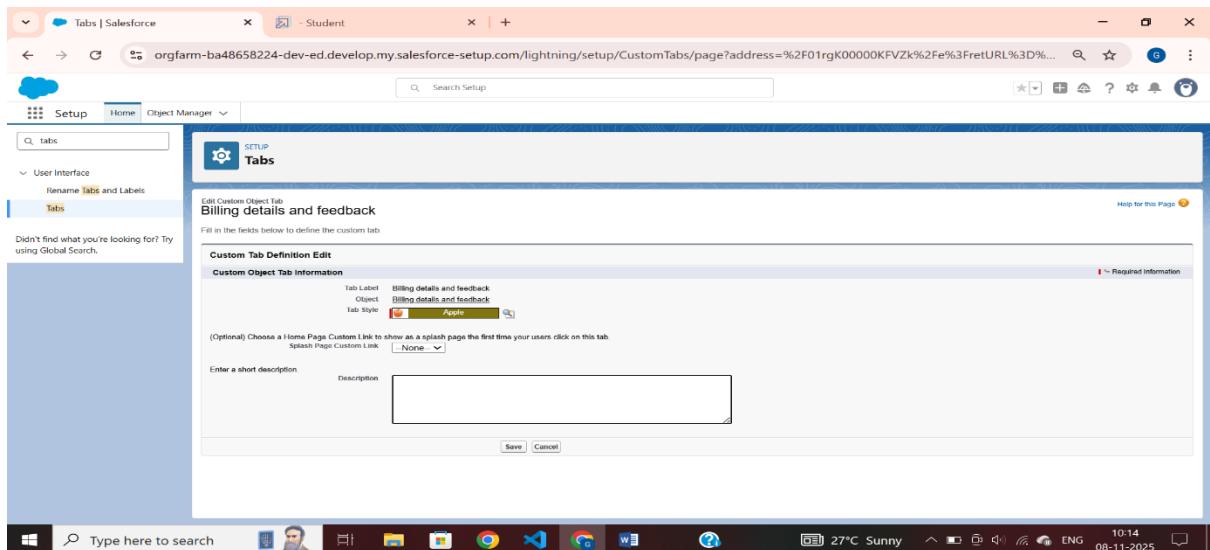
Tab (Appointments):



Tab (Service records):



Tab (Billing details and feedback):



Milestone 4: The Lightning App

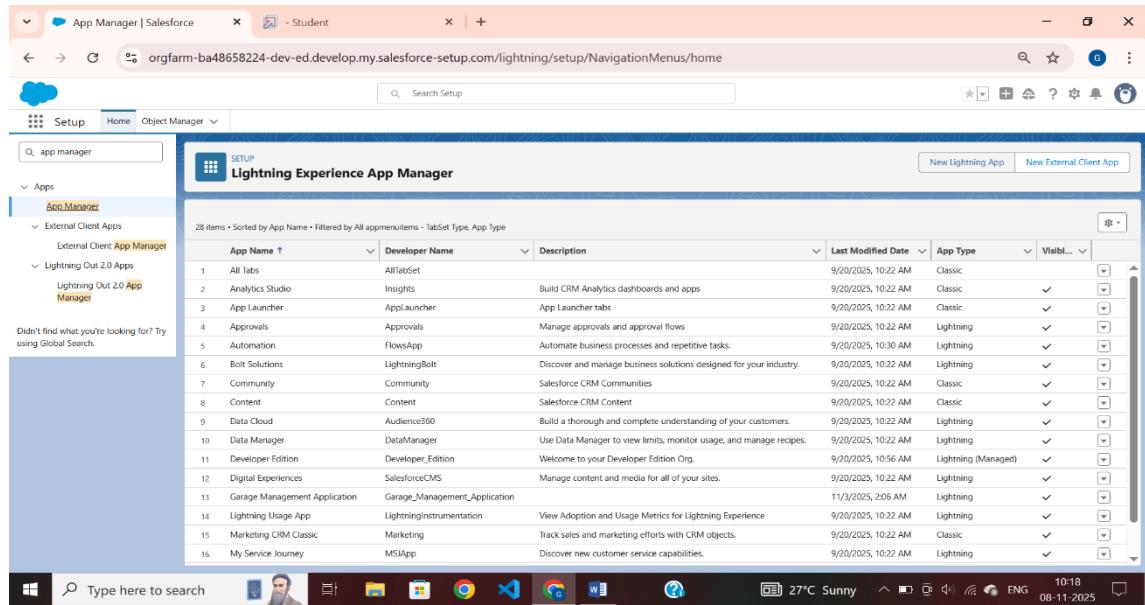
An app is a collection of items that work together to serve a particular function. In Lightning Experience, Lightning apps give your users access to sets of objects, tabs, and other items all in one convenient bundle in the navigation bar.

Lightning apps let you brand your apps with a custom colour and logo. You can even include a utility bar and Lightning page tabs in your Lightning app. Members of your org can work more efficiently by easily switching between apps.

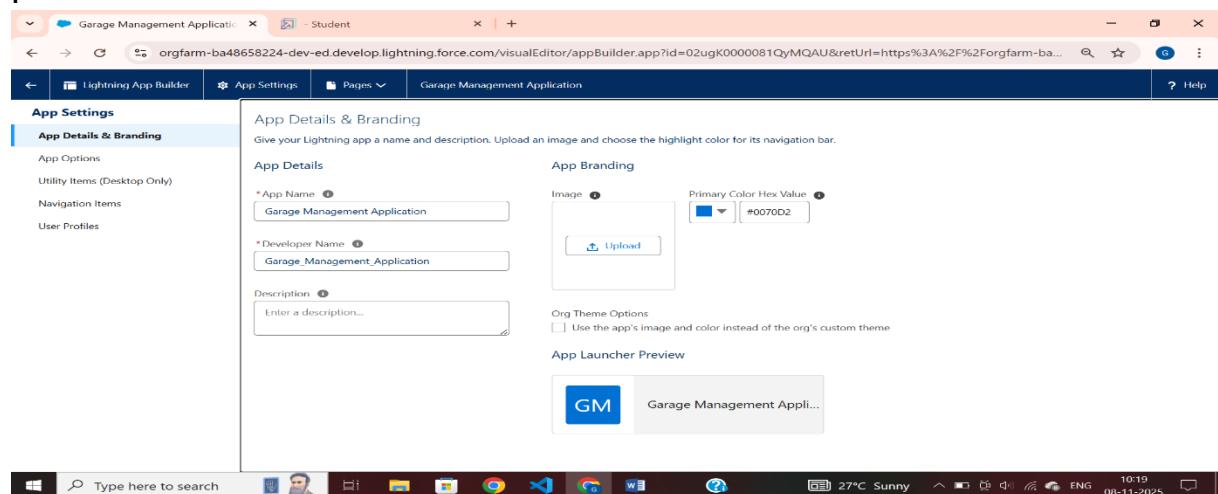
Activity 1: Create A Lightning App

To create a lightning app page:

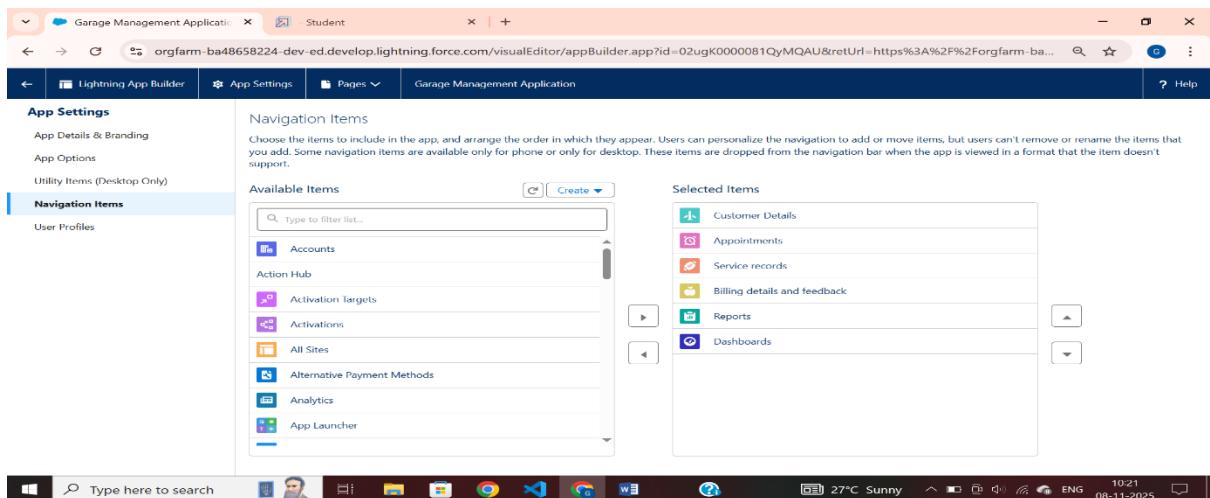
1. Go to setup page >> search “app manager” in quick find >> select “app manager” >> click on New lightning App.



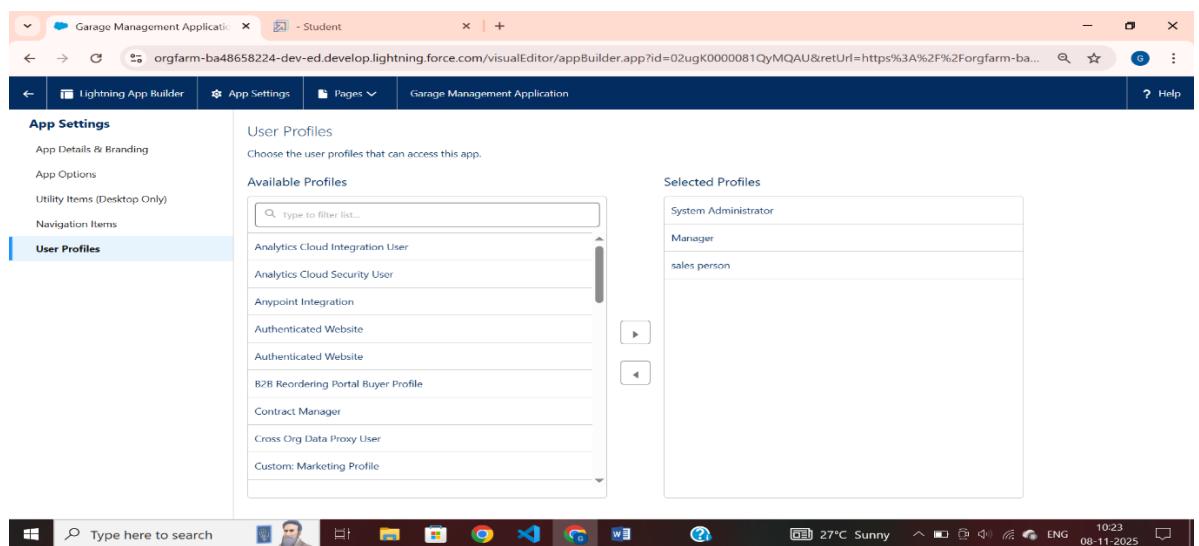
2. Fill the app name in app details as Garage Management Application >> Next >> (App option page) keep it as default >> Next >> (Utility Items) keep it as default >> Next



3. To Add Navigation Items:
4. 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.



5. To Add User Profiles:



Search profiles (System administrator) in the search bar >> click on the arrow button >> save & finish.

Milestone 5: Fields

When we talk about Salesforce, Fields represent the data stored in the columns of a relational database. It can also hold any valuable information that you require for a specific object. Hence, the overall searching, deletion, and editing of the records become simpler and quicker.

Types of Fields

1. Standard Fields
2. Custom Fields

Standard Fields:

As the name suggests, the Standard Fields are the predefined fields in Salesforce that perform a standard task. The main point is that you can't simply delete a

Standard Field until it is a non-required standard field. Otherwise, users have the option to delete them at any point from the application freely. Moreover, we have some fields that you will find common in every Salesforce application. They are,

- Created By
- Owner
- Last Modified
- Field Made During object Creation

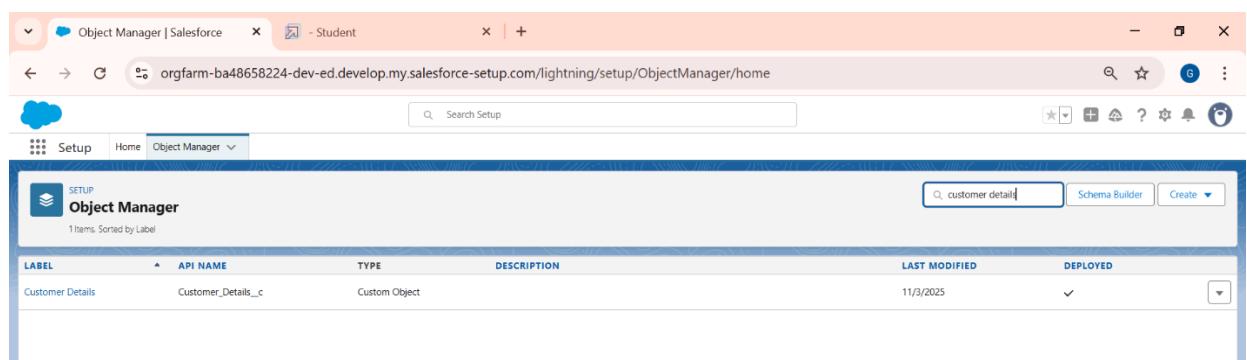
Custom Fields:

On the other side of the coin, Custom Fields are highly flexible, and users can change them according to requirements. Moreover, each organiser or company can use them if necessary. It means you need not always include them in the records, unlike Standard fields. Hence, the final decision depends on the user, and he can add/remove Custom Fields of any given form.

Activity 1: Creation Of Fields For The Customer Details Object

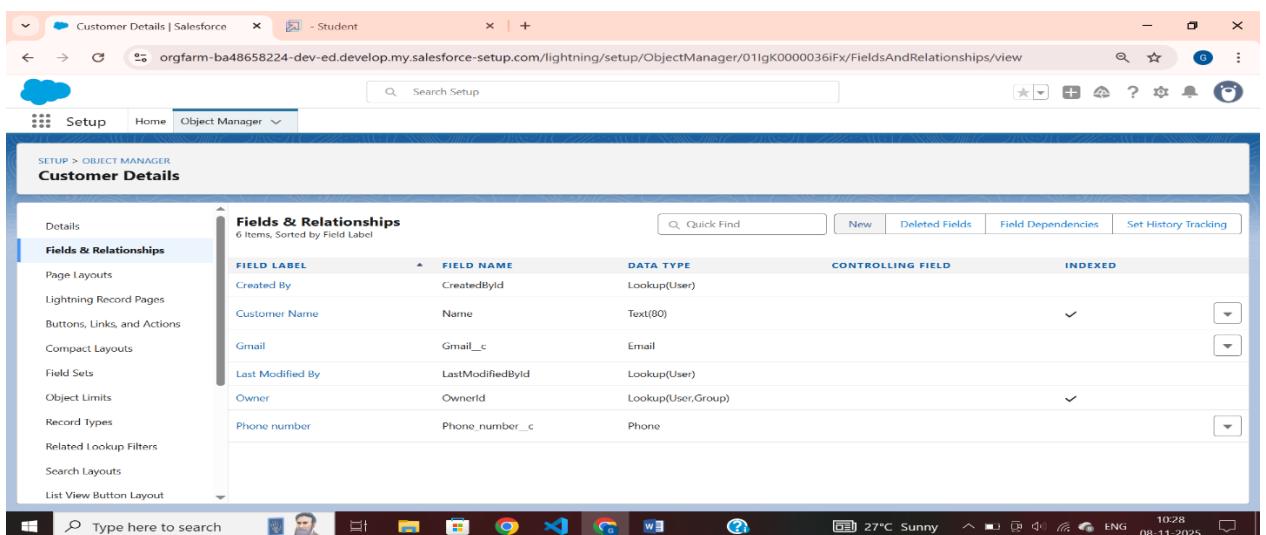
1. To create fields in an object:

1. Go to setup >> click on Object Manager >> type object name(Customer Details) in search bar >> click on the object.



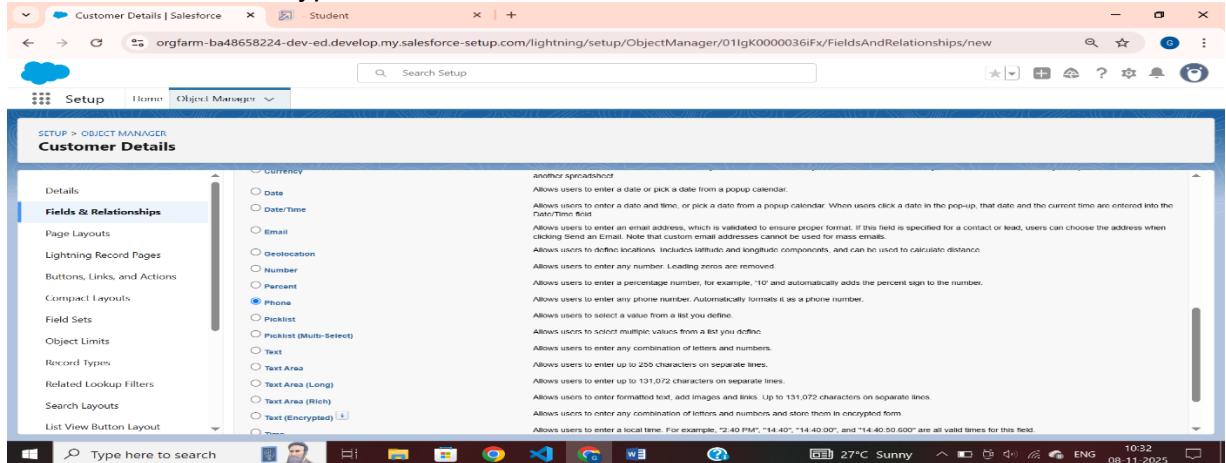
The screenshot shows the Salesforce Object Manager interface. At the top, there's a search bar with 'customer detail' typed into it. Below the search bar, the 'Object Manager' tab is selected. A table lists one object: 'Customer Details' with API name 'Customer_Details_c' and Type 'Custom Object'. The table includes columns for Label, API Name, Type, Description, Last Modified, and Deployed. The 'Last Modified' column shows '11/3/2025'. The 'Deployed' column has a dropdown arrow. The status bar at the bottom indicates '1 Items, Sorted by Label'.

2. Now click on “Fields & Relationships” >> New



The screenshot shows the 'Fields & Relationships' section of the Customer Details object setup. On the left, a sidebar lists various setup options like Page Layouts, Lightning Record Pages, etc. The main area shows a table of fields under the 'Fields & Relationships' heading. The table has columns for Field Label, Field Name, Data Type, Controlling Field, and Indexed. The fields listed are: 'Created By' (Field Name: CreatedBy, Data Type: Lookup(User)), 'Customer Name' (Field Name: Name, Data Type: Text(80)), 'Gmail' (Field Name: Gmail_c, Data Type: Email), 'Last Modified By' (Field Name: LastModifiedBy, Data Type: Lookup(User)), 'Owner' (Field Name: OwnerId, Data Type: Lookup(User,Group)), and 'Phone number' (Field Name: Phone_number_c, Data Type: Phone). There are also buttons for 'New', 'Deleted Fields', 'Field Dependencies', and 'Set History Tracking'. The status bar at the bottom shows system information like '27°C Sunny' and the date '08-11-2025'.

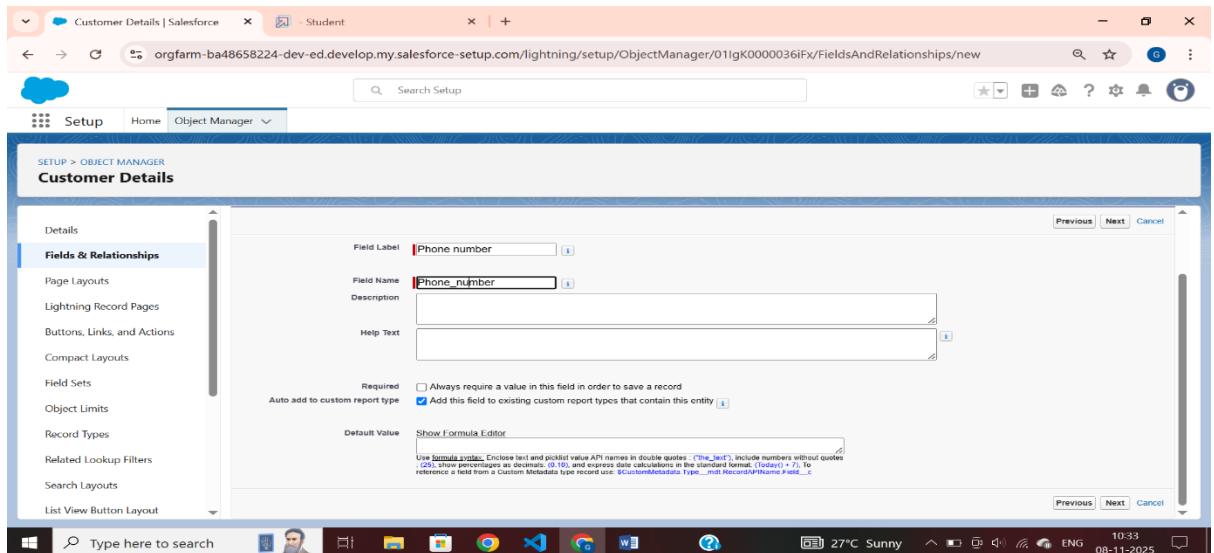
3. Select Data Type as a “Phone”



4. Click on next.

5. Fill the Above as following:

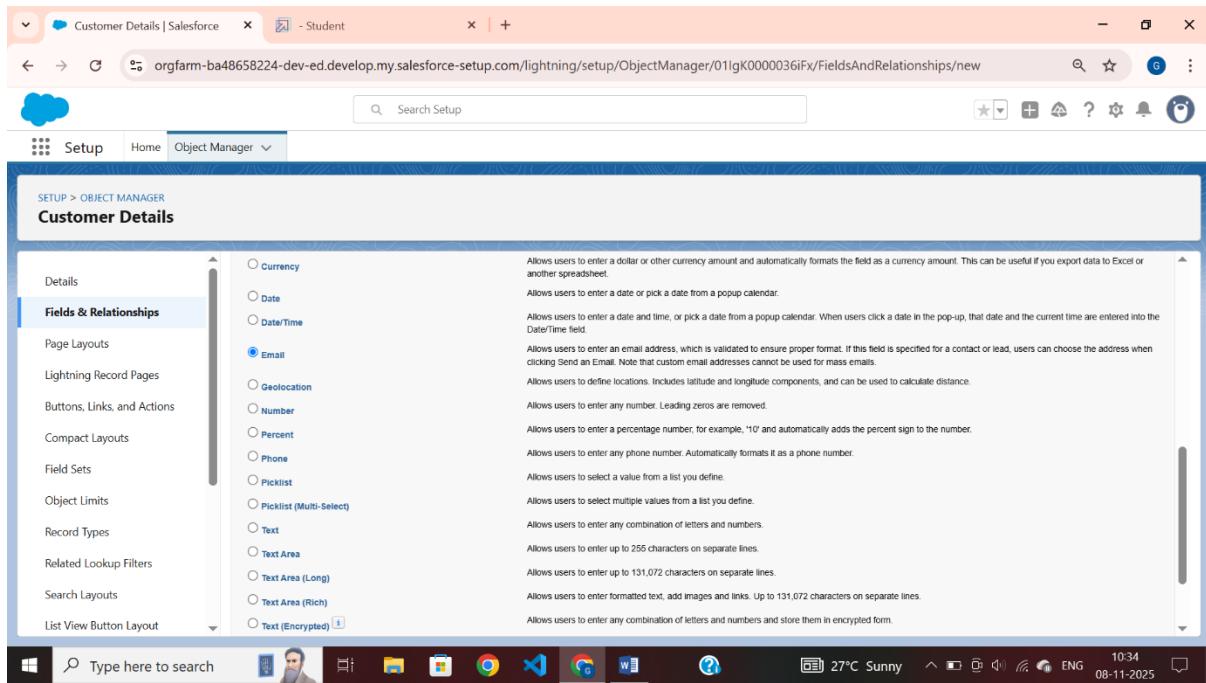
- Field Label: Phone number
- Field Name : gets auto generated
- Click on Next >> Next >> Save and new.



Note: Follow the above steps for the remaining field for the same object.

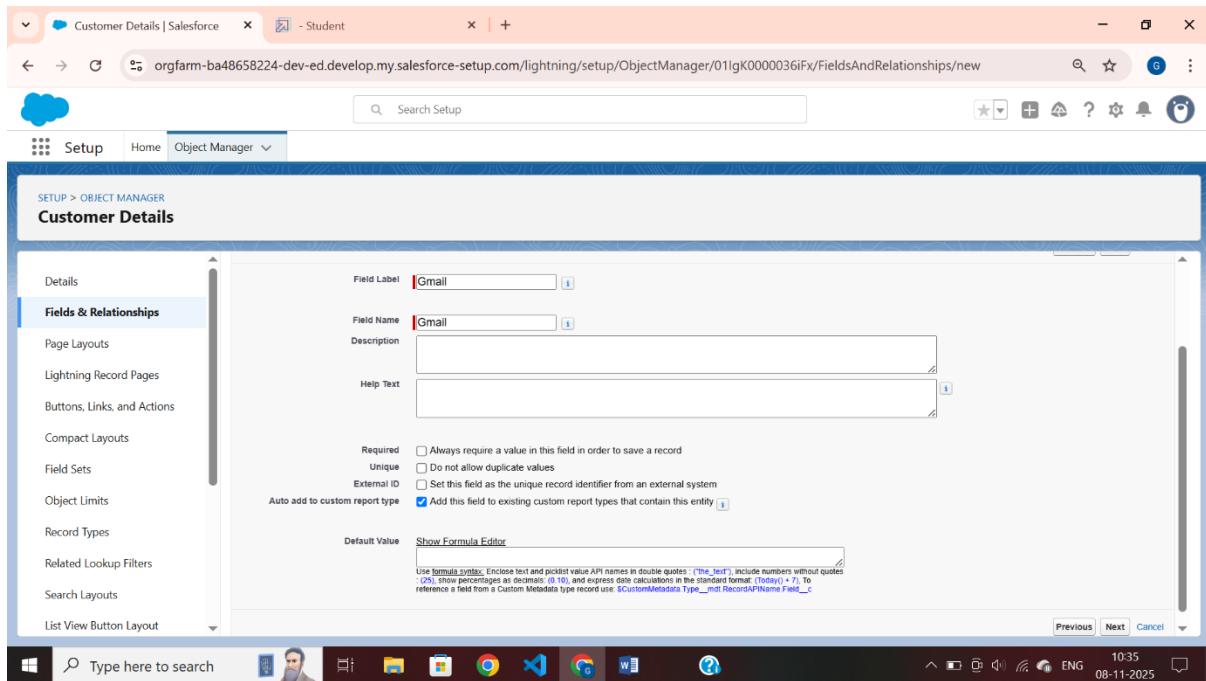
2. To create another fields in an object:

1. Go to setup >> click on Object Manager >> type object name(Customer Details) in search bar >> click on the object.
2. Now click on “Fields & Relationships” >> New
3. Select Data type as a “Email” and Click on Next



4. Fill the Above as following:

- Field Label : Gmail
- Field Name : gets auto generated
- Click on Next > Next > Save and new.



Activity 2: Creation Of Lookup Fields

Creation of Lookup Field on Appointment Object :

1. Go to setup >> click on Object Manager >> type object name(Appointment) in the search bar >> click on the object.

The screenshot shows the Salesforce Object Manager interface. The search bar at the top contains the text "appointment". A table below lists three objects: "Appointment" (Custom Object), "Appointment Category" (Standard Object), and "Appointment Invitation" (Standard Object). The "Appointment" row is highlighted.

LABEL	API NAME	TYPE	DESCRIPTION	LAST MODIFIED	DEPLOYED
Appointment	Appointment_c	Custom Object		11/3/2025	✓
Appointment Category	AppointmentCategory	Standard Object			
Appointment Invitation	Appointmentinvitation	Standard Object			

2. Now click on “Fields & Relationships” >> New
3. Select “Look-up relationship” as data type and click Next.

The screenshot shows the "Fields & Relationships" configuration page for the "Appointment" object. The "Data Type" section is open, showing various options. The "Lookup Relationship" option is selected, which is described as creating a relationship that links the object to another object via a lookup field. Other options shown include "None Selected", "Auto Number", "Formula", "Roll-Up Summary", "Master-Detail Relationship", and "External Lookup Relationship".

4. Select the related object “Customer Details” and click next.

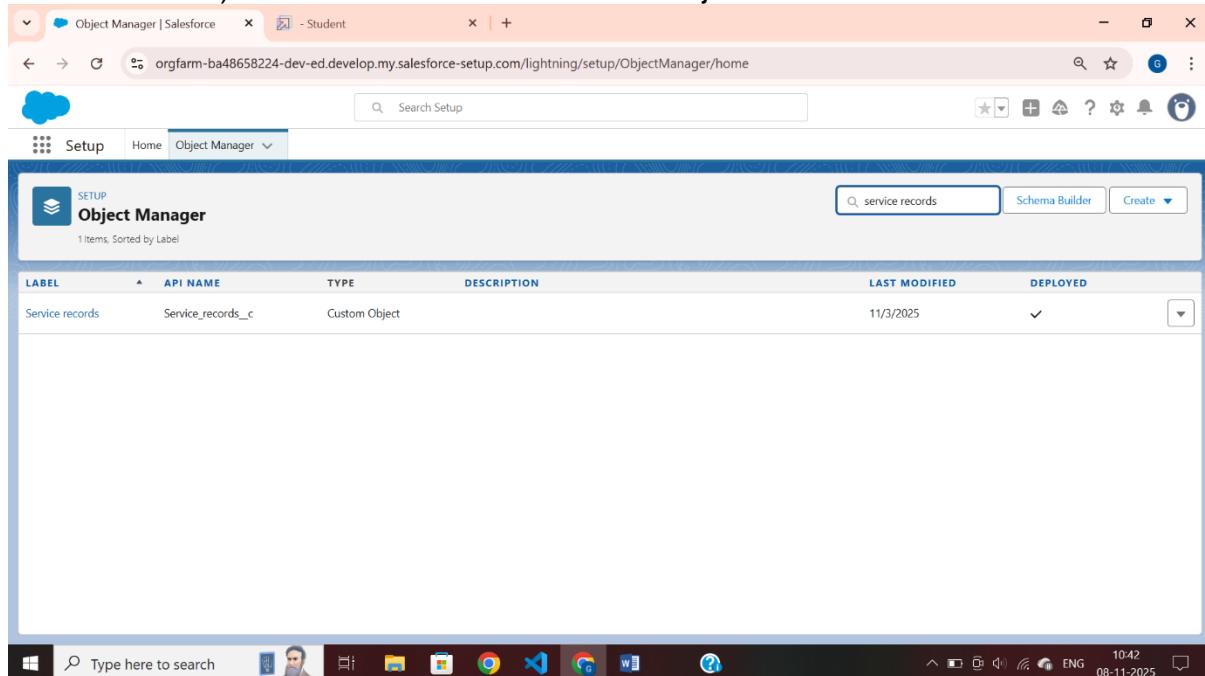
The screenshot shows the "New Relationship" configuration page for the "Appointment" object. Step 2, "Choose the related object", is active. In the "Related To" dropdown, "Customer Details" is selected. The page includes navigation buttons for "Previous", "Next", and "Cancel".

5. Next >> Next >> Save.

Note: Make sure you complete Activity 4 Before continuing.

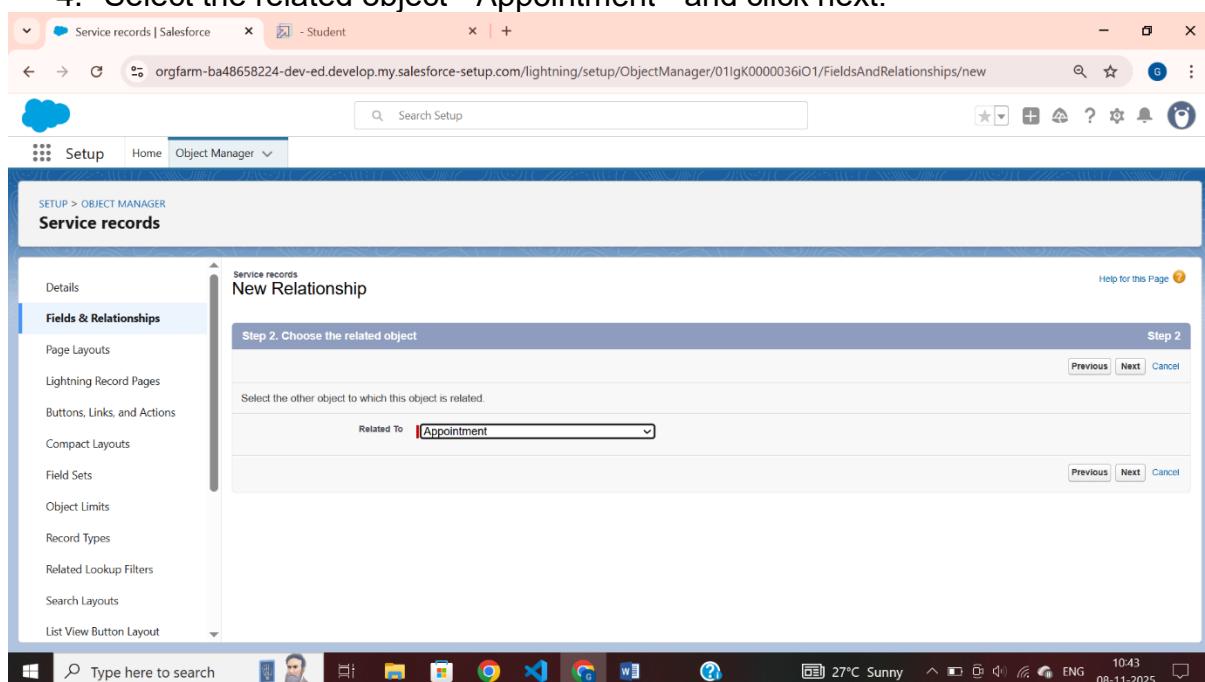
Creation of Lookup Field on Service records Object :

1. Go to setup >> click on Object Manager >> type object name(Service records) in search bar >> click on the object.



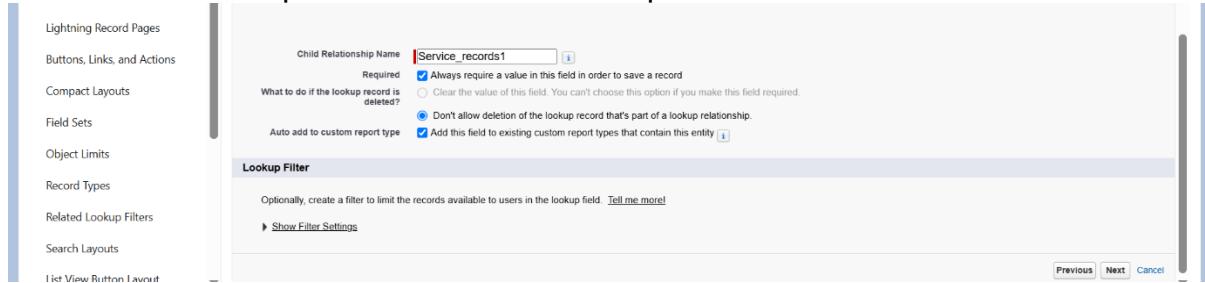
The screenshot shows the Salesforce Object Manager interface. At the top, there's a navigation bar with tabs for Setup, Home, and Object Manager. Below the navigation bar is a search bar containing the text "service records". A table lists one item: "Service records" with API name "Service_records__c", Type "Custom Object", Last Modified on 11/3/2025, and Deployed status checked. The bottom of the screen shows a Windows taskbar with various icons and system status.

2. Now click on “Fields & Relationships” >> New
3. Select “Look-up relationship” as data type and click Next.
4. Select the related object “ Appointment ” and click next.



The screenshot shows the "New Relationship" setup page in the Salesforce Object Manager. On the left, a sidebar lists options like Details, Fields & Relationships (which is selected), 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 area is titled "Step 2. Choose the related object" and contains a dropdown menu labeled "Related To" with "Appointment" selected. Navigation buttons for Previous, Next, and Cancel are at the bottom right. The bottom of the screen shows a Windows taskbar with various icons and system status.

5. Make it a required field so click on Required.

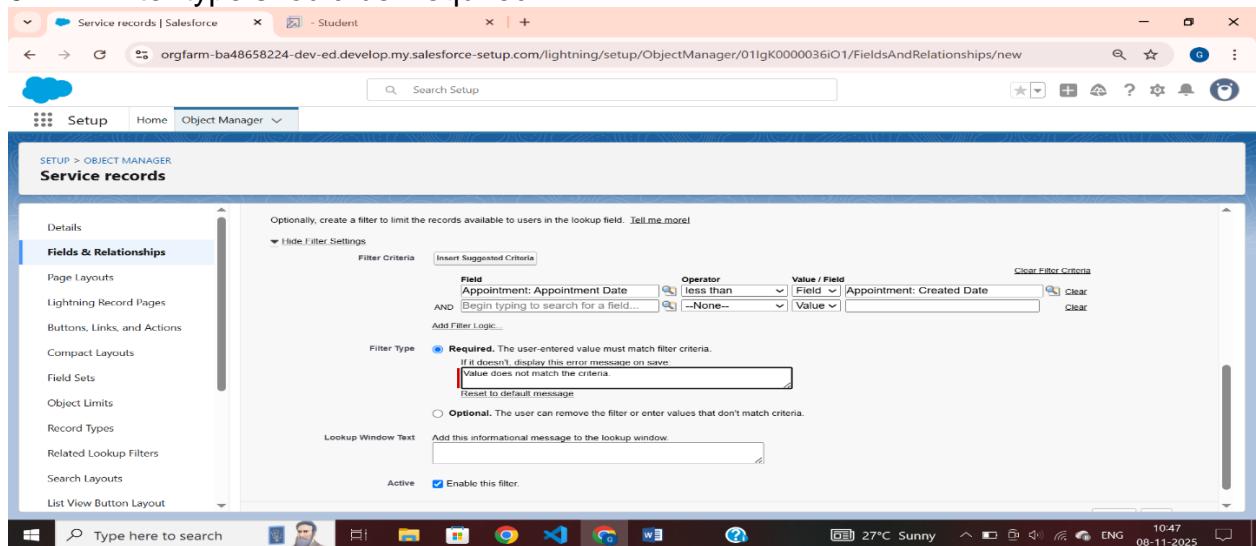


6. Scroll down for Lookup Filter and click on Show filter settings.

7. Now add the filter criteria.

8. Field : Appointment: Appointment Date >> Operator : less than >> select field >> Appointment: Created Date

9. Filter type should be Required.



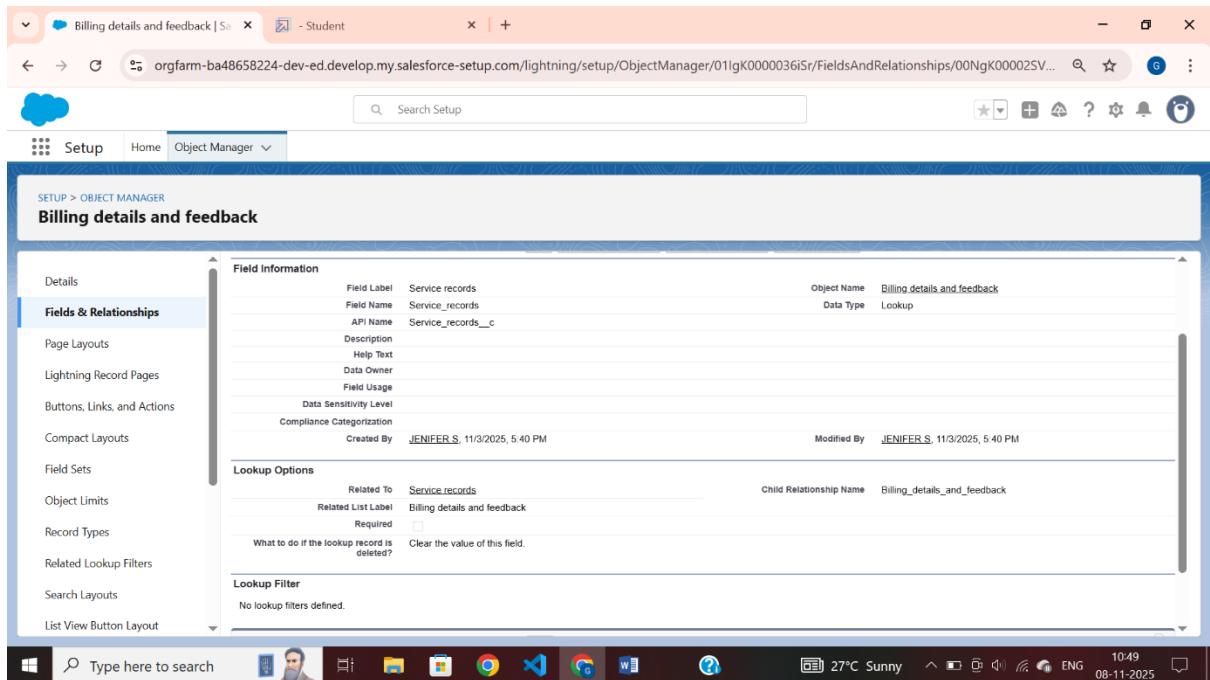
10. Error Message : Value does not match the criteria.

11. Enable the filter by click on Active.

12. Next >> Next >> Save.

Creation of Lookup Field on Billing details and feedback Object :

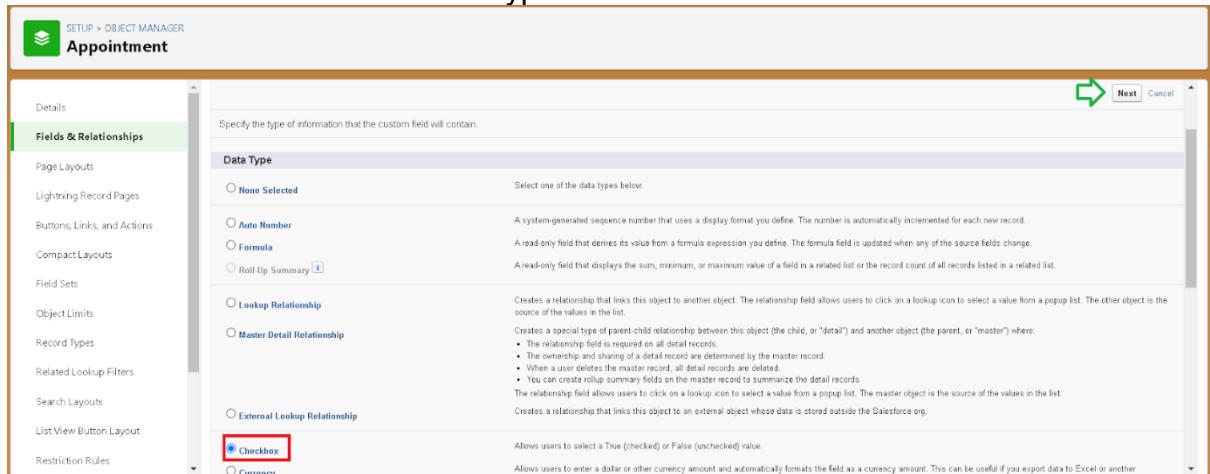
1. Go to setup >> click on Object Manager >> type object name(Billing details and feedback) in search bar >> click on the object.
2. Now click on “Fields & Relationships” >> New.
3. Select “Look-up relationship” as data type and click Next.
4. Select the related object “ Service records” and click next.
5. Next >> Next >> Save & new.



Activity 3: Creation Of Checkbox Fields

Creation of Checkbox Field on Appointment Object :

1. Go to setup >> click on Object Manager >> type object name(Appointment) in search bar >> click on the object.
2. Now click on “Fields & Relationships” >> New.
3. Select “Check box” as data type and click Next.



4. Give the Field Label : Maintenance service
5. Field Name : is auto populated
6. Default value : unchecked

Appointment
New Custom Field

Help for this Page 

Step 2. Enter the details Step 2 of 4

Field Label 

Default Value Checked Unchecked 

Field Name 

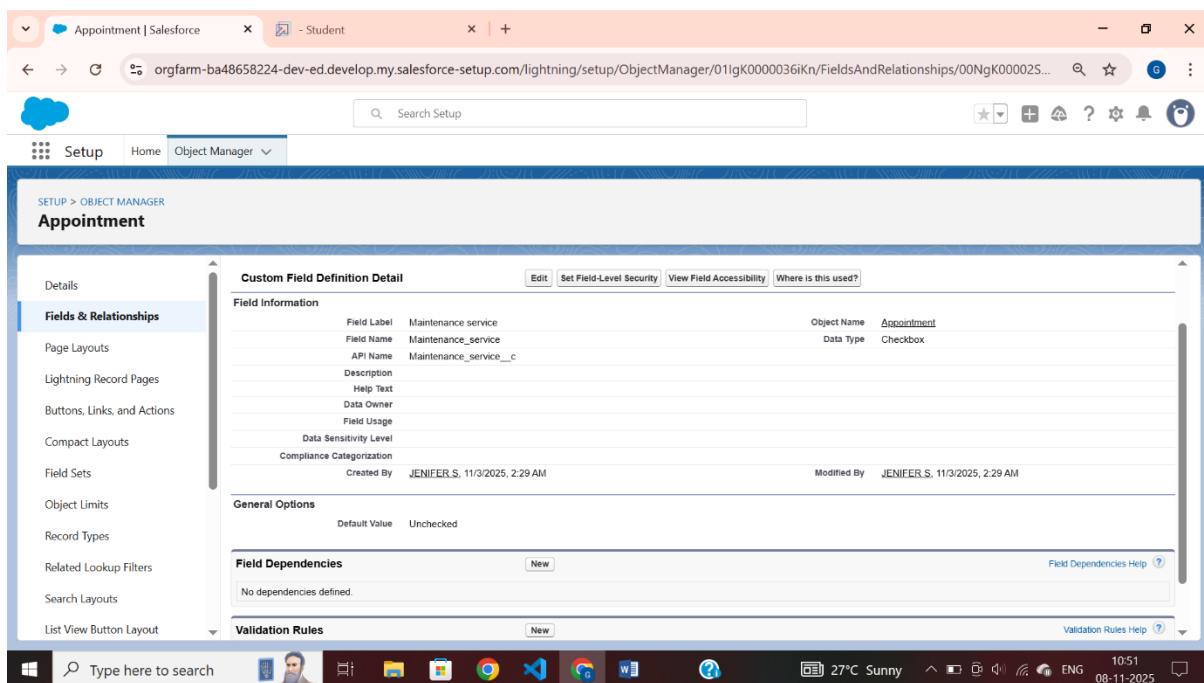
Description

Help Text

Auto add to custom report type Add this field to existing custom report types that contain this entity 

Previous Next Cancel 

7. Click on next >> next >> save.



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

Custom Field Definition Detail for the **Appointment** object.

Field Information (Visible):

- Field Label: Maintenance service
- Field Name: Maintenance_service
- API Name: Maintenance_service_c
- Description: (empty)
- Help Text: (empty)
- Data Owner: (empty)
- Field Usage: (empty)
- Data Sensitivity Level: (empty)
- Compliance Categorization: (empty)
- Created By: JENIFER.S. 11/3/2025, 2:29 AM
- Modified By: JENIFER.S. 11/3/2025, 2:29 AM
- Object Name: Appointment
- Data Type: Checkbox

General Options (Visible):

- Default Value: Unchecked

Field Dependencies (Visible):

- No dependencies defined.

Validation Rules (Visible):

- New

Navigation (Left sidebar):

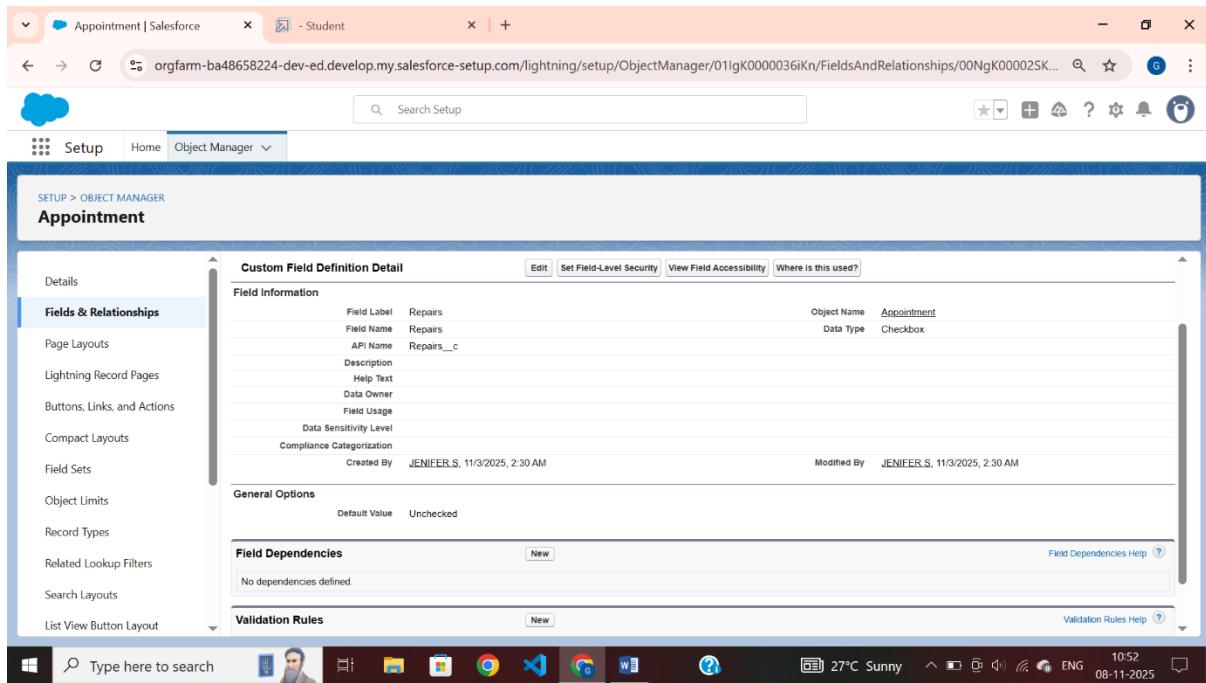
- Details
- Fields & Relationships** (selected)
- Page Layouts
- Lightning Record Pages
- Buttons, Links, and Actions
- Compact Layouts
- Field Sets
- Object Limits
- Record Types
- Related Lookup Filters
- Search Layouts
- List View Button Layout

System Status (Bottom):

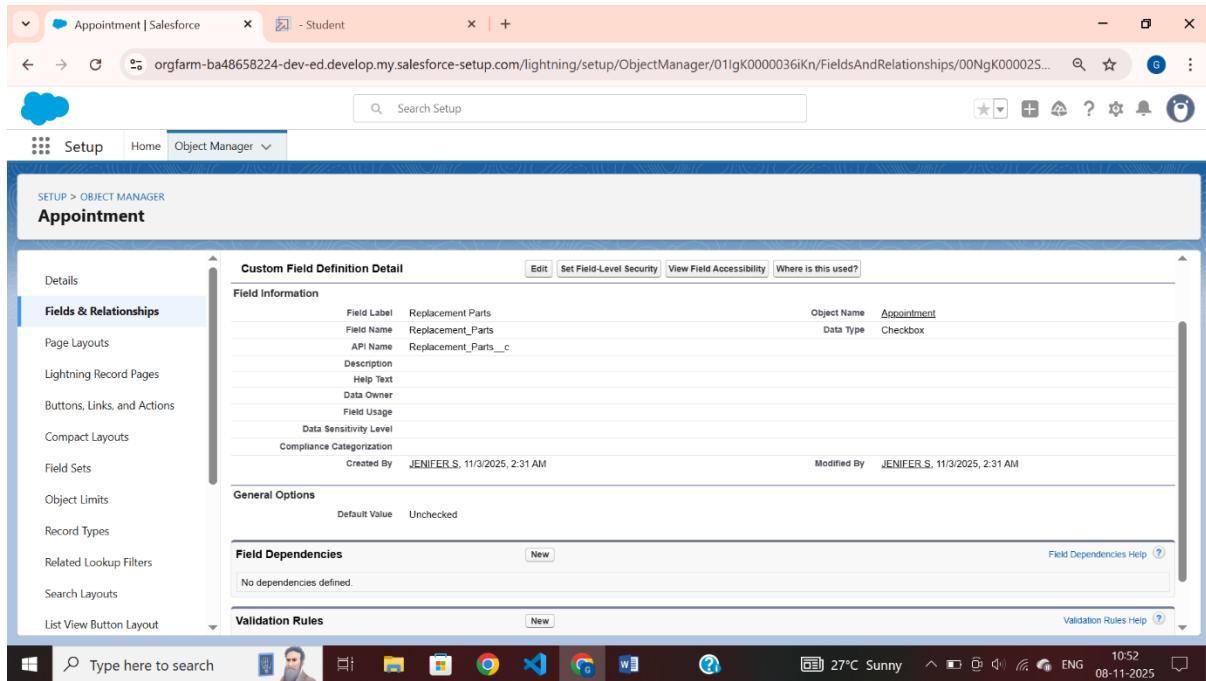
- Type here to search
- Icons for various applications (File Explorer, Task View, Start, etc.)
- Weather: 27°C Sunny
- Date and Time: 10:51 08-11-2025

Creation of Another Checkbox Field on Appointment Object :

1. Repeat the steps from 1 to 3.
2. Give the Field Label : Repairs
3. Field Name : is auto populated
4. Default value : unchecked
5. Click on next >> next >> save.



6. Follow the same and create another checkbox with given names
7. Give the Field Label : Replacement Parts
8. Field Nme : is auto populated
9. Default value : unchecked
10. Click on next >> next >> save.



Creation of Checkbox Field on Service records Object :

1. Go to setup >> click on Object Manager >> type object name(Service records) in search bar >> click on the object.
2. Now click on “Fields & Relationships” >> New.

3. Select “Check box” as data type and click Next.
4. Give the Field Label : Quality Check Status
5. Field Name : is auto populated
6. Default value : unchecked
7. Click on next >> next >> save.

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: [Unspecified]
- Field Usage: [Unspecified]
- Data Sensitivity Level: [Unspecified]
- Compliance Categorization: [Unspecified]

Created By: JENIFER.S, 11/3/2025, 2:32 AM Modified By: JENIFER.S, 11/3/2025, 2:32 AM

General Options

- Default Value: Unchecked

Field Dependencies

No dependencies defined.

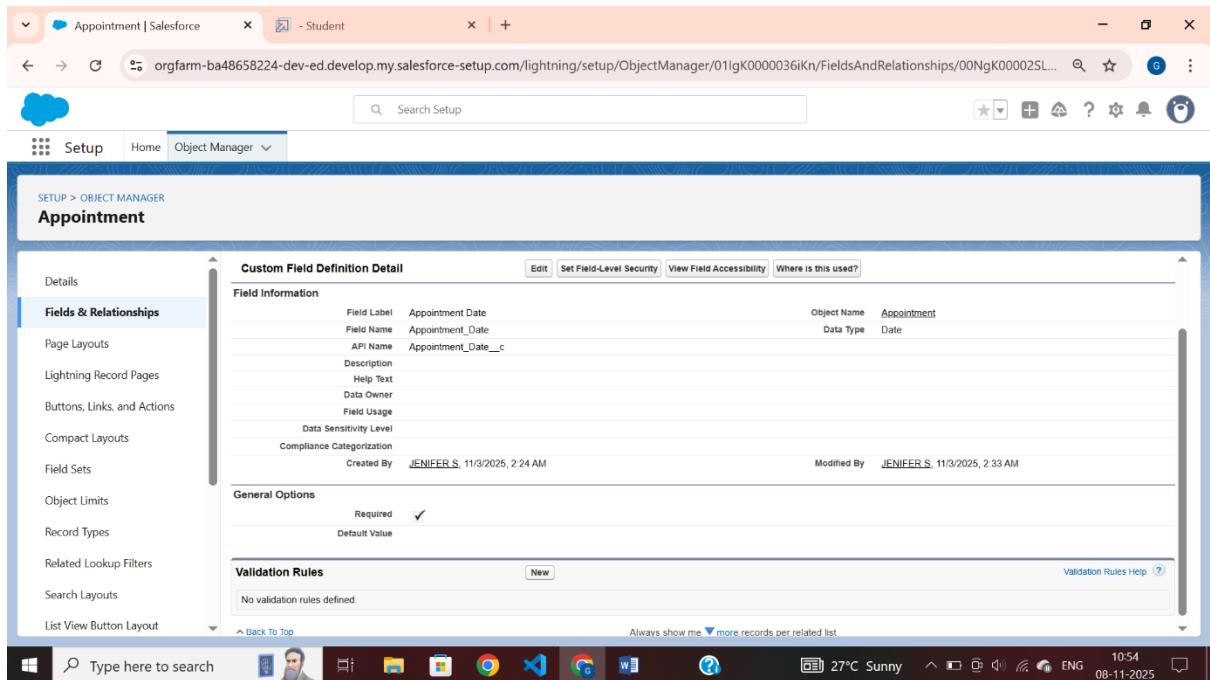
Validation Rules

Type here to search 27°C Sunny 10:53 08-11-2025

Activity 4: Creation Of Date Fields

Creation of Date Field on Appointment Object :

1. Go to setup >> click on Object Manager >> type object name(Appointment) in the search bar >> click on the object.
2. Now click on “Fields & Relationships” >> New.
3. Select “Date” as data type and click Next.
4. Give the Field Label : Appointment Date
5. Field Nme : is auto populated
6. Make it as a Required field by click on the Required option.
7. Click on next >> next >> save.



Activity 5: Creation Of Currency Fields

Creation of Currency Field on Appointment Object :

1. Go to setup >> click on Object Manager >> type object name(Appointment) in the search bar >> click on the object.
2. Now click on “Fields & Relationships” >> New.
3. Select “Currency” as data type and click Next.
4. Give the Field Label : Service Amount
5. Field Nme : is auto populated

Step 2. Enter the details Step 2 of 4

Field Label: Service Amount

Please enter the length of the number and the number of decimal places. For example, a number with a length of 8 and 2 decimal places can accept values up to "12345678.90".

Length:	18	Decimal Places:	0
Number of digits to the left of the decimal point		Number of digits to the right of the decimal point	
Field Name:	Service_Amount		
Description:			
Help Text:			

Required: Always require a value in this field in order to save a record
 Add this field to existing custom report types that contain this entity

6. Click on next
7. Give read only for all the profiles in field level security for profile.

Appointment
New Custom Field

Step 3. Establish field-level security Step 3 of 4

Field Label	Service Amounts	Visible	<input checked="" type="checkbox"/>	Read Only	<input checked="" type="checkbox"/>
Data Type	Currency		<input checked="" type="checkbox"/>		<input checked="" type="checkbox"/>
Field Name	Service_Amounts		<input checked="" type="checkbox"/>		<input checked="" type="checkbox"/>
Description			<input checked="" type="checkbox"/>		<input checked="" type="checkbox"/>

Select the profiles to which you want to grant edit access to this field via field-level security. The field will be hidden from all profiles if you do not add it to field-level security.

Field Level Security for Profile	Visible	Read Only
Analytics Cloud Integration User	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Analytics Cloud Security User	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Authenticated Website	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Authenticated Website	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Contract Manager	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Cross Org Data Proxy User	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>

8. Click on next > > save.

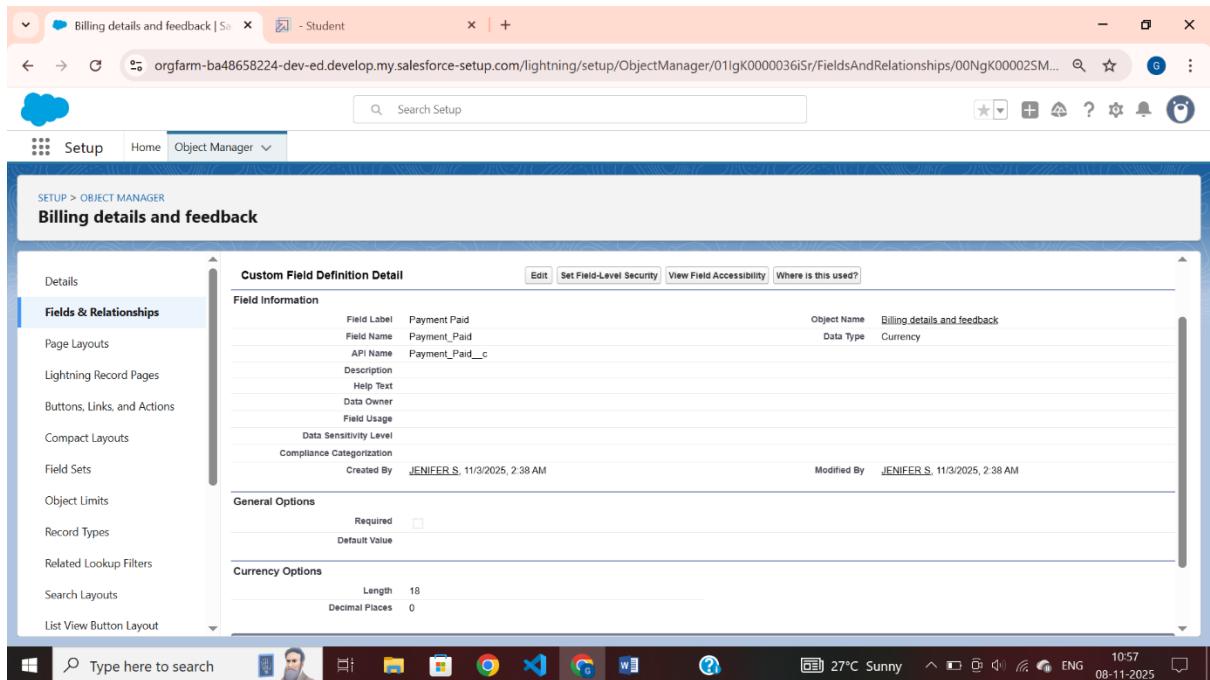
The screenshot shows the Salesforce Setup interface under the Object Manager. On the left, a sidebar lists various setup categories like Details, Fields & Relationships, Page Layouts, etc. The main content area displays the 'Custom Field Definition Detail' for the 'Service Amount' field. The field information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

- Field Label: Service Amount
- Field Name: Service_Amount
- API Name: Service_Amount_c
- Description: Help Text
- Data Owner: Field Usage
- Data Sensitivity Level: Compliance Categorization
- Created By: JENIFER.S. 11/3/2025, 2:36 AM
- Modified By: JENIFER.S. 11/3/2025, 2:36 AM

Under General Options, 'Required' is checked. Under Currency Options, 'Length' is set to 18 and 'Decimal Places' is set to 0. At the top right of the detail page, there are tabs for Edit, Set Field-Level Security, View Field Accessibility, and Where is this used?

Creation of Currency Field on Billing details and feedback Object :

1. Follow the same steps as mentioned above in Billing details and feedback Object.
2. Change the label name as mentioned.
3. Give the Field Label : Payment Paid
4. Field Nme : is auto populated



Activity 6: Creation Of Text Fields

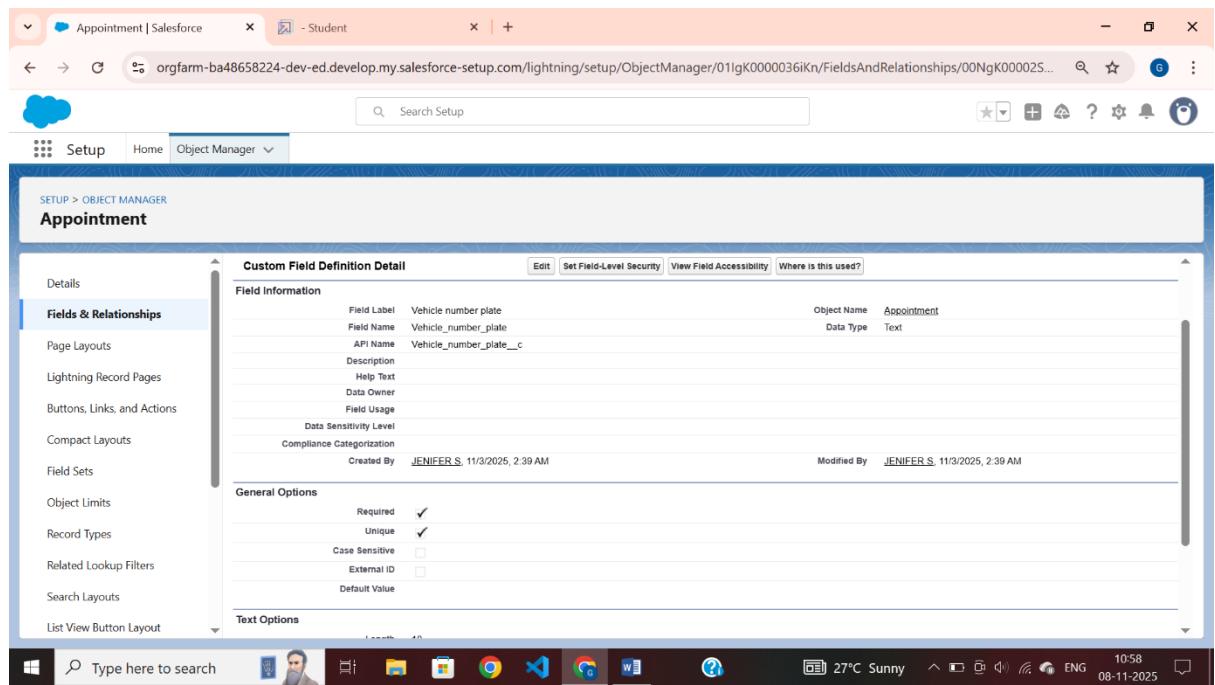
1. Go to setup >> click on Object Manager >> type object name(Appointment) in the search bar >> click on the object.
2. Now click on “Fields & Relationships” >> New.
3. Select “Text” as data type and click Next.
4. Give the Field Label : Vehicle number plate
5. Field Name : is auto populated
6. Length : 10
7. Make field as Required and Unique.

Step 2. Enter the details Step 2 of 4

Previous Next Cancel

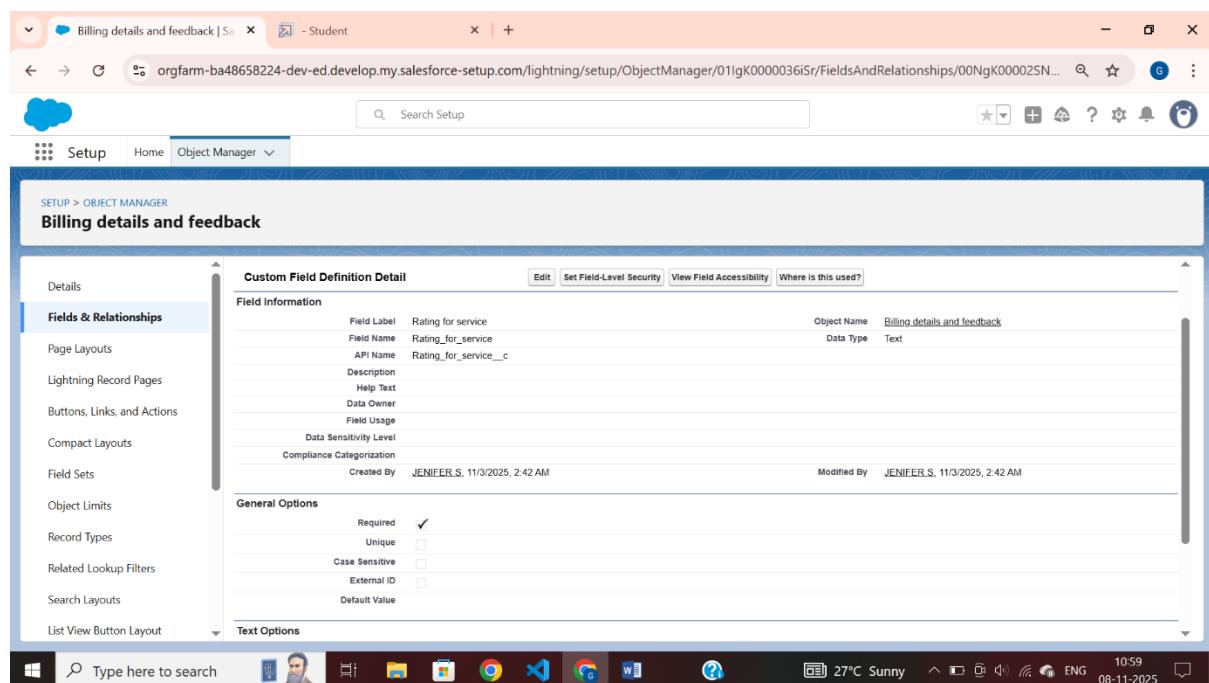
Field Label	<input type="text" value="Vehicle number plate"/>
Please enter the maximum length for a text field below.	
Length	<input type="text" value="10"/>
Field Name	<input type="text" value="Vehicle_number_plate"/>
Description	<input type="text"/>
Help Text	<input type="text"/>
Required	<input checked="" type="checkbox"/> Always require a value in this field in order to save a record
Unique	<input checked="" type="checkbox"/> Do not allow duplicate values <ul style="list-style-type: none"> <input checked="" type="radio"/> Treat "ABC" and "abc" as duplicate values (case insensitive) <input type="radio"/> Treat "ABC" and "abc" as different values (case sensitive)
External ID	<input type="checkbox"/> Set this field as the unique record identifier from an external system
Auto add to custom report type	<input checked="" type="checkbox"/> Add this field to existing custom report types that contain this entity

8. Click on next >> next >> save.



Creation of Text Fields in Billing details and feedback object :

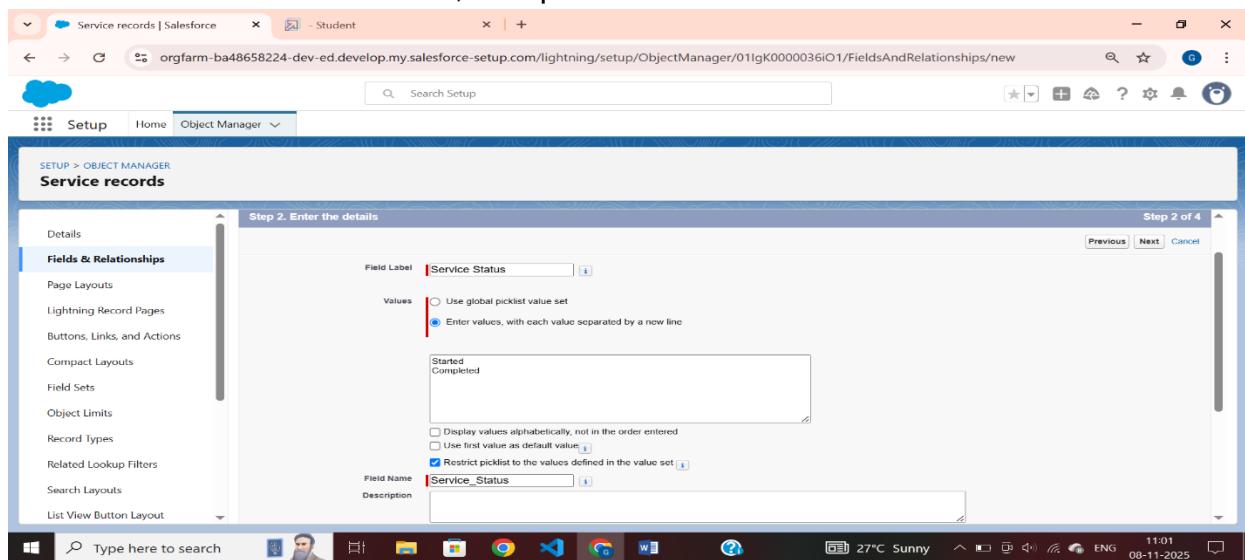
1. Go to setup >> click on Object Manager >> type object name(Billing details and feedback) in search bar >> click on the object.
2. Now click on “Fields & Relationships” >> New.
3. Select “text” as data type and click Next.
4. Give the Field Label : Rating for service
5. Field Name : is auto populated
6. Length : 1
7. Make field as Required.
8. Click on next >> next >> save



Activity 6: Creation Of Picklist Fields

Creation of Picklist Fields in Service records object :

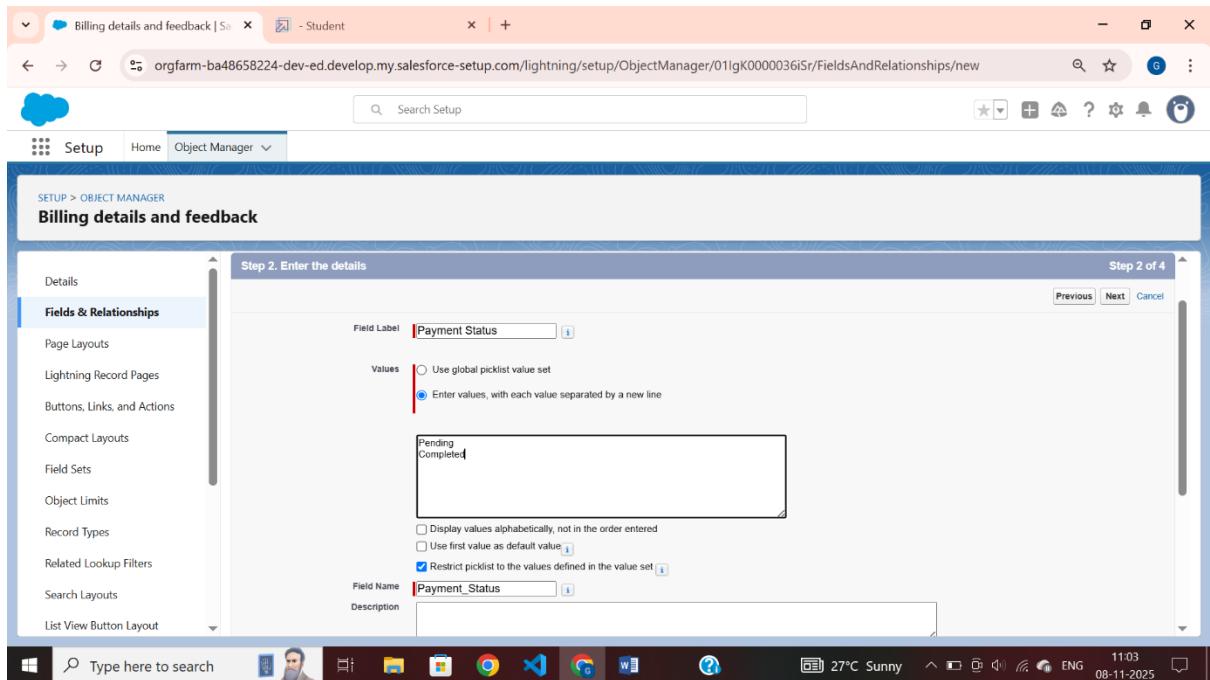
1. Go to setup >> click on Object Manager >> type object name(Service records) in search bar >> click on the object.
2. Click on fields & relationship >> click on New.
3. Select Data type as “Picklist” and click Next.
4. Enter Field Label as “Service Status”, under values select “Enter values, with each value separated by a new line” and enter values as shown below.
5. The values are: Started, Completed.



6. Click Next.
7. Next >> Next >> Save.

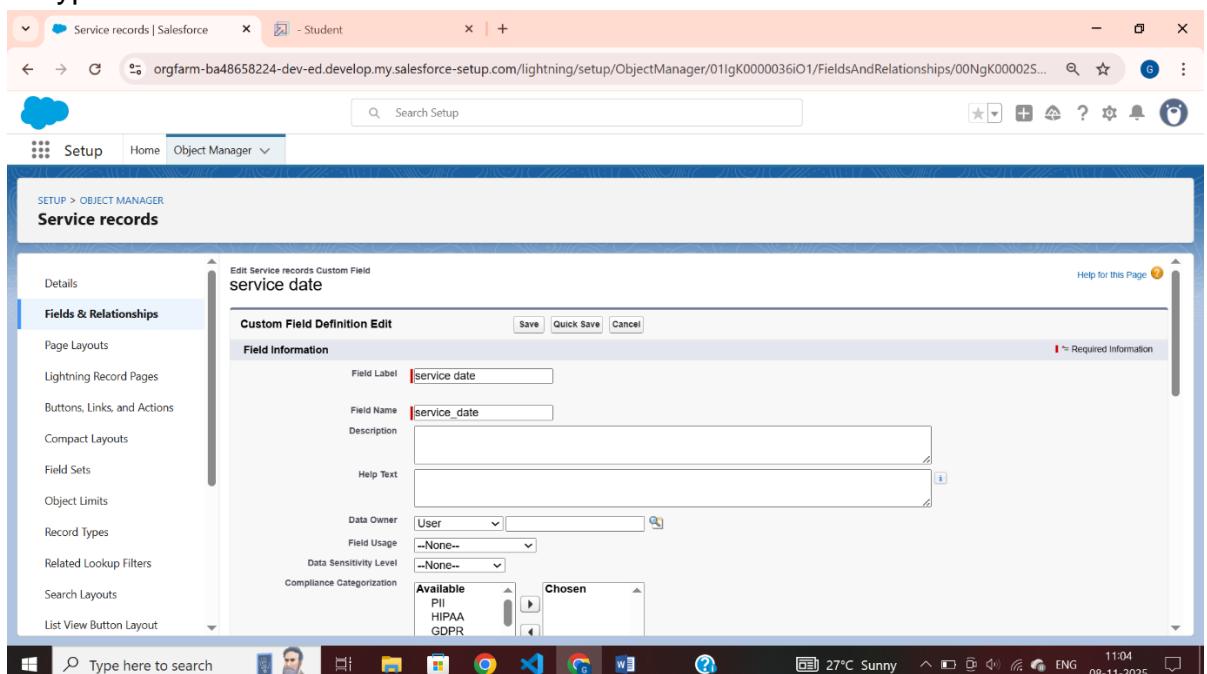
Creation of Picklist Fields in Billing details and feedback object :

1. Go to setup >> click on Object Manager >> type object name(Billing details and feedback) in search bar >> click on the object.
2. Click on fields & relationship >> click on New.
3. Select Data type as “Picklist” and click Next.
4. Enter Field Label as “Payment Status”, under values select “Enter values, with each value separated by a new line” and enter values as shown below.
5. The values are: Pending, Completed.
6. Click Next.
7. Next >> Next >> Save.

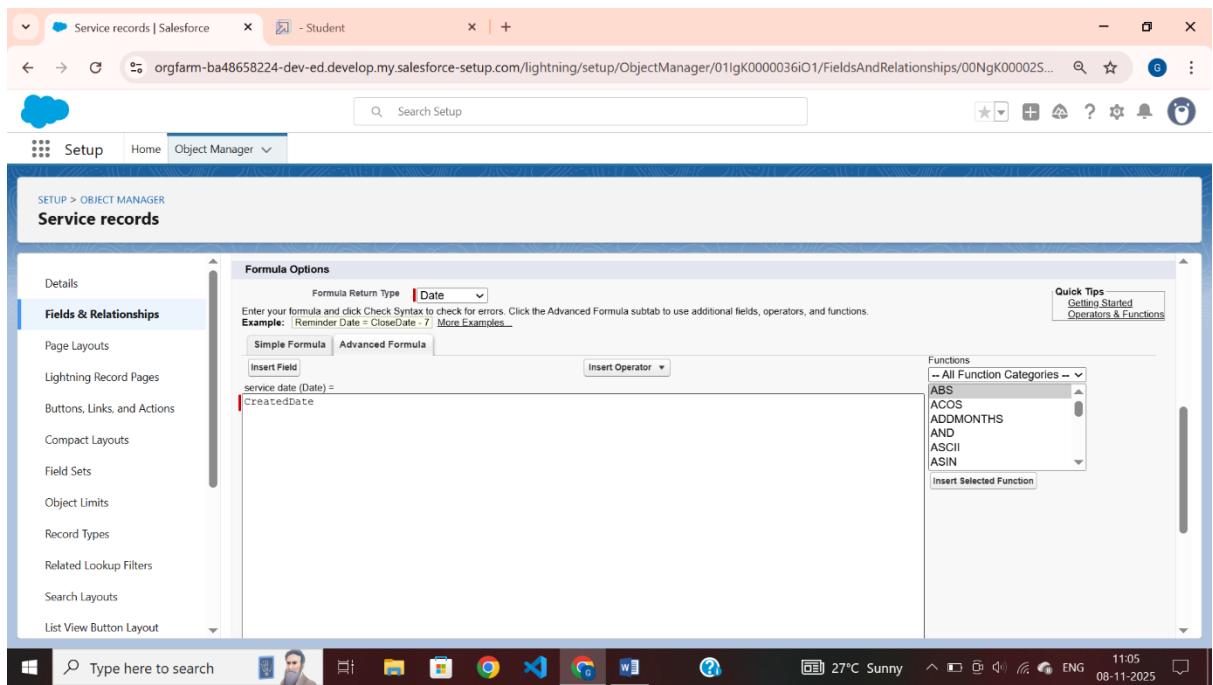


Activity 6: Creating Formula Field In Service Records Object

1. Go to setup >> click on Object Manager >> type object name(Service records) in search bar >> click on the object.
2. Click on fields & relationship >> click on New.
3. Select Data type as “Formula” and click Next.
4. Give Field Label and Field Name as “service date” and select formula return type as “Date” and click next.



5. Insert field formula should be : CreatedDate



6. click "Check Syntax".
7. Click next >> next >> Save.

Milestone 6: Validation Rule

Validation rules are applied when a user tries to save a record and are used to check if the data meets specified criteria. If the criteria are not met, the validation rule triggers an error message and prevents the user from saving the record until the issues are resolved.

Activity 1: To Create A Validation Rule To An Appointment Object

1. Go to the setup page >> click on object manager >> From drop down click edit for Appointment object.
2. Click on the validation rule >> click New.

RULE NAME	ERROR LOCATION	ERROR MESSAGE	ACTIVE	MODIFIED BY
Vehicle	Vehicle number plate	Please enter valid number	✓	project 2, 25/09/2023, 11:56 am

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

SETUP > OBJECT MANAGER
Appointment

Rule Name: Vehicle
Active:
Description:

Error Condition Formula:

```
NOT( REGEX( Vehicle_number_plate__c , "[A-Z]{2}[0-9]{2}[A-Z]{2}[0-9]{4}" ))
```

Functions:

- All Function Categories
- ABS
- ACOS
- ADDMONTHS
- AND
- ASCII
- ASIN

Quick Tips: Operators & Functions

5. Enter the Error Message as "Please enter valid number", select the Error location as Field and select the field as "Vehicle number plate", and click Save.

Error Message:

Example: Discount percent cannot exceed 30%
This message will appear when Error Condition formula is true

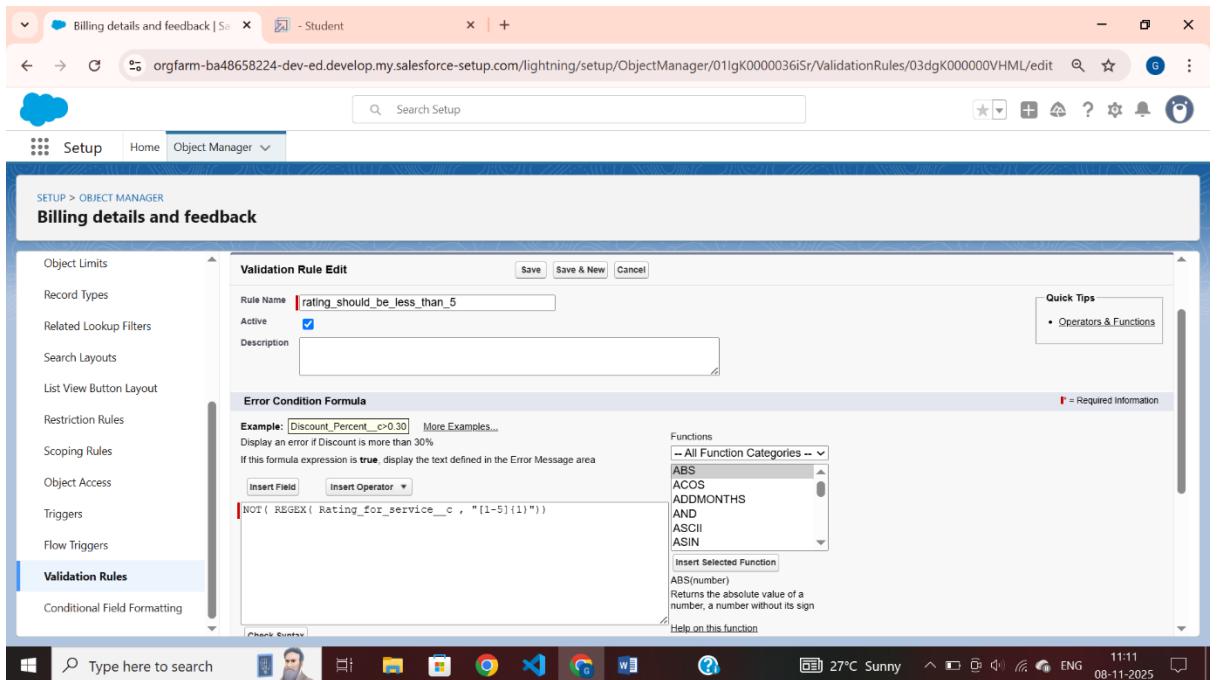
Error Message: Please enter valid number

This error message can either appear at the top of the page or below a specific field on the page

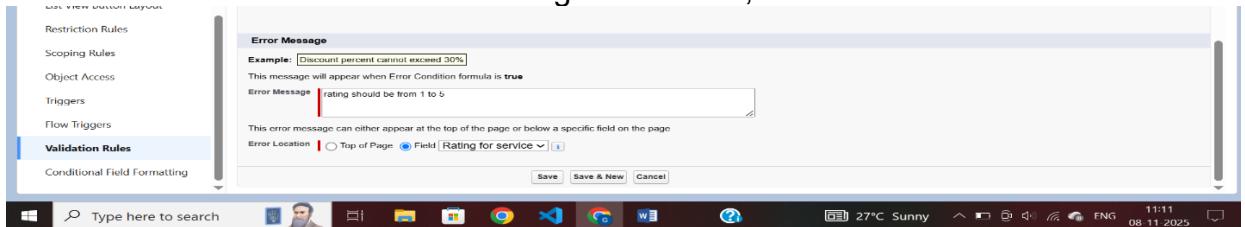
Error Location: Top of Page Field: Vehicle number plate

Activity 2: To Create A Validation Rule To An billing Details And Feedback Object

1. Go to the setup page >> click on object manager >> From drop down click edit for Billing details and feedback object.
2. Click on the validation rule >> click New.
3. Enter the Rule name as " rating_should_be_less_than_5".
4. Insert the Error Condition Formula as : -
NOT(REGEX(Rating_for_service__c , "[1-5]{1}"))



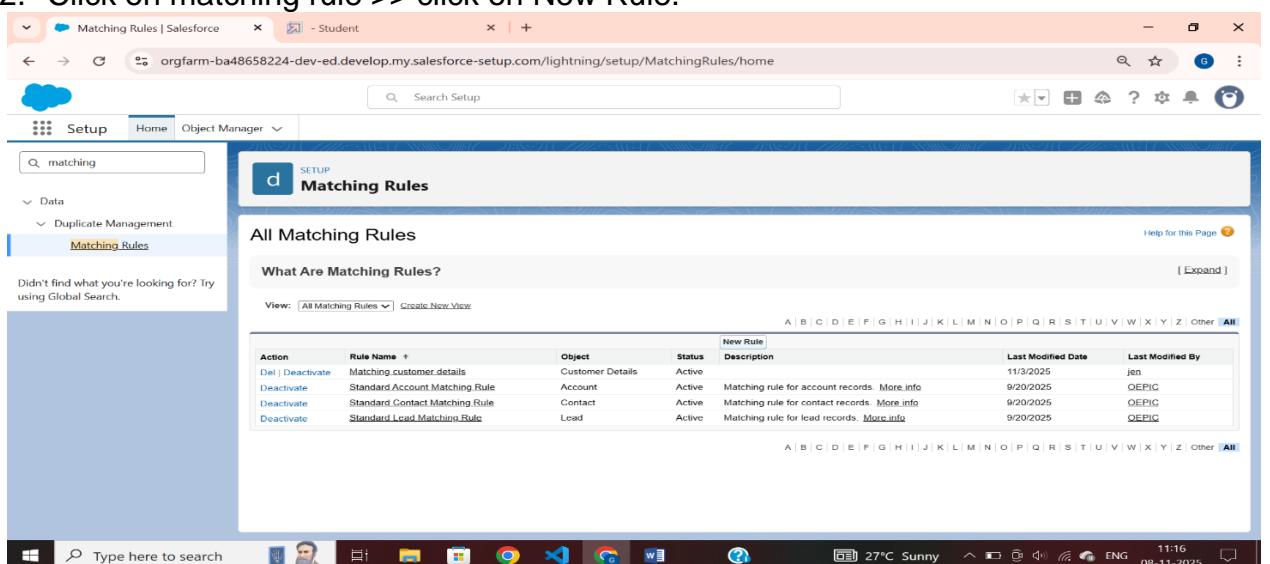
5. Enter the Error Message as “rating should be from 1 to 5”, select the Error location as Field and select the field as “Rating for Service”, and click Save.



Milestone 7: Duplicate Rule

Activity 1: To Create A Matching Rule To An Customer Details Object

1. Go to quick find box in setup and search for matching Rule.
2. Click on matching rule >> click on New Rule.



3. Select the object as Customer details and click Next.

Matching Rule
New Matching Rule

Help for this Page 

Step 1 : Select object Step 1 of 2

Select the object to which this matching rule applies.

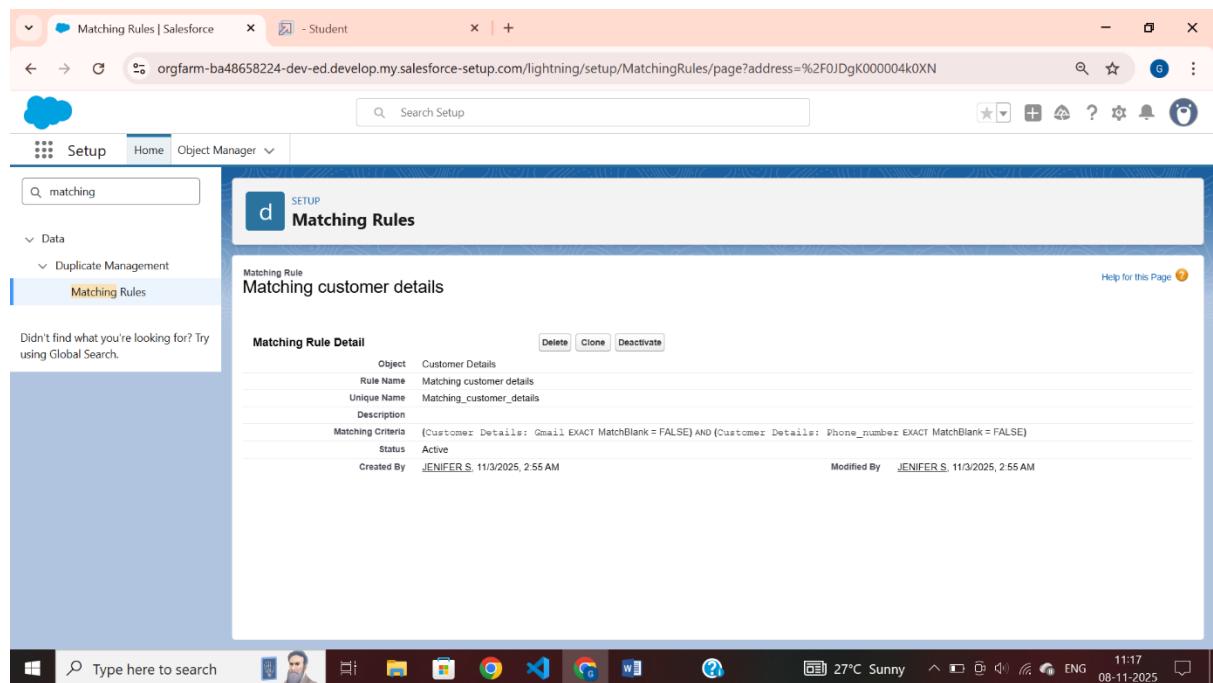
Object 

Next Cancel

Next Cancel

4. Give the Rule name : Matching customer details
5. Unique name : is auto populated
6. Define the matching criteria as
7. Field

1. Gmail	Matching Method
2. Phone Number	Exact
8. Click save.
9. After Saving Click on Activate.



The screenshot shows the Salesforce Matching Rules interface. The URL is <https://orgfarm-ba48658224-dev-ed.my.salesforce.com/lightning/setup/MatchingRules/page?address=%2F0JDgK000004k0XN>. The page title is "Matching Rules". A matching rule named "Matching customer details" is displayed, targeting the "Customer Details" object. The matching criteria are set to "Exact" for both "Gmail" and "Phone Number" fields. The status is "Active". The page includes a search bar and various navigation links.

Activity 2: To Create A Duplicate Rule To An Customer Details Object

1. Go to quick find box in setup and search for Duplicate rules.
2. Click on Duplicate rule >> click on New Rule >> select customer details object.

The screenshot shows the Salesforce Duplicate Rules page. The URL is <https://orgfarm-ba48658224-dev-ed.develop.my.salesforce-setup.com/lightning/setup/DuplicateRules/home>. The page title is "Duplicate Rules". The left sidebar shows "Data" and "Duplicate Management" sections, with "Duplicate Rules" selected. A search bar at the top says "Search Setup" and contains the text "duplicate rules". The main content area is titled "All Duplicate Rules" and includes a section "What Are Duplicate Rules?". Below this is a table listing four duplicate rules:

Rule Name	Description	Object	Matching Rule	Active	Last Modified By	Last Modified Date
Customer Detail duplicate	Identify accounts that duplicate other accounts.	Account	Standard Account Matching Rule	<input checked="" type="checkbox"/>	OEPIC	9/20/2025
Standard Contact Duplicate Rule	Identify contacts that duplicate other contacts and leads.	Contact	Standard Contact Matching Rule	<input checked="" type="checkbox"/>	OEPIC	9/20/2025
Standard Lead Duplicate Rule	Identify leads that duplicate other leads and contacts.	Lead	Standard Lead Matching Rule	<input checked="" type="checkbox"/>	OEPIC	9/20/2025

3. Give the Rule name as : Customer Detail duplicate
4. Scroll a little in Matching rule section
5. Select the matching rule : Matching customer details
6. And Click on save.
7. After saving the Duplicate Rule, Click on Activate.

The screenshot shows the "Edit Duplicate Rule" page for "Customer Detail duplicate". The URL is <https://orgfarm-ba48658224-dev-ed.develop.my.salesforce-setup.com/lightning/setup/DuplicateRules/page?address=%2F0BmgK000004cm4X%2Fe%3Fsetupid%...>. The page title is "Customer Detail duplicate". The left sidebar shows "Data" and "Duplicate Management" sections, with "Duplicate Rules" selected. The main content area is titled "Duplicate Rule Edit" and includes a "Rule Details" section with fields for Rule Name (Customer Detail duplicate), Description, Object (Customer Details), and Record-Level Security (Enforce sharing rules selected). Below this is an "Actions" section with "Action On Create" and "Action On Edit" dropdowns, and an "Alert Text" field containing "Use one of these records?".

The screenshot shows the "Duplicate Rules" page with the "Matching Rules" tab selected. The URL is <https://orgfarm-ba48658224-dev-ed.develop.my.salesforce-setup.com/lightning/setup/DuplicateRules/page?address=%2F0BmgK000004cm4X%2Fe%3Fsetupid%...>. The page title is "Duplicate Rules". The left sidebar shows "Data" and "Duplicate Management" sections, with "Duplicate Rules" selected. The main content area is titled "Matching Rules" and includes sections for "Compare Customer Details With" (Customer Details), "Matching Rule" (Matching customer details selected), "Matching Criteria" (Customer__Detail__Email EXACT MatchBlank = FALSE AND Customer__Detail__Phone EXACT MatchBlank = FALSE), and "Field Mapping" (Mapping Selected). Below this is a "Conditions" section with a table for defining record conditions:

Field	Operator	Value
--None--	--None--	

Milestone 8: Profiles

A profile is a group/collection of settings and permissions that define what a user can do in salesforce. Profile controls “Object permissions, Field permissions, User permissions, Tab settings, App settings, Apex class access, Visualforce page access, Page layouts, Record Types, Login hours & Login IP ranges. You can define profiles by the user's job function. For example System Administrator, Developer, Sales Representative.

Types of profiles in salesforce

1. Standard profiles:

By default salesforce provides below standard profiles.

- Contract Manager
- Read Only
- Marketing User
- Solutions Manager
- Standard User
- System Administrator.

We cannot deleted standard ones

Each of these standard ones includes a default set of permissions for all of the standard objects available on the platform.

2. Custom Profiles:

Custom ones defined by us.

They can be deleted if there are no users assigned with that particular one.

Activity 1: Manager Profile

To create a new profile:

1. Go to setup >> type profiles in quick find box >> click on profiles >> clone the desired profile (Standard User) >> enter profile name (Manager) >> Save.

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

- Page Header:** Profiles | Salesforce - Student
- Search Bar:** Search Setup
- Left Sidebar:** Setup, Home, Object Manager, Profiles (selected), Users.
- Profile Manager Section:**
 - Name:** Manager
 - User License:** Salesforce
 - Description:** (empty)
 - Created By:** JENIFER.S 11/3/2025, 2:59 AM
 - Modified By:** JENIFER.S 11/3/2025, 5:48 PM
 - Custom Profile:** checked
- Page Layouts Section:**
 - Standard Object Layouts:** Global (Global Layout [View Assignment]), Email Application (Not Assigned [View Assignment]), Home Page Layout (Home Page Default [View Assignment]).
 - Location Group Assignment:** Location Group Assignment Layout [View Assignment], Macro Macro Layout [View Assignment], Object Milestone Object Milestone Layout [View Assignment].
- System Status Bar:** Type here to search, Taskbar icons, 27°C Sunny, 11:25, ENG, 08-11-2025.

2. While still on the profile page, then click Edit.
3. Select the Custom App settings as default for the Garage management.



4. 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			
Appointments	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>			
Billing details and feedback	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" 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"/>			
Environments	<input type="checkbox"/>								
Laptops	<input type="checkbox"/>								
Service records	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
SessionData	<input type="checkbox"/>								

5. Changing the session times out after should be “ 8 hours of inactivity”.
6. Change the password policies as mentioned :
7. User passwords expire in should be “ never expires ”.
8. Minimum password length should be “ 8 ”, and click save.

using Global Search.

User passwords expire in	Never expires
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
Disclose secret answer for password resets	<input type="checkbox"/>
Require a minimum 1 day password lifetime	<input type="checkbox"/>
Don't immediately expire links in forgot password emails	<input type="checkbox"/>

Save Save & New Cancel

Activity 2: Sales Person Profile

1. Go to setup >> type profiles in quick find box >> click on profiles >> clone the desired profile (Salesforce Platform User) >> enter profile name (sales person) >> Save.

Profiles

sales person

Users with this profile have the permissions and page layouts listed below. Administrators can change a user's profile by editing that user's personal information.

If your organization uses Record Types, use the Edit links in the Record Type Settings section below to make one or more record types available to users with this profile.

Profile Detail

Name	sales person	Custom Profile	<input checked="" type="checkbox"/>
User License	Salesforce Platform		
Description			
Created By	JENIER S.	Modified By	JENIER S.
	11/3/2025, 3:03 AM		11/3/2025, 5:48 PM

Page Layouts

2. While still on the profile page, then click Edit.
3. Select the Custom App settings as default for the Garage management.
4. 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
Appointments	<input checked="" type="checkbox"/>	<input type="checkbox"/>				
Billing details and feedback	<input checked="" type="checkbox"/>	<input type="checkbox"/>				
Customer Details	<input checked="" type="checkbox"/>	<input type="checkbox"/>				
Environments	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Custom Object Permissions						
	Basic Access			Data Administration		
	Read	Create	Edit	Delete	View All	Modify All
Laptops	<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"/>
SessionData	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

5. And click save.

Milestone 9: Role & Role Hierarchy

A role in Salesforce defines a user's visibility access at the record level. Roles may be used to specify the types of access that people in your Salesforce organization can have to data. Simply put, it describes what a user could see within the Salesforce organization.

Activity 1: Creating Manager Role

Creating Manager Role:

1. Go to quick find >> Search for Roles >> click on set up roles.

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

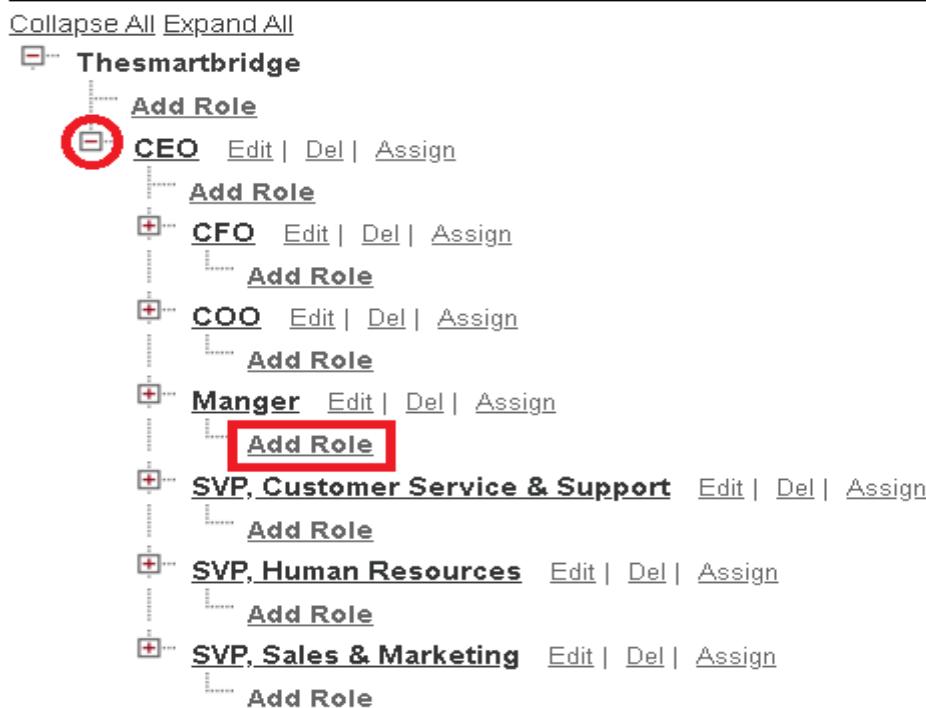
3. Give Label as “Manager” and Role name gets auto populated. Then click on Save.

The screenshot shows the 'Role Edit' interface. At the top, there is a 'Label' field containing 'Manger' with a red double-headed arrow indicating it is being edited. Below it is a 'Role Name' field also containing 'Manger'. Underneath these is a section labeled 'This role reports to' with a dropdown menu set to 'CEO'. At the bottom of the form are buttons for 'Save' (with a red double-headed arrow), 'Save & New', and 'Cancel'.

Activity 2: Creating Another Roles

Creating another two roles under manager

1. Go to quick find >> Search for Roles >> click on set up roles.
2. Click plus on CEO role, and click add role under manager.



3. Give Label as “sales person” and Role name gets auto populated. Then click on Save.

Phase 3: Project Design

Milestone 1: Users

A user is 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. Every user in Salesforce has a user account. The user account

identifies the user, and the user account settings determine what features and records the user can access.

Activity 1: Create User

1. Go to setup >> type users in quick find box >> select users >> click New user.
2. 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

The screenshot shows the Salesforce Setup interface with the 'Users' tab selected. On the left, a sidebar lists various user management options like Permission Set Groups, Profiles, and Roles. The main area displays a 'User Detail' form for a user named 'Niklaus Mikaelson'. The form includes fields for Name, Alias, Email, Username, Nickname, Title, Company, Department, Division, Address, Time Zone, Locale, Language, Delegated Approver, Manager, Receive Approval Request Emails, Federation ID, App Registration, and several checkboxes for User License, Profile, and various system roles. The 'Role' field is set to 'Manager'. The 'User License' field is set to 'Salesforce Platform'. The 'Profile' field is set to 'Manager'. The 'Active' checkbox is checked. Other checkboxes for Marketing User, Offline User, Knowledge User, Flow User, Service Cloud User, Site.com Contributor User, Site.com Publisher User, WDC User, Mobile Push Registrations, Data.com User Type, Accessibility Mode (Classic Only), Debug Mode, High-Contrast Palette on Charts, and Load Lightning Pages While Scrolling are all unchecked. The status bar at the bottom shows the date and time as 11:34 08.11.2025.

3. Save.

Activity 2: Creating Another Users

1. Repeat the steps and create another user using
 1. Role : sales person
 2. User licence : Salesforce Platform
 3. Profile : sales person

Note : create atleast 3 users with these permissions.

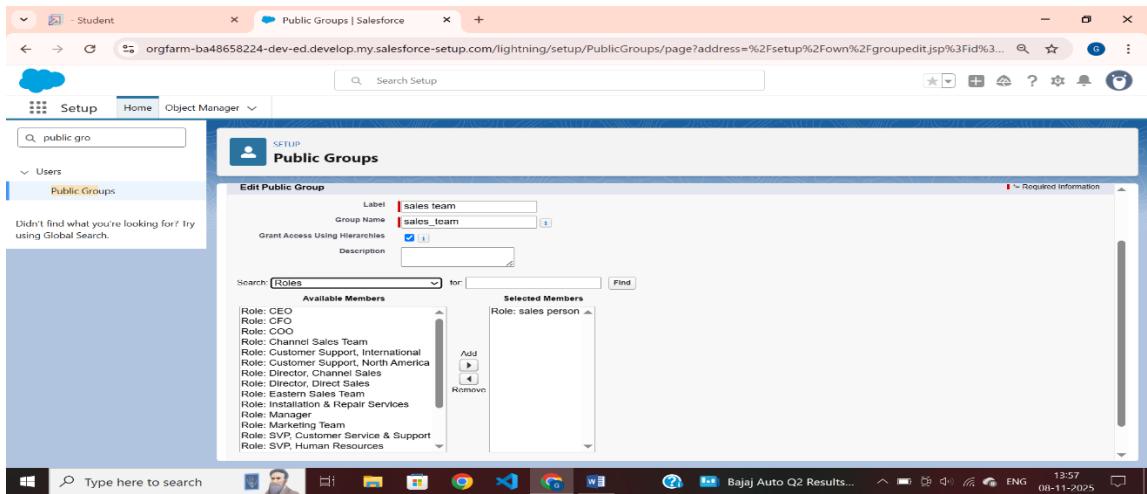
Milestone 2: Public Groups

Public groups are a valuable tool for Salesforce administrators and developers to streamline user management, data access, and security settings. By creating and using public groups effectively, you can maintain a secure and organized Salesforce environment while ensuring that users have appropriate access to the resources they need.

Activity 1: Creating New Public Group

1. Go to setup >> type users in quick find box >> select public groups >> click New.

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



Milestone 3: Sharing Setting

Salesforce allows you to configure sharing settings to control how records are accessed and shared within your organization. These settings are crucial for maintaining data security and privacy. Salesforce provides a variety of tools and mechanisms to define and enforce sharing rules, such as:

Organization-Wide Default (OWD) Settings:

These settings define the default level of access for all objects within your Salesforce org.

OWD settings include Private, Public Read-Only, Public Read/Write, and Controlled by Parent.

OWD settings can be configured for each standard and custom object.

Role Hierarchy:

Salesforce uses a role hierarchy to determine record access.

Users at higher levels in the hierarchy have greater access to records owned by or shared with users lower in the hierarchy.

The role hierarchy is often used in combination with OWD settings to grant different levels of access.

Profiles and Permission Sets:

Profiles and permission sets allow administrators to specify object-level and field-level permissions for users.

Profiles are typically used to grant general object and field access, while permission sets can be used to extend those permissions to specific users.

Sharing Rules:

Sharing rules are used to extend access to records for users who meet specific criteria.

They can be used to grant read-only or read-write access to records owned by other users.

Manual Sharing:

Administrators and record owners can manually share specific records with other users or groups.

Activity 1: Creating Sharing Settings

1. Go to setup >> type users in quick find box >> select Sharing Settings >> click Edit.
2. Change the OWD setting of the Service records Object to private as shown in fig.

The screenshot shows the Salesforce Sharing Settings page. In the 'Sharing Rules' section, under 'Service records', there is a 'New' button highlighted with a red arrow. The status bar at the bottom right indicates it's 13:59 on 08-11-2025.

3. Click on save and refresh.
4. Scroll down a bit, Click new on Service records sharing Rules.
- 5.

The screenshot shows the 'Service records Sharing Rules' page. The 'New' button is highlighted with a red arrow. The status bar at the bottom right indicates it's 13:59 on 08-11-2025.

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

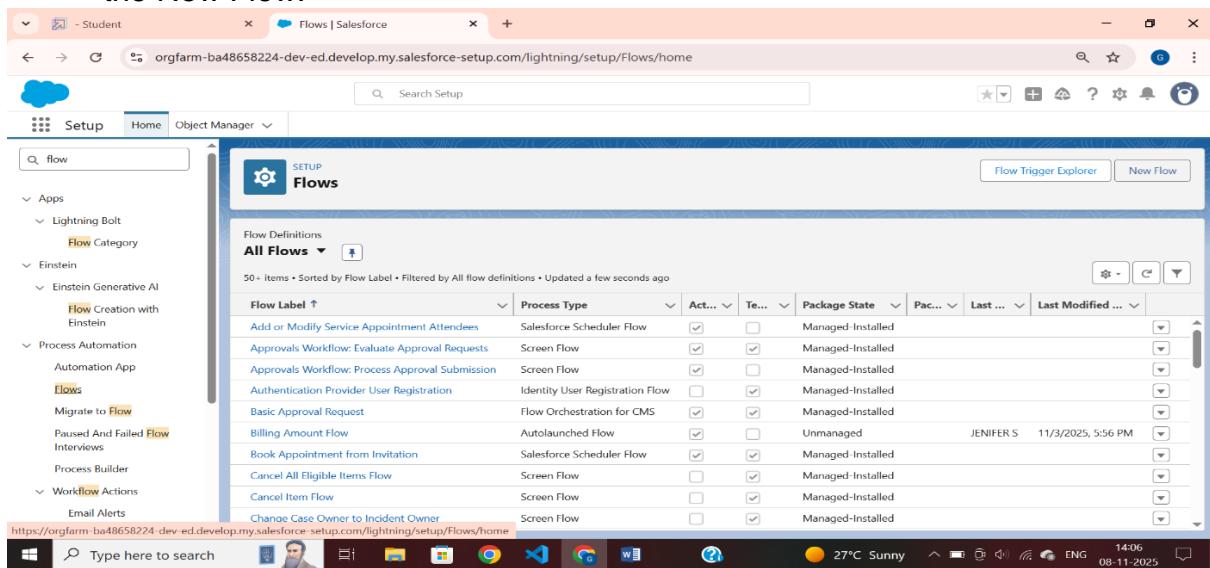
The screenshot shows the 'Step 1: Rule Name' configuration screen. The 'Label' field contains 'Sharing setting' and the 'Rule Name' field contains 'Sharing_setting'. The 'Access Level' dropdown is set to 'ReadWrite'. The status bar at the bottom right indicates it's 14:04 on 08-11-2025.

Milestone 4: Flows

In Salesforce, a flow is a powerful tool that allows you to automate business processes, collect and update data, and guide users through a series of screens or steps. Flows are built using a visual interface and can be created without any coding knowledge.

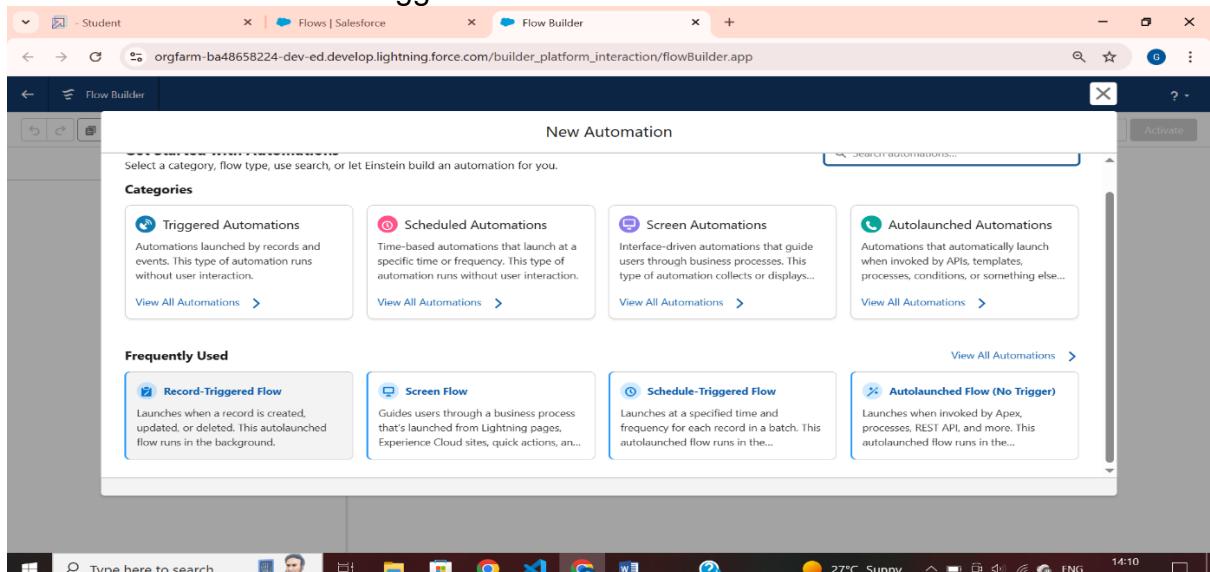
Activity 1: Create A Flow

1. Go to setup >> type Flow in quick find box >> Click on the Flow and Select the New Flow.



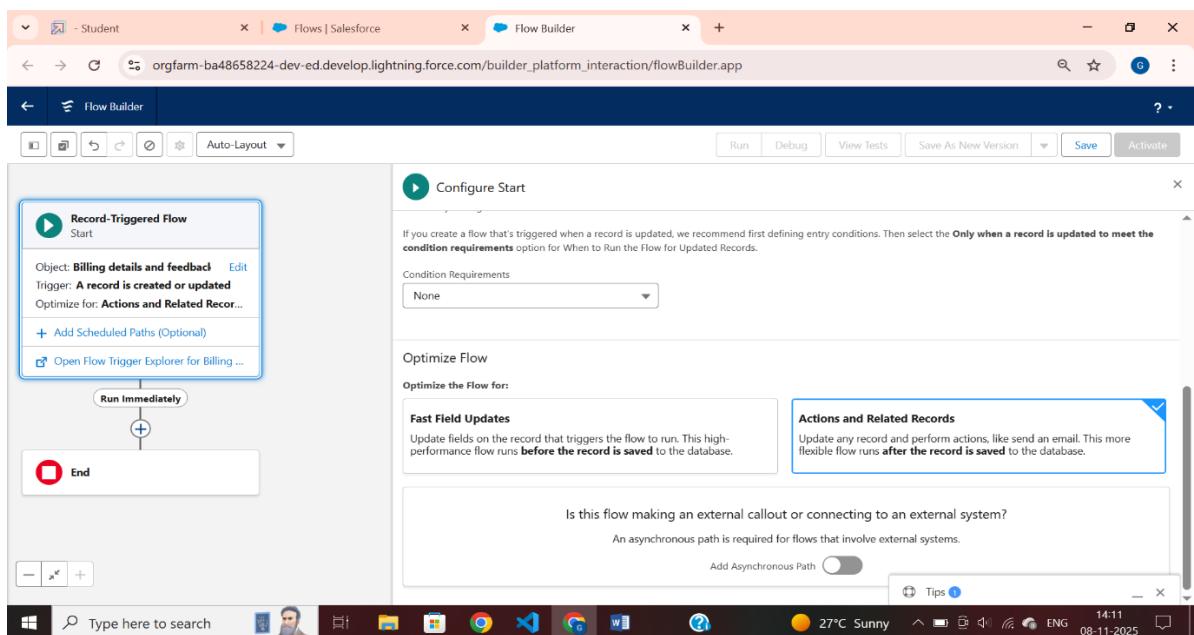
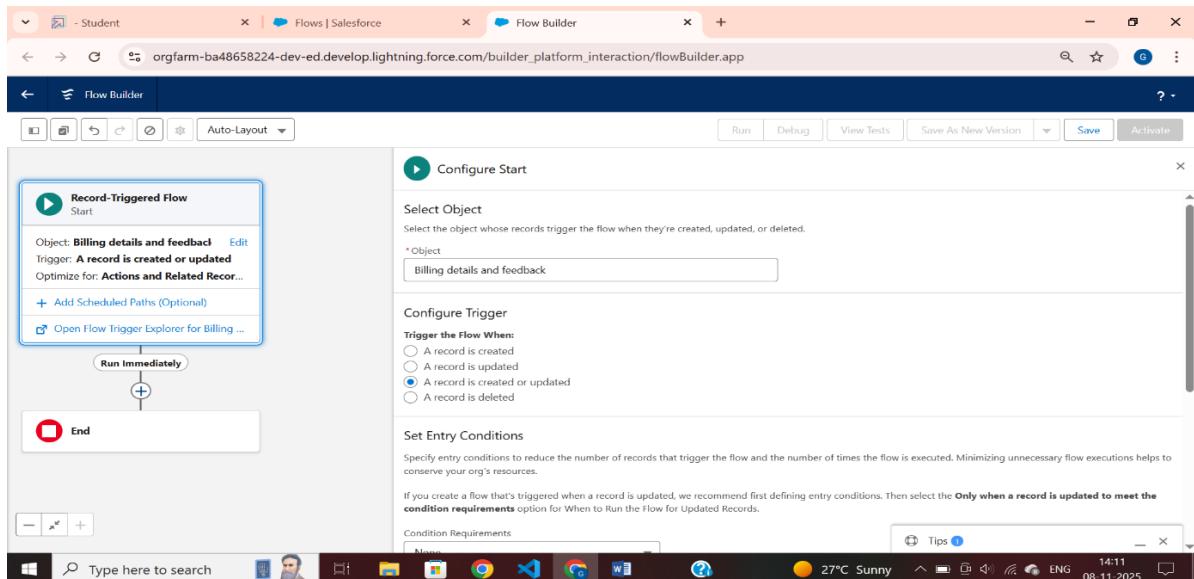
The screenshot shows the Salesforce Setup interface with the 'Flows' category selected in the left sidebar. The main area displays a table of 'Flow Definitions' with various rows listed, such as 'Add or Modify Service Appointment Attendees', 'Approvals Workflow Evaluate Approval Requests', and 'Basic Approval Request'. The table includes columns for 'Flow Label', 'Process Type', 'Actions', 'Triggers', 'Package State', and 'Last Modified'. A search bar at the top right says 'Search Setup'.

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

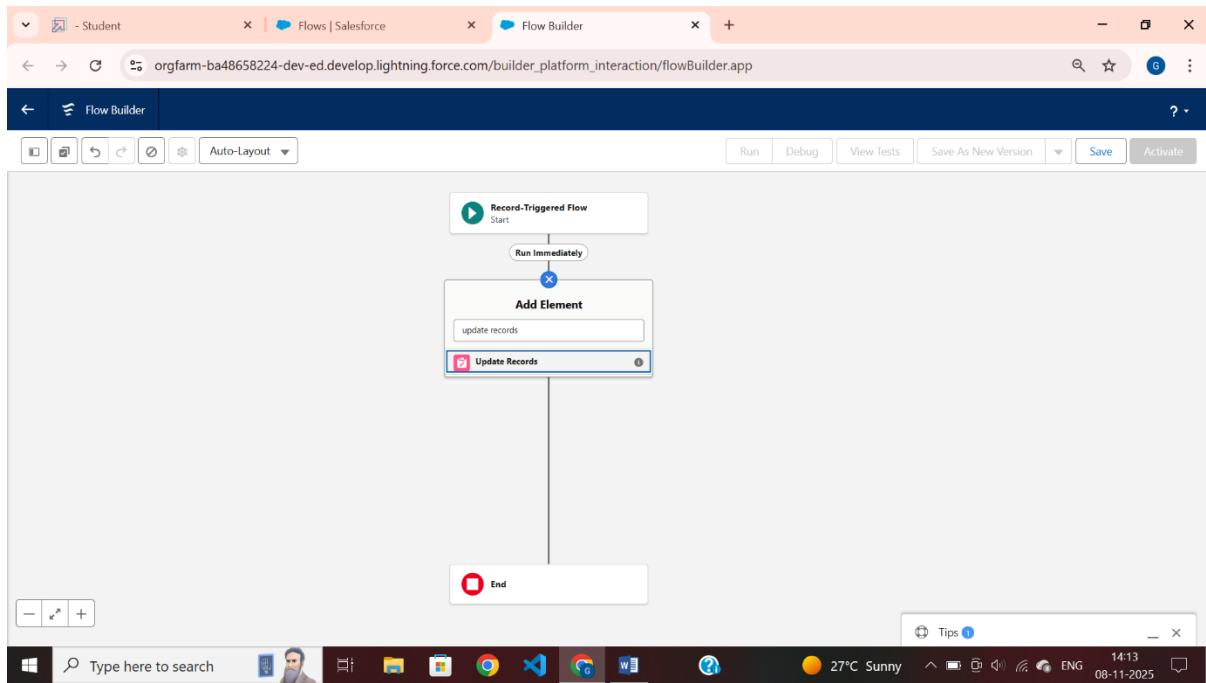


The screenshot shows the Flow Builder interface with the 'New Automation' section selected. It features four categories: 'Triggered Automations', 'Scheduled Automations', 'Screen Automations', and 'Autolaunched Automations'. Below these are sections for 'Frequently Used' flows: 'Record-Triggered Flow', 'Screen Flow', 'Schedule-Triggered Flow', and 'Autolaunched Flow (No Trigger)'. Each section provides a brief description of the flow type.

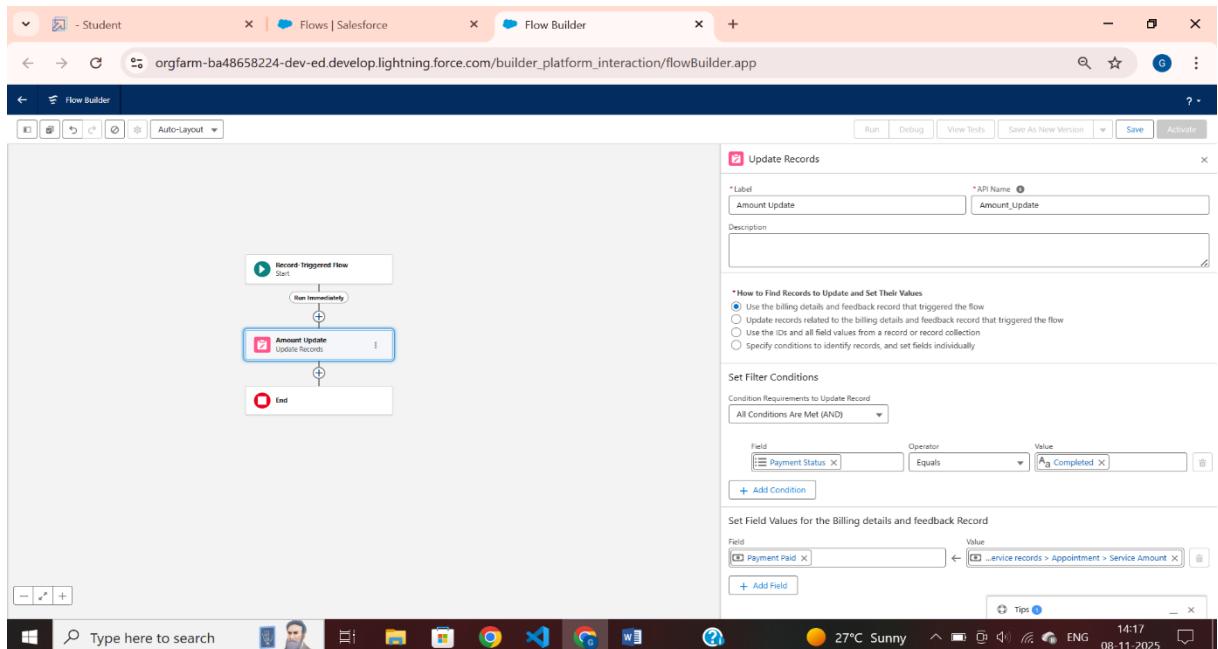
3. Select the Object as "Billing details and feedback" in the Drop down list.
4. Select the Trigger Flow when: "A record is Created or Updated".
5. Select the Optimize the flow for: "Actions and Related Records" and Click on Done.



6. Under the Record-triggered Flow Click on “+” Symbol and In the Drop down List select the “Update records Element”.

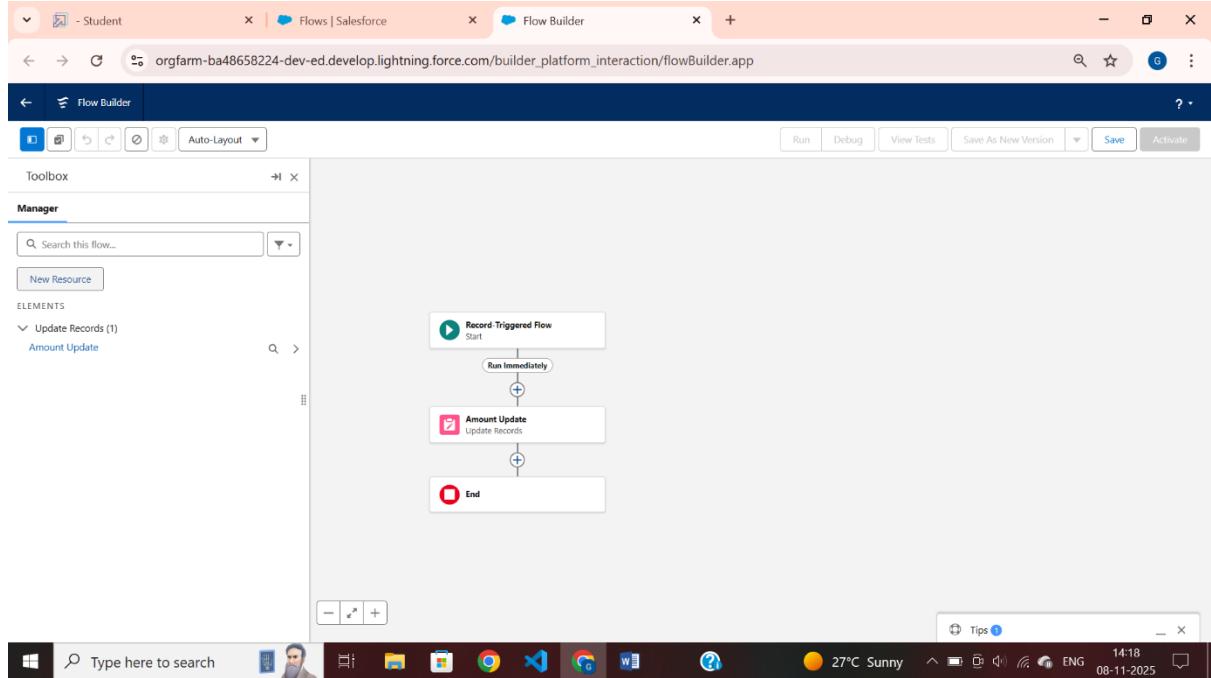


7. Give the Label Name : Amount Update
8. Api name : is auto populated



9. Set a filter condition : All Conditions are met(AND)
10. Field : Payment_Status__c
11. Operator : Equals
12. Value : Completed
13. And Set Field Values for the Billing details and feedback Record
14. Field : Payment_Paid__c
15. Value : {!\$Record.Service_records__r.Appointment__r.Service_Amount__c}
16. Click On Done.

17. Before creating another Element. Create a New Resource form Toolbox form top left.



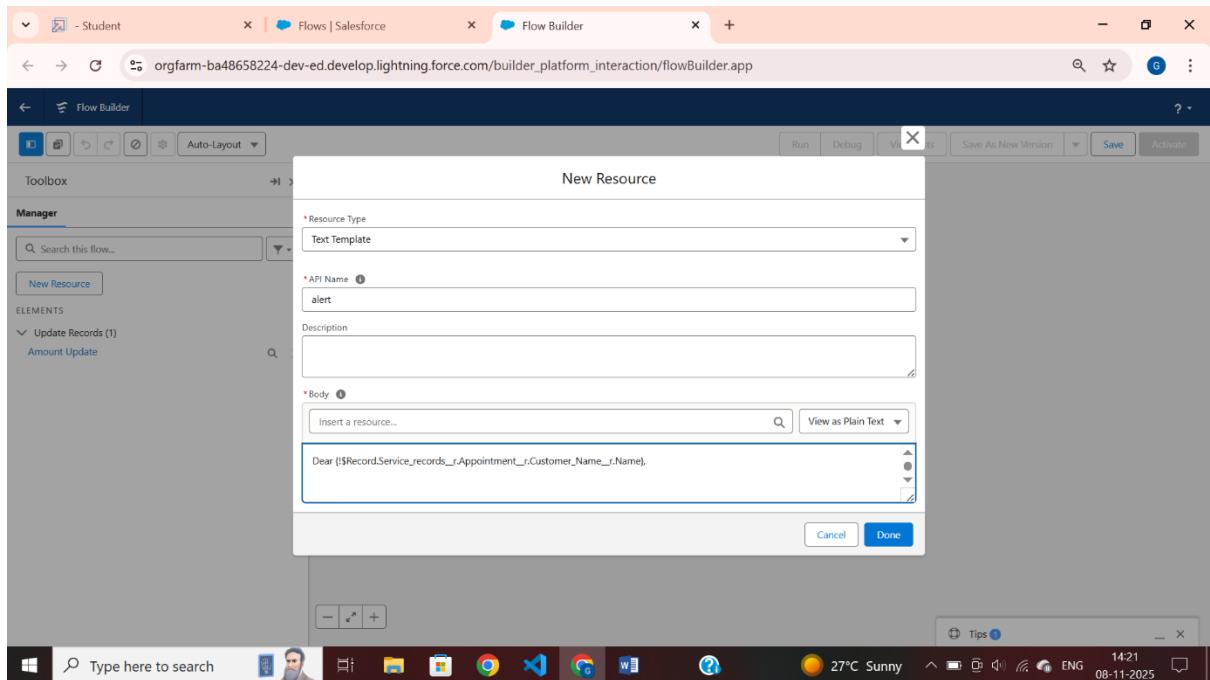
18. Click on the New Resource
19. Select the resource type as text template.
20. Enter the API name as “alert”.
21. Change the view as Rich Text ? View to Plain Text.
22. In body field paste the syntax that given below.

Dear {!\$Record.Service_records__r.Appointment__r.Customer_Name__r.Name},

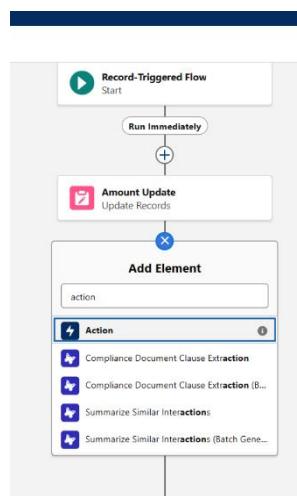
I hope this message finds you well. I wanted to take a moment to express my sincere gratitude for your recent payment for the services provided by our garage management team. Your prompt payment is greatly appreciated, and it helps us continue to provide top-notch services to you and all our valued customers.

Amount paid : {!\$Record.Payment_Paid__c}
Thank you for Coming .

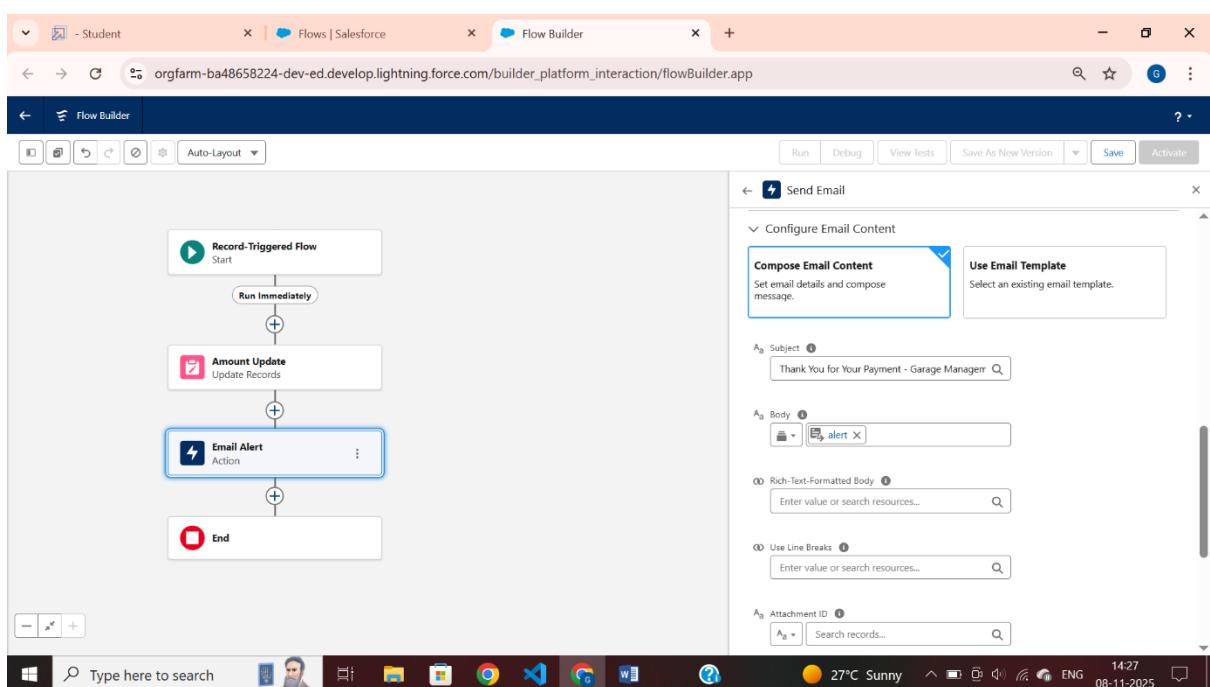
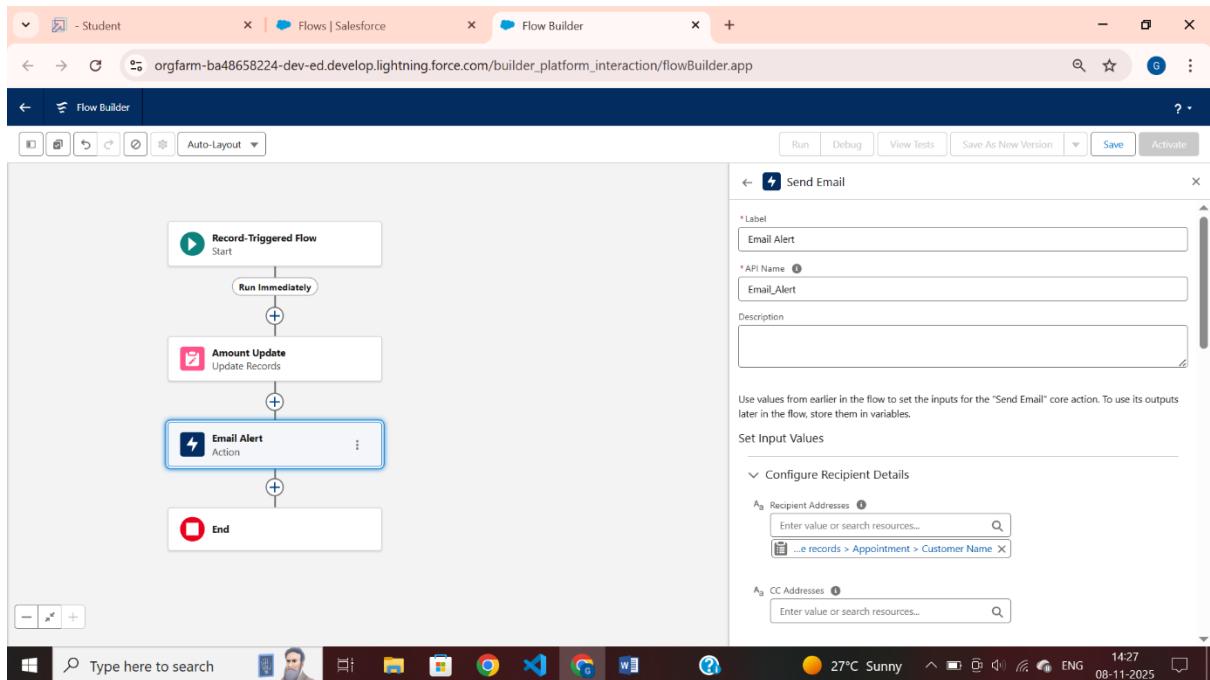
23. Click done.



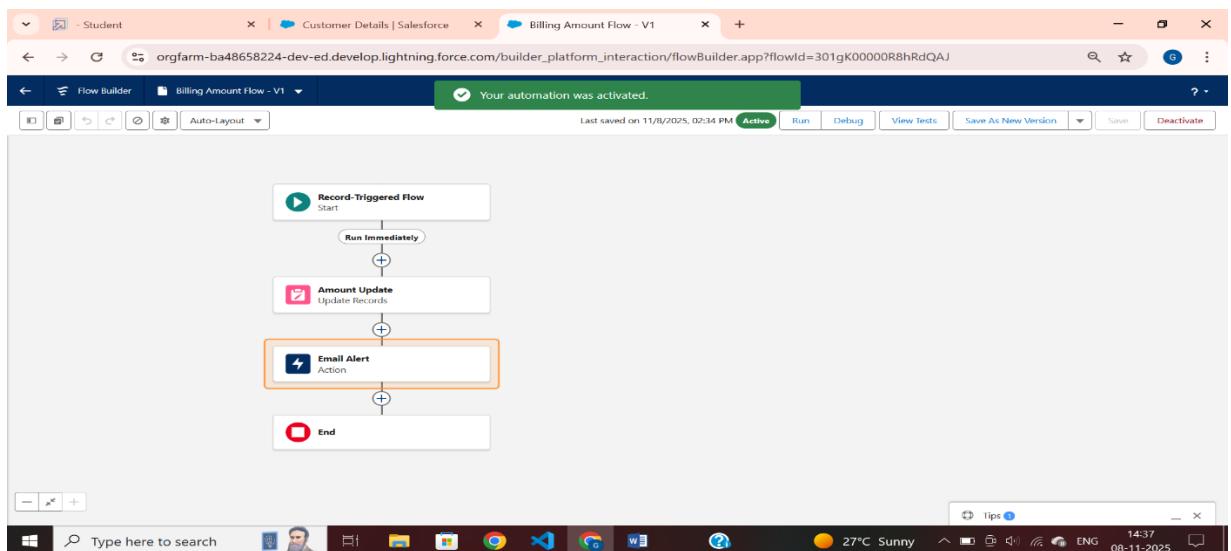
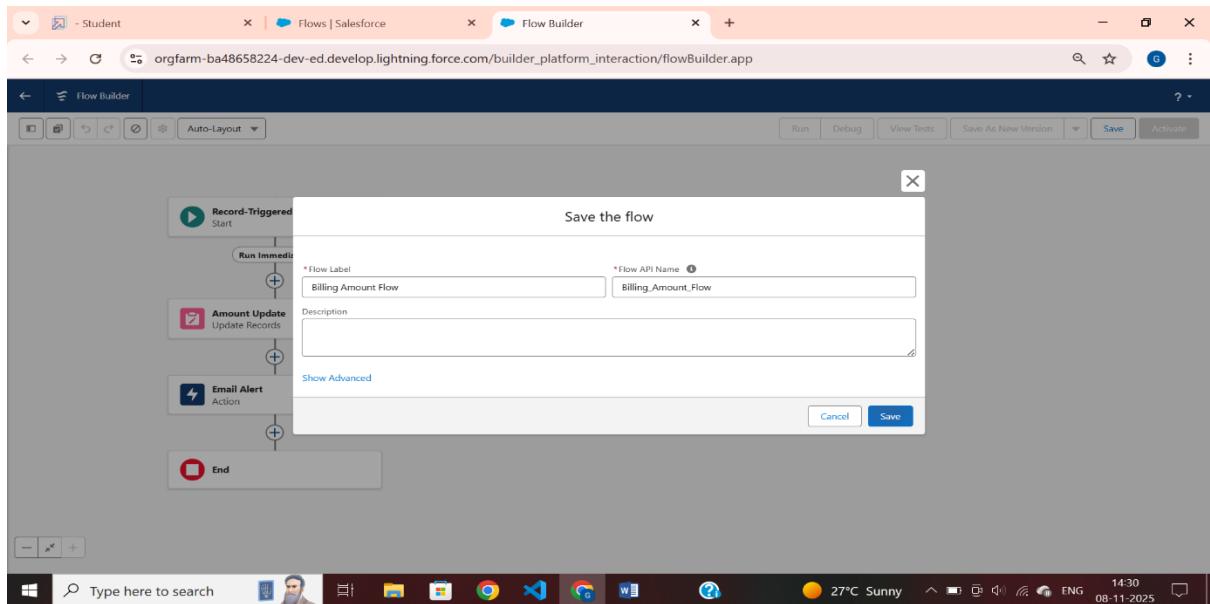
24. Now Click on Add Element , select Action.



25. Their action bar will be opened in that search for “ send email ” and click on it.
26. Give the label name as “ Email Alert”
27. API name will be auto populated.
28. Enable the body in set input values for the selected action.
29. Select the text template that created , Body : {!alert}
30. Include recipient address list select the email form the record.
31. RecipientAddressList:
{!\$Record.Service_records__r.Appointment__r.Customer_Name__r.Gmail__c}
32. Include subject as “ Thank You for Your Payment - Garage Management”.
33. Click done.



34. Click on save. Give the Flow label , Flow Api name will be autopopulated.
35. And click save, and click on activate.

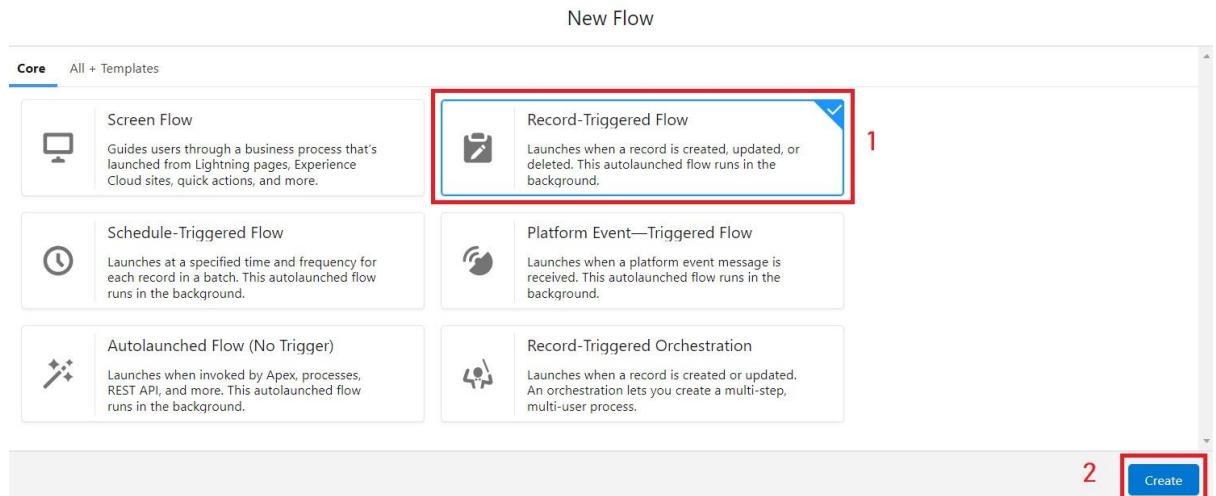


Activity 2: Create Another Flow

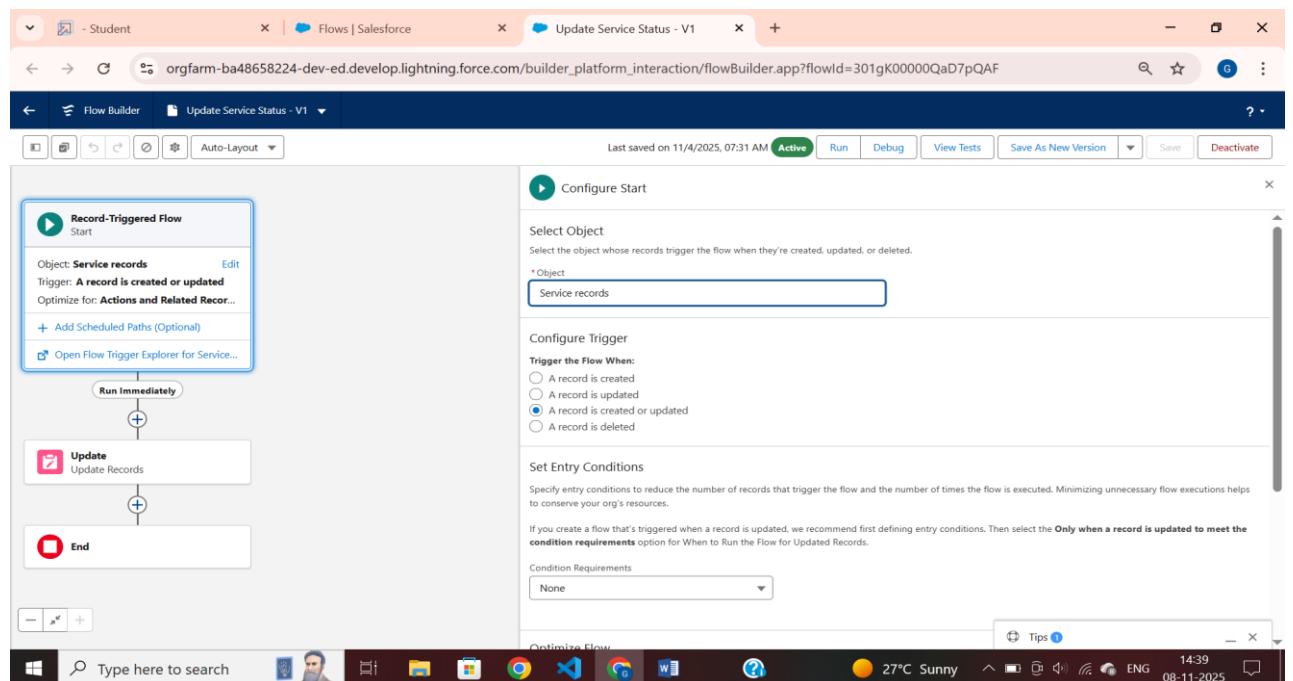
1. Go to setup ? type Flow in quick find box ? Click on the Flow and Select the New Flow.

Flow Label	Process Type	Ac...	Te...	Package State	Pa...	Last Modified By	Last Modified ...
Ac Amount update	Autolaunched Flow	<input type="checkbox"/>	<input type="checkbox"/>	Unmanaged		Veera Venkata Varaprasad Androthu	07/06/2023, 11:35 am
Book Appointment from Invitation	Salesforce Scheduler Flow	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	Managed-Installed			
Cancel Item Flow	Screen Flow	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Managed-Installed			
Change Case Owner to Incident Owner	Screen Flow	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Managed-Installed			
Close Change Request & Related Issues	Screen Flow	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Managed-Installed			

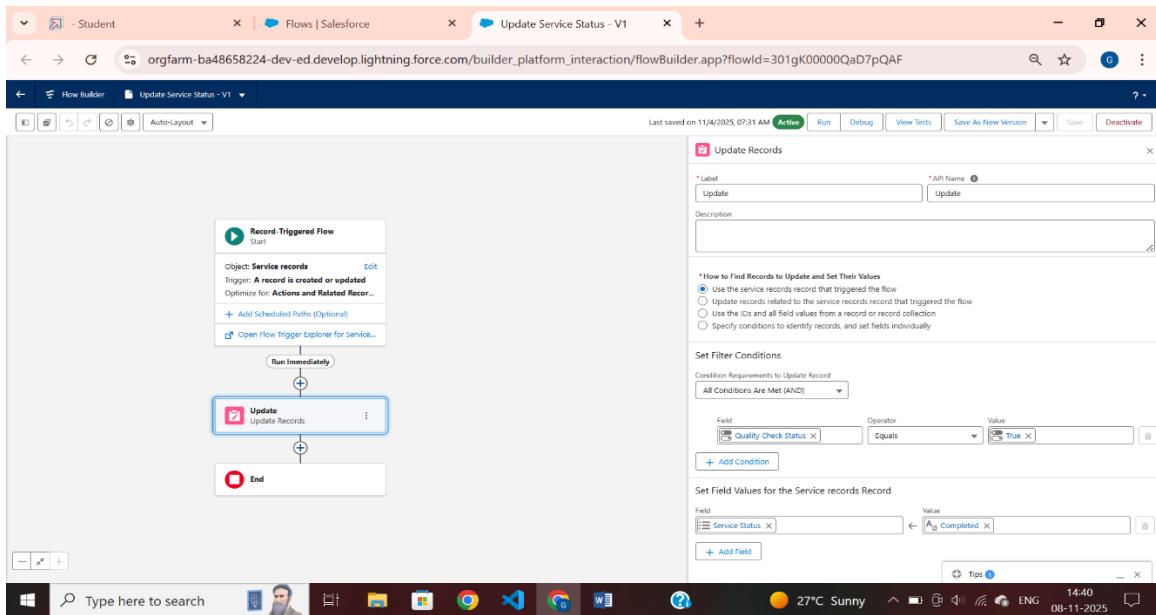
2. Select the Record-triggered flow and Click on Create.



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” and Click on Done.



6. Under the Record-triggered Flow Click on “+” Symbol and In the Drop down List select the “Update records Element”.
7. Set a filter condition : All Conditions are met(AND)
8. Field : **Quality_Check_Status__c**
9. Operator : **Equals**
10. Value : **True**
11. And Set Field Values for the Billing details and feedback Record
12. Field : **Service_Status__c**
13. Value : **Completed**



14. Click On **Done**.
15. Click on **save**
16. Given the Flow label as **Update Service Status** , Flow Api name will be auto populated.
17. And click save, and click on **activate**.

Phase 4: Project Development

Milestone 1: Apex Trigger

Apex can be invoked by using triggers. Apex triggers enable you to perform custom actions

before or after changes to Salesforce records, such as insertions, updates, or deletions. A trigger is Apex code that executes before or after the following types of operations:

- insert
- update
- delete
- merge
- upsert
- undelete

For example, you can have a trigger run before an object's records are inserted into the database, after records have been deleted, or even after a record is restored from the Recycle Bin.

You can define triggers for top-level standard objects that support triggers, such as a Contact or an Account, some standard child objects, such as a CaseComment, and custom objects. To define a trigger, from the object management settings for the object whose triggers you want to access, go to Triggers.

There are primarily two types of Apex Triggers:

Before Trigger: This type of trigger in Salesforce is used either to update or validate the values of a record before they can be saved into the database. So, basically, the before trigger validates the record first and then saves it. Some

criteria or code can be set to check data before it gets ready to be inserted into the database.

After Trigger: This type of trigger in Salesforce is used to access the field values set by the system and affect any change in the record. In other words, the after trigger makes changes to the value from the data inserted in some other record.

Activity 1: Apex Handler

UseCase : This use case works for Amount Distribution for each Service the customer selected for there Vehicle.

1. Login to the respective trailhead account and navigate to the gear icon in the top right corner.
2. Click on the Developer console. Now you will see a new console window.
3. In the toolbar, you can see FILE. Click on it and navigate to new and create New apex class.
4. Name the class as “AmountDistributionHandler”.



```
1 * public class AmountDistributionHandler {  
2  
3     public static void amountDist(list<Appointment_c> listApp){  
4         list<Service_records_c> serlist = new list<Service_records_c>();  
5  
6         for(Appointment_c app : listApp){  
7             if(app.Maintenance_service_c == true && app.Repairs_c == true && app.Replacement_Parts_c == true){  
8                 app.Service_Amount_c = 10000;  
9             }  
10            else if(app.Maintenance_service_c == true && app.Repairs_c == true){  
11                app.Service_Amount_c = 5000;  
12            }  
13            else if(app.Maintenance_service_c == true && app.Replacement_Parts_c == true){  
14                app.Service_Amount_c = 8000;  
15            }  
16            else if(app.Repairs_c == true && app.Replacement_Parts_c == true){  
17                app.Service_Amount_c = 7000;  
18            }  
19            else if(app.Maintenance_service_c == true){  
20                app.Service_Amount_c = 2000;  
21            }  
22        }  
23    }  
24  
25    }  
26  
27}  
28  
29}  
30  
31 }
```

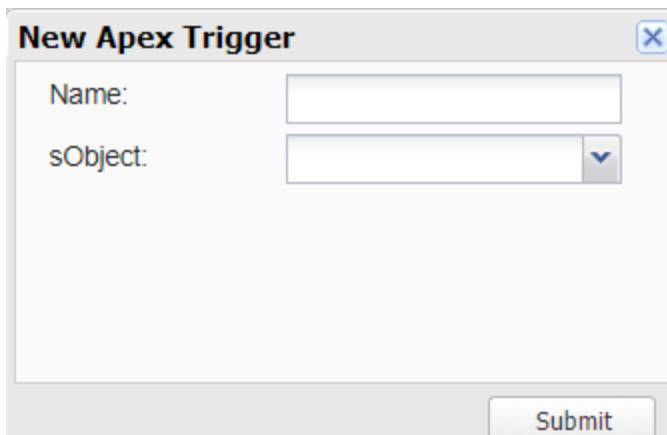
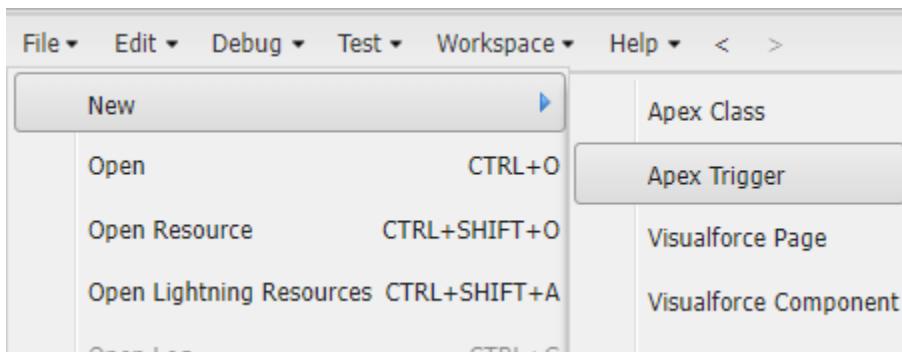
Code:

```
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 :

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

The screenshot shows the Salesforce IDE's code editor. The title bar indicates the file is 'AmountDistribution.apxt'. The code editor displays the following Apex trigger:

```

1 trigger AmountDistribution on Appointment__c (before insert, before update) {
2
3     if(trigger.isbefore && trigger.isinsert || trigger.isupdate){
4         AmountDistributionHandler.amountDist(trigger.new);
5
6     }
7
8 }
```

Code:

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

Milestone 2: Reports

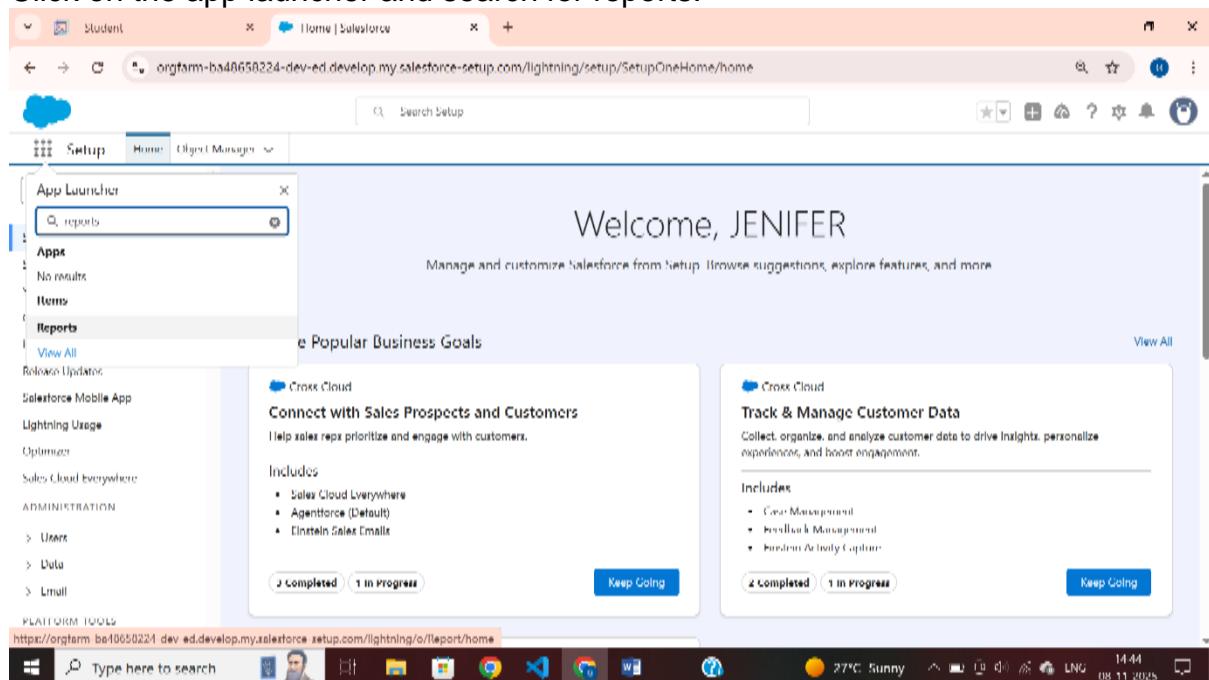
Reports give you access to your Salesforce data. You can examine your Salesforce data in almost infinite combinations, display it in easy-to-understand formats, and share the resulting insights with others. Before building, reading, and sharing reports, review these reporting basics.

Types of Reports in Salesforce

1. Tabular
2. Summary
3. Matrix
4. Joined Reports

Activity 1: Create A Report Folder

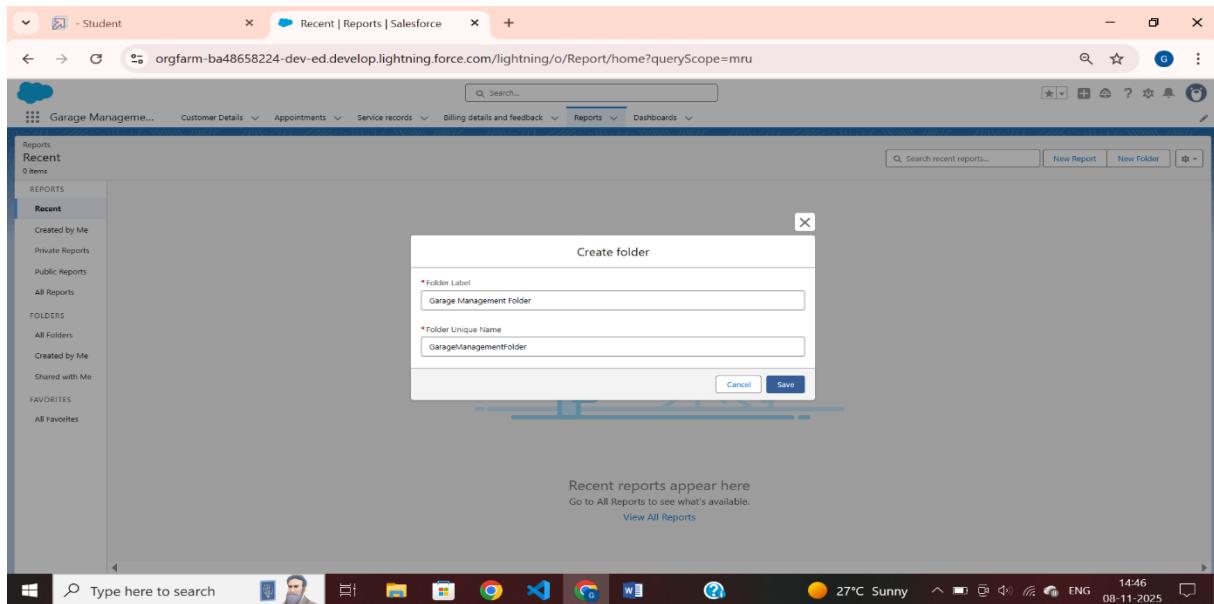
1. Click on the app launcher and search for reports.



2. Click on the report tab, click on new folder.

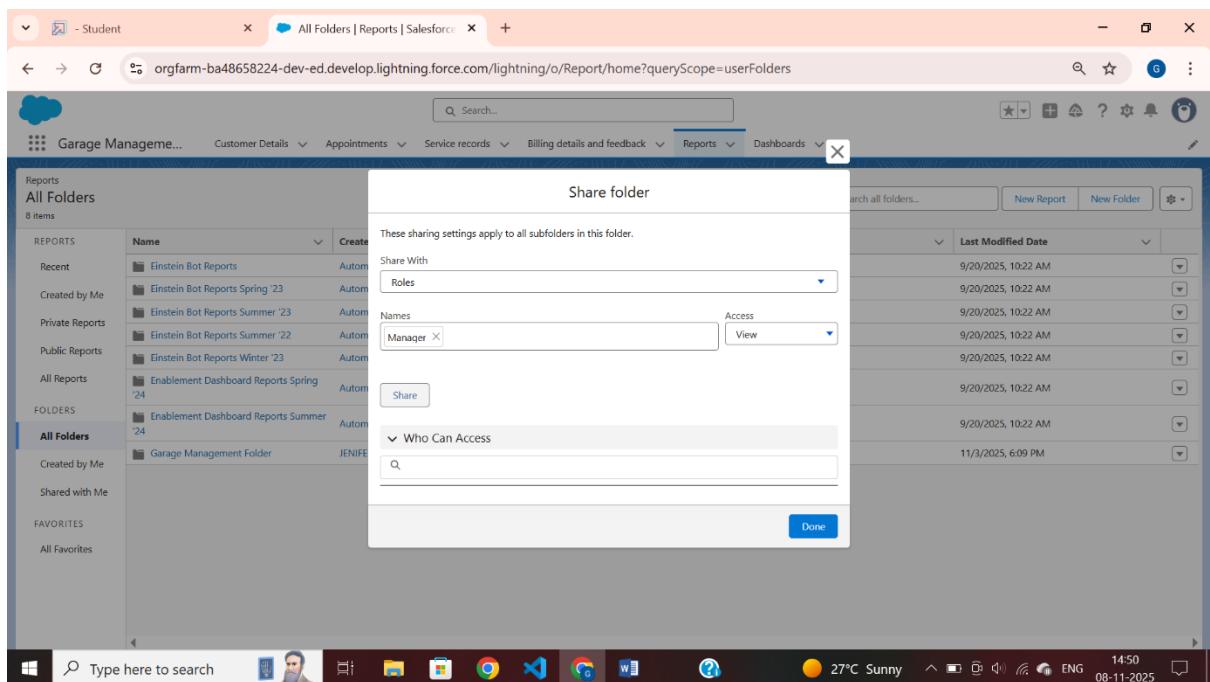
3. Give the Folder label as “Garage Management Folder”, Folder unique name will be auto populated.

4. Click save.



Activity 2: Sharing A Report Folder

1. Go to the app >> click on the reports tab.
2. Click on the All folder , click on the Drop down arrow for Garage Management folder, and Click on share.
3. Select the share with as “roles”, in name field search for “manager”, give “view” as access for that role.
4. Then click share, and click on Done.



Activity 3: Create Report Type

1. Go to setup >> type users in quick find box >> select Report Type >> click on Continue.

2. Click on new custom report type.

The screenshot shows the 'Custom Report Types' page in the Salesforce Setup. The list includes:

- Orchestration Run Logs Spring '24
- Orchestration Runs Spring '24
- Orchestration Stage Runs Spring '24
- Orchestration Step Runs Spring '24
- Orchestration Work Items Spring '24
- Program Definition Spring '24
- Program Item Progress Spring '24
- Program Progress Summer '24
- Program Progress Spring '24
- Program Progress Summer '24
- Screen Rows
- Service Information

Details for the first item:

Label	Name	Description	Category	Created Date
Orchestration Run Logs Spring '24	How_orchestration_log_cortt_crt_two_hour_right	Find out which orchestration run logs were created and what happened in their associated orchestration runs.	Other Report...	9/20/2023, 10:22 AM

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

The screenshot shows the 'Edit Custom Report Type' page. The 'Primary Object' is set to 'Customer Details'. The 'Details' section contains:

Display Label	API Name
Service information	Service_information

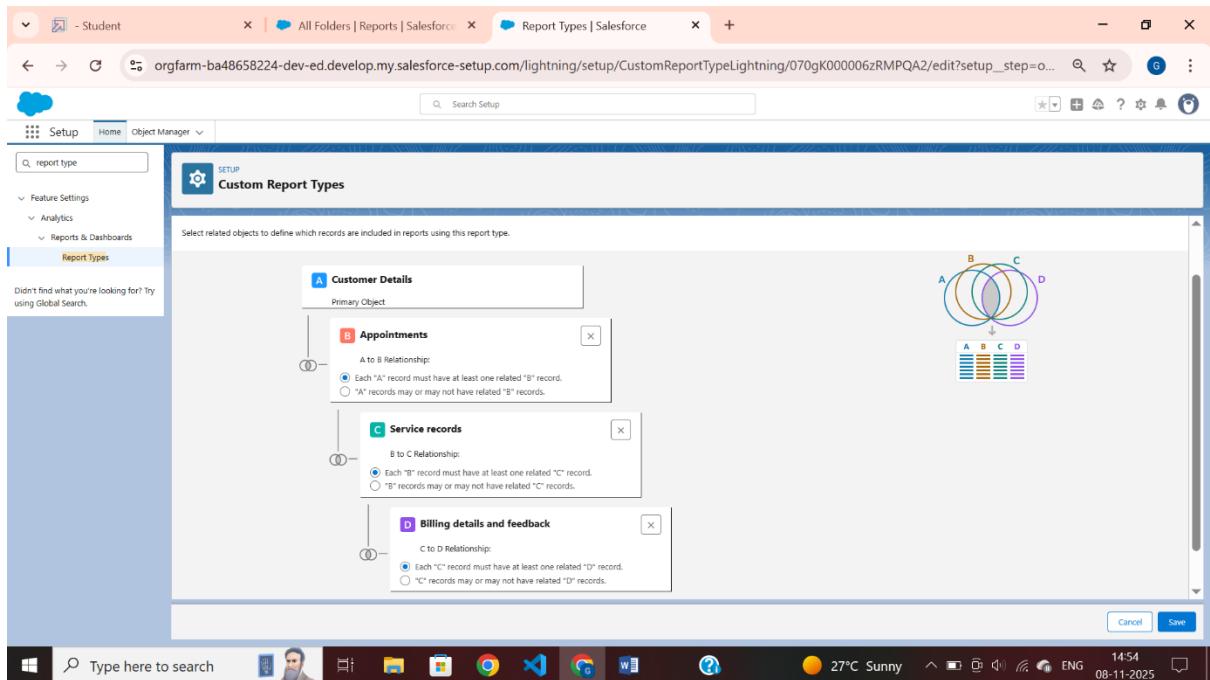
The 'Set Availability' section shows:

An in-development report type is visible only to users with the Manage Custom Report Types permission. A deployed report type is available to all users.

Status: In Development Deployed

Buttons at the bottom right: 'Cancel' and 'Save'.

9. now , Click on Related object box.
10. Click on Select Object, choose Appointment Object as shown in fig.
11. Again Click to relate another object.
12. And select the related object as “ service records ”.
13. Repeat the process and select the related object as “ Billing details and feedback ”.
14. And click on save.



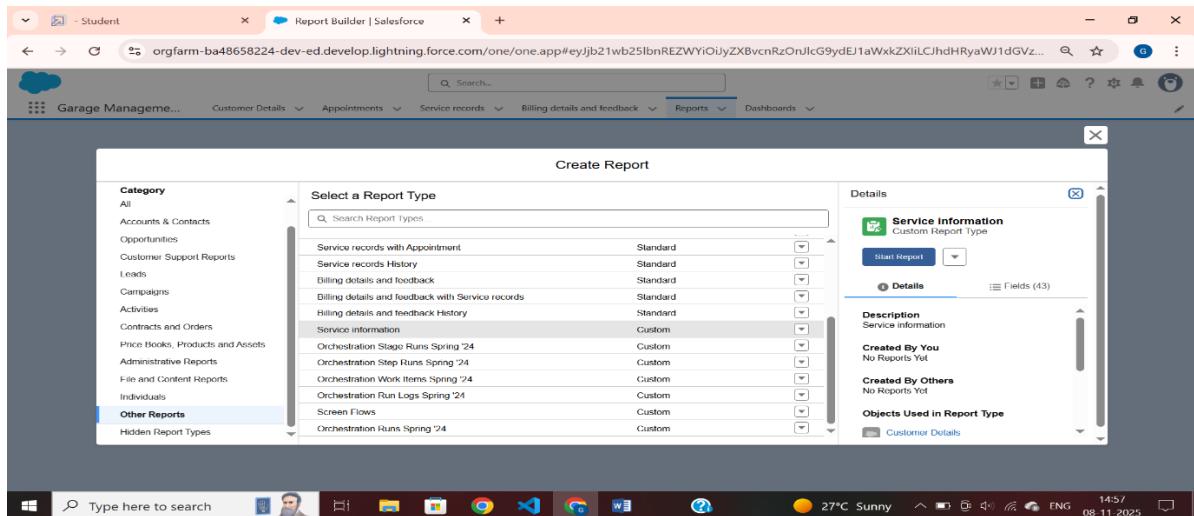
Activity 4: Create Report

**Note : Before creating report, create latest “10” records in every object.
Try to fill every field in each record for better experience.**

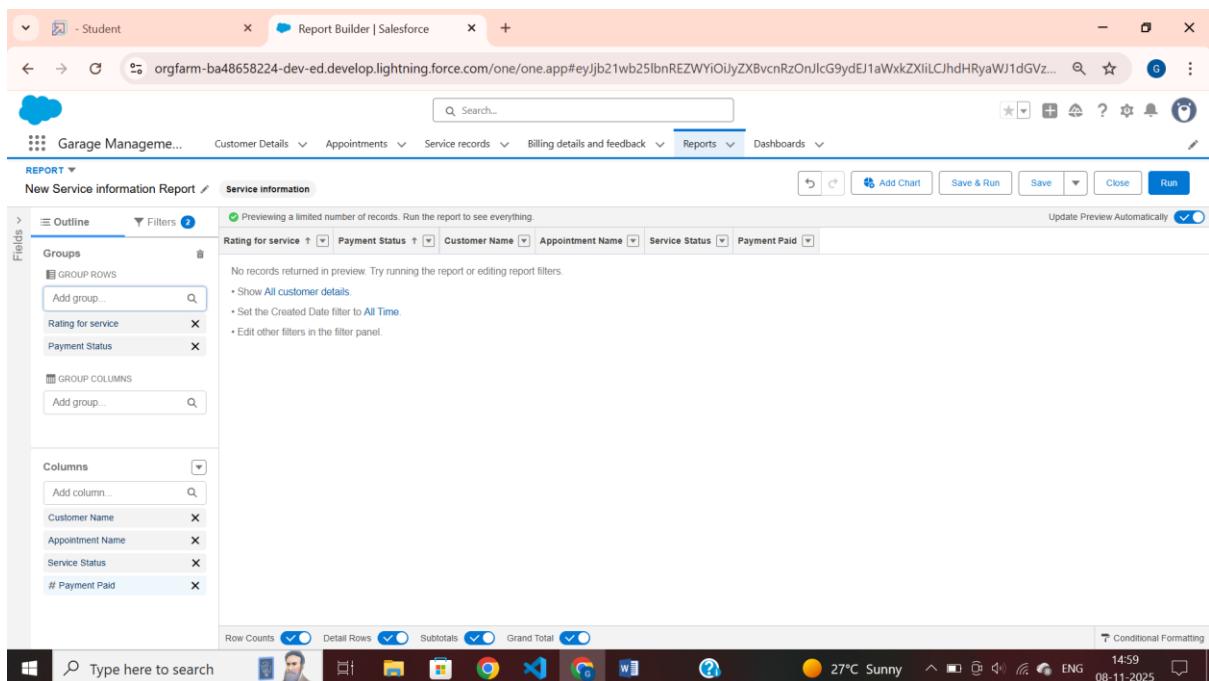
1. Go to the app >> click on the reports tab
2. Click New Report.

REPORTS	Report Name	Description	Folder	Created By	Created On	Subscribed
Recent	Employee's working on projects report		Private Reports	Employee Project	5/6/2023, 9:33 am	
Created by Me	Assets assigned to Employees		Private Reports	Employee Project	5/6/2023, 9:36 am	
Private Reports						
Public Reports						
All Reports						
FOLDERS						

3. Select the Category as other reports, search for Service Information, select that report, click on it. And click on start report.

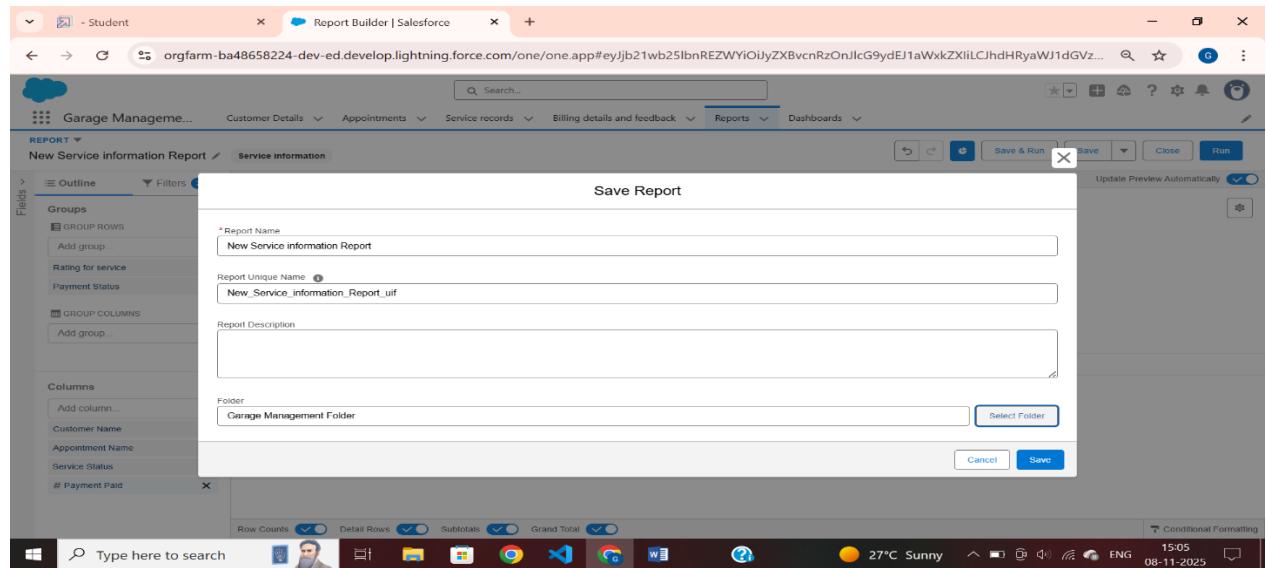


4. Their outline pane is opened already, select the fields that mentioned below in column section.
1. Customer name
 2. Appointment Date
 3. Service Status
 4. Payment paid
5. Remove the unnecessary fields.
6. Select the fields that mentioned below in GROUP ROWS section.
- . Rating for Service
7. Select the fields that mentioned below in GROUP ROWS section.
- . Payment Status
8. Click on Add Chart , Select the Line Chart.



9. Click on save, Give the report Name : New Service information Report

10. Report unique Name is auto populated.
11. Select the folder the created and Click on save.

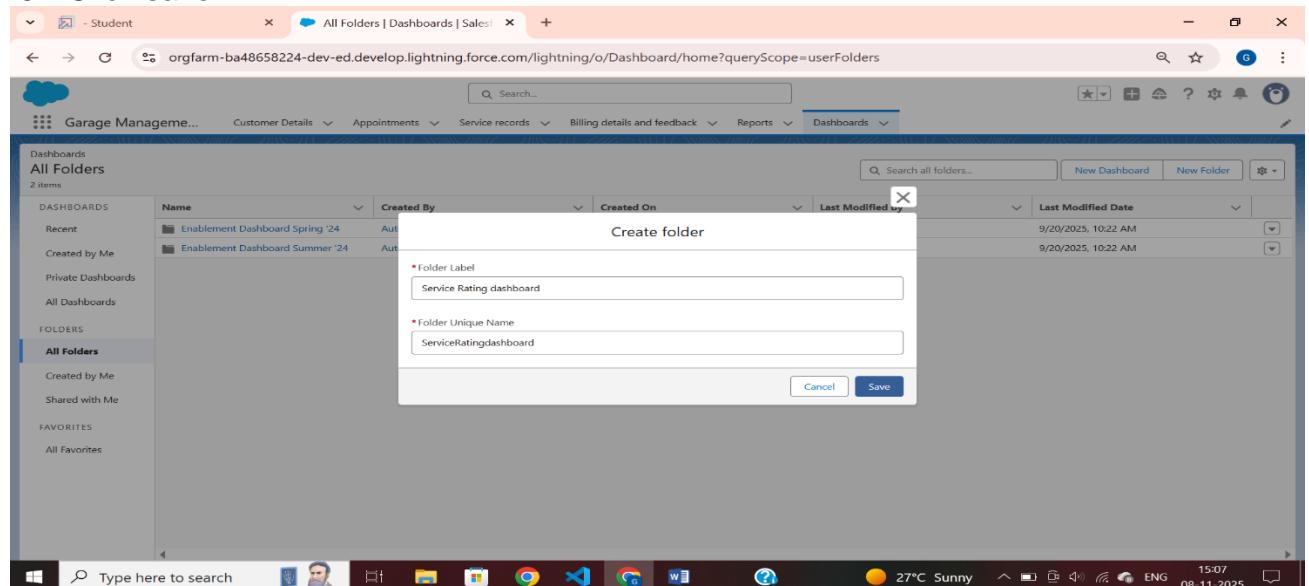


Milestone 3: Dashboards

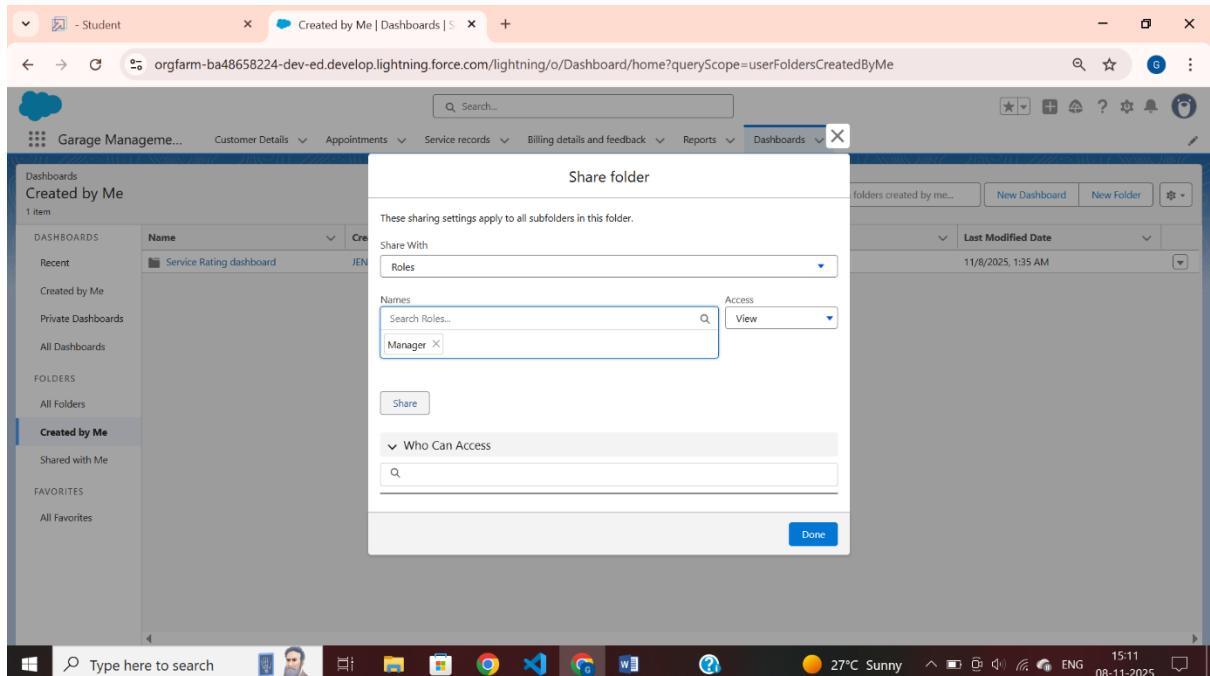
Dashboards help you visually understand changing business conditions so you can make decisions based on the real-time data you've gathered with reports. Use dashboards to help users identify trends, sort out quantities, and measure the impact of their activities. Before building, reading, and sharing dashboards, review these dashboard basics.

Activity 1: Create Dashboard Folder

1. Click on the app launcher and search for dashboard.
2. Click on dashboard tab.
3. Click new folder, give the folder label as “Service Rating dashboard”.
4. Folder unique name will be auto populated.
5. Click save.

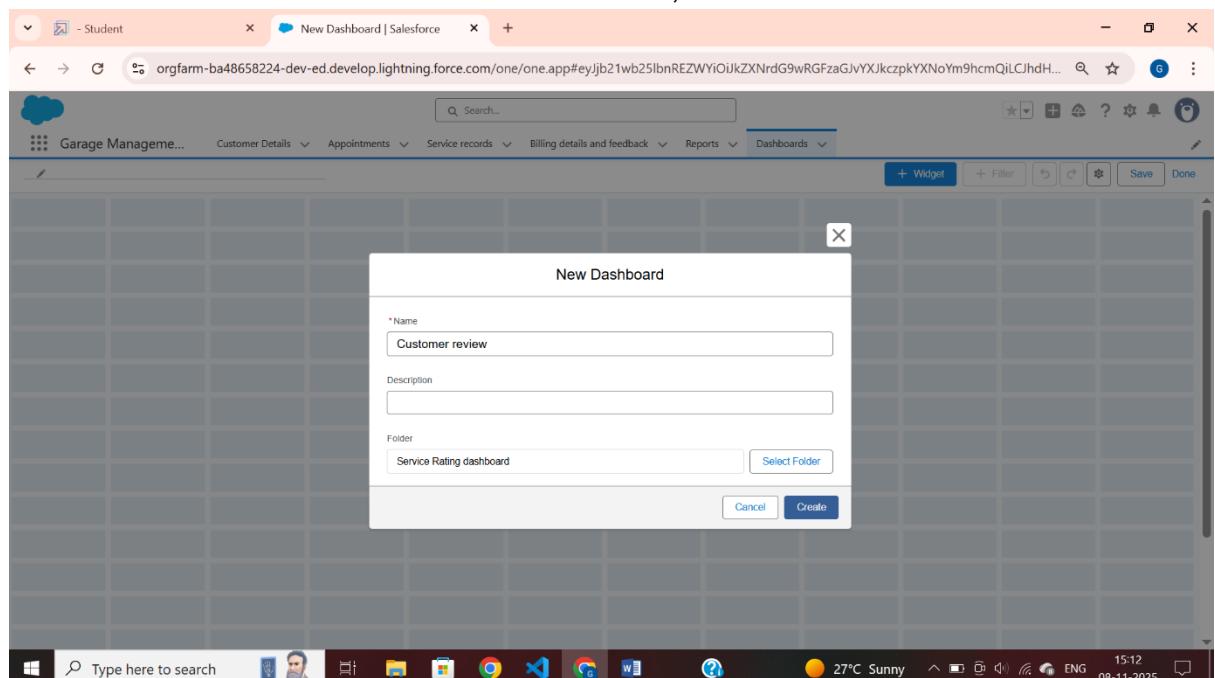


6. Follow the same steps, from Reports Milestone and Activity 2, and provide the sharing settings for the folder that was just created.

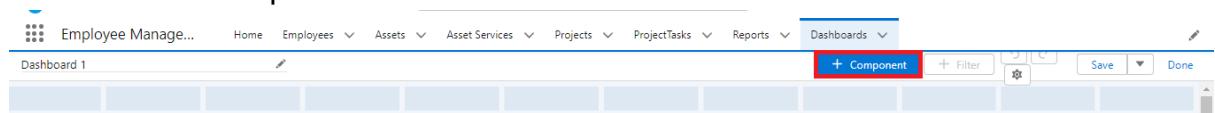


Activity 2: Create Dashboard

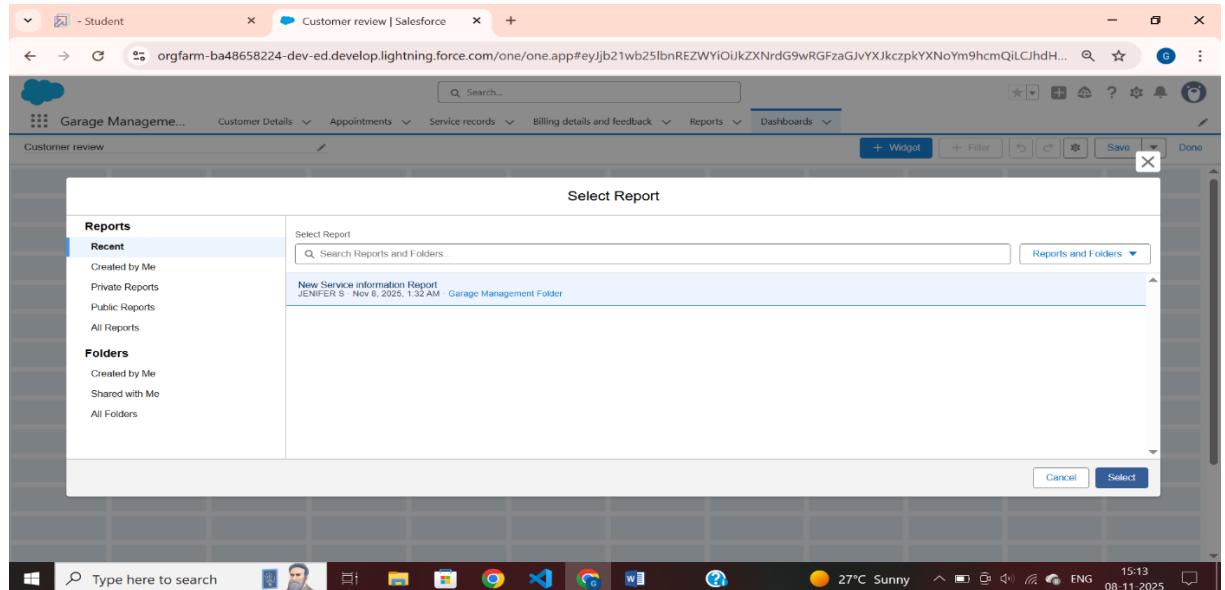
1. Go to the app >> click on the Dashboards tabs.
2. Give a Name and select the folder that created, and click on create.



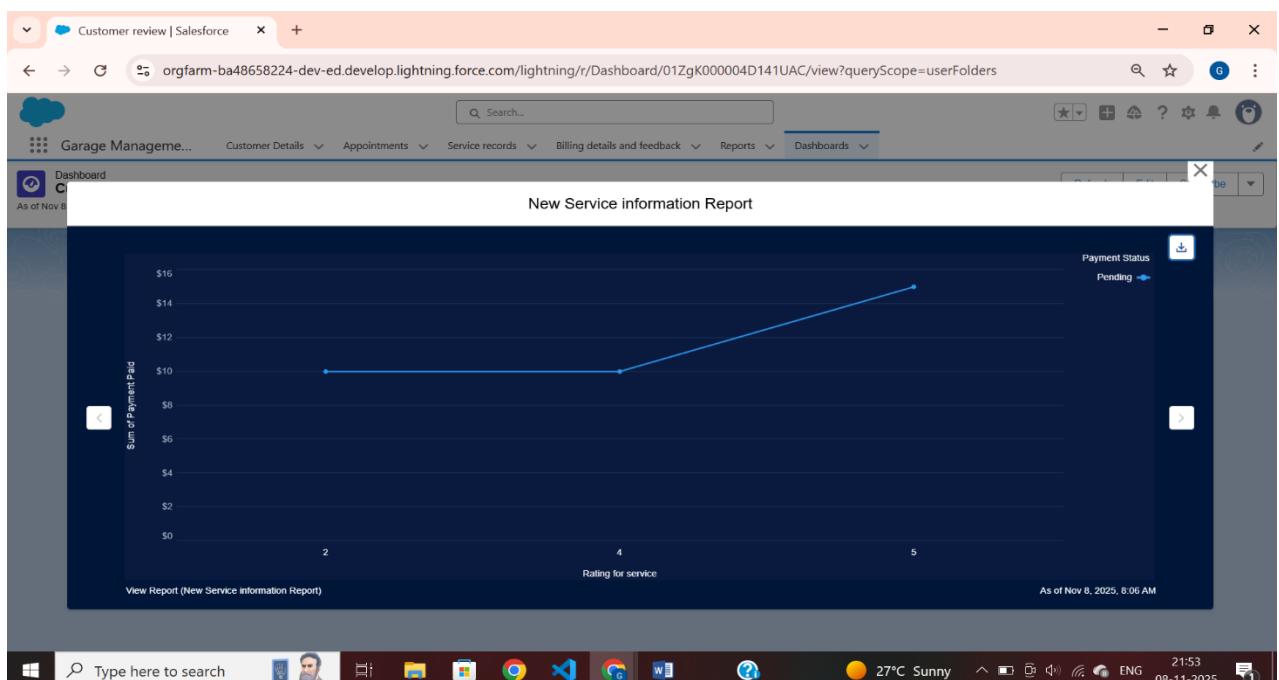
3. Select add component.



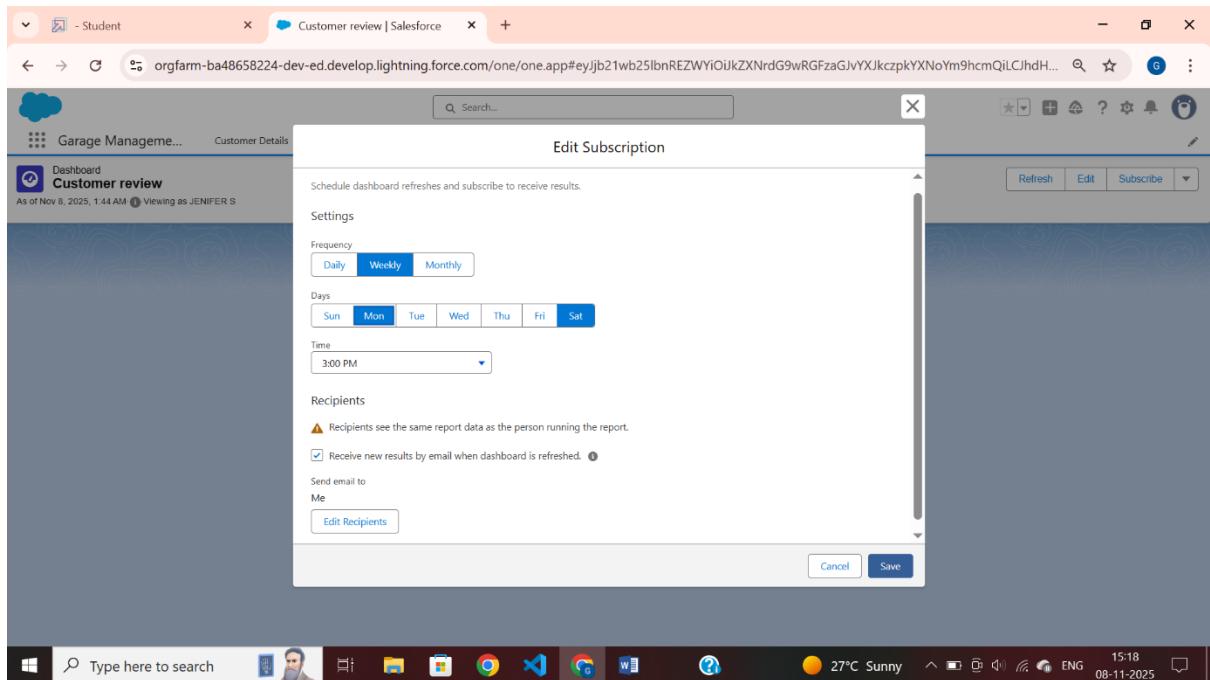
4. Select a Report and click on select.



5. Select the Line Chart. Change the theme.
6. Click Add then click on Save and then click on Done.
7. Preview is shown below.



8. After that Click on Subscribe on top right.
9. Set the Frequency as " weekly ".
10. Set a day as monday.
11. And Click on save.

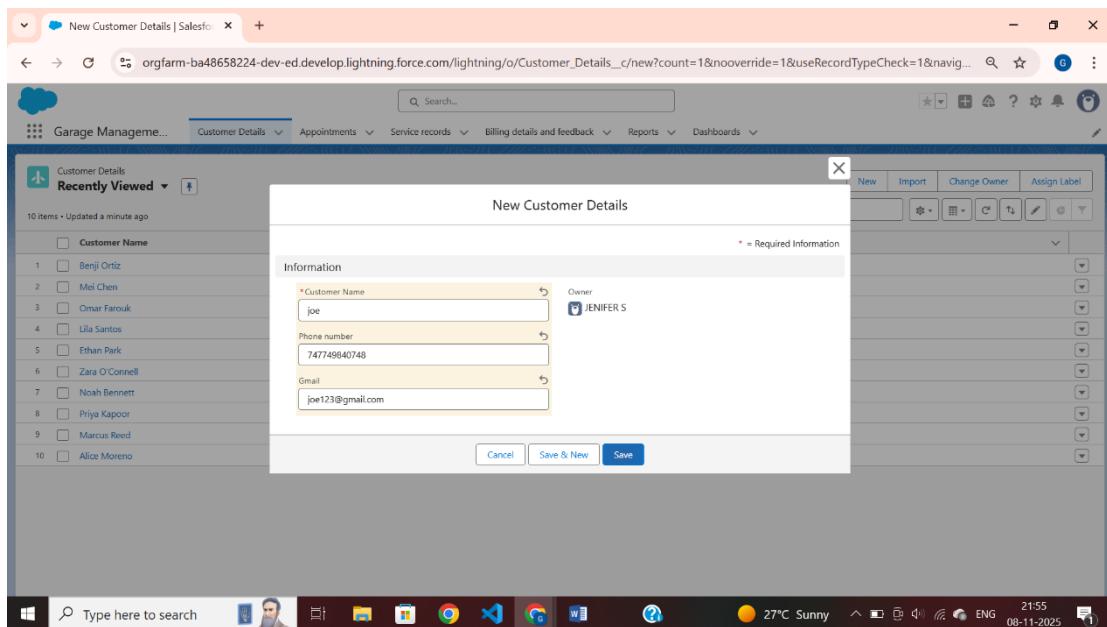


Milestone 4: User Adoption

Activity 1: Creating Records

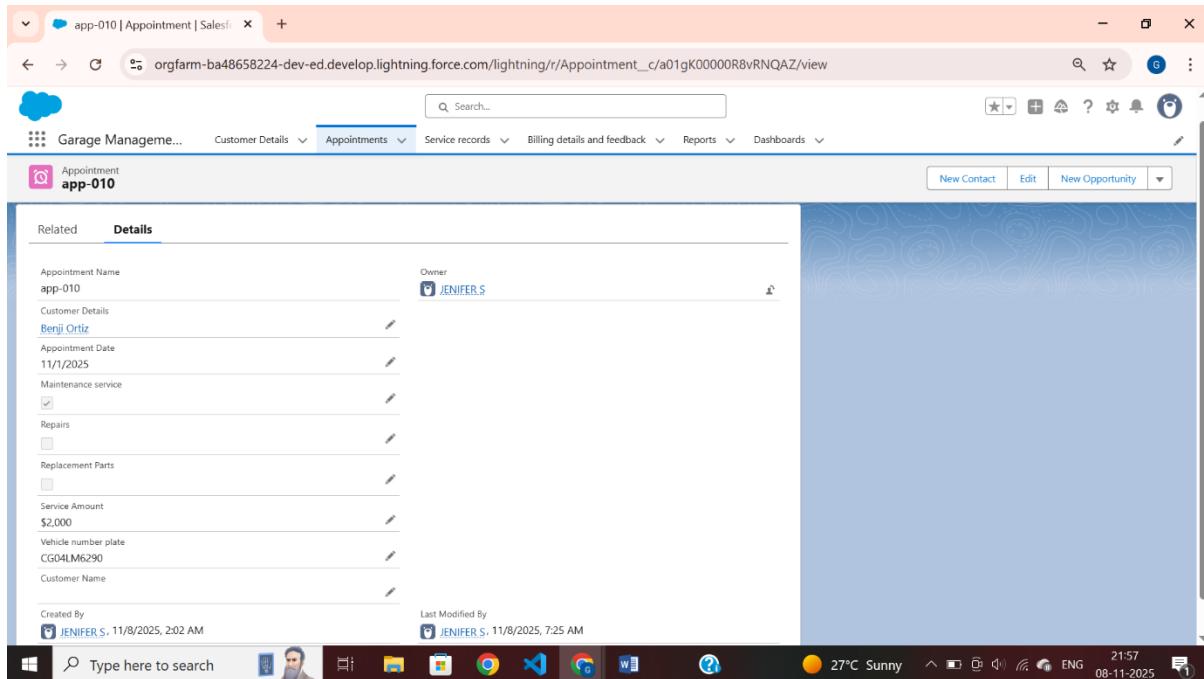
To create a record in the follow objects follow these steps

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.



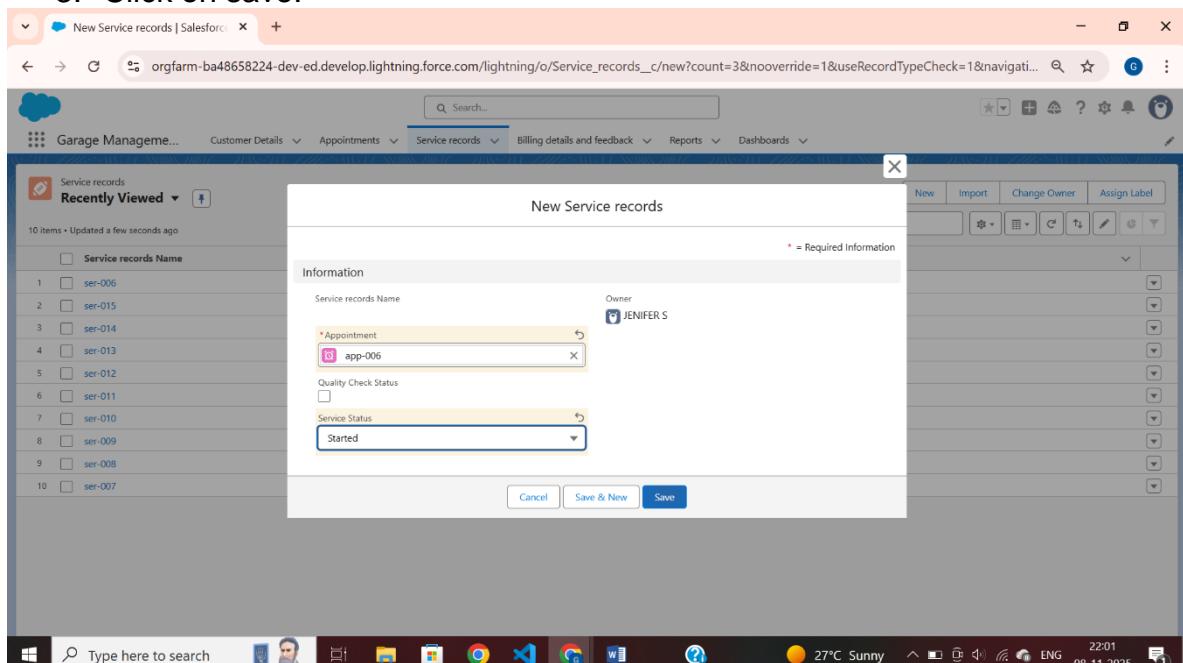
Now, Create the Appointment Record

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.



Now, Create a service Record

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



4. Open the record and click on Quality check status as true.
5. Click on save.

6. Now automatically Service status will be moved to completed.

