

# Project Report on

## Garage Management System

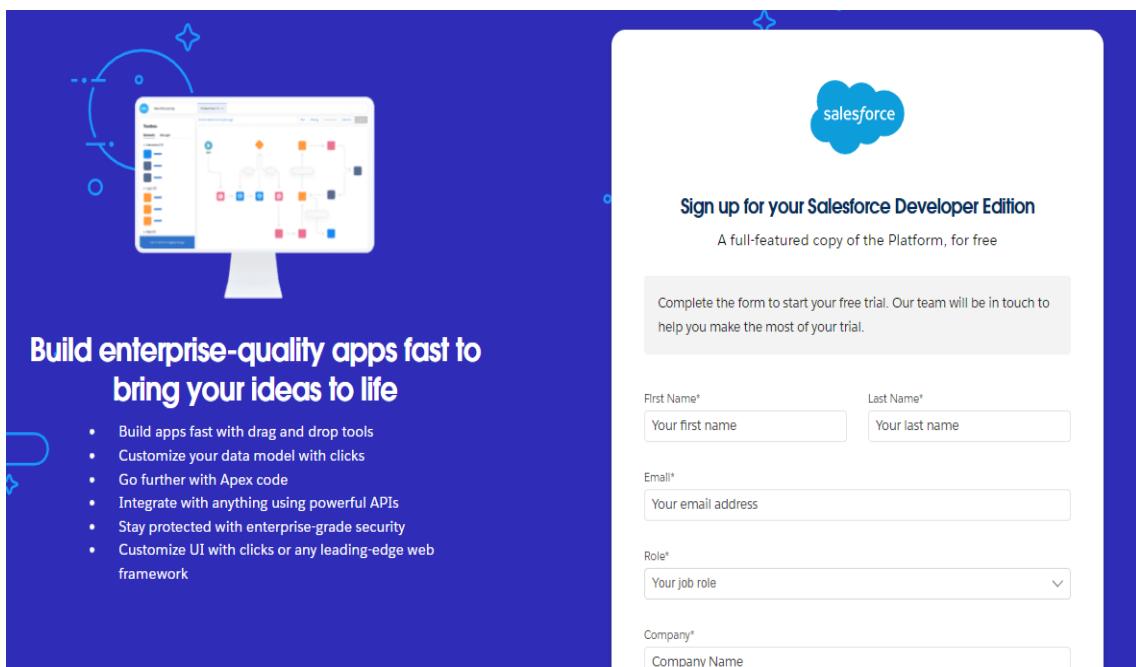
**Milestone-01:** Create Salesforce Org

Go to [developers.salesforce.com/Signup](https://developers.salesforce.com/Signup)

Click on sign up.

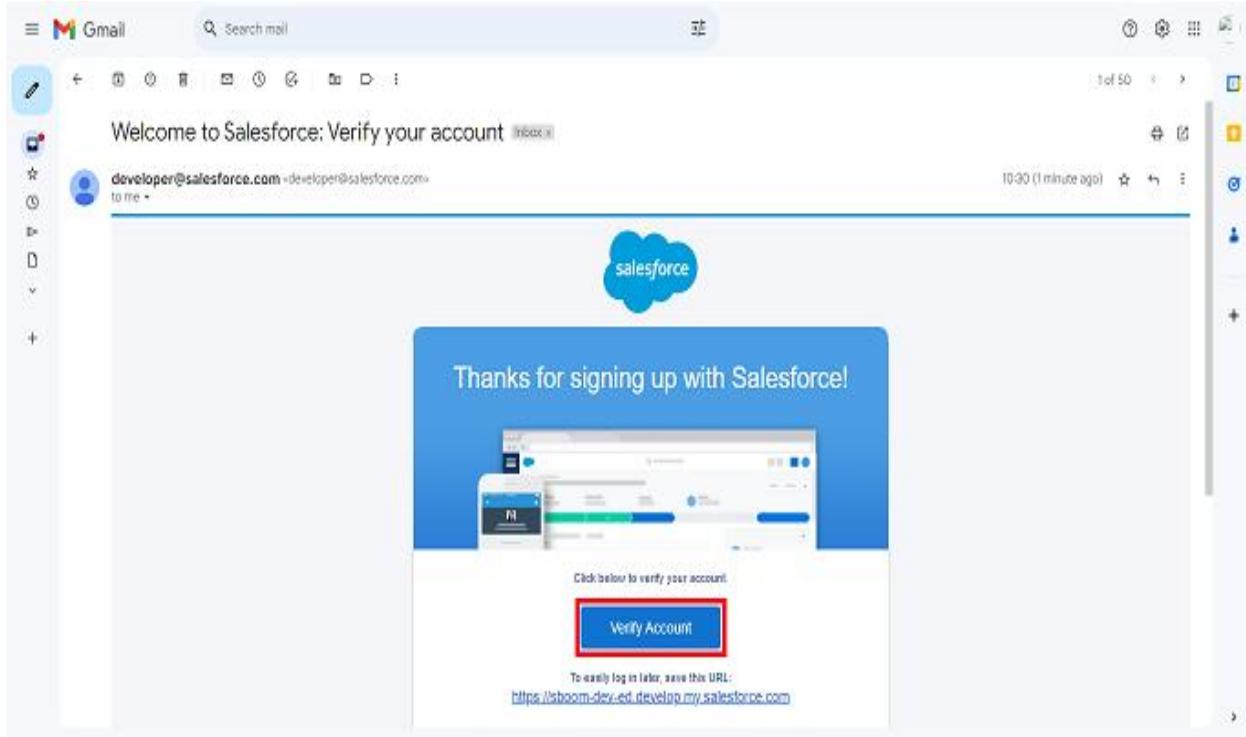
On the sign-up form, enter the following details:

1. First name & Last name – G.M. POOJITHA
2. Email – konkavishnupriya@gmail.com
3. Role: Admin
4. Company: GAYATRI DEGREE COLLEGE – TIRUPATI
5. Country: India
6. Postal code: 517501
7. Username: konkavishnupriya@gdcproject.com



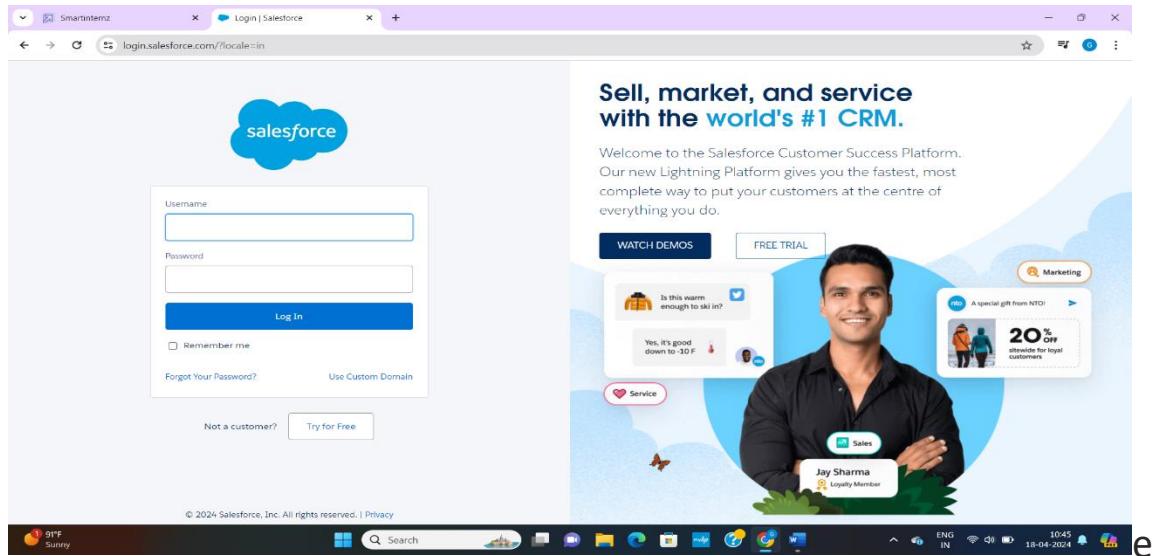
## **Account Activation:**

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.



## **Login to Your Salesforce Account:**

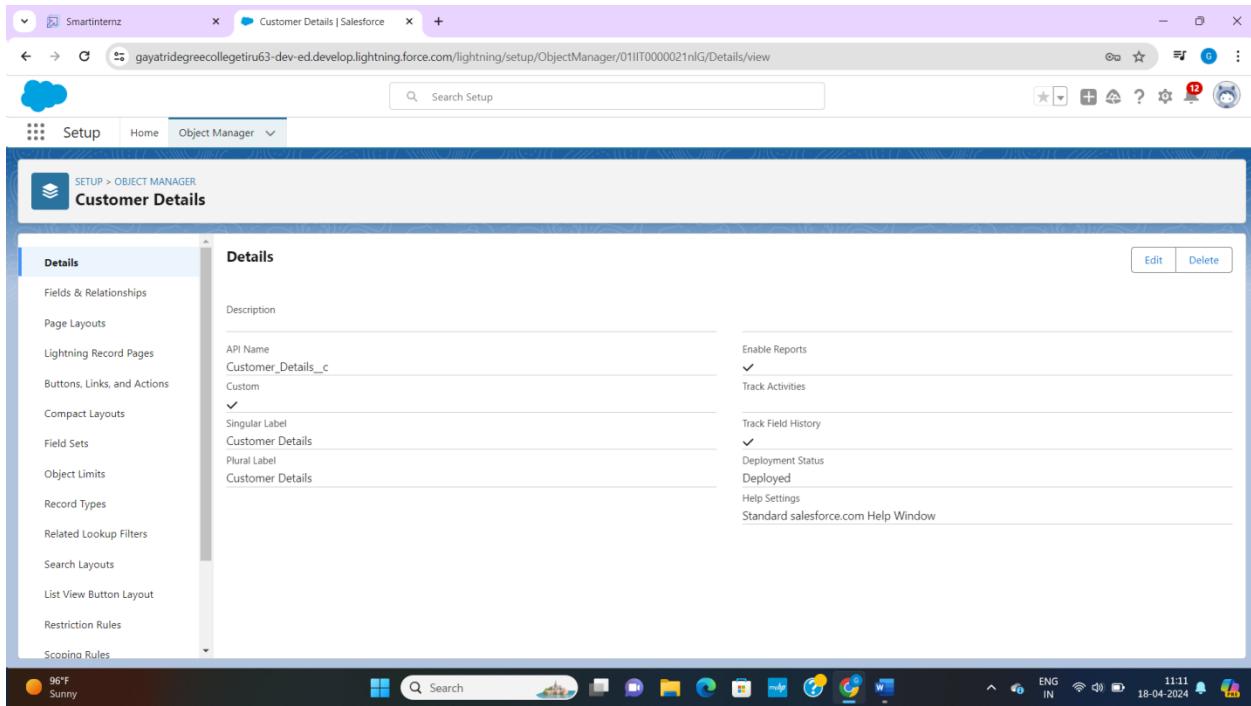
1. Go to salesforce.com and click on login.
2. Enter the username and password that you just created.
3. After login this is the home page which you will see.



## Milestone-02: Creation of objects

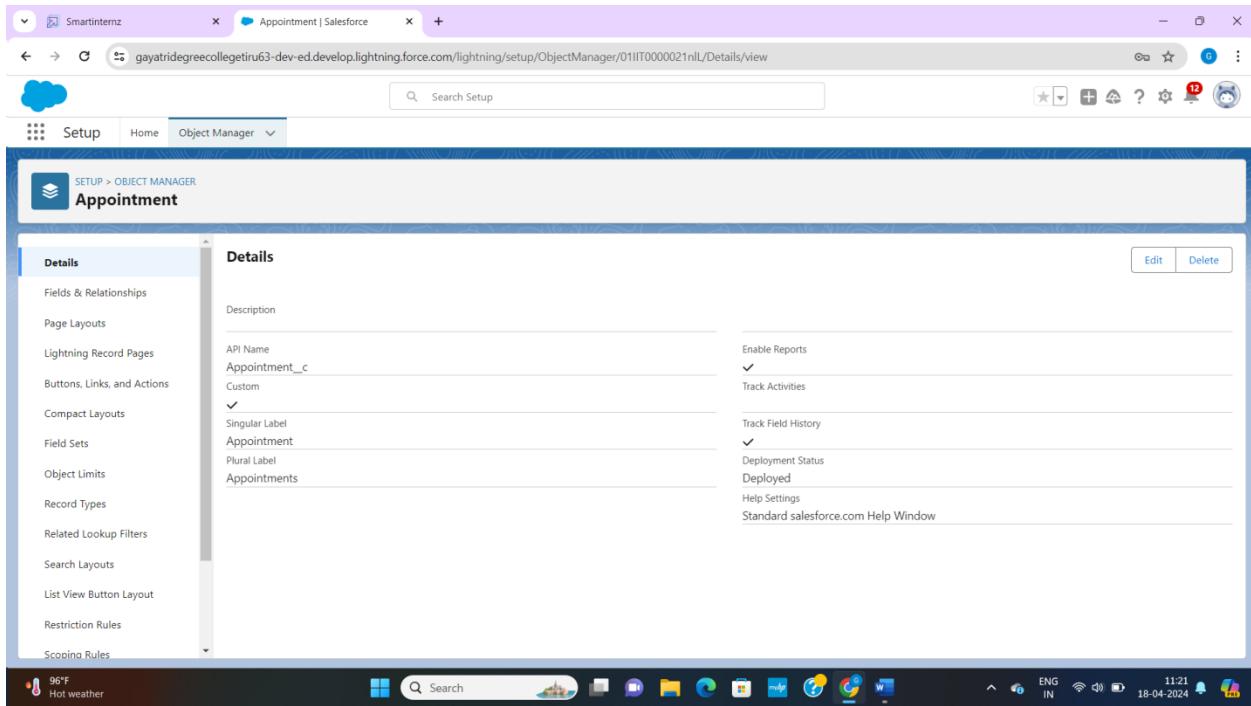
### Object – Customer details:

1. From the setup page >> click on object manager>> click on create>>click on custom object.
2. Enter the label name: customer details
3. Plural label name: customer details
4. Enter record name label and format
5. Record name: customer name
6. Date type: text
7. Click on allow reports and track field history.
8. Allow search
9. Click save.



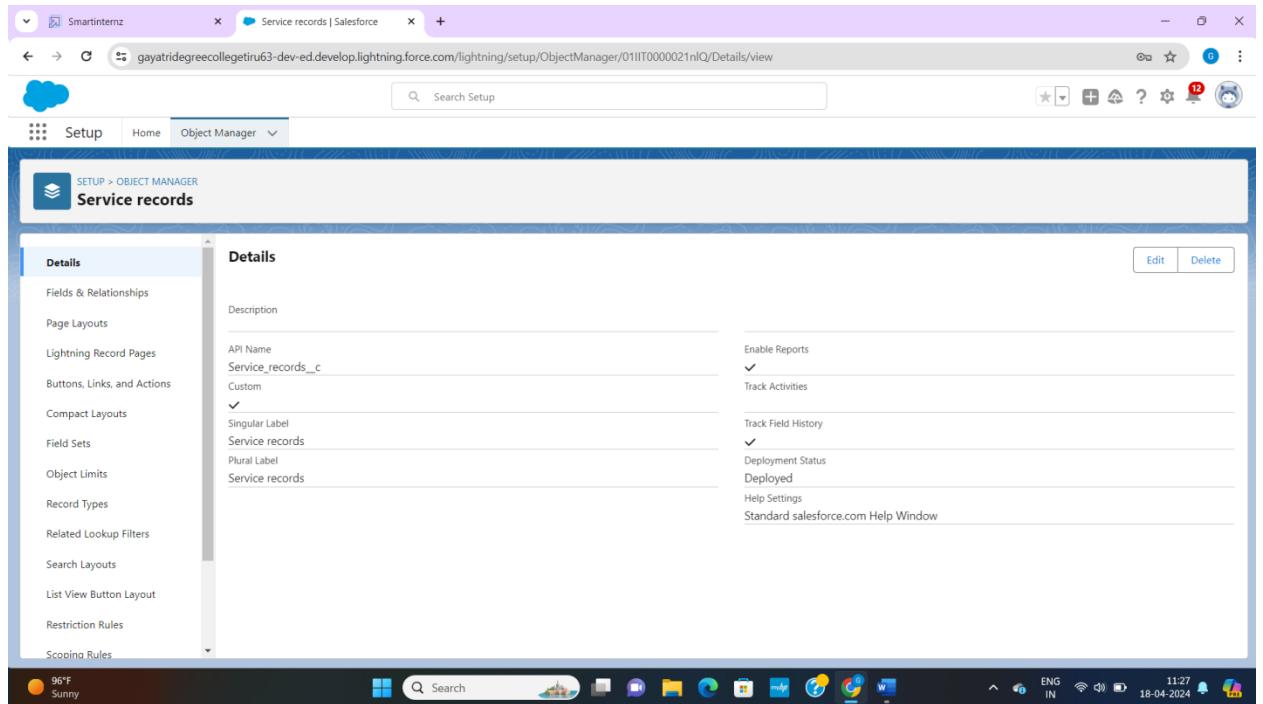
## Object – Appointment Object:

1. From the setup page>> click on object manager>> click on create>> click on custom object.
2. Enter the label name: appointment
3. Plural label name: appointments
4. Enter record name label and format
5. Record name: appointment date
6. Data type: auto number
7. Display format: app-{000}
8. Starting number: 1
9. Click on allow reports and track field history,Allow search
- 10.Click save.



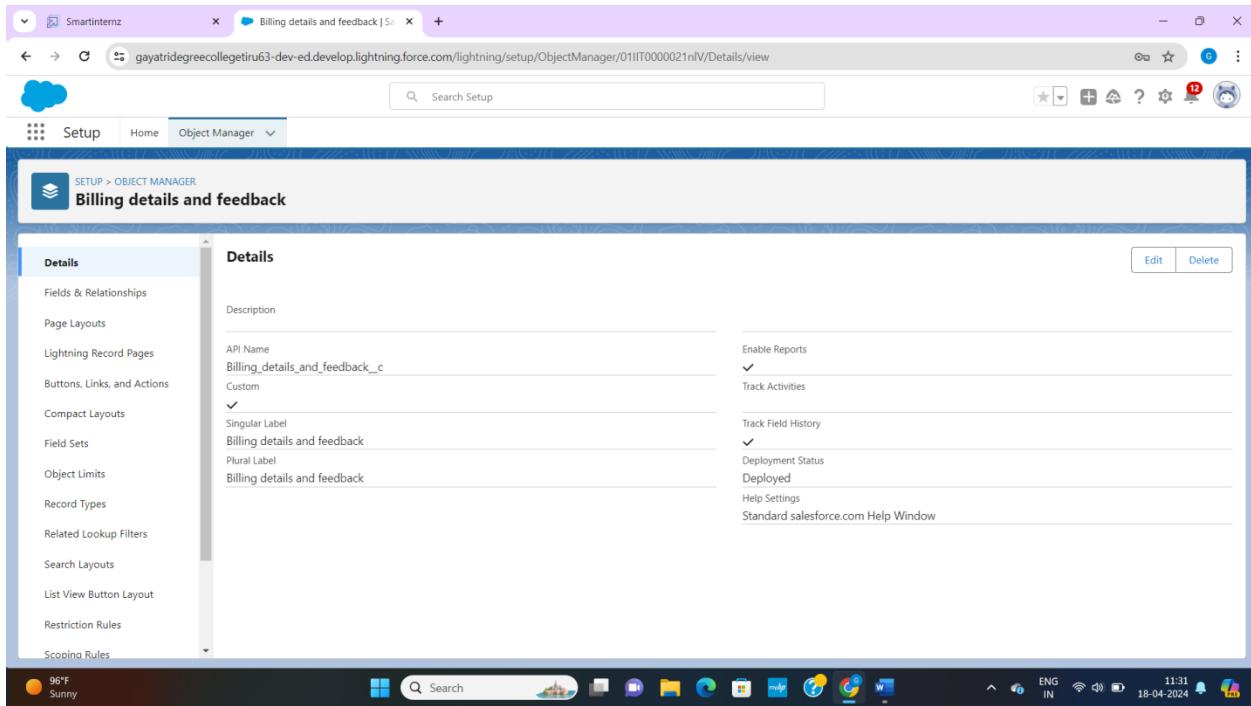
## Object - Service Record:

1. From the setup page>> click on object manager>> click on create>> click on custom object.
2. Enter the label name: service records
3. Plural label name: service records
4. Enter record name label and format
5. Record name: service records name
6. Data type: auto number
7. Display format: ser-{000}
8. Starting number: 1
9. Click on allow reports and track field history,Allow search
- 10.Click save



## Object – Billing Details And Feedback

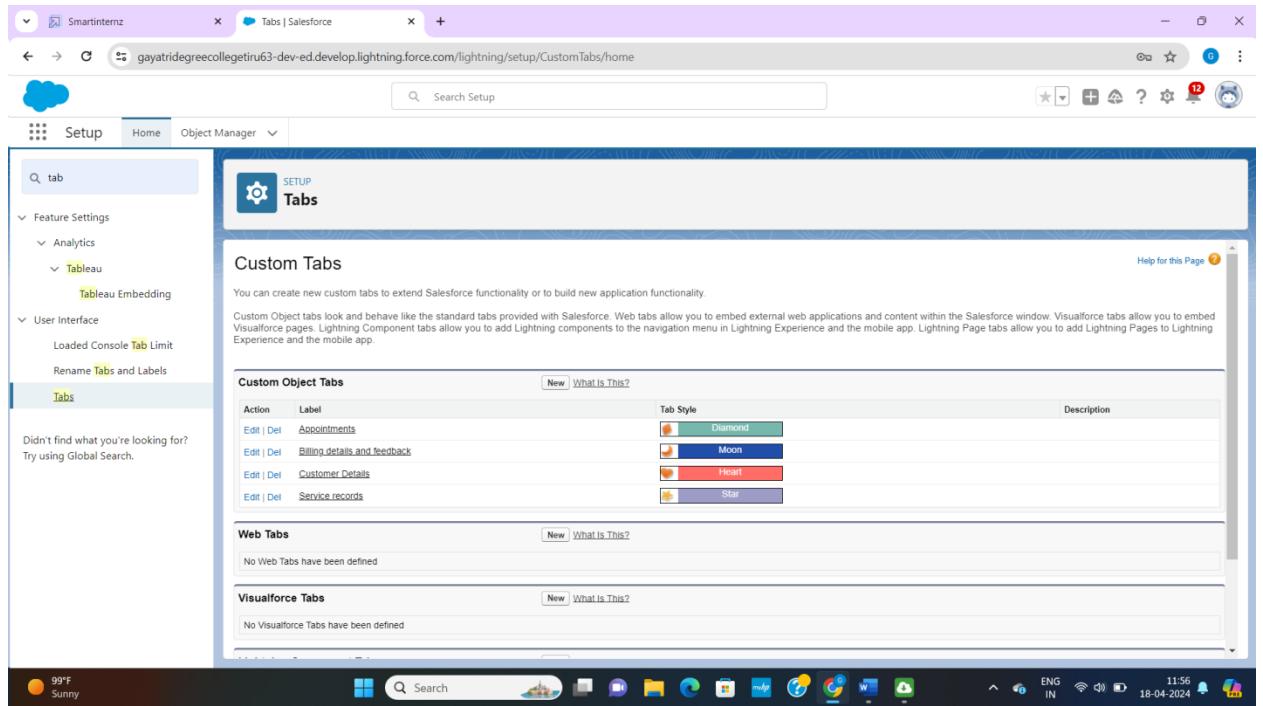
1. From the setup page>> click on object manager>> click on create>> click on custom object.
2. Enter the label name: billing details and feedback
3. Plural label name: billing details and feedback
4. Enter record name label and format
5. Record name: billing details and feedback name
6. Data type: auto number
7. Display format: bill-{000}
8. Starting number: 1
9. Click on allow reports and track field history.
10. Allow search
11. Click save.



## Milestone – 03: Tabs

Tabs in salesforce help users view the information at a glance. It displays the data of objects and other web content in the application. Now create a custom tab. Click the home tab.

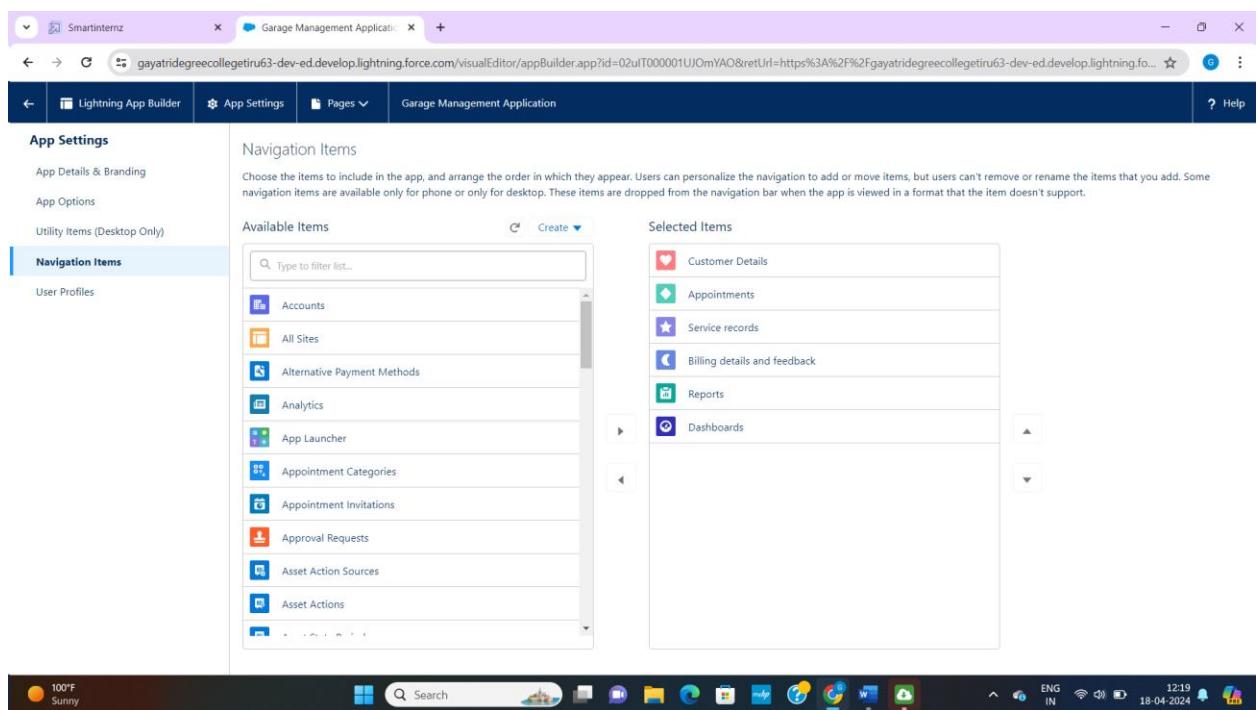
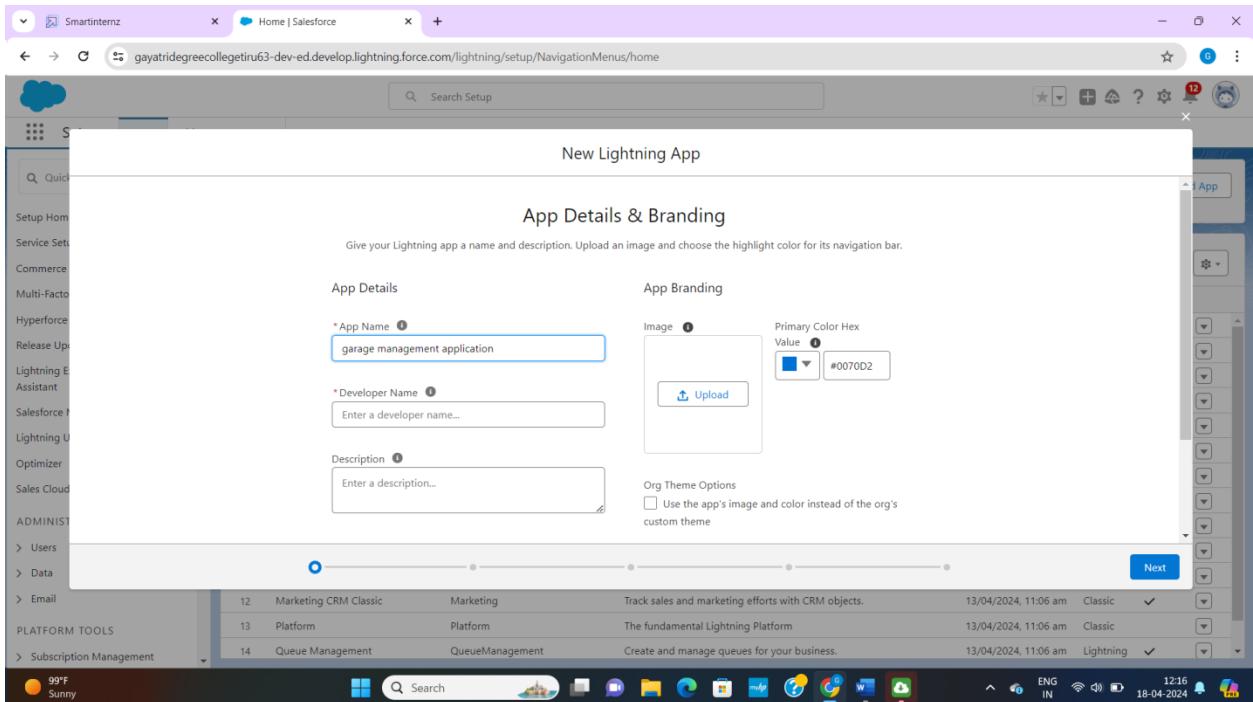
1. Go to setup page>> type tabs in quick fine bar>> click on tabs>> new(under custom object tab)
2. Select object (customer details)
3. Select the tab style
4. Next add to profiles page keep it as default
5. Next add to custom app uncheck the include tab.
6. Make sure that the append tab to users existing personal customizations is checked and save
7. In the same way create tabs for all custom objects – appointments, service records, billing detail and feedback



## Milestone – 04 Lightning app

### Create the garage management application

1. Go to setup page>> search “app manager” in quick fine >> select “app manager”>> click on new lightning app.
2. Fill the app name in app details as garage management application. Next
3. App option page keep it as default click next
4. Utility items keep it as default click next
5. To app navigation items.
6. Select the items (customer details, appointments, service records, billing details and feedback, reports and dash boards) from the search bar and move it using the arrow button. Click next
7. To add user profiles.
8. Search profile system administrator in the search bar.
9. Click on arrow button and Click save and finish.



## Milestone – 05 Fields And Relationship

### Creation of fields for the customer details 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 and relationship”, new
3. Select data type as a “phone”
4. Click next.
5. Field label: phone number
6. Field name: get auto generated
7. Click next, next, save and new

**Note :** follow the above steps for the remaining fields for the same object.

The screenshots illustrate the Salesforce Object Manager interface. The top screenshot shows the main Object Manager page with a table of objects. The bottom screenshot shows the 'Fields & Relationships' section for the 'Customer1' object, with red arrows pointing to the 'Customer1' label, the 'Fields & Relationships' tab, and the 'New' button.

LABEL	API NAME	TYPE	DESCRIPTION	LAST MODIFIED	DEPLOYED
Customer	Customer	Standard Object			
Customer Details	Customer_Details__c	Custom Object		05/10/2023	

**Fields & Relationships**

FIELD LABEL	FIELD NAME	DATA TYPE	CONTROLLING FIELD	INDEXED
Created By	CreatedById	Lookup(User)		
current Status	current_Status__c	Picklist		
Customer Name	Name	Text(80)		
Email id	Email_id__c	Email (Unique)		
Last Modified By	LastModifiedById	Lookup(User)		
Owner	OwnerId	Lookup(User,Group)		
Permanent Address	Permanent_Address__c	Text Area(255)		
Phone no	Phone_no__c	Phone		

Customer1

Fields & Relationships

- Currency
- Date
- Date/Time
- Email
- Geolocation
- Number
- Percent
- Phone**
- Picklist
- Picklist (Multi-Select)
- Text
- Text Area
- Text Area (Long)
- Text Area (Rich)
- Text (Encrypted)
- Time
- URL

Customer1

Custom Field Definition Edit

Field Information

Field Label:	Phone no
Field Name:	Phone_no

General Options

Required:  always require a value in this field in order to save a record

Show Formula Editor

Save Cancel

## To create another field in an object:

1. Go to setup>> click on object manager>> type object name(customer details) in search bar>> click on object
2. Now click on “fields and relationships”, new
3. Select data type as a “e mail” and click on next
4. Field label: gmail
5. Field name: get auto generated
6. Click on next, next, save and new.

The screenshot shows the Salesforce Setup interface. In the top navigation bar, there are tabs for 'Smartinternz' and 'Customer Details | Salesforce'. Below the tabs, the URL is 'gayatridegreecollegeit63-dev-ed.lightning.force.com/lightning/setup/ObjectManager/01IIT0000021nLG/FieldsAndRelationships/view'. The main content area is titled 'Customer Details' under 'SETUP > OBJECT MANAGER'. On the left, a sidebar lists various setup categories. The 'Fields & Relationships' section is currently selected. It displays a table with columns: FIELD LABEL, FIELD NAME, DATA TYPE, CONTROLLING FIELD, and INDEXED. The table contains six rows corresponding to the fields listed in the screenshot.

## Creation of lookup fields 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 and relationships”, new
3. Select “lookup relationship” as data type and click next
4. Select the related object “customer details” and click next
5. Next, next, save

**Note:** make sure you complete activity 4 before continuing.

The screenshot shows the Salesforce Setup interface. The top navigation bar includes 'Smartinternz', 'Customer Details | Salesforce', and a search bar with 'app'. The main content area is titled 'Object Manager' under 'SETUP > OBJECT MANAGER'. A table lists objects: Appointment (selected and highlighted with a red box), Appointment Category, Appointment Invitation, and Appointment Invitee. Below this, the 'Fields & Relationships' section for the 'Appointment' object is shown, with a red box highlighting the 'New' button in the top right corner of the table header.

The screenshot shows the Salesforce Setup interface. The top navigation bar includes 'Smartinternz', 'Customer Details | Salesforce', and a search bar with 'app'. The main content area is titled 'Appointment' under 'SETUP > OBJECT MANAGER'. The 'Fields & Relationships' section is selected and highlighted with a red box. The table header has a red box around the 'New' button. The table lists two fields: Appointment Date and Appointment Name.

Specify the type of information that the custom field will contain.

Data Type	
<input type="radio"/> None Selected	Select one of the data types below.
<input type="radio"/> Auto Number	A system-generated sequence number that uses a display format you define. The number is automatically incremented for each new record.
<input type="radio"/> Formula	A read-only field that derives its value from a formula expression you define. The formula field is updated when any of the source fields change.
<input type="radio"/> Roll-Up Summary <small>(1)</small>	A read-only field that displays the sum, minimum, or maximum value of a field in a related list or the record count of all records listed in a related list.
<input checked="" type="radio"/> Lookup Relationship	Creates a relationship that links this object to another object. The relationship field allows users to click on a lookup icon to select a value from a popup list. The other object is the source of the values in the list.
<input type="radio"/> Master-Detail Relationship	Creates a special type of parent-child relationship between this object (the child, or "detail") and another object (the parent, or "master") where: <ul style="list-style-type: none"> <li>The relationship field is required on all detail records.</li> <li>The ownership and sharing of a detail record are determined by the master record.</li> </ul>

Smartinternz Appointment | Salesforce

gayatridegreecollegeituru63-dev-ed.lightning.force.com/lightning/setup/ObjectManager/01IIT0000021nL/FieldsAndRelationships/view

Setup Home Object Manager

SETUP > OBJECT MANAGER  
Appointment

Details

Fields & Relationships

Page Layouts

Lightning Record Pages

Buttons, Links, and Actions

Compact Layouts

Field Sets

Object Limits

Record Types

Related Lookup Filters

Search Layouts

List View Button Layout

Restriction Rules

Fields & Relationships

FIELD LABEL FIELD NAME DATA TYPE CONTROLLING FIELD INDEXED

FIELD LABEL	FIELD NAME	DATA TYPE	CONTROLLING FIELD	INDEXED
Appointment	Appointment_c	Lookup(Appointment)		✓
Appointment Date	Appointment_Date_c	Date		
Appointment Date	Name	Auto Number		✓
Billing details and feedback	Billing_details_and_feedback_c	Lookup(Billing details and feedback)		✓
Create Date	Create_Date_c	Auto Number		
Created By	CreatedBy	Lookup(User)		
Customer Details	Customer_Details_c	Lookup(Customer Details)		✓
Last Modified By	LastModifiedBy	Lookup(User)		
Maintenance service	Maintenance_service_c	Checkbox		

https://gadgetsdegreecollegeituru63-dev-ed.lightning.force.com/one/one.app#/setup/ObjectManager/01IIT0000021nL/FieldsAndRelationships/view

## 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 object
2. Now click on “fields and relationships”, new
3. Select “lookup relationship” as data type and click next
4. Select the related object “appointment” and click next
5. Make it a required field so click required.

Lookup Options

Related To	Appointment	Child Relationship Name	Service_records
Related List Label	Service records		
Required	<input checked="" type="checkbox"/> Always require a value in this field in order to save a record		
What to do if the lookup record is deleted?	<input type="radio"/> Clear the value of this field. You can't choose this option if you make this field required. <input checked="" type="radio"/> Don't allow deletion of the lookup record that's part of a lookup relationship.		

6. Scroll down for lookup filters and click on show filter settings.

7. Now add the filter criteria.
8. Field: appointment: appointment day >> operator: not equal to >> select field>> appointment created date.
9. We have to create appointment created date, we have to go object manager select appointment and click fields and relationship
10. click new, data type as auto number, label name created date, click next, next, save.
11. Filter type should be required.
12. Error message: value does not match the criteria.
13. Enable the filter by click on active
14. Next, next, save

The screenshot shows the Salesforce Object Manager interface. The top navigation bar includes 'Smartinternz' and 'Service records | Salesforce'. The main area is titled 'SETUP > OBJECT MANAGER Service records'. On the left, a sidebar lists various setup options: 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, Restriction Rules, and Scoping Rules. The 'Fields & Relationships' section displays a table with 9 items, sorted by Field Label. The columns are FIELD LABEL, FIELD NAME, DATA TYPE, CONTROLLING FIELD, and INDEXED. The data includes:

FIELD LABEL	FIELD NAME	DATA TYPE	CONTROLLING FIELD	INDEXED
Appointment	Appointment__c	Lookup(Appointment)		✓
Created By	CreatedBy	Lookup(User)		
Last Modified By	LastModifiedBy	Lookup(User)		
Owner	OwnerId	Lookup(User,Group)		✓
Phone number	Phone_number__c	Phone		
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		

### **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 and relationships”, new
3. Select “lookup relationship” as data type and click and next.
4. Select the related object “service records” and click next.
5. Next, next, save

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		
Phone number	Phone_number__c	Phone		
Rating for service	Rating_for_service__c	Text(1) (Unique Case Insensitive)		✓
Service records	Service_records__c	Lookup(Service records)		✓

## 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 and relationships”, new
3. Select “checkbox” as data type and click next
4. Give the field label: maintenance service
5. Field name: is auto populated
6. Default value: unchecked
7. Click on next, next, save

**Data Type**

- None Selected
- Auto Number
- Formula
- Roll-up Summary
- Lookup Relationship
- Master Detail Relationship
- Checkbox
- External Lookup Relationship
- Currency

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 

## Creation of another checkbox field on appointment object

1. Repeat the steps from 1-3
2. 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. Field label: replacement parts
8. Field name: 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 object.
2. Now click on “fields and relationships”, next
3. Select “checkbox” as data type and click next.
4. Field label: quality check status
5. Field name: is auto populated
6. Default value: unchecked
7. Click on next, next, save.

## Creation of data fields

### Creation of data field on appointment object:

1. Go to setup>> click on object manager>> type object name(appointment) in search bar>> click on object.
2. Now click on “fields and relationships”, new
3. Select “date” as data type and click next.
4. Field label: appointment date
5. Field name: is auto populated
6. Make it as a required field by click on the required option
7. Click on next, next, save.

Appointment  
New Custom Field

Help for this Page ?

Step 2. Enter the details Step 2 of 4

Field Label

Field Name

Description

Help Text

Required  Always require a value in this field in order to save a record

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

Default Value  Show Formula Editor

## 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 object.
2. Now click on “fields and relationships”, new
3. Select “currency” as data type and click next.
4. Field label: service amount
5. Field name: is auto populated
6. Click on next
7. Give read only for all the profiles in field level security for profile
8. Click on next, save

Step 2. Enter the details Step 2 of 4

Field Label: Service Amount 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: <span style="border: 1px solid red; padding: 2px;">18</span>	Decimal Places: <span style="border: 1px solid red; padding: 2px;">0</span>
Number of digits to the left of the decimal point	
Field Name: <span style="border: 1px solid red; padding: 2px;">Service_Amount</span>	Number of digits to the right of the decimal point
Description:	
Help Text:	

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 i

Appointment New Custom Field Help for this Page ?

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

Field Label: Service Amounts  
Data Type: Currency  
Field Name: Service\_Amounts  
Description:

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"/>

## Creation of currency field on billing details and feedback object:

- Follow the same steps as mentioned above in billing details and feedback object.
- Change the label name as mentioned.
- Field label: payment paid
- Field name: is auto populated

## Creation of text fields

- Go to setup>> click on object manager>> type object name(appointment) in search bar>> click on object
- Now click on “fields and relationships”, new
- Select “text” as data type and click next
- Field label: vehicle number plate
- Field name: is auto populated
- Length: 10

7. Make field as required and unique.
8. Click on next, next, save.

Step 2. Enter the details Step 2 of 4

Field Label: Vehicle number plate

Length: 10

Field Name: Vehicle\_number\_plate

Description:

Help Text:

Required:  Always require a value in this field in order to save a record

Unique:  Do not allow duplicate values
   
 Treat "ABC" and "abc" as duplicate values (case insensitive)
   
 Treat "ABC" and "abc" as different values (case sensitive)

External ID:  Set this field as the unique record identifier from an external system

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

### **Creation of text field 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 object.
2. Now click on “fields and relationships”, next
3. Select “text” as data type and click next
4. Field label: rating for service
5. Field name: is auto populated
6. Length:1
7. Make field as required and unique
8. Click on next, next, save.

### **Creation of picklist fields**

#### **Creation of picklist fields in service record object:**

1. Go to setup>> click on object manager>> type object name(service records) in search bar>> click on object
2. Click on fields and relationships, new
3. Select data type as “picklist” and click next
4. Enter field label: service status
5. Under value select “enter values, with each value separated by a new line” and enter values as shown below.
6. The value are: started, completed.
7. Click next, next, next, save.

New Custom Field

Step 2. Enter the details Step 2 of 4

Field Label: Service Status

Values:  Enter values, with each value separated by a new line

Started  
Completed

Display values alphabetically, not in the order entered  
 Use first value as default value  
 Restrict picklist to the values defined in the value set

Field Name: Service\_Status

Description:

### 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 object
2. Click on fields and relationships, new
3. Select data type as “picklist” and click next
4. Enter field label: payment status
5. Under value select “enter values, with each value separated by a new line” and enter values as shown below.
6. The value are: pending, completed.
7. Click next, next, next, save.

### 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 object
2. Click on fields and relationships, new
3. Select data type as “formula” and click next
4. 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

**Step 2. Choose output type**

Step 2 of 5

Field Label   

Field Name   

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

**Formula Return Type**

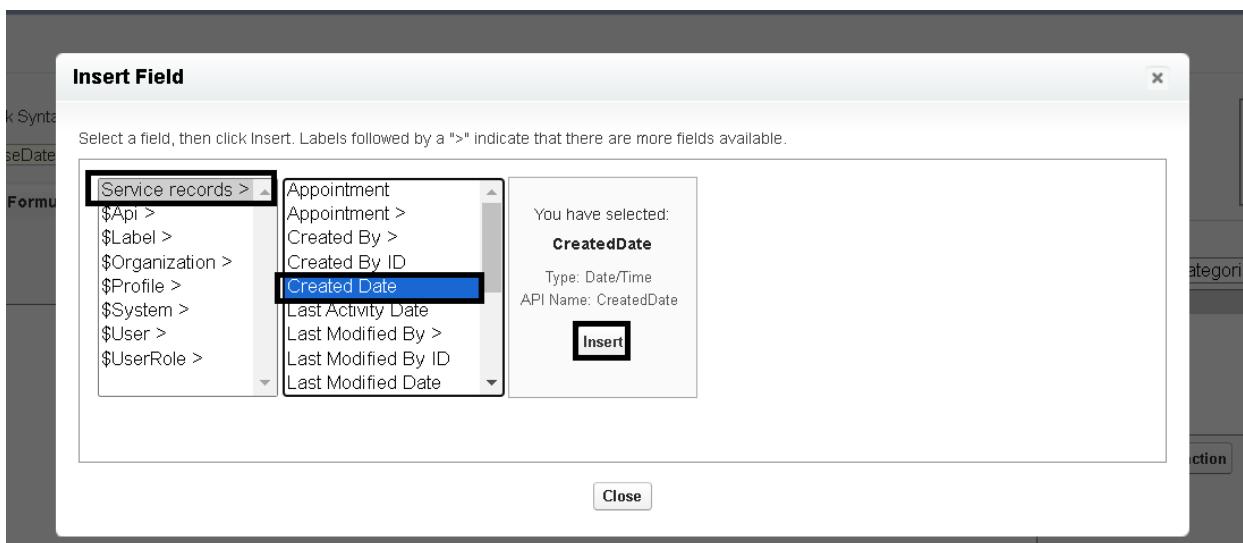
None Selected Select one of the data types below.

Checkbox Calculate a boolean value.  
Example: `TODAY() > CloseDate`

Currency Calculate a dollar or other currency amount and automatically format the field as a currency amount.  
Example: `Gross Margin = Amount - Cost_C`

Date Calculate a date, for example, by adding or subtracting days to other dates.  
Example: `Reminder Date = CloseDate - 7`

Date/Time Calculate a date/time, for example, by adding a number of hours or days to another date/time.  
Example: `Next = NOW() + 1`



**Step 3. Enter formula**

Step 3 of 5

Enter your formula and click Check Syntax to check for errors. Click the Advanced Formula subtab to use additional fields, operators, and functions.

Example: `Reminder Date = CloseDate - 7` [More Examples...](#)

Simple Formula  Advanced Formula

Insert Field service dates (Date) =  CreatedDate  

Insert Operator  

Functions -- All Function Categories --

- ABS
- ACOS
- ADDMONTHS
- AND
- ASCII

**Quick Tips**

- Getting Started
- Operators & Functions

## Milestone – 06 validation rules:

### To create a validation rule to an appointment object:

1. Go to setup page>> click on object manager>> from drop down click edit for appointment object.
2. Click on validation rules, click new
3. Enter rule name as vehicle

4. Insert the error condition formula as

5. :

NOT(REGEX(Vehicle\_number\_plate\_c , "[A-Z]{2}[0-9]{2}[A-Z]{2}[0-9]{4}"))

6. 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.

The screenshot shows the Salesforce Object Manager interface for the 'Appointment' object. On the left, a sidebar lists various setup options like Buttons, Links, and Actions, Field Sets, and Validation Rules. The 'Validation Rules' option is highlighted with a green box. In the main area, a table titled 'Validation Rules' displays one existing rule: 'Vehicle' (Rule Name), 'Vehicle number plate' (Error Location), and 'Please enter valid number' (Error Message). A 'New' button is visible in the top right corner of the table header. Below the table, the 'Validation Rule Edit' dialog is open. It shows the 'Rule Name' as 'Vehicle', 'Active' checked, and a 'Description' of 'vehicle'. The 'Error Condition Formula' section contains the formula 'NOT(REGEX( Vehicle\_number\_plate\_c , "[A-Z]{2}[0-9]{2}[A-Z]{2}[0-9]{4}"))'. A dropdown menu for functions is open, showing 'ABS', 'ACOS', 'ADDMONTHS', 'AND', 'ASCII', and 'ASIN'. A 'Check Syntax' button is at the bottom left of the formula input area. A tooltip for the 'ABS' function is shown on the right, stating it returns the absolute value of a number.



The screenshot shows the 'Validation Rules' section in the Salesforce Setup. The 'Appointment' object is selected. A single validation rule is listed:

Rule Name	Error Location	Error Message	Active	Modified By
Vehicle	Vehicle number plate	Please enter valid number	✓	POOJITHA GANDIKOTA, 14/04/2024, 5:32 pm

## To create a validation rules in service records object:

1. Go to setup page>> click on object manager>> from drop down click edit for service records object.
2. Click on validation rules, click new
3. Enter rule name as “service\_status\_note”
4. Insert the error condition formula as:  
NOT(ISPICKVAL(Service\_Status\_\_c , “completed”))
5. Enter the error message as “still it is pending”, select the error location as field and select the field as “service status”, and click save

The screenshot shows the Salesforce Setup interface. The top navigation bar includes tabs for Smartinternz, Service records | Salesforce, and a search bar labeled "Search Setup". Below the navigation is a header with a cloud icon, "Setup", "Home", and "Object Manager". The main content area is titled "Service records" under "SETUP > OBJECT MANAGER". On the left, a sidebar lists various setup categories like Details, Fields & Relationships, Page Layouts, etc. The right side displays a table titled "Validation Rules" with one item listed:

RULE NAME	ERROR LOCATION	ERROR MESSAGE	ACTIVE	MODIFIED BY
service_status_note	Service Status	still it is pending	✓	POOJITHA GANDIKOTA, 14/04/2024, 5:35 pm

The URL in the browser address bar is <https://gayatridegreecollegeit63-dev-ed.lightning.force.com/lightning/setup/ObjectManager/01II0000021nIQ/ValidationRules/view>. The system status bar at the bottom shows weather (100°F Sunny), network connectivity, battery level (1505), and the date (18-04-2024).

## To create a validation rule to an billing details and feedback object:

1. Go to setup page>> click on object manager>> from drop down click edit for billing details and feedback object.
2. Click on validation rules, click new
3. Enter rule name as “rating\_should\_be\_less\_than\_s”
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.

Validation Rules

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	✓	POOJITHA GANDIKOTA, 14/04/2024, 5:38 pm

## Milestone – 07 duplicate rules

### To create a matching rules to an customer details object:

1. Go to quick find box in setup and search for matching rules
2. Click matching rule, click on new
3. Select the object customer detail and click next

4. Rule name: matching customer details

5. Unique name: is auto populated
6. Define the matching criteria as
7. Field matching methods
 

Gmail	exact
Phone number	exact
8. Click save and after saving click on activate.

The screenshot shows the Salesforce Setup interface with the Matching Rules page open. The URL is https://gayatridegreecollegeituru63-dev-ed.lightning.force.com/lightning/setup/MatchingRules/page?address=%2F0JDIT00000Dff9n. The page title is "Matching Rules". A matching rule named "Matching customer details" is displayed, which matches customer details based on exact Gmail and phone number values. The rule is active and was created by PCQJITHA GANDIKOTA on 14/04/2024 at 5:45 pm.

## 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 Setup interface with the Duplicate Rules page open. The URL is https://gayatridegreecollegeituru63-dev-ed.my.salesforce.com/one/one.app#/alohaRedirect/0JDIT00000Dff9n?sdtp=p1. The page title is "Duplicate Rules". It lists various standard and custom duplicate rules across different objects like Account, Appointment, Contact, and Lead, each with its description and status.

3. Rule name as: customer detail duplicate

4. Scroll a little in matching rule section
5. Select matching rule: matching customer details
6. Click on save after saving the duplicate rule, click on activate.

The screenshot shows the 'Duplicate Rules' page in the Salesforce Setup. A specific rule named 'Customer Detail duplicate' is selected. The rule details include:

- Rule Name:** Customer Detail duplicate
- Description:** Customer Details
- Object:** Customer Details
- Record-Level Security:** Enforce sharing rules
- Action On Create:** Allow
- Action On Edit:** Allow
- Alert Text:** Use one of these records?
- Active:** ✓
- Matching Rule:** Matching customer details (selected)
- Matching Criteria:** (Customer Details: Gmail EXACT MatchBlank = FALSE) AND (Customer Details: Phone\_number EXACT MatchBlank = FALSE)
- Conditions:** POOJITHA GANDIKOTA, 14/04/2024, 5:48 pm
- Created By:** POOJITHA GANDIKOTA, 14/04/2024, 5:48 pm
- Modified By:** POOJITHA GANDIKOTA, 14/04/2024, 5:48 pm

## Milestone – 08 profiles

### Manager profiles

#### 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
2. While still on the profile page click edit
3. Select the custom app settings as default for the garage management application.
4. Scroll down to custom object permission and give access permissions for appointments, billing details and feedback, service records and customer details objects.
5. Changing the session times out after should be “8 hours of inactive”.
6. Change the password policies as mentioned
7. User password expire in should be “never expires”

## 8. Minimum password length should be “8” and click save

The screenshot shows the Salesforce Setup interface under the Profiles section. A modal window titled 'Clone Profile' is open, prompting the user to enter a name for the new profile. The 'Existing Profile' dropdown is set to 'Standard User'. A red box highlights the 'Profile Name' input field, which contains the placeholder 'Standard User'. Below the input fields are 'Save' and 'Cancel' buttons.

The screenshot shows the Salesforce Profile Manager page. In the 'Profile Detail' section, the 'Edit' button is highlighted with a red box. The 'Custom Profile' checkbox is checked. Other details shown include the profile's name ('Manager'), user license ('Salesforce'), and creation information ('Created By: sunny\_1, 13/06/2023, 2:40 pm').

The screenshot shows the 'Permissions' section of the Profile Manager. A red box highlights the 'Edit' button in the toolbar. The main area displays a grid of permissions for various objects like Data Manager, Digital Experiences, Garage Management Application, Service Console, etc., with checkboxes for Read, Create, Edit, Delete, View All, and Modify All.

The screenshot shows the 'Custom Object Permissions' section. A red box highlights the 'Edit' button in the toolbar. The main area displays a grid of permissions for custom objects like Appointments, Billing details and feedback, Customer Details, Environments, Laptops, Service records, and SessionData, with checkboxes for Read, Create, Edit, Delete, View All, and Modify All.

**Sales person profile:**

1. Go to setup>> type profile in quick find box>> click on profiles>> clone the desired profile(salesforce platform user)>> enter profile name (salesperson)>>save
2. While still on the profile page, then click edit
3. Select the custom app settings as default for the garage management application.
4. Scroll down to custom object permission and give access permission for appointments, billing details and feedback, service records and customer details objects as mentioned in the below diagram
5. Click save

Custom Object Permissions						
	Basic Access			Data Administration		
	Read	Create	Edit	Delete	View All	Modify All
Appointments	<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 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"/>
Environments	<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"/>
Service records	<input 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"/>

## Milestone – 09 role and role hierarchy

### Creating manager role

1. Go to quick find>> search for roles>> click on setup roles.

The screenshot shows the Salesforce Setup Roles page. On the left, there's a sidebar with navigation links like Setup, Home, Object Manager, and a search bar. Under 'Users', the 'Roles' link is highlighted. In the main content area, there's a title 'Understanding Roles' and a sub-section 'Sample Role Hierarchy'. A diagram illustrates a hierarchy from 'Executive Staff' down to 'Sales Reps'. The 'Set Up Roles' button is at the bottom right of the page.

2. Click on expand all and click on add role under whom these role works



3. Give label as “manager” and role name gets auto populated. then click on save

Role Edit

Label	Manger	
Role Name	Manger	
This role reports to	CEO	
Role Name as displayed on reports		
<input style="background-color: #e6f2ff; border: none; padding: 2px 10px; margin-right: 10px;" type="button" value="Save"/> <input style="background-color: #e6f2ff; border: none; padding: 2px 10px;" type="button" value="Save &amp; New"/> <input style="background-color: #e6f2ff; border: none; padding: 2px 10px;" type="button" value="Cancel"/>		

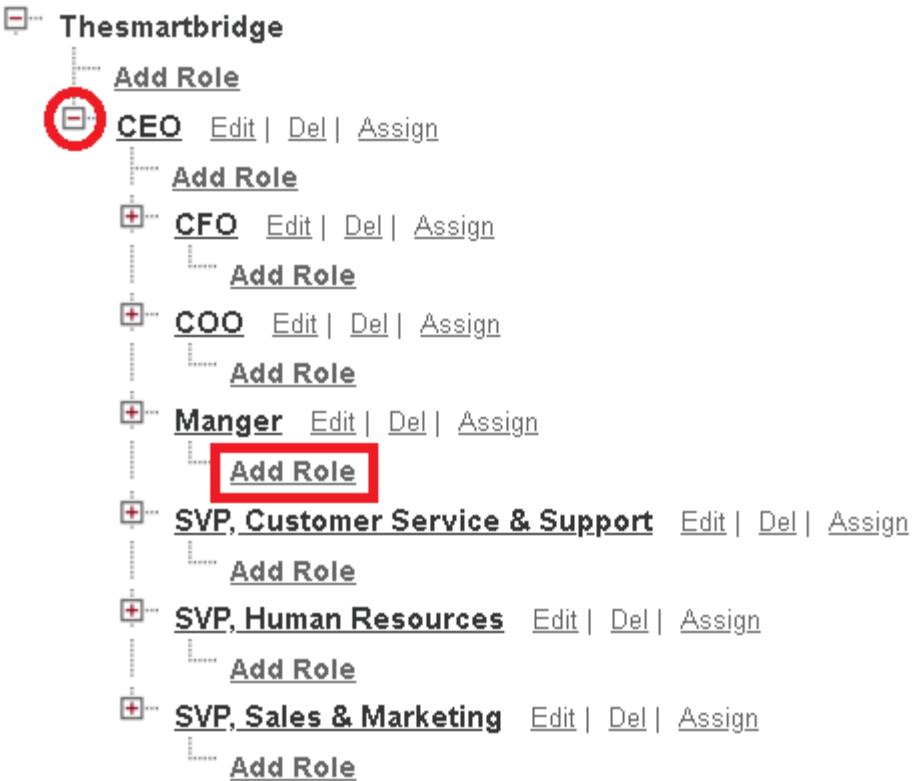
## Creating another roles

### Creating another two roles under manager

1. Go to quick find>> search for roles>> click on setup 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
4. Then click on save

---

[Collapse All](#) [Expand All](#)



## Milestone – 10 users

### Create users

1. Go to setup>> type user in quick find box>> select user>> click new user.
2. Fill in the fields
3. First name: niklaus
4. Last name: mikaelson
5. Alias: give a alias name
6. Email id: give your personal email id
7. User name: user name should be in this form: [text@text.text](#)
8. Nick name: give a nick name
9. Role: manager
10. User licence: salesforce
11. Profile: manager
12. Save

New User

User Edit Save Save & New Cancel

**General Information**

First Name	Niklaus	Role	Manger
Last Name	Mikaelson	User License	Salesforce
Alias	nmika	Profile	Manager
Email		Active	<input checked="" type="checkbox"/>
Username	Mikaelson@Niklaus	Marketing User	
Nickname	nik	Offline User	<input type="checkbox"/>
Title		Knowledge User	<input type="checkbox"/>
Company		Flow User	<input type="checkbox"/>
Department		Service Cloud User	<input type="checkbox"/>
Division		Site.com Contributor User	<input type="checkbox"/>

Required Information

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--

## Creating another users

1. Repeat the steps and create another user using
  - a. Role: sales person
  - b. User licence: salesforce platform
  - c. Profile: sales person

**Note:** create atleast three users with these permissions.

Smartinternz Users | Salesforce +

gayatridegreecollegeitiru63-dev-ed.lightning.force.com/lightning/setup/ManageUsers/home

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](#)

Action	Full Name	Alias	Username	Role	Active	Profile
<a href="#">Edit</a>	bharti_kalicherla	kthar	gandikotapool04@green.com	sales_person	<input checked="" type="checkbox"/>	sales_person
<a href="#">Edit</a>	bhavya_muni	mbhay	gandikotapool04@black.com	sales_person	<input checked="" type="checkbox"/>	sales_person
<a href="#">Edit</a>	Chatter Expert	Chatter	chatty.0000000020ouv2a4.yathb5eisoid@chatter.salesforce.com	Chatter Free User	<input checked="" type="checkbox"/>	
<a href="#">Edit</a>	GANDIKOTA_POOJITHA	PGAND	gandikotapool04@pdctrinati.com	System Administrator	<input checked="" type="checkbox"/>	
<a href="#">Edit</a>	kalpana_kanchi	kkalo	gandikotapool04@blue.com	sales_person	<input checked="" type="checkbox"/>	sales_person
<a href="#">Edit</a>	Mikaelson_Niklaus	nmika	gandikotapool04@234.com	Manager	<input checked="" type="checkbox"/>	Manager
<a href="#">Edit</a>	User_Integration	integ	integration@0000000020ouv2a4.com		<input checked="" type="checkbox"/>	Analytics Cloud Integration User
<a href="#">Edit</a>	User_Security	sec	insightsssecurity@0000000020ouv2a4.com		<input checked="" type="checkbox"/>	Analytics Cloud Security User

**Milestone – 11 public groups**  
**Creating new public groups**

1. Go to setup>> type user in quick find box>> select public groups>> click new
2. Give the label as “sales team”
3. Group name is auto populated
4. Search for roles
5. In available members select sales person and click on add it will be moved to selected members
6. Click on save

Action	Label	Group Name	Created By	Created Date
Edit   Del	sales team	sales_team	GANDIKOTA POOJITHA	15/04/2024, 2:09 pm

## Milestone – 12 sharing settings

### Creating sharing settings

1. Go to setup>> type users in quick find box>> select sharing settings>> click edit
2. Change the OWD settings of the service record object to private as shown in figure

**Sharing Settings**

Work Plan Template	Private	Private	<input checked="" type="checkbox"/>
Work Step Template	Private	Private	<input checked="" type="checkbox"/>
Work Type	Private	Private	<input checked="" type="checkbox"/>
Work Type Group	Public Read/Write	Private	<input checked="" type="checkbox"/>
Appointment	Public Read/Write	Private	<input checked="" type="checkbox"/>
Billing details and feedback	Public Read/Write	Private	<input checked="" type="checkbox"/>
Customer Details	Public Read/Write	Private	<input checked="" type="checkbox"/>
Environment	Public Read/Write	Private	<input checked="" type="checkbox"/>
Laptop	Public Read/Write	Private	<input checked="" type="checkbox"/>
Service records	Private	Private	<input checked="" type="checkbox"/>
SessionData	Public Read/Write	Private	<input checked="" type="checkbox"/>

**User Visibility Settings**

Portal User Visibility  [i](#) Site User Visibility  [i](#)

**Other Settings**

Standard Report Visibility  [i](#) Manual User Record Sharing  [i](#) Manager Groups  [i](#)

Minimize the number of roles created, which improves performance by cutting down processing loads  [i](#) Grant site users access to related record cases  [i](#) Secure guest user access  [i](#) Require permission to view record names in lookup fields  [i](#)

**Save** **Cancel**

3. Click on save and refresh
4. Scroll down a bit, click new on service records sharing rules
5. Give the label name as “sharing setting”
6. Rule name is auto populated
7. In step 3: select which record to be shared, members of “role”>> “sales person”
8. In step 4: share with, select “roles”>> “manager”
9. In step 5: change the access level to “read/write”.
10. Click on save.

**Sharing Settings**

You can use sharing rules only to grant wider access to data, not to restrict access.

**Step 1: Rule Name**

Label:  **Rule Name:**  [i](#)

**Step 2: Select your rule type**

Rule Type:  Based on record owner  Based on criteria

**Step 3: Select which records to be shared**

Service records: owned by members of:   [i](#)

**Step 4: Select the users to share with**

Share with:   [i](#)

**Step 5: Select the level of access for the users**

Access Level:  [i](#)

**Save** **Cancel**

**Milestone –13 Flows**

1. Go to setup>> type flow in quick find box >> click on the flow and select the new flow.
2. Select the record triggered flow and click on create.
3. Select the object as “billing details and feedback” in the dropdown list.
4. select the triggered flow when “a record is created or updated”.
5. Select the optimizes 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. 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 value for the billing detail and feedback record
14. Field: payment\_paid\_c
15. Value:  
`{!$Record.Service_records__r.Appointment__r.Service_Amount__c}`
16. click done
17. Before creating another element. Create a new resource from toolbox from top left.
18. click on new resources, and select text template.
19. enter the api name: “alert”
20. change the view to plain text
21. In body field paste the syntax in given below

Dear

`{!$Record.Service_records__r.Appointment__r.Customer_Name__c.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.

22. click on done.

23. now click on add elements, select action.

24. In action bar in that search the “send email” and click on it.

25. label name as “email alert”

26. API name will autopopulated.

27. Enable the body in set input values for the selected action.

28. select the text template that created body:{!alert}

29. Include the recipient address list as alert

30. Include the subject as “Thank you for your payment – garage management”.

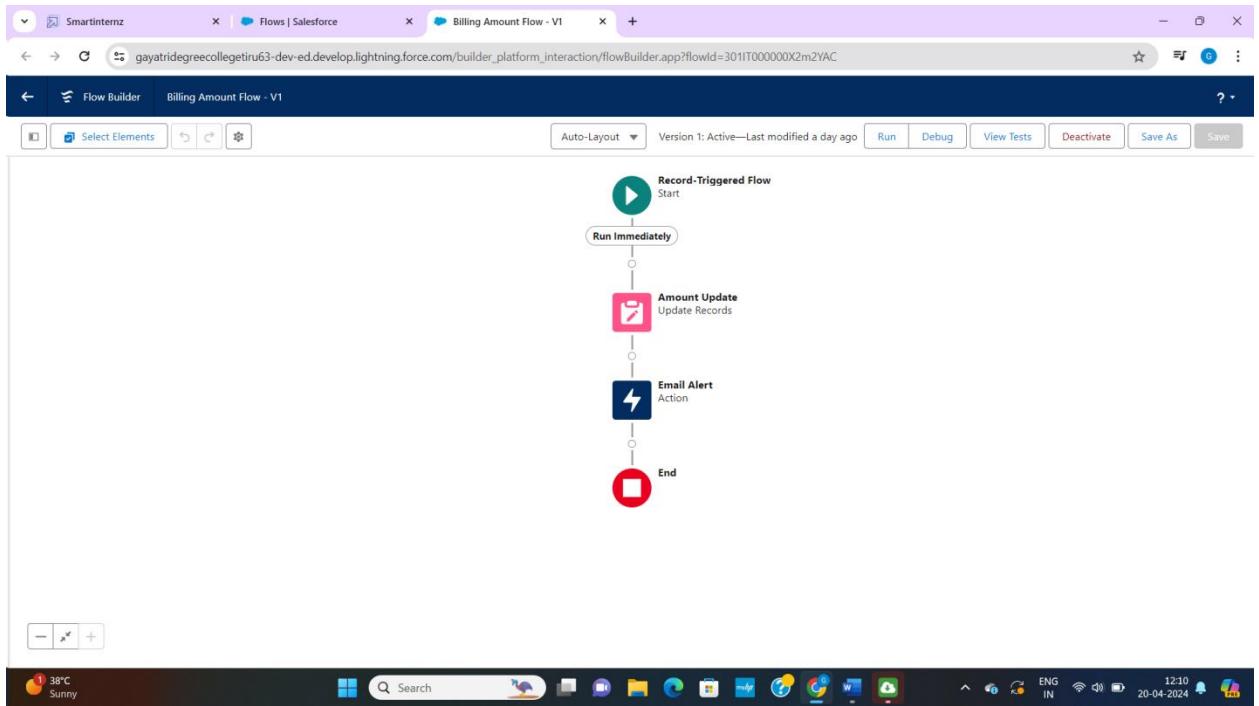
31. click done.

32. click on save. Give the flow label as billing amount flow and api name is auto populated.

33. click save and activate.

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

- Page Header:** Smartinternz > Flows | Salesforce
- Search Bar:** Search Setup
- Left Sidebar:** Includes sections for Apps (Lightning Bolt, Flow Category), Process Automation (Automation Home (Beta), Flows, Migrate to Flow, Paused and Failed Flow, Interviews, Process Builder), Workflow Actions (Email Alerts, Field Updates, Outbound Messages, Send Actions, Tasks, Workflow Rules), and Environments.
- Central Content:** The "Flows" section under "Setup".
  - Section Headers:** SETUP, Flows, Flow Definitions, All Flows.
  - Table:** Displays a list of 38 flow definitions, including columns for Flow Label, Process Type, Act..., Te..., Package State, Pac..., Last Modified By, and Last Modified ... .
  - Actions:** Buttons for Flow Trigger Explorer and New Flow.
- Bottom Status Bar:** Shows system information including weather (38°C Sunny), search bar, and various application icons.



## Milestones – 14 Apex Trigger

### Apex Handler:

UseCase: this use case work for amount distribution for each service the customer selected the 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 Newapex class.
4. Name the class as “AmountDistributionHandler ”.

The screenshot shows the Salesforce Developer Console interface. The top navigation bar includes tabs for 'Flows | Salesforce' and 'Developer Console'. The main area displays the code for the 'AmountDistributionHandler' class:

```
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        }  
17    }  
18}
```

Below the code editor is a log viewer with tabs for 'Logs', 'Tests', 'Checkpoints', 'Query Editor', 'View State', 'Progress', and 'Problems'. The 'Logs' tab is selected. The log table has columns for 'User', 'Application', 'Operation', 'Time', 'Status', and 'Size'. The status column shows entries like 'Read' and 'Size'. At the bottom of the log viewer is a filter bar with the placeholder 'Click here to filter the log list'.

This screenshot shows the same Salesforce Developer Console interface as the previous one, but the code in the editor has been modified to include additional logic for different service types:

```
16        }  
17    }  
18    else if(app.Maintenance_service__c == true && app.Replacement_Parts__c == true){  
19        app.Service_Amount__c = 8000;  
20    }  
21    else if(app.Repairs__c == true && app.Replacement_Parts__c == true){  
22        app.Service_Amount__c = 7000;  
23    }  
24    else if(app.Maintenance_service__c == true){  
25        app.Service_Amount__c = 2000;  
26    }  
27    else if(app.Repairs__c == true){  
28        app.Service_Amount__c = 3000;  
29    }  
30    else if(app.Replacement_Parts__c == true){  
31        app.Service_Amount__c = 5000;  
32    }  
33}  
34}
```

The rest of the interface, including the log viewer at the bottom, remains the same.

**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: amountdistution  
6. sObject: appointment\_\_c

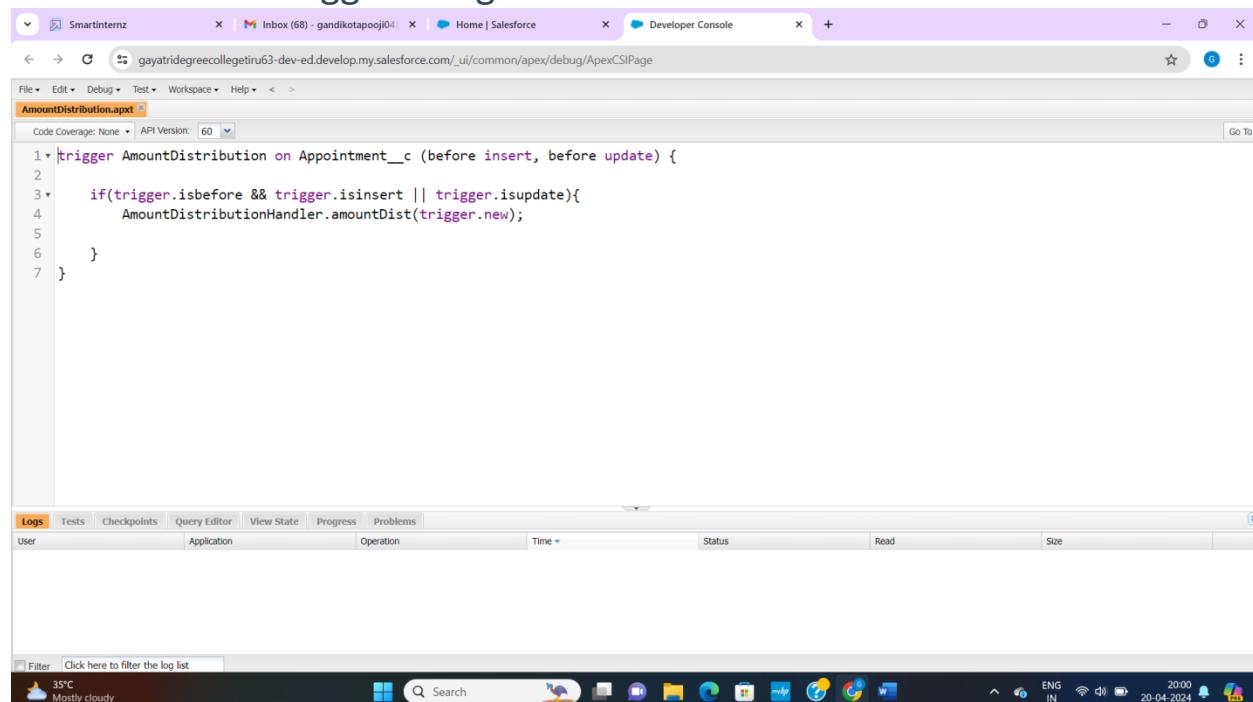
### **syntax for creating trigger:**

The syntax for creating trigger is:

Trigger [trigger name] on [object name] (before/after event)

```
{
}
```

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



The screenshot shows the Salesforce Developer Console interface. The title bar includes tabs for Smartinternz, Inbox (68), Home | Salesforce, and Developer Console. The main area displays the code for the AmountDistribution trigger:

```

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

```

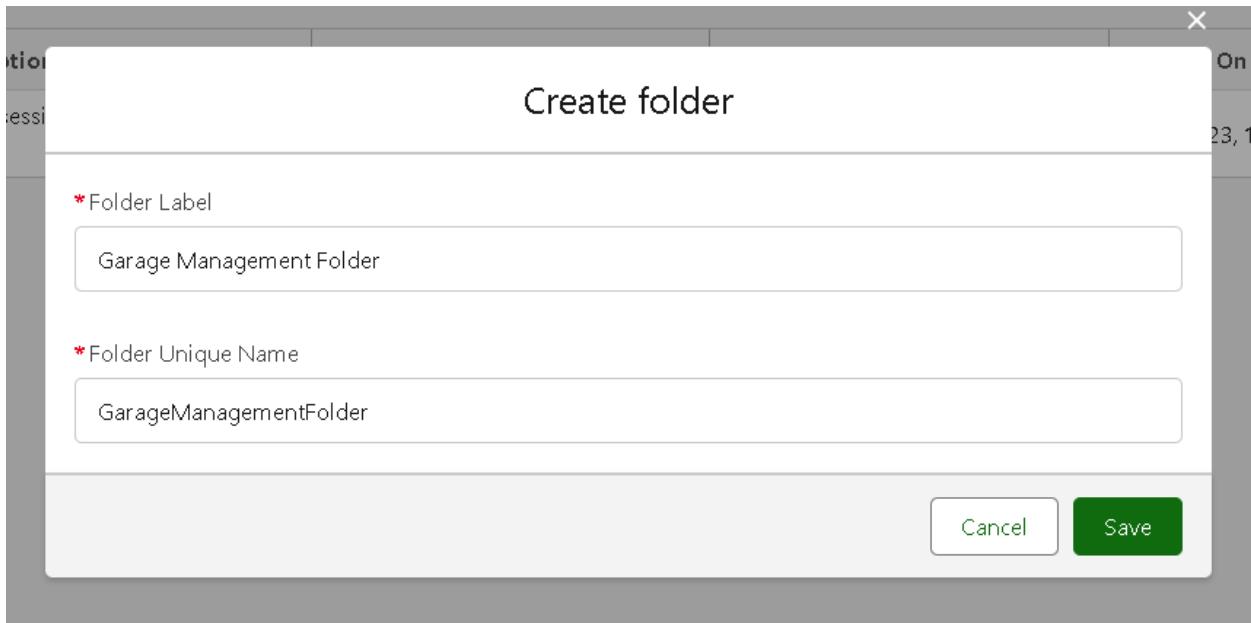
Below the code editor, there are tabs for Logs, Tests, Checkpoints, Query Editor, View State, Progress, and Problems. The Logs tab is selected. At the bottom, there's a toolbar with icons for Filter, Search, and various system functions, along with system status indicators like weather (35°C, Mostly cloudy), date (20-04-2024), and time (20:00).

### **Milestone – 15 Reports:**

#### **Create a reports folder:**

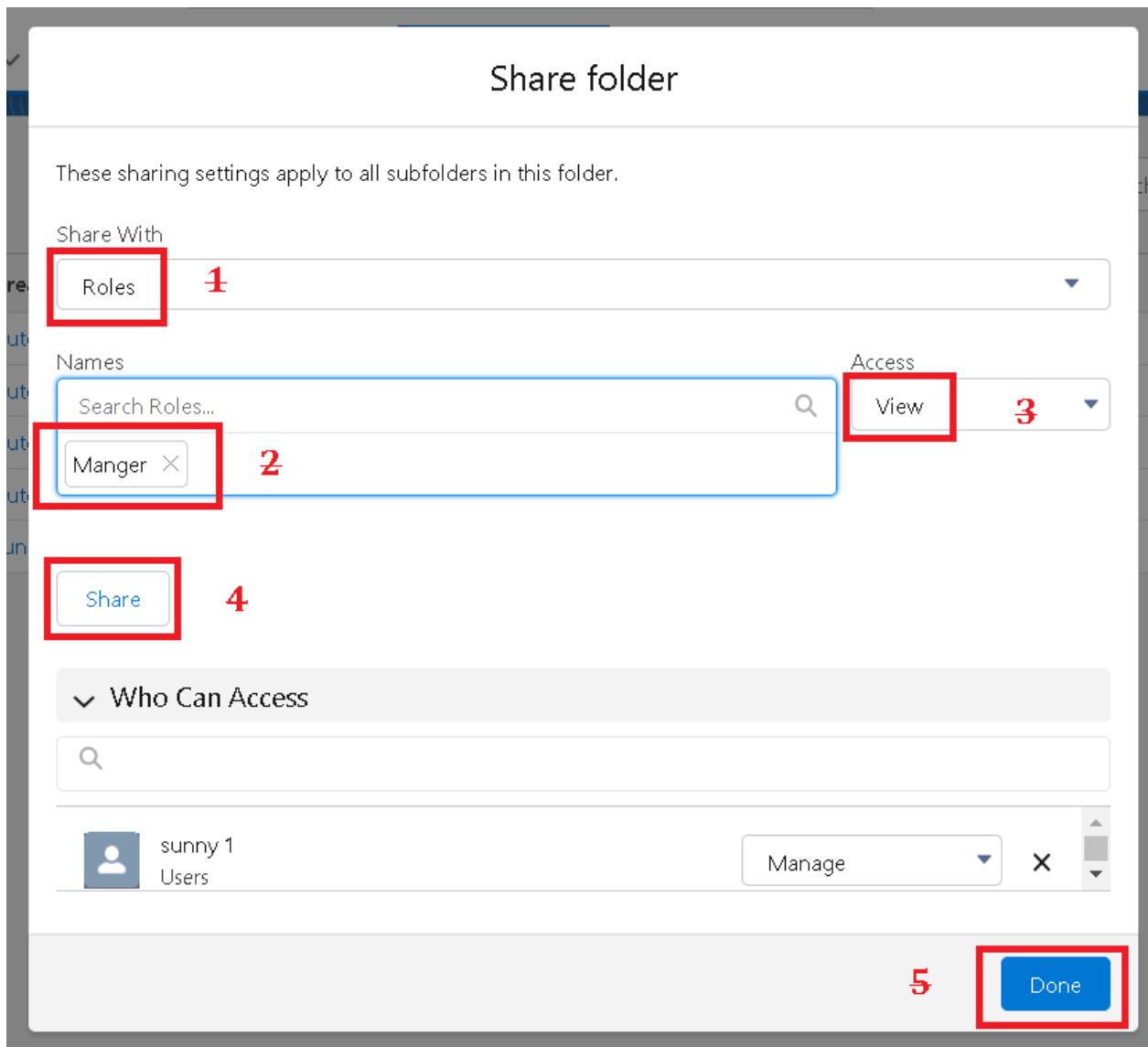
1. click on the app launcher and search for reports

2. click on the report tab, click on new folder
3. Give the folder label name as “garage management folder”. Folder unique name will be auto populated.
4. Click save.



### 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 “manger”, give “view” as access for the role.
4. Then click share and click on done.



### Create reports type:

1. Go to setup >> type users in quick find box >>select report type >> click on continue.
2. Click on new custom report type.
3. Select the primary object as “customer detail”
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.
9. Now click on related object box

10.Click on select object, choose the appointment object as shown in figure.

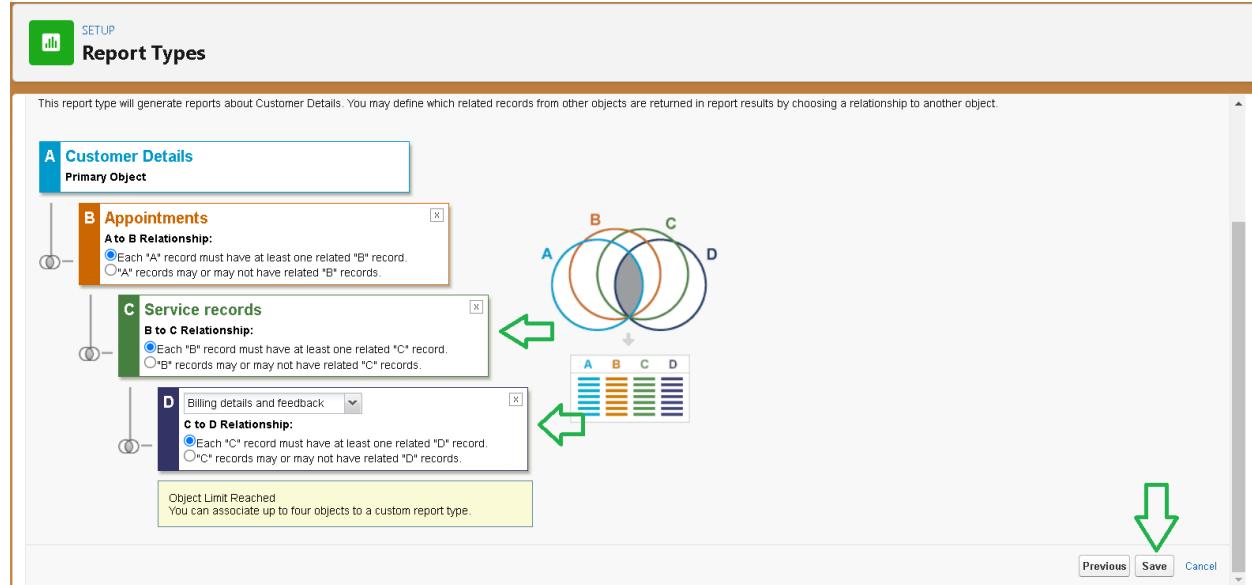


11.again click to relate another object.

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.

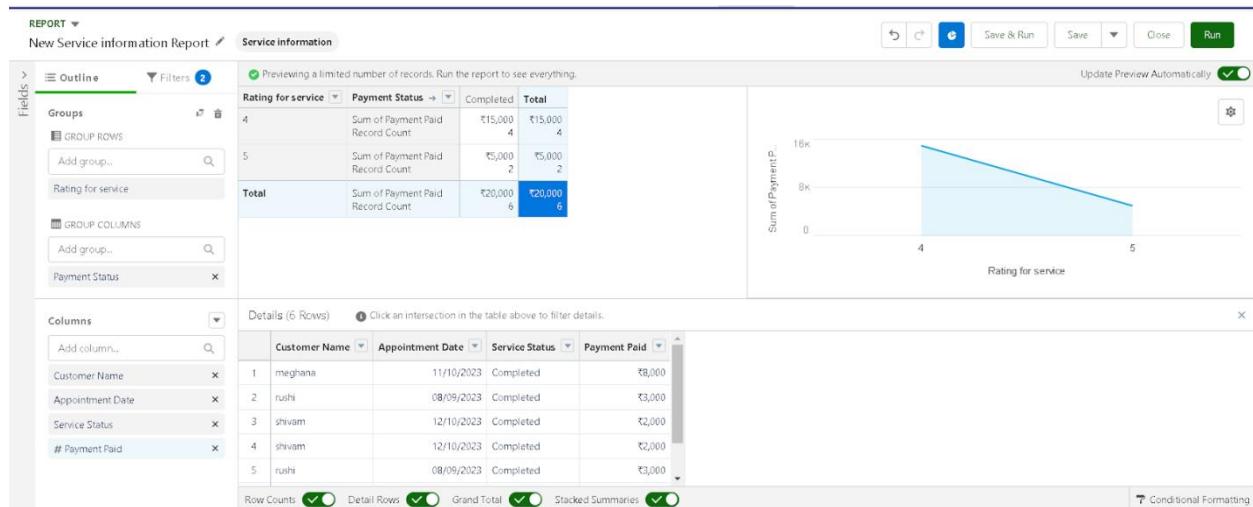


### Create report:

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

1. Go to app >> click on the reports tab.
2. Click on new report.

3. Select the category as other reports, search for the service information, select that report, click on it. And click on start report.
4. Their outline pane is opened already, select the field that mentioned below in column section.
  - a. Customer name
  - b. Appointment date
  - c. Service status
  - d. Payment paid
5. Remove the unnecessary fields.
6. Select the fields that mentioned below in GROUPS ROWS section.
  - a. Rating for service
7. Select the field that mentioned below in GROUP ROWS section.
  - a. Payment status
8. Click on chart, select the line chart.
9. Click on save, give report name: New service information report
10. Report unique name is auto populated
11. Select the folder the created and click on save.

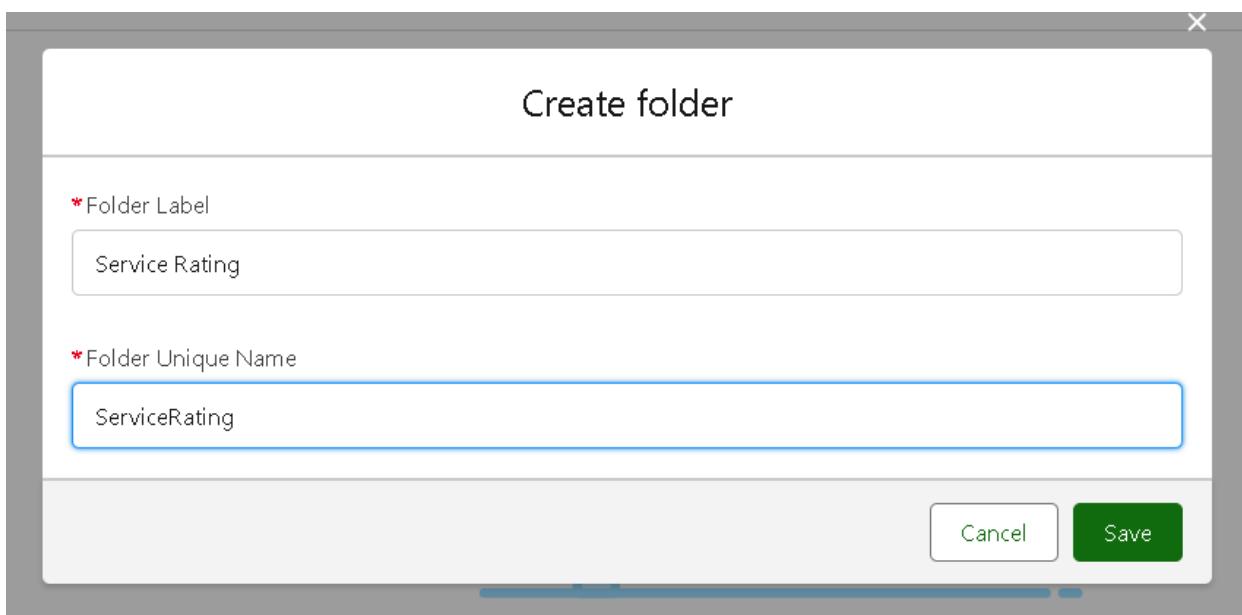


## Milestone – 16 Dashboards:

### Create dashboards folder:

1. Click on 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 is auto populated
5. Click save
6. Follow the same steps from milestone 15, and activity 2 and provide the sharing setting for the folder that just created.



### Create dashboard:

1. Go to the app launcher >> click on dashboard tabs.
2. Give the name as customer review select the folder that created “service rating” 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 and click on save and then click on done.
7. After that click on subscribe on top right
8. Set the frequency as “weekly”.
9. Set a day as Monday and click on save.

## New Service information Report

Payment Status

Completed



[View Report \(New Service information Report\)](#)

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

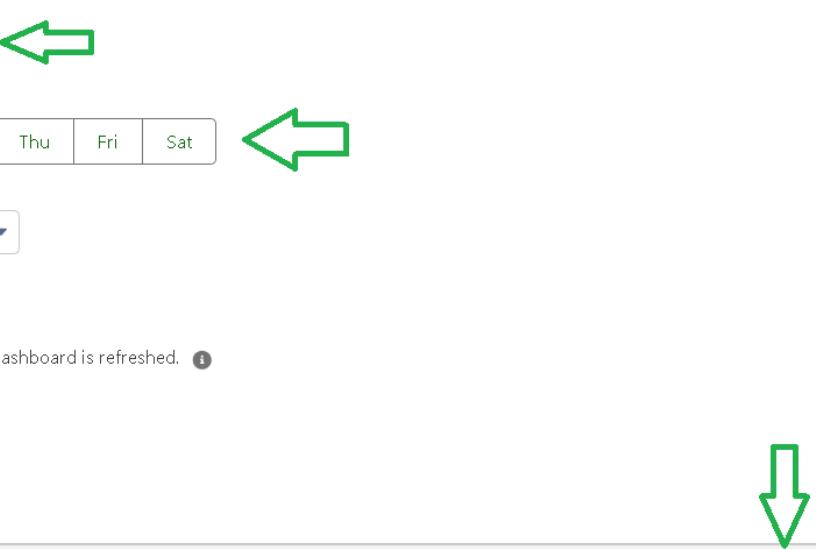
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