

# GARAGE MANAGEMENT SYSTEM

By

TEAM DETAIL

SNO	NAME	ROLL NO	MAIL ID
1	GOKULNATH N	2322JC25	2322jc25@kgcas.com
2	HEPCYBA ANGEL A	2322JC26	2322JC26@kgcas.com
3	JANANI S	2322JC27	2322jc27@kgcas.com
4	KALPANA SALVA M	2322JC28	2322jc28@kgcas.com

# Project Abstraction

The Garage Management System is a web-based tool designed to manage and track all garage operations. The system aims to provide a centralized platform for garage owners to monitor and control their business activities, including employee management, inventory tracking, and customer service. The system is built on the Salesforce platform, which provides a robust and secure infrastructure for managing and storing data. The Salesforce platform also offers a wide range of tools and features that can be used to customize and extend the system to meet the specific needs of the garage business.

One of the key features of the Garage Management System is its employee management module. This module allows garage owners to keep track of all their employees, including their contact information, work schedules, and job assignments. The system also provides tools for managing employee performance, such as tracking attendance and evaluating performance.

The Garage Management System also includes a customer service module, which allows garage owners to keep track of all their customers and their interactions with the garage. The system provides tools for managing customer information, such as contact details and service history, as well as tools for scheduling appointments and tracking customer feedback.

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# INTRODUCTION

The Garage Management System is a comprehensive solution designed to optimize the usage of vehicles and trailers that carry inventories to stores. The system aims to streamline the management of vehicle records, track vehicles, and ensure efficient inventory transportation.

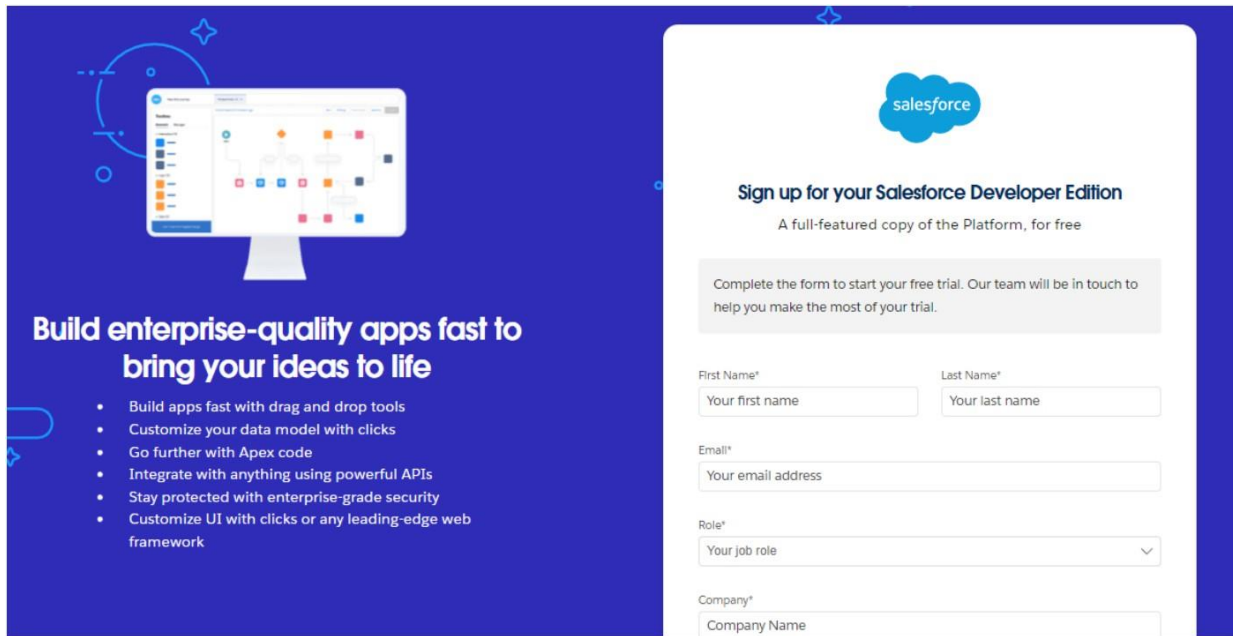
The Garage Management System will be built on the Salesforce platform, leveraging its robust architecture and scalability. The system will consist of several components, including vehicle records, inventory management, workflow automation, and integration with other Salesforce modules. The implementation strategy will involve requirements gathering, design, development, testing, and deployment. The abstraction framework for the system will use an Integration Procedure to get input from a workflow, query the product model based on that input, and update products, attributes, and inventory levels. The Garage Management System will provide a flexible and scalable architecture for managing and optimizing inventory transportation, ensuring efficient vehicle utilization, and automating business processes.

## TASK 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 :
3. First name & Last name
4. Email
5. Role : Developer
6. Company : College Name
7. County : India
8. Postal Code : pin code
9. 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
10. Click on sign me up after filling these.



The image shows the Salesforce Developer Edition sign-up page. On the left, there's a blue background with a white monitor displaying a Salesforce interface. The text 'Build enterprise-quality apps fast to bring your ideas to life' is prominently displayed. Below this, a list of features is provided: 'Build apps fast with drag and drop tools', 'Customize your data model with clicks', 'Go further with Apex code', 'Integrate with anything using powerful APIs', 'Stay protected with enterprise-grade security', and 'Customize UI with clicks or any leading-edge web framework'. On the right, the Salesforce logo is at the top, followed by the heading 'Sign up for your Salesforce Developer Edition' and the subtext 'A full-featured copy of the Platform, for free'. A grey box contains the instruction: 'Complete the form to start your free trial. Our team will be in touch to help you make the most of your trial.' Below this, the form fields are: 'First Name\*' (with placeholder 'Your first name'), 'Last Name\*' (with placeholder 'Your last name'), 'Email\*' (with placeholder 'Your email address'), 'Role\*' (a dropdown menu with 'Your job role' selected), and 'Company\*' (with placeholder 'Company Name').

**Build enterprise-quality apps fast to bring your ideas to life**

- Build apps fast with drag and drop tools
- Customize your data model with clicks
- Go further with Apex code
- Integrate with anything using powerful APIs
- Stay protected with enterprise-grade security
- Customize UI with clicks or any leading-edge web framework

**Sign up for your Salesforce Developer Edition**  
A full-featured copy of the Platform, for free

Complete the form to start your free trial. Our team will be in touch to help you make the most of your trial.

First Name\*  
Your first name

Last Name\*  
Your last name

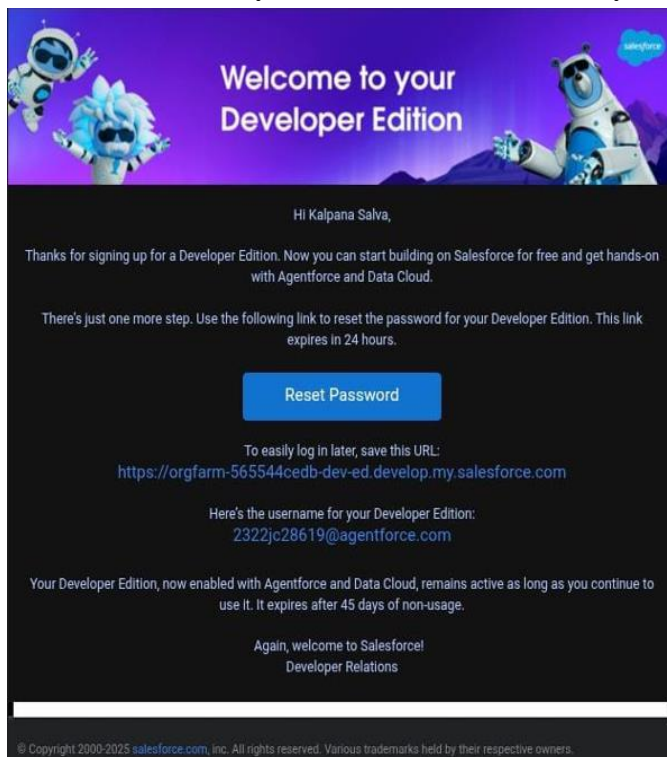
Email\*  
Your email address

Role\*  
Your job role

Company\*  
Company Name

## 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. Click on Verify Account
3. Give a password and answer a security question and click on change password.

## 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

Change Password

4. Then you will be taken to your Salesforce setup page

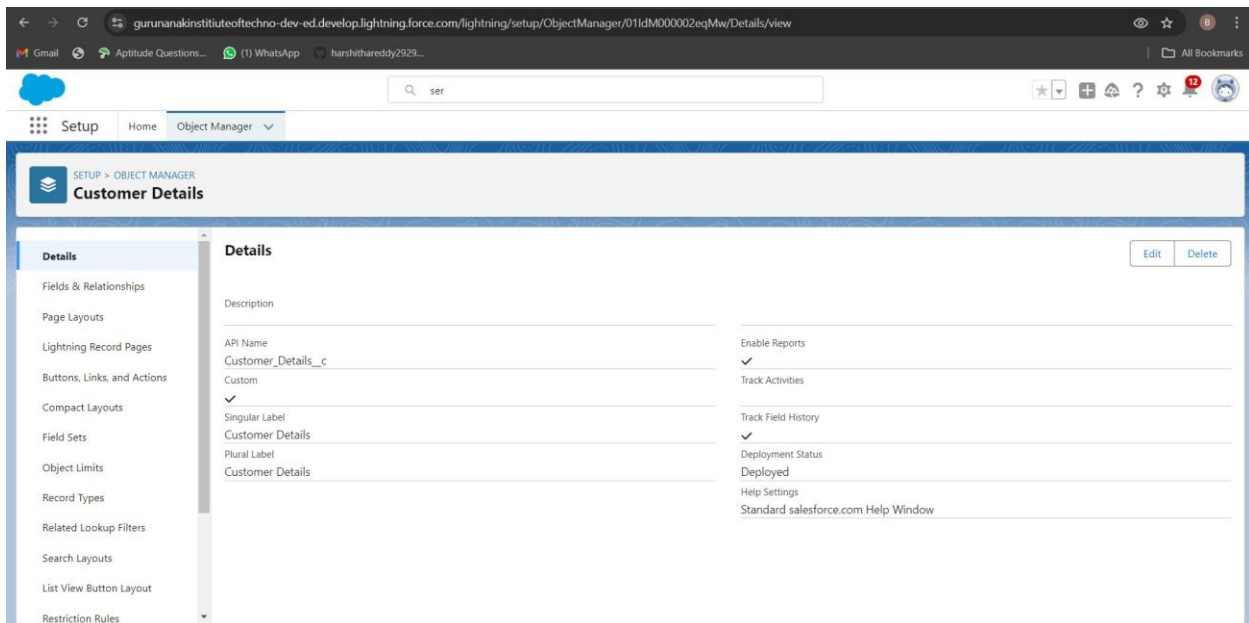
The screenshot shows the Salesforce Setup page. The top navigation bar includes a search bar labeled "Search Setup" and several utility icons. The sidebar on the left contains a "Quick Find" search bar and a list of navigation options: Setup Home, Service Setup Assistant, Multi-Factor Authentication Assistant, Release Updates, Lightning Experience Transition Assistant, Salesforce Mobile App, Lightning Usage, Optimizer, and ADMINISTRATION. The main content area is titled "SETUP Home" and features three featured cards: "Get Started with Einstein Bots" (with a "Get Started" button), "Mobile Publisher" (with a "Learn More" button), and "Real-time Collaborative Docs" (with a "Get Started" button). The bottom of the page shows a series of three dots, indicating a carousel of featured content.

## TASK 2: CREATING THE OBJECTS

### i) Create Customer Details Object

To create an object:

1. From the setup page >> Click on Object Manager >> Click on Create >> Click 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.

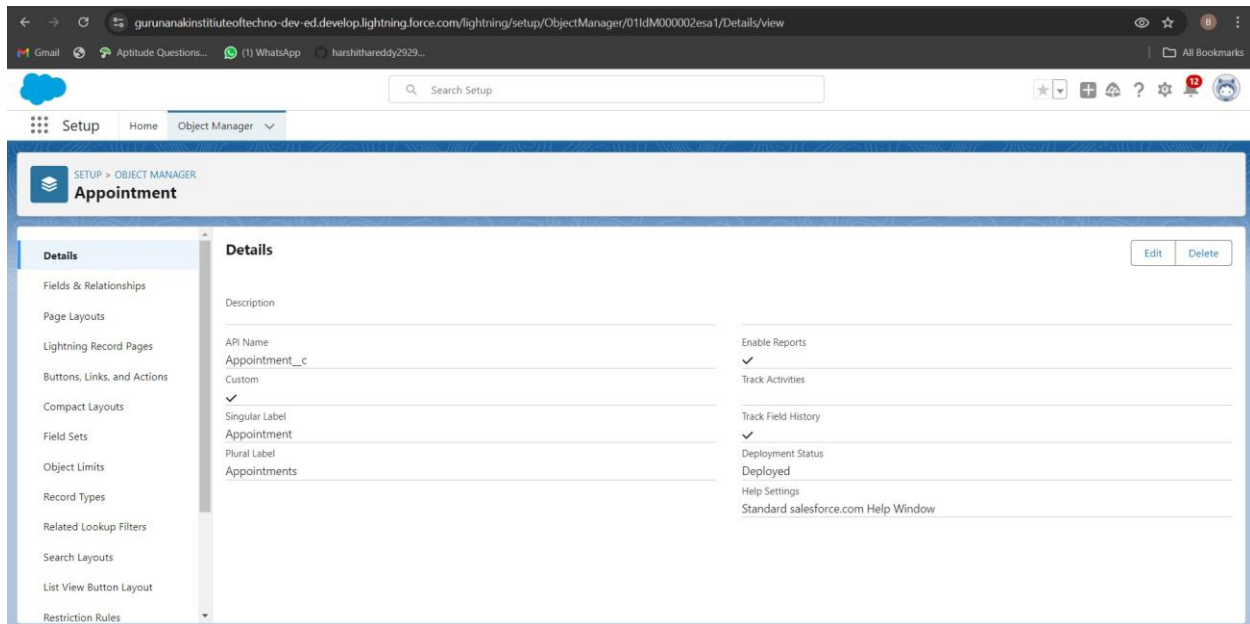


### ii) Create Appointment Object

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.

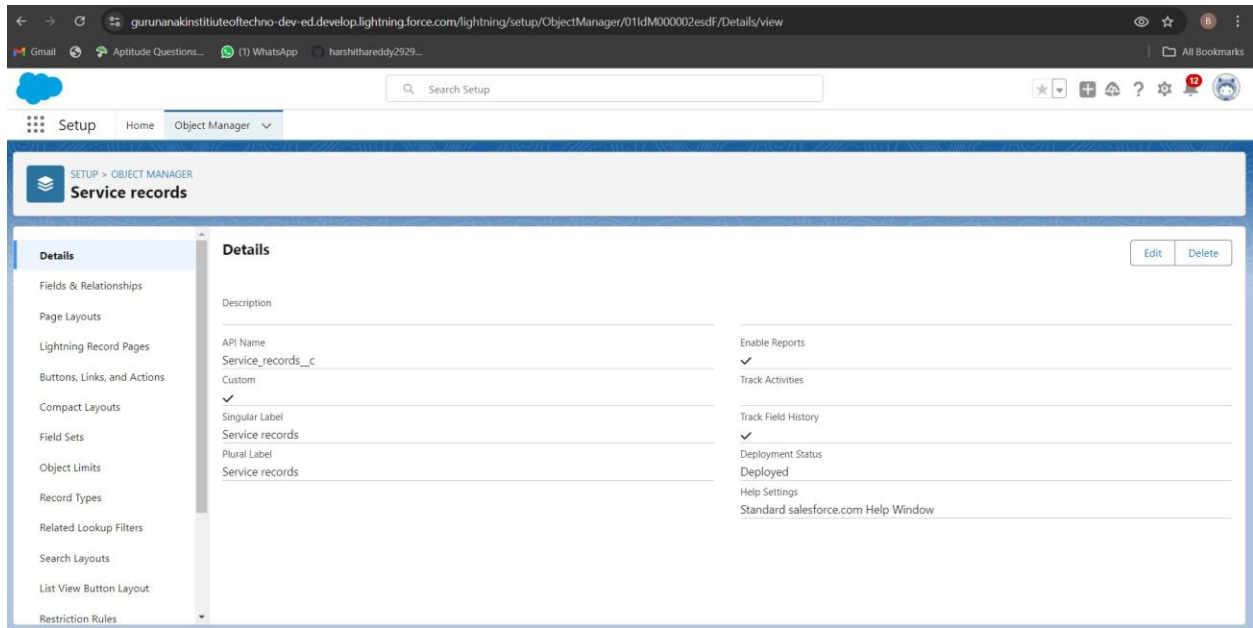


### m) Create Service Records Object

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.





#### IV) 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

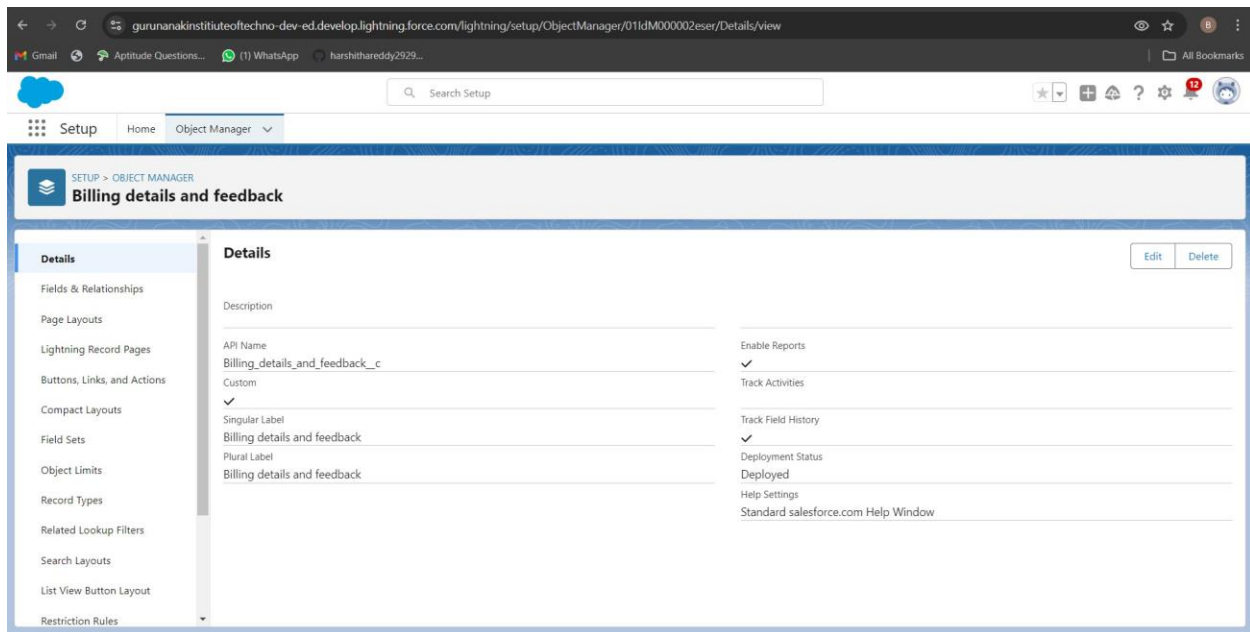
- Data Type >> Auto Number

- Display Format >> bill-{000}

- Starting number >> 1

2. Click on Allow reports and Track Field History,

3. Allow search >> Save.

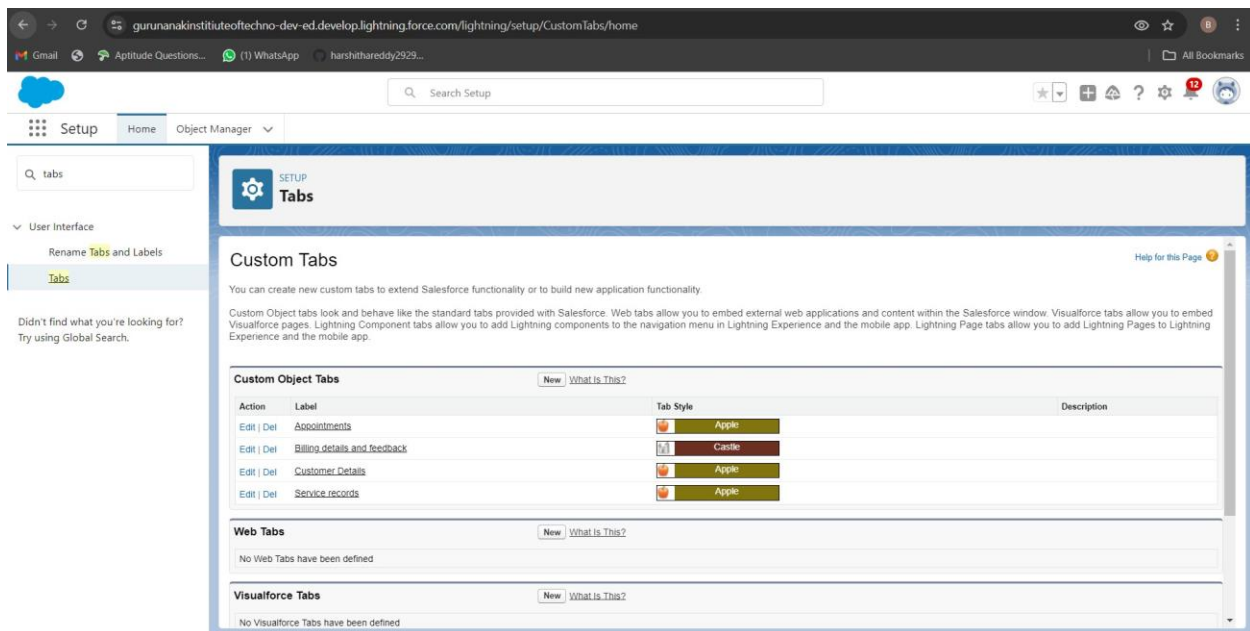


## TASK 3: CREATE TABS

### 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.

New Custom Object Tab

Help for this Page

Step 1. Enter the Details

Step 1 of 3

Choose the custom object for this new custom tab. Fill in other details.

Select an existing custom object or create a new custom object now.

Object: Customer Details

Tab Style: [Style Selector]

(Optional) Choose a Home Page Custom Link to show as a splash page the first time your users click on this tab.

Splash Page Custom Link: --None--

Enter a short description.

Description: [Text Box]

Next Cancel

Tab Style Selector

Create your own style

Hide styles which are used on other tabs

Airplane	Alarm clock	Apple	Balls
Bank[1]	Bell	Big top	Boat[1]
Books	Bottle	Box	Bridge
Building	Building Block	Caduceus	Camera
Can	Car	Castle	CD/DVD
Cell phone	Chalkboard	Chess piece	Chip
Circle	Compass	Computer	Credit card
CRT TV	Cup	Desk[1]	Diamond
Dice	Factory	Fan	Flag
Form	Gears	Globe	Guitar
Hammer	Hands	Handsaw	Headset
Heart[1]	Helicopter	Hexagon	Highway Sign
Hot Air Balloon	Insect	IP Phone	Jewel
Keys	Laptop	Leaf	Lightning

Save Cancel

### To create a Tab:(Appointment)

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

### **To create a Tab:(Service Records)**

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

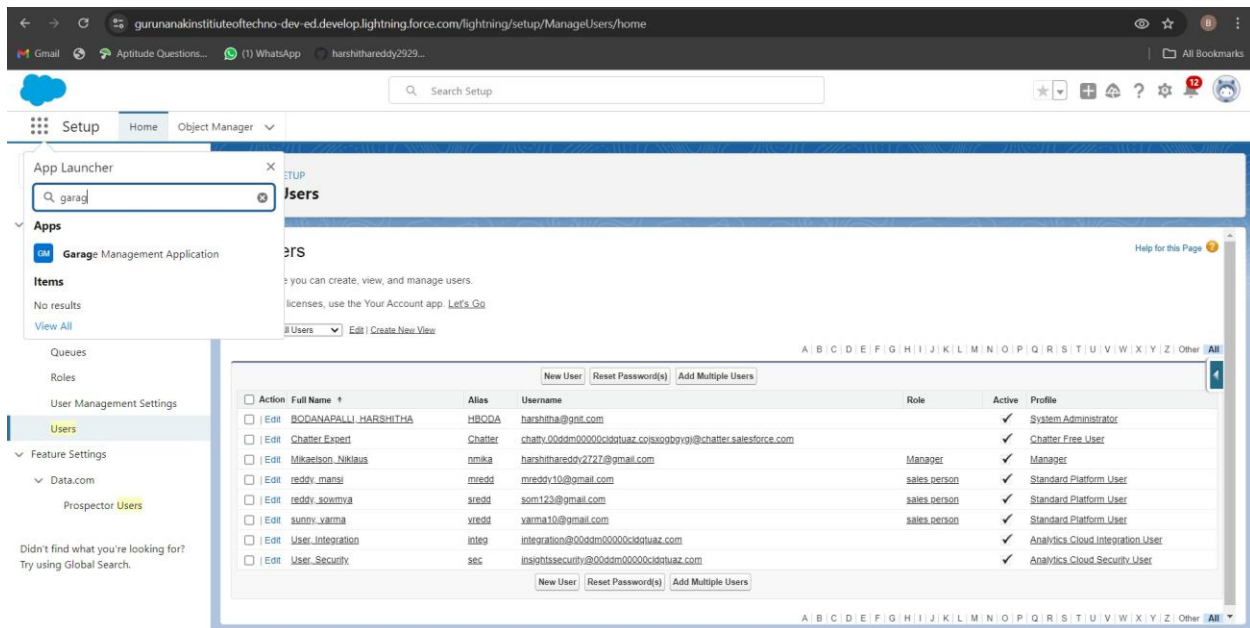
### **To create a Tab:(Billing details and feedback)**

1. Go to setup page >> type Tabs in Quick Find bar >> click on tabs >> New (under custom object tab)
2. Select Object(Billing details and feedback) >> 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

## **TASK 4:CREATE THE 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.



## TASK 5:CREATE THE FIELDS

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

## 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.
2. Now click on “Fields & Relationships” >> New
3. Select “Look-up 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.

### **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.
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.
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.

### **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
7. Click on next >> next >> save.

#### **Creation of Another Checkbox Field on Appointment Object :**

1. Repeat the steps form 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 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 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

#### **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 Name : is auto populated
6. Make it as a Required field by click on the Required option.
7. Click on next >> next >> save.

#### **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 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.

#### **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 Name : is auto populated

#### **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.
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 and Unique.
8. Click on next >> next >> save

#### **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.



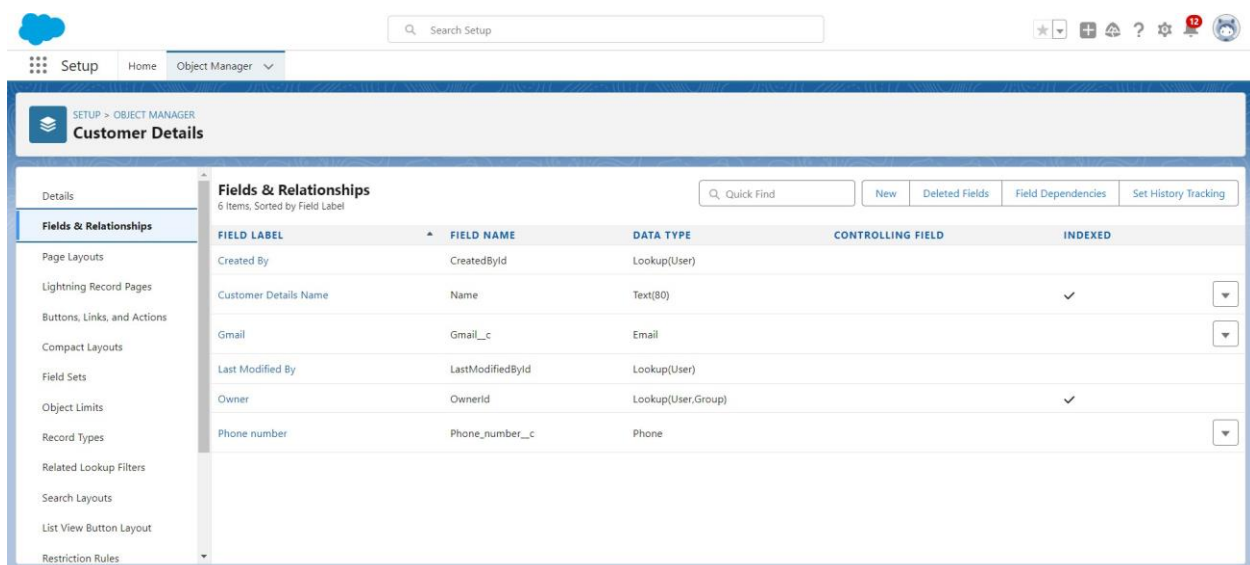
3. Select Data type as “Picklist” and click Next.
4. Enter Field Label as “Service Status”, under values select “Enter values, with each value separated by a new line” and enter values as shown below.
5. The values are: Started, Completed
6. Click Next.
7. Next >> Next >> Save.

### 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.

### 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.



The screenshot shows the Salesforce Setup interface. The top navigation bar includes the Setup icon, a search bar, and various utility icons. The main content area is titled "SETUP > OBJECT MANAGER" and "Customer Details". The left sidebar shows a list of setup options, with "Fields & Relationships" selected. The main panel displays a table of fields for the "Customer Details" object, sorted by Field Label. The table has columns for FIELD LABEL, FIELD NAME, DATA TYPE, CONTROLLING FIELD, and INDEXED. The fields listed are: Created By (Lookup(User)), Customer Details Name (Text(80)), Gmail (Email), Last Modified By (Lookup(User)), Owner (Lookup(User,Group)), and Phone number (Phone). The "Customer Details Name" and "Owner" fields are marked as indexed.

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

Setup

Home

Object Manager

Search Setup

Star

Plus

Refresh

Help

Settings

12

Avatar

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

11 Items, Sorted by Field Label

Quick Find

New

Deleted Fields

Field Dependencies

Set History Tracking

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

30°C

Partly cloudy

Search

ENG IN

18:20

29-09-2024

Setup

Home

Object Manager

Search Setup

Star

Plus

Refresh

Help

Settings

12

Avatar

Setup > OBJECT MANAGER

Service records

Details

Fields & Relationships

Page Layouts

Lightning Record Pages

Buttons, Links, and Actions

Compact Layouts

Field Sets

Object Limits

Record Types

Related Lookup Filters

Search Layouts

List View Button Layout

Fields & Relationships

8 Items, Sorted by Field Label

Quick Find

New

Deleted Fields

Field Dependencies

Set History Tracking

FIELD LABEL	FIELD NAME	DATA TYPE	CONTROLLING FIELD	INDEXED
Appointment	Appointment__c	Lookup(Appointment)		✓
Created By	CreatedById	Lookup(User)		
Last Modified By	LastModifiedById	Lookup(User)		
Owner	OwnerId	Lookup(User,Group)		✓
Quality Check Status	Quality_Check_Status__c	Checkbox		
service date	service_date__c	Formula (Date)		
Service records Name	Name	Auto Number		✓
Service Status	Service_Status__c	Picklist		

30°C

Partly cloudy

Search

ENG IN

18:20

29-09-2024

https://gurunankinstiitutedevelop-dev-ed.develop.lightning.force.com/oneapp#/setup/ObjectManager/014M000002esd7/FieldsAndRelationships/new

SETUP > OBJECT MANAGER

### Billing details and feedback

Details

**Fields & Relationships**  
10 Items, Sorted by Field Label

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

## TASK 6: VALIDATION RULES

### 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.
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}"))
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.

SETUP > OBJECT MANAGER

### Appointment

Details

**Appointment Validation Rule**  
Back to Appointment

**Validation Rule Detail**

Rule Name	Vehicle	Active	✓
Error Condition Formula	NOT(REGEX( Vehicle_number_plate__c , "[A-Z]{2}[0-9]{2}[A-Z]{2}[0-9]{4}"))		
Error Message	Please enter valid number	Error Location	Vehicle number plate
Description			
Created By	HARSHITHA.BODANAPALLI	Modified By	HARSHITHA.BODANAPALLI
	28/09/2024, 10:08 pm		28/09/2024, 10:08 pm

### To Create A Validation Rule To An Service Records Object

1. Go to the setup page >> click on object manager >> From drop down click edit for Service

records object.

2. Click on the validation rule >> click New.
3. Enter the 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 left sidebar contains a navigation menu with options like Details, Fields & Relationships, Page Layouts, Lightning Record Pages, Buttons, Links, and Actions, Compact Layouts, Field Sets, Object Limits, Record Types, Related Lookup Filters, Search Layouts, and List View Button Layout. The main content area is titled 'Service records' and displays the 'Service records Validation Rule' configuration page. The 'Validation Rule Detail' section shows the following information:

Validation Rule Detail		Active
Rule Name	service_status_note	<input checked="" type="checkbox"/>
Error Condition Formula	NOT( ISPICKVAL( Service_Status__c , "Completed"))	
Error Message	still it is pending	Error Location: Service Status
Description		
Created By	HARSHITHA.BODANAPALLI	28/09/2024, 10:19 pm
Modified By	HARSHITHA.BODANAPALLI	28/09/2024, 10:19 pm

Buttons for 'Edit' and 'Clone' are available for the Rule Name, Error Condition Formula, and the Created/Modified By fields.

### 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\_10”.
4. Insert the Error Condition Formula as : - NOT( REGEX( Rating\_for\_service\_\_c , "[0-9]{1}"))
5. Enter the Error Message as “rating should be from 0 to 9”, select the Error location as Field and select the field as “Rating for Service”, and click Save

Setup

Home

Object Manager

SETUP > OBJECT MANAGER

Billing details and feedback

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

Billing details and feedback Validation Rule

Back to Billing details and feedback

Help for this Page

Validation Rule Detail

Edit

Clone

Rule Name	rating_should_be_less_than_10	Active	✓
Error Condition Formula	NOT( REGEX( Rating_for_service__c, "[0-9]{1}") )		
Error Message	rating should be from 0 to 9	Error Location	Rating for service
Description			
Created By	HARSHITHA.BODANAPALLI, 28/09/2024, 10:20 pm	Modified By	HARSHITHA.BODANAPALLI, 29/09/2024, 2:16 pm

Edit

Clone

## TASK 7:DUPLICATE RULE

### To Create A Matching Rule To An Customer Details Object

- Go to quick find box in setup and search for matching Rule.
- Click on matching rule >> click on New Rule.
- Select the object as Customer details and click Next.
- Give the Rule name : Matching customer details
- Unique name : is auto populated
- Define the matching criteria as
 

Field	Matching Method
1. Gmail	Exact
2. Phone Number	Exact
- Click save.
- After Saving Click on Activate.

SETUP

Matching Rules

Matching Rule

Matching customer details

Help for this Page

Matching Rule Detail

Delete

Clone

Deactivate

Object	Customer Details
Rule Name	Matching customer details
Unique Name	Matching_customer_details
Description	
Matching Criteria	(Customer Details: Gmail EXACT MatchBlank = FALSE) AND (Customer Details: Phone_number EXACT MatchBlank = FALSE)
Status	Active
Created By	HARSHITHA.BODANAPALLI, 28/09/2024, 10:22 pm
Modified By	HARSHITHA.BODANAPALLI, 28/09/2024, 10:22 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.
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 'Matching Rules' configuration page. Under the 'Matching Rules' section, 'Compare Customer Details With' is set to 'Customer Details'. The 'Matching Rule' dropdown is set to 'matching Customer details', which is highlighted with a green arrow. The 'Matching Criteria' section shows two conditions: '(Customer Details: Email EXACT MatchBlank = FALSE) AND (Customer Details: Phone\_Number EXACT MatchBlank = FALSE)'. The 'Field Mapping' section shows 'Mapping Selected' with a green checkmark. Below this are 'Add Rule' and 'Remove Rule' buttons. The 'Conditions' section has a table with columns 'Field', 'Operator', and 'Value', all set to '--None--'. There are 'AND' operators between the rows. At the bottom, there are 'Save', 'Save & New', and 'Cancel' buttons, with a green arrow pointing to the 'Save' button.

## TASK 8:CREATE PROFILES

### 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 'Clone Profile' page in the Salesforce Setup interface. The left sidebar shows the 'Setup' menu with 'Profiles' highlighted. The main content area is titled 'Clone Profile' and has a sub-header 'Enter the name of the new profile.' Below this, a message states 'You must select an existing profile to clone from.' There is a dropdown menu for 'Existing Profile' with 'Standard User' selected, and a text input field for 'Profile Name' with 'Manager' entered. At the bottom, there are 'Save' and 'Cancel' buttons, with a red arrow pointing to the 'Save' button.

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"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

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

## Sales Person Profile

- 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.
- While still on the profile page, then click Edit.
- Select the Custom App settings as default for the GARage management.
- Scroll down to Custom Object Permissions and Give access permissions for Appointments, Billing details and feedback, service records and customer details objects as mentioned in the below diagram.
- And click save.

The screenshot shows the Salesforce Setup interface. The left sidebar has a search bar with 'profiles' entered and a 'Profiles' link highlighted. The main content area is titled 'Profiles' and shows the 'Standard Platform User' profile. Below the title, there is a list of permissions: Login IP Ranges, Enabled Apex Class Access, Enabled Visualforce Page Access, Enabled External Data Source Access, Enabled Named Credential Access, Enabled External Credential Principal Access, Enabled Custom Metadata Type Access, Enabled Custom Setting Definitions Access, Enabled Flow Access, Enabled Service Presence Status Access, and Enabled Custom Permissions. The 'Profile Detail' section shows the profile name 'Standard Platform User', user license 'Salesforce Platform', created by 'salesforce.com, inc.' on 28/09/2024 at 8:05 pm, and modified by 'HARSHITHA BODANAPALLI' on 29/09/2024 at 12:25 am. The 'Page Layouts' section shows a table of layouts for various objects.

Object	Layout	View Assignment
Global	Global Layout	[ View Assignment ]
Lead	Lead Layout	[ View Assignment ]
Email Application	Not Assigned	[ View Assignment ]
Location	Location Layout	[ View Assignment ]
Home Page Layout	Home Page Default	[ View Assignment ]
Location Group	Location Group Layout	[ View Assignment ]
Account	Account Layout	[ View Assignment ]
Location Group Assignment	Location Group Assignment Layout	[ View Assignment ]
Alternative Payment Method	Alternative Payment Method Layout	[ View Assignment ]
Object Milestone	Object Milestone Layout	[ View Assignment ]

## TASK 9: Role & Role Hierarchy

Creating Manager Role:

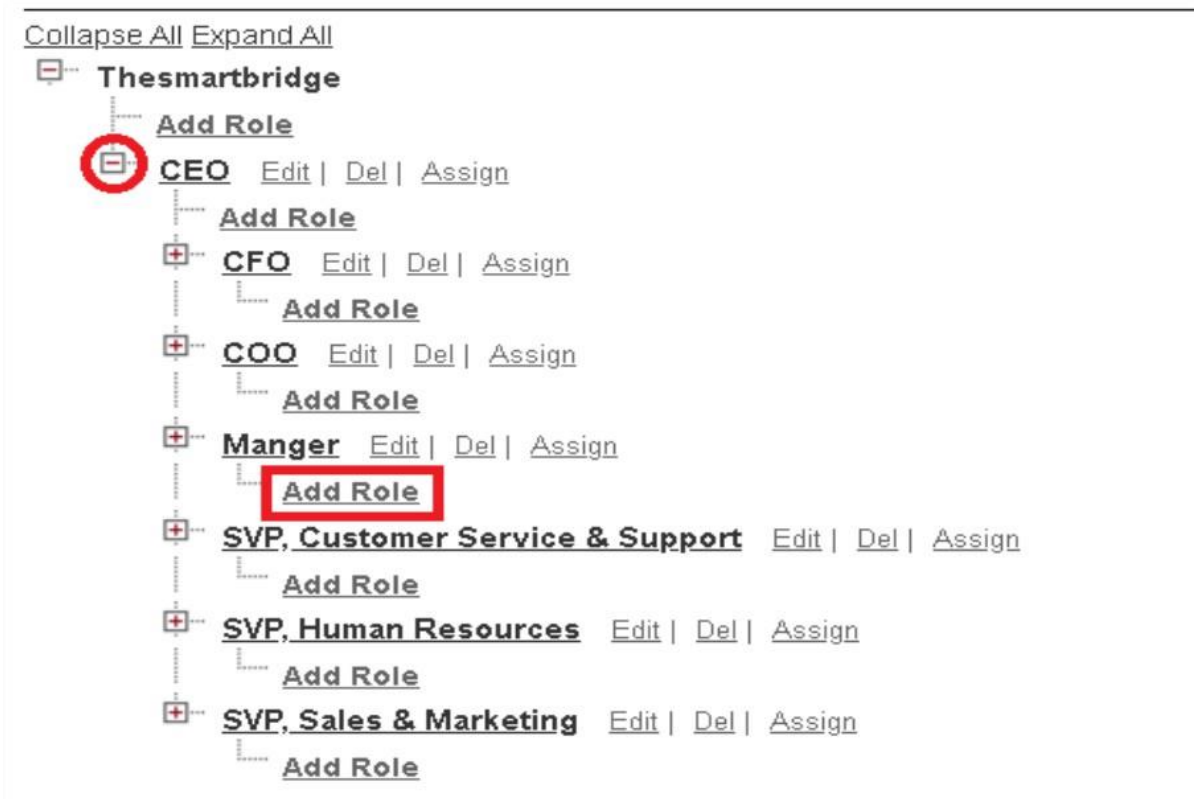
1. Go to quick find >> Search for Roles >> click on set up roles.
2. Click on Expand All and click on add role under whom this role works.
3. Give Label as “Manager” and Role name gets auto populated. Then click on Save.

## 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.





## TASK 10:USERS

### Create User

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

ii. Fill in the fields

1. First Name : Nicklaus
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 license : Salesforce
9. Profiles : Manager

iii. Save.

**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>	BODANAPALLI_HARSHITHA	HBODA	harshitha@gnil.com		✓	System Administrator
<a href="#">Edit</a>	Chatter_Expert	chatter	chatter.000dm0000cd0tuaz.cojsxogboygi@chatter.salesforce.com		✓	Chatter Free User
<a href="#">Edit</a>	Mikaelson_Niklaus	nmika	harshitharedh2727@gmail.com	Manager	✓	Manager
<a href="#">Edit</a>	reddy_mansi	rmredd	rmreddh10@gmail.com	sales person	✓	Standard Platform User
<a href="#">Edit</a>	reddy_sowmya	sredd	som123@gmail.com	sales person	✓	Standard Platform User
<a href="#">Edit</a>	sunny_varma	vmredd	varma10@gmail.com	sales person	✓	Standard Platform User
<a href="#">Edit</a>	User_Integration	intep	integration@000dm0000cd0tuaz.com		✓	Analytics Cloud Integration User
<a href="#">Edit</a>	User_Security	sec	insightsecurity@000dm0000cd0tuaz.com		✓	Analytics Cloud Security User

## TASK 11:PUBLIC GROUPS

### 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 auto populated.
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

**Public Groups**

A public group is a set of users. It can contain individual users, other groups, the users in a particular role or territory, or the users in a role or territory plus all of the users below that role or territory in the hierarchy.

View: [All](#) | [Edit](#) | [Create New View](#)

Action	Label	Group Name	Created By	Created Date
<a href="#">Edit</a>   <a href="#">Del</a>	sales_team	sales_team	BODANAPALLI_HARSHITHA	28/09/2024, 11:21 pm

## TASK 12:SHARE SETTING

### 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.

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

**Sharing Settings**

This page displays your organization's sharing settings. These settings specify the level of access your users have to each others' data. Go to [Background Jobs](#) to monitor the progress of a change to an organization-wide default or a parallel sharing recalculation.

Manage sharing settings for: All Objects

[Disable External Sharing Model](#)

**Default Sharing Settings** [Edit](#) [Organization-Wide Defaults Help](#)

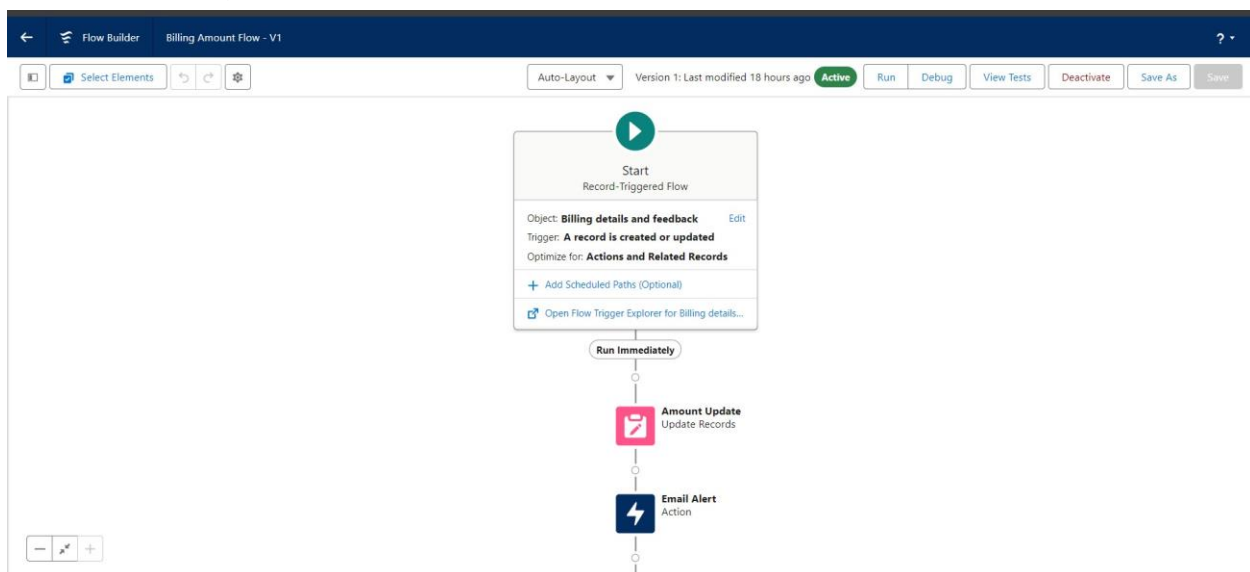
Object	Default Internal Access	Default External Access	Grant Access Using Hierarchies
Lead	Public Read/Write/Transfer	Private	<input checked="" type="checkbox"/>
Account and Contract	Public Read/Write	Private	<input checked="" type="checkbox"/>
Contact	Controlled by Parent	Controlled by Parent	<input checked="" type="checkbox"/>
Order	Controlled by Parent	Controlled by Parent	<input checked="" type="checkbox"/>
Asset	Controlled by Parent	Controlled by Parent	<input checked="" type="checkbox"/>
Opportunity	Public Read/Write	Private	<input checked="" type="checkbox"/>
Case	Public Read/Write/Transfer	Private	<input checked="" type="checkbox"/>
Campaign	Public Full Access	Private	<input checked="" type="checkbox"/>
Campaign Member	Controlled by Campaign	Controlled by Campaign	<input checked="" type="checkbox"/>

## TASK 13: FLOWS

### Create A Flow

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 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 Set a filter condition : All Conditions are met(AND)
9. Field : Payment\_Status\_\_c
10. Operator : Equals
11. Value : Completed
12. And Set Field Values for the Billing details and feedback Record
13. Field : Payment\_Paid\_\_c
14. Value : {!\$Record.Service\_records\_\_r.Appointment\_\_r.Service\_Amount\_\_c}
15. Click On Done.
17. Before creating another Element. Create a New Resource form Toolbox form top left.

18. Click on the New Resource, And select Variable.
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 auto populated.
35. And click save, and click on activate




## TASK 14: APEX TRIGGER

### 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”.

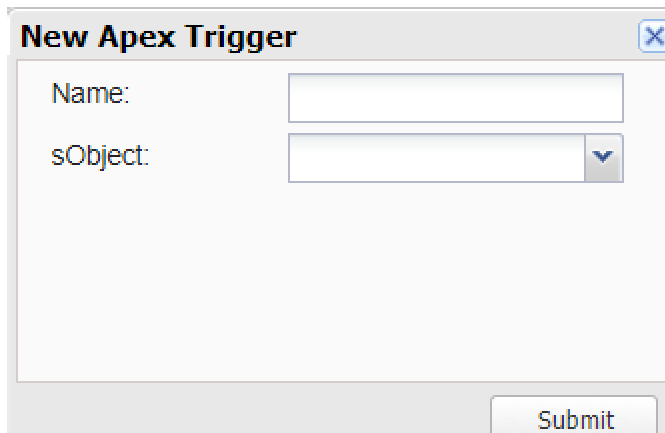


```
1 public class AmountDistributionHandler {
2
3     public static void amountDist(list<Appointment__c> listApp){
4         list<Service_records__c> serlist = new list<Service_records__c>();
5
6         for(Appointment__c app : listApp){
7             if(app.Maintenance_service__c == true && app.Repairs__c == 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            else if(app.Repairs__c == true){
23                app.Service_Amount__c = 3000;
24            }
25            else if(app.Replacement_Parts__c == true){
26                app.Service_Amount__c = 5000;
27            }
28        }
29    }
30 }
31 }
```

### 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



The image shows a 'New Apex Trigger' dialog box. It has a title bar with a close button. Inside, there are two labels: 'Name:' followed by a text input field, and 'sObject:' followed by a dropdown menu. At the bottom right, there is a 'Submit' button.

Syntax For creating trigger :

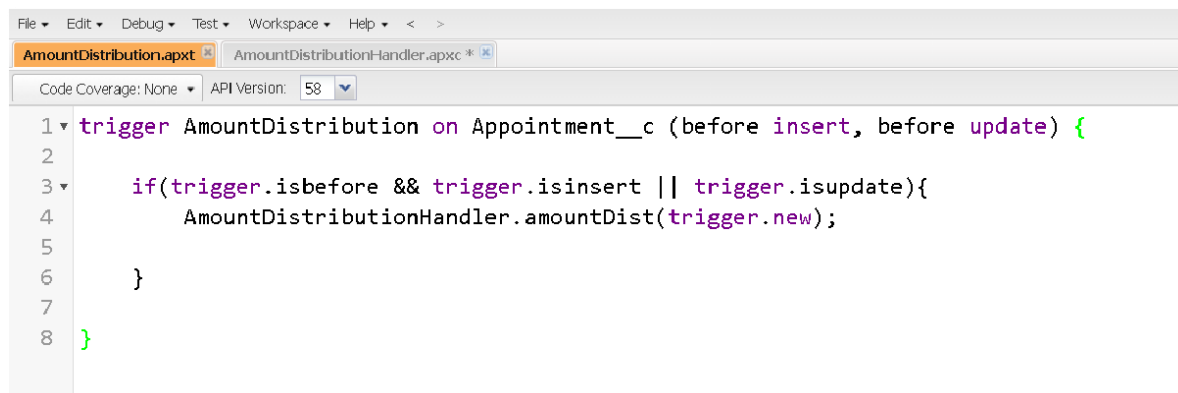
The syntax for creating trigger is :

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 image is a screenshot of an IDE window. The title bar shows 'File', 'Edit', 'Debug', 'Test', 'Workspace', and 'Help'. Below the title bar, there are two tabs: 'AmountDistribution.apxt' (active) and 'AmountDistributionHandler.apxc \*'. Below the tabs, there is a status bar showing 'Code Coverage: None' and 'API Version: 58'. The main area displays the following Apex code:

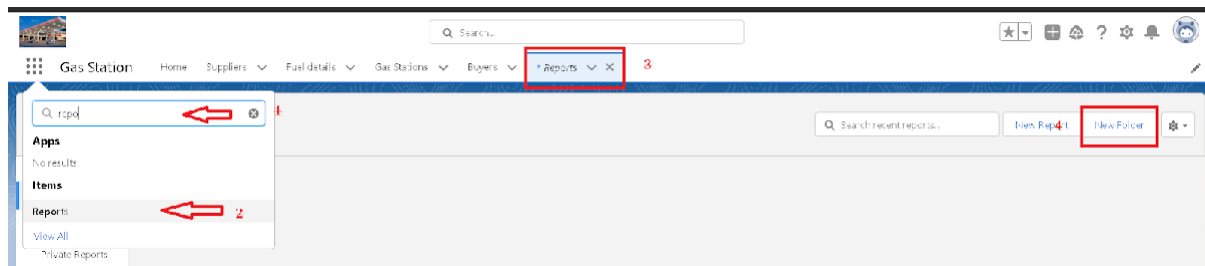
```
1 trigger AmountDistribution on Appointment__c (before insert, before update) {
2
3     if(trigger.isbefore && trigger.isinsert || trigger.isupdate){
4         AmountDistributionHandler.amountDist(trigger.new);
5     }
6 }
7
8 }
```

Code:

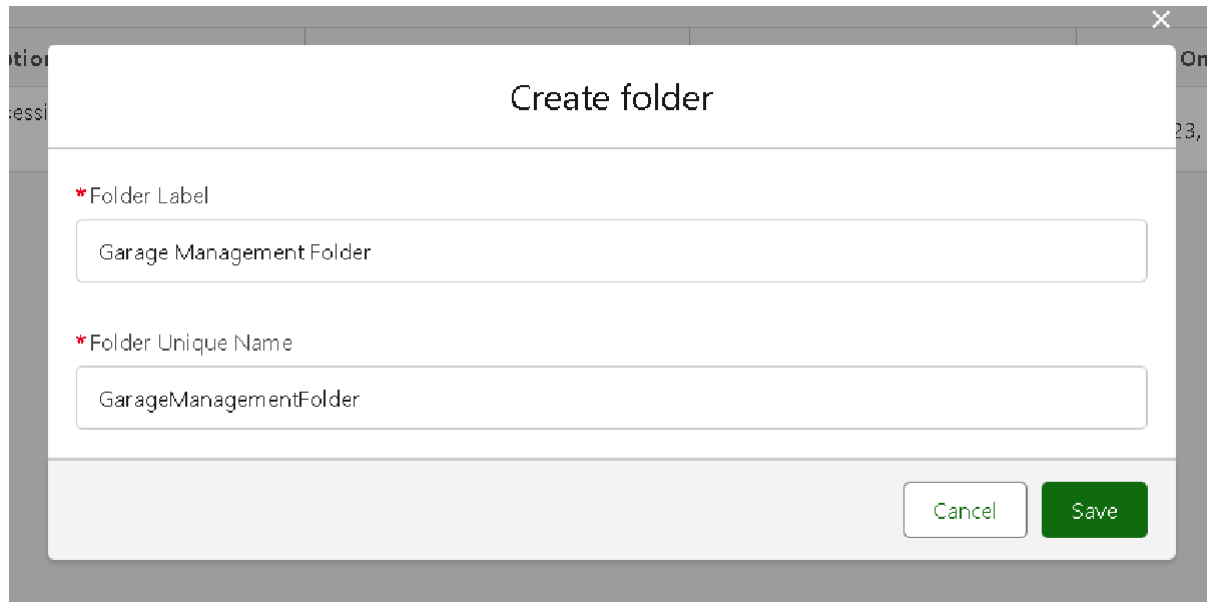
```
trigger AmountDistribution on Appointment__c (before insert, before update) { if(trigger.isbefore &&
trigger.isinsert || trigger.isupdate){
    AmountDistributionHandler.amountDist(trigger.new);
}
}
```

## 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.



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On

### Create folder

\*Folder Label

Garage Management Folder

\*Folder Unique Name

GarageManagementFolder

Cancel 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 “manager”, give “view” as access for that role.
4. Then click share, and click on Done.

## 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.
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 “ Depolyed ”, click on Next.
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”.

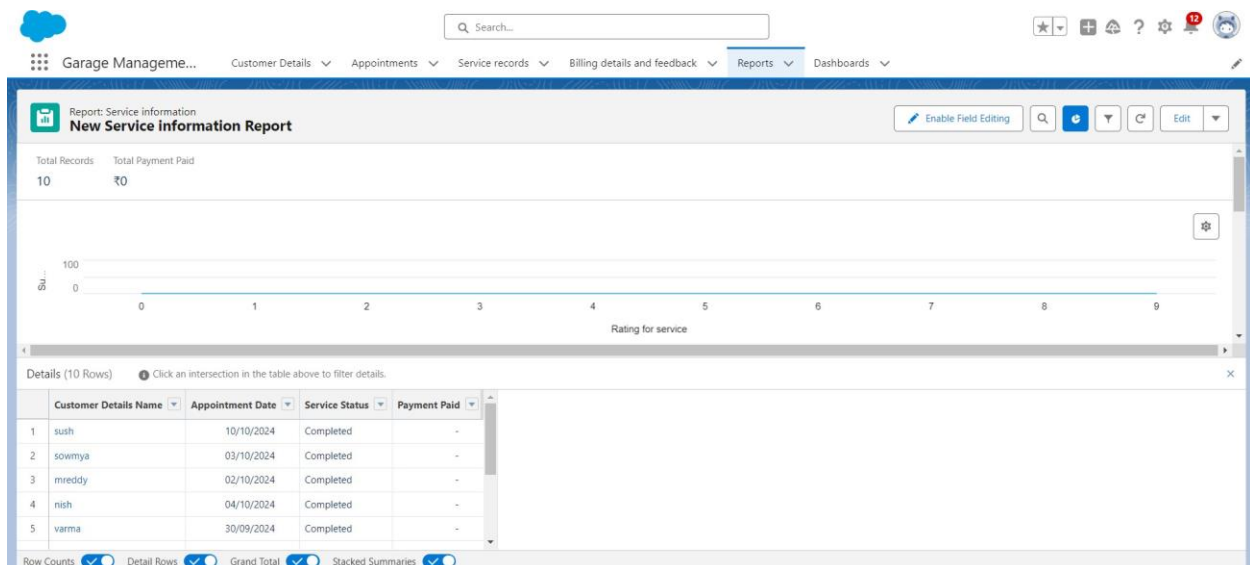


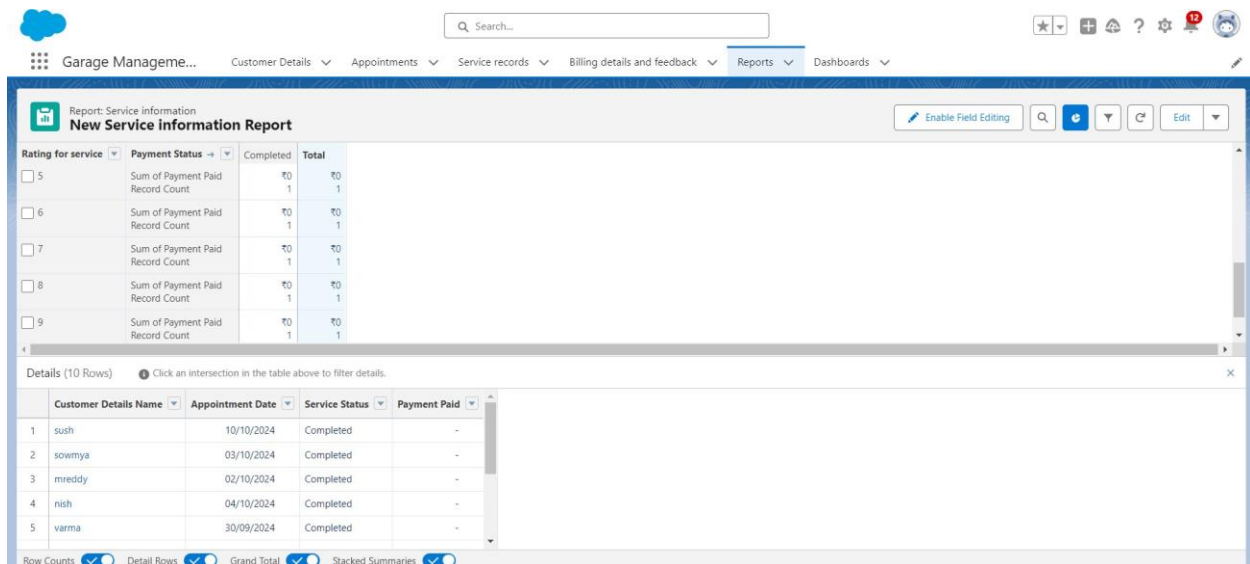
14. And click on save.

## 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.
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.
  1. Rating for Service
7. Select the fields that mentioned below in GROUP ROWS section.
  1. 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.





The screenshot shows a software interface with a top navigation bar containing a search bar and various icons. Below the navigation bar, there's a section titled 'Report: Service Information' and 'New Service information Report'. This section contains a table with columns: 'Rating for service', 'Payment Status', 'Completed', and 'Total'. Below this table is a 'Details' section with a table containing columns: 'Customer Details Name', 'Appointment Date', 'Service Status', and 'Payment Paid'. At the bottom, there are toggle switches for 'Row Counts', 'Detail Rows', 'Grand Total', and 'Stacked Summaries'.

Rating for service	Payment Status	Completed	Total
5	Sum of Payment Paid Record Count	1	1
6	Sum of Payment Paid Record Count	1	1
7	Sum of Payment Paid Record Count	1	1
8	Sum of Payment Paid Record Count	1	1
9	Sum of Payment Paid Record Count	1	1

	Customer Details Name	Appointment Date	Service Status	Payment Paid
1	sush	10/10/2024	Completed	-
2	sowmya	03/10/2024	Completed	-
3	meeddy	02/10/2024	Completed	-
4	nish	04/10/2024	Completed	-
5	varma	30/09/2024	Completed	-

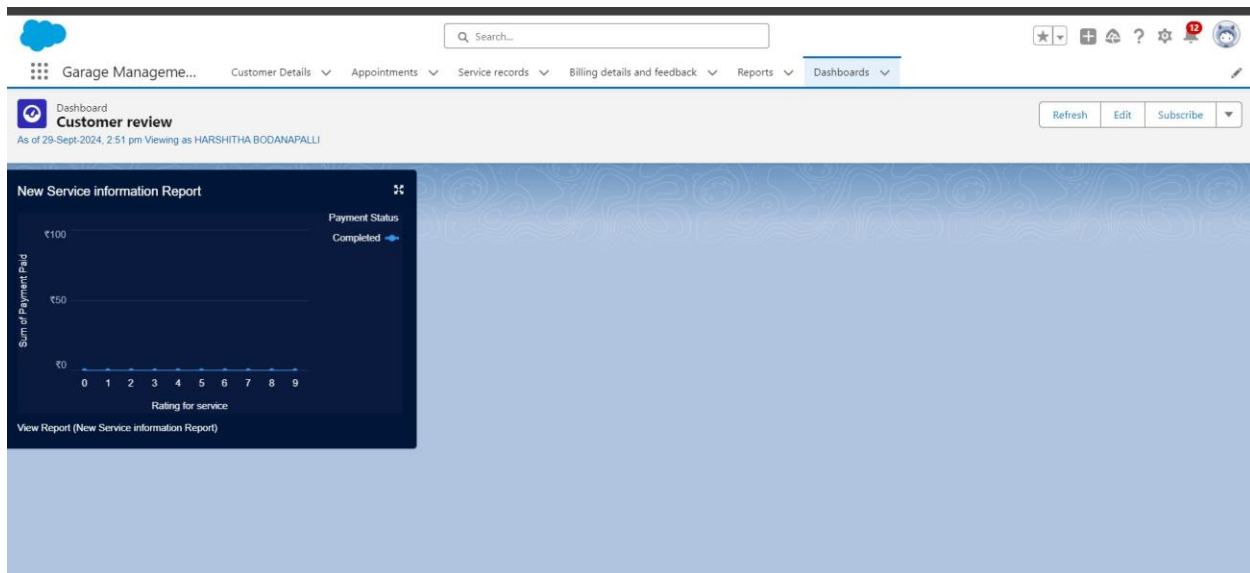
Row Counts ☒ Detail Rows ☒ Grand Total ☒ Stacked Summaries ☒

## 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.

## 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.



### Edit Subscription

Schedule dashboard refreshes and subscribe to receive results.

#### Settings

Frequency

Daily Weekly Monthly

Days

Sun Mon Tue Wed Thu Fri Sat

Time

3:00 pm

#### Recipients

☒ Receive new results by email when dashboard is refreshed. ⓘ

Send email to

Me

Edit Recipients

Cancel Save

The 'Edit Subscription' form allows users to configure dashboard refreshes. Under the 'Settings' section, the 'Frequency' is set to 'Weekly' (indicated by a green arrow), the 'Days' are set to 'Mon' (indicated by a green arrow), and the 'Time' is set to '3:00 pm'. Under the 'Recipients' section, the option to 'Receive new results by email when dashboard is refreshed' is checked. The 'Send email to' field is set to 'Me', with an 'Edit Recipients' button. At the bottom right, there are 'Cancel' and 'Save' buttons, with a green arrow pointing to the 'Save' button.

THANK YOU