

# **GARAGE MANAGEMENT SYSTEM**

**By**  
**E.Sathwik Teja**  
**esathwikteja@gmail.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

## INDEX PAGE

TASKS	PAGE
INTRODUCTION	4
1.Creating Developer Account	4
2.Creating the Objects	7
3.Create the tabs	10
4.Create the lighting app	12
5.Create the Fields	13
6.Validation Rules	20
7.Duplicate Rules	22
8.Profiles	24
9.Role & Role Hierarchy	25
10.Users	26
11.Public Groups	27
12.Share Settings	28
13.Flows	28
14.Apex Trigger	30
15.Reports	32
16.DashBoard	35

## 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.

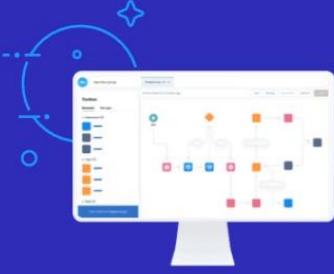
## **TASK 1:**

### **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.



**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\*

Last Name\*

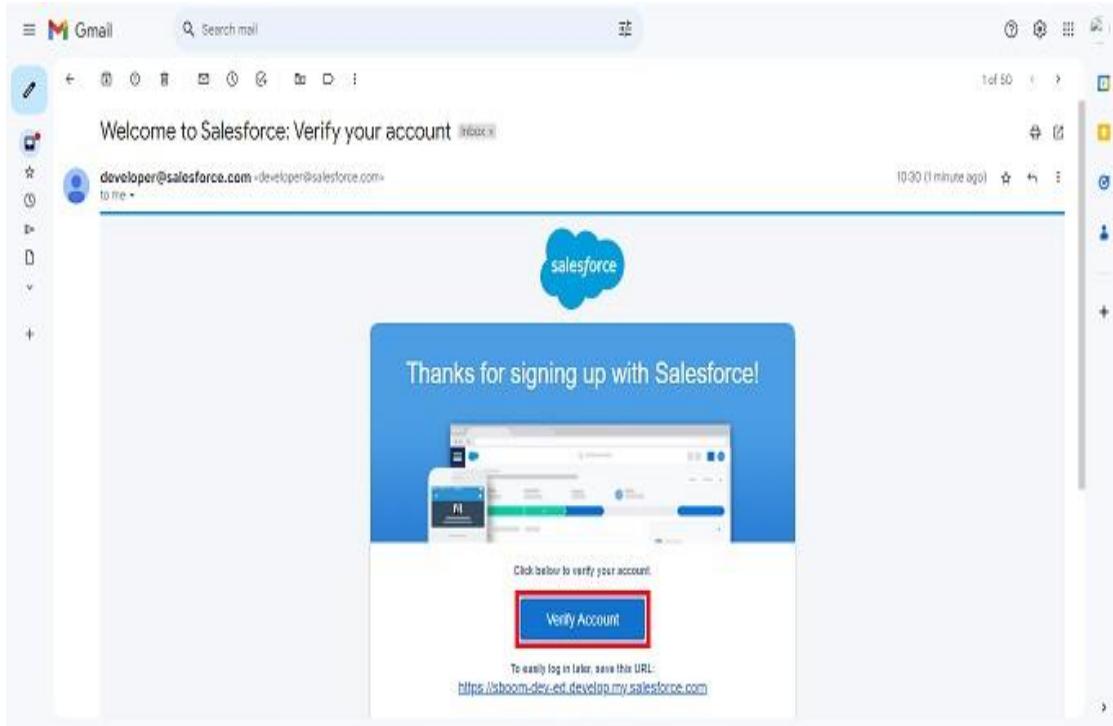
Email\*

Role\*

Company\*

## 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

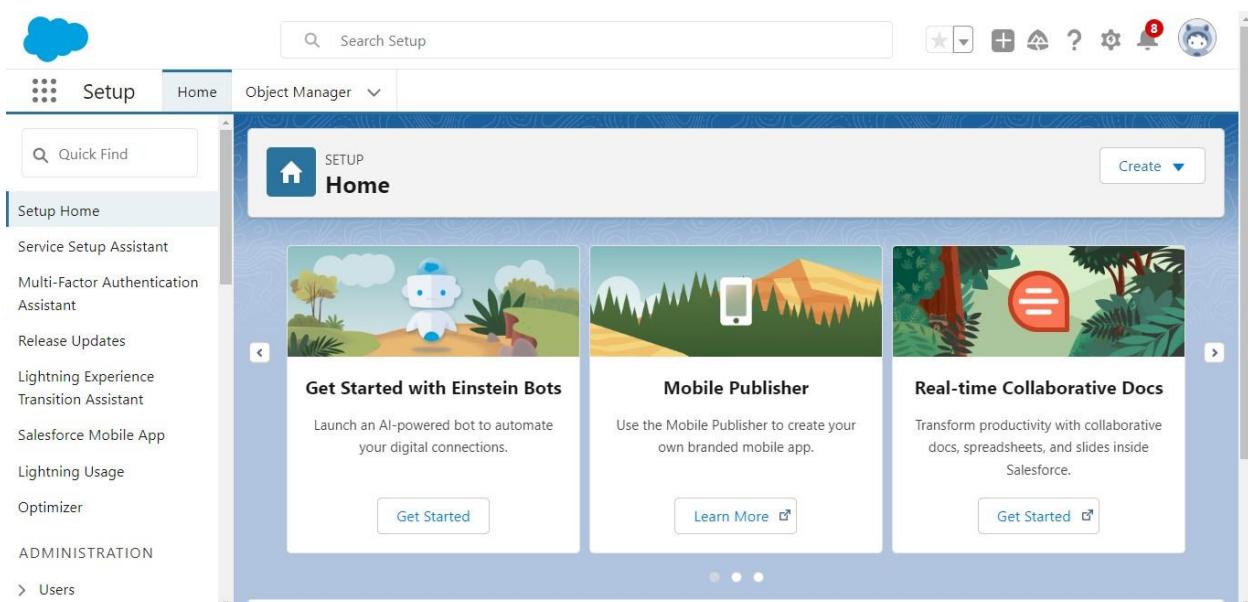
\* Confirm New Password  
..... Match

Security Question  
▼ In what city were you born?

\* Answer  
asdfghjkl

**Change Password**

4. Then you will redirect to your salesforce setup page.



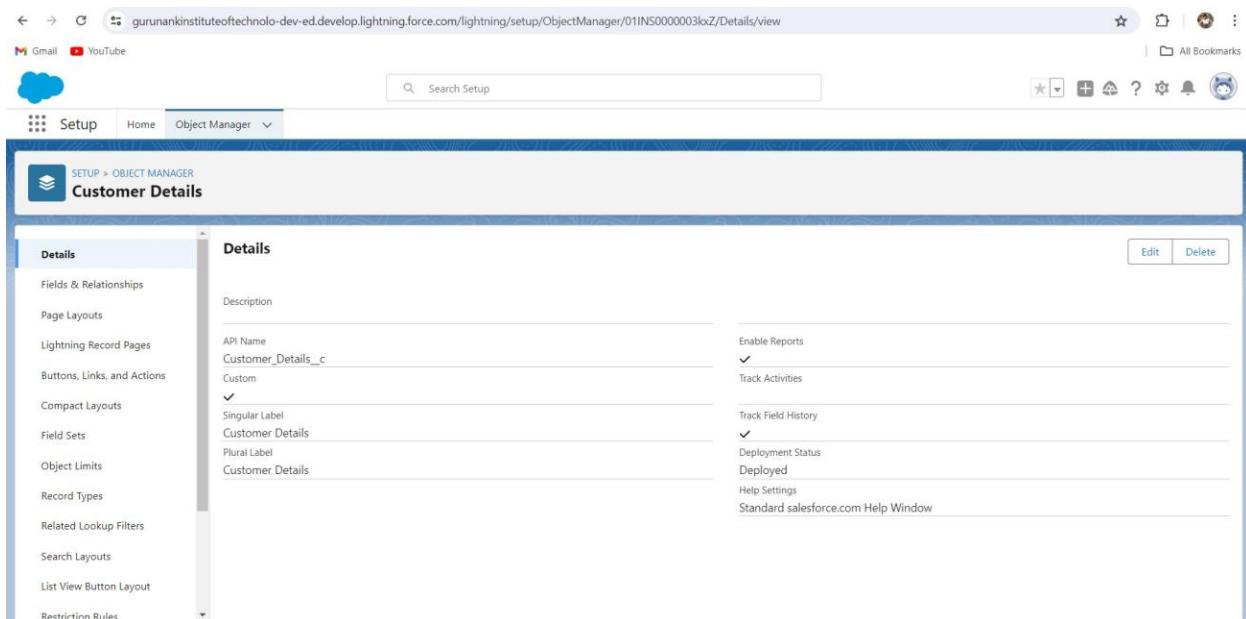
The screenshot shows the Salesforce Setup Home page. The top navigation bar includes a cloud icon, a search bar labeled "Search Setup", and various navigation links like "Home", "Object Manager", "Create", and user profile icons. On the left, a sidebar menu lists options such as "Setup Home", "Service Setup Assistant", "Multi-Factor Authentication Assistant", "Release Updates", "Lightning Experience Transition Assistant", "Salesforce Mobile App", "Lightning Usage", "Optimizer", and "ADMINISTRATION". The main content area features a "SETUP Home" header with a "Create" button. Below it are three cards: "Get Started with Einstein Bots" (Launch an AI-powered bot to automate your digital connections), "Mobile Publisher" (Use the Mobile Publisher to create your own branded mobile app), and "Real-time Collaborative Docs" (Transform productivity with collaborative docs, spreadsheets, and slides inside Salesforce). Each card has a "Get Started" button.

## **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 on Custom Object.
1. Enter the label name >> Customer Details
2. Plural label name >> Customer Details
3. Enter Record Name Label and Format
  - Record Name >> Customer Name
  - Data Type >> Text
2. Click on Allow reports and Track Field History,
3. Allow search >> Save



### **ii) Create Appointment Object**

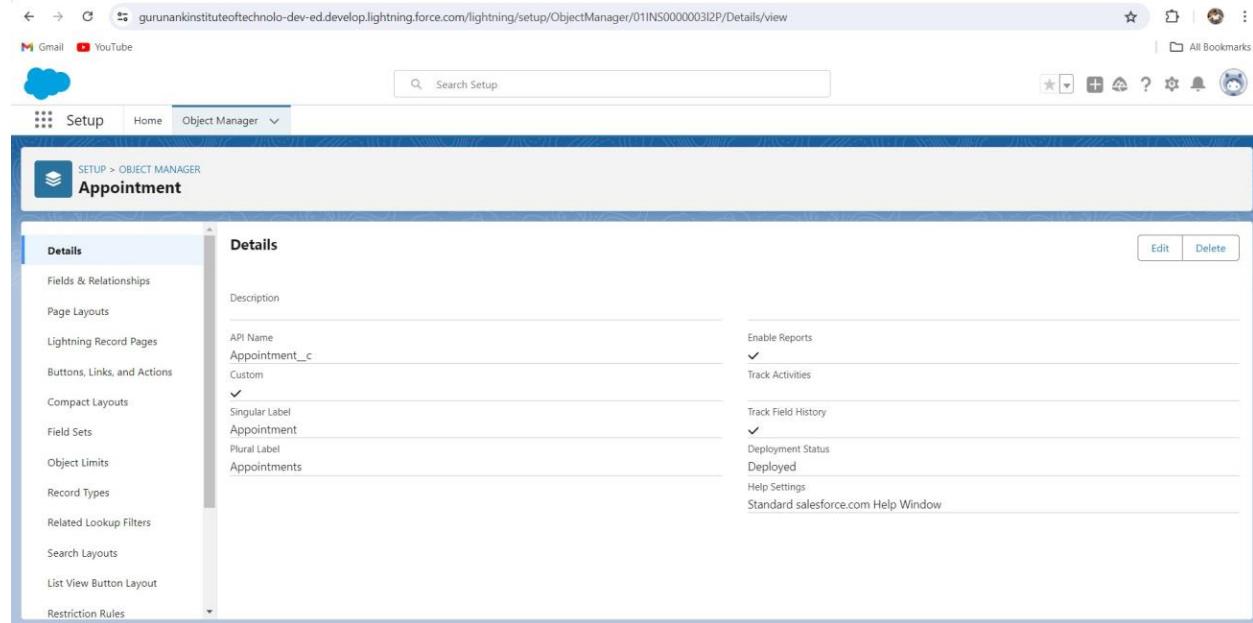
To create an object:

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.



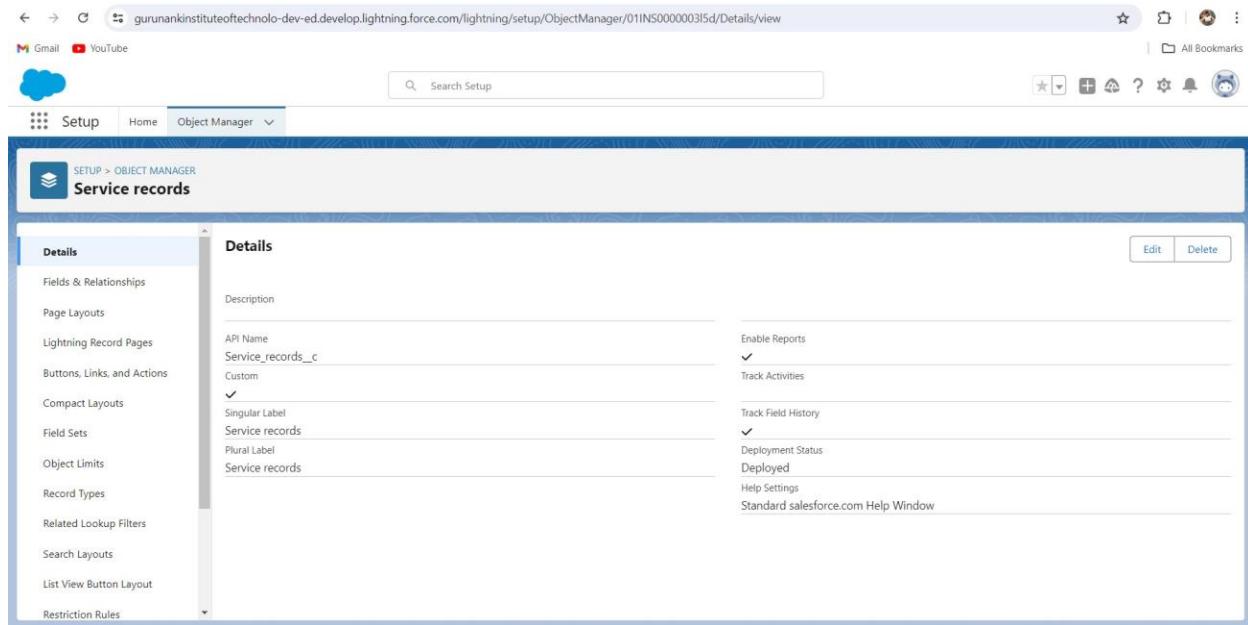
## iii) Create Service Records Object

### 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 T

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.

The screenshot shows the Salesforce Object Manager setup page for the 'Billing details and feedback' object. The left sidebar lists various configuration options: 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, and Restriction Rules. The main 'Details' tab is selected. The 'Description' field is empty. The 'API Name' field contains 'Billing\_details\_and\_feedback\_\_c'. Under the 'Custom' section, 'Singular Label' is set to 'Billing details and feedback' and 'Plural Label' is set to 'Billing details and feedback'. On the right, under 'Enable Reports', 'Track Activities', and 'Track Field History', there are checkboxes followed by checkmarks. Under 'Deployment Status', it says 'Deployed'. Under 'Help Settings', it says 'Standard salesforce.com Help Window'. At the bottom right are 'Edit' and 'Delete' buttons.

## **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.

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

- Header:** The title bar says "Tabs | Salesforce".
- Navigation:** The "Setup" button is at the top left. A red box highlights the "Customize" tab, which is currently selected. Another red box highlights the "Tabs" icon in the navigation menu.
- Search Bar:** A search bar at the top right contains the placeholder "Search Setup".
- Page Content:** The main area is titled "Custom Tabs". It includes a sub-header "Custom Object Tabs" and a table listing various tabs with their descriptions. A red box highlights the "New" button in the top right corner of the table header.

Action	Label	Tab Style	Description
Edit / Del	Activities	Desk	created to setup with student activity(junction object)
Edit / Del	Addresses	Airplane	
Edit / Del	Categories	Chess piece	
Edit / Del	Guidelines	Journal	This tab is related to Hotel Reservation App.
Edit / Del	Goals	Airplane	
Edit / Del	Ident	Phone	This tab is related to College Management System.
Edit / Del	Color_Codes	Camera	
Edit / Del	Codes	Desk	
Edit / Del	Comments	Computer	
Edit / Del	Endots	Desk	
Edit / Del	Reservations	Highway sign	This tab is related to Hotel Reservation App.
Edit / Del	Rooms	Highway sign	This tab is related to Hotel Reservation App.
Edit / Del	Scenarios	Airplane	This tab is related to College Management System.
Custom Page Tabs			

The screenshot shows the "New Custom Object Tab" configuration page with the following details:

- Section Header:** "Step 1. Enter the Details" and "Step 1 of 3".
- Instructions:** "Choose the custom object for this new custom tab. Fill in other details."
- Object Selection:** A dropdown menu labeled "Object" with "Customer Details" selected. A red box highlights the dropdown menu.
- Tab Style:** A dropdown menu labeled "Tab Style" with a blue selection bar. A red box highlights the dropdown menu.
- Splash Page Custom Link:** A dropdown menu labeled "Splash Page Custom Link" with "--None--" selected.
- Description:** A text input field labeled "Description" with a large empty text area.
- Buttons:** "Next" and "Cancel" buttons at the bottom right.



### 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 LIGHTING 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.

Action	Full Name	Alias	Username	Role	Active	Profile
<input type="checkbox"/>   Edit	Chatter Expert	Chatter	chatty@00dns000000dzy@zak.cformwathgza@chatter.salesforce.com		<input checked="" type="checkbox"/>	Chatter Free User
<input type="checkbox"/>   Edit	Mikaelson Niklaus	nmika	mikaelson@mikaelson.mikaelson	Manager	<input checked="" type="checkbox"/>	Manager
<input type="checkbox"/>   Edit	Meesh_B	bmitc	21831a6615@pnindia.org	sales_person	<input checked="" type="checkbox"/>	sales_person
<input type="checkbox"/>   Edit	mohan_k	kmoha	21831a6635@pnindia.org	sales_person	<input checked="" type="checkbox"/>	sales_person
<input type="checkbox"/>   Edit	Nikhil Kumar Alampally	ANikh	nikhilalampally24@gmail.com		<input checked="" type="checkbox"/>	System Administrator
<input type="checkbox"/>   Edit	salTeja_A	asait	21831a6607@pnindia.org	sales_person	<input checked="" type="checkbox"/>	sales_person
<input type="checkbox"/>   Edit	User_Integration	integ	integration@00dns000000dzy@zak.com		<input checked="" type="checkbox"/>	Analytics Cloud Integration User
<input type="checkbox"/>   Edit	User_Security	sec	insightssecurity@00dns000000dzy@zak.com		<input checked="" type="checkbox"/>	Analytics Cloud Security User

## 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.

Customer Details

**Fields & Relationships**  
6 items, Sorted by Field Label

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

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

Appointment

**Fields & Relationships**  
13 items, Sorted by Field Label

FIELD LABEL	FIELD NAME	DATA TYPE	CONTROLLING FIELD	INDEXED
Last Modified By	LastModifiedById	Lookup(User)		
Maintenance service	Maintenance_service__c	Checkbox		
Owner	OwnerId	Lookup(User,Group)		✓
Payment Paid	Payment_Paid__c	Currency(18, 0)		
Quality Check Status	Quality_Check_Status__c	Checkbox		
Repairs	Repairs__c	Checkbox		
Replacement Parts	Replacement_Parts__c	Checkbox		
Service Amount	Service_Amount__c	Currency(18, 0)		
Vehicle number plate	Vehicle_number_plate__c	Text(10) (Unique Case Insensitive)		✓

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

SETUP > OBJECT MANAGER  
Service records

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

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)		✓
service date	service_date_c	Formula (Date)		
Service records Name	Name	Auto Number		✓
Service Status	Service_Status_c	Picklist		

SETUP > OBJECT MANAGER  
Billing details and feedback

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

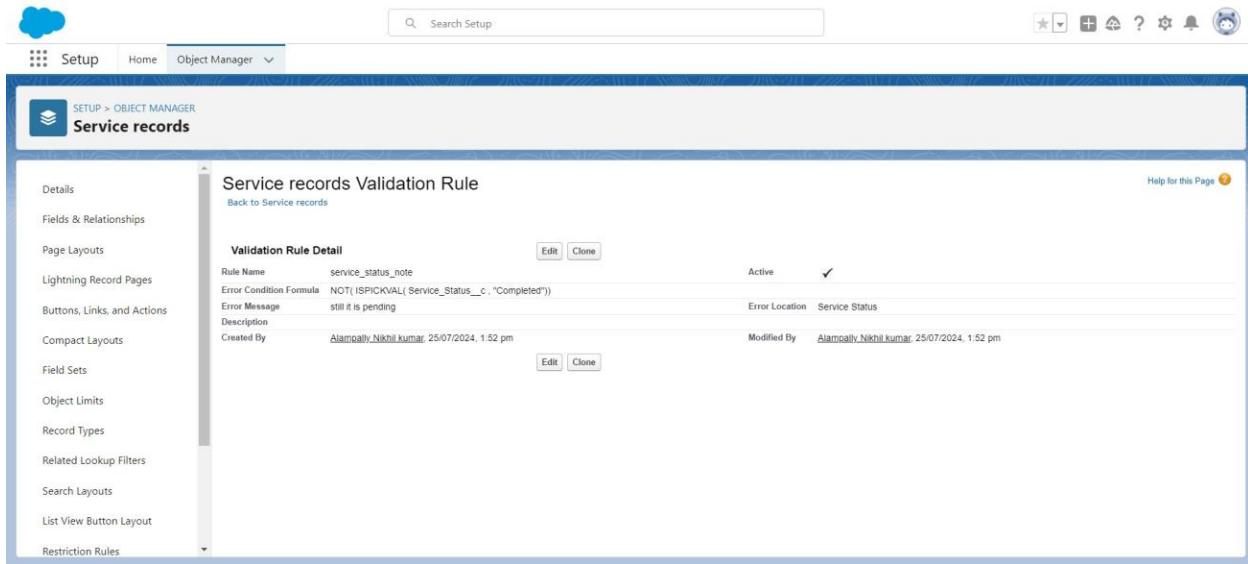
FIELD LABEL	FIELD NAME	DATA TYPE	CONTROLLING FIELD	INDEXED
Billing details and feedback Name	Name	Auto Number		✓
Created By	CreatedById	Lookup(User)		
Last Modified By	LastModifiedById	Lookup(User)		
Owner	OwnerId	Lookup(User,Group)		✓
Payment Paid	Payment_Paid_c	Currency(18, 0)		
Payment Status	Payment_Status_c	Picklist		
Rating for service	Rating_for_service_c	Text(2)		
Service records	Service_records_c	Lookup(Service records)		✓

## 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.



## 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 under the Object Manager section for Service records. On the left, a sidebar lists various object management options like Details, Fields & Relationships, Page Layouts, and Lightning Record Pages. The main content area is titled 'Service records Validation Rule' and displays the 'Validation Rule Detail' for a rule named 'service\_status\_note'. The rule's formula is 'NOT(ISPICKVAL(Service\_Status\_\_c, "Completed"))', and its message is 'still it is pending'. It is set to Active and assigned to the 'Service Status' field. The 'Created By' and 'Modified By' fields both show 'Alamally Nikhil kumar' with the timestamp '25/07/2024, 1:52 pm'. There are 'Edit' and 'Clone' buttons at the top right of the rule detail.

## To Create A Validation Rule To An Billing Details And Feedback Object

1. Go to the setup page >> click on object manager >> From drop down click edit for Billing details and feedback object.
2. Click on the validation rule >> click New.
3. Enter the Rule name as “ rating\_should\_be\_less\_than\_5”.
4. Insert the Error Condition Formula as :-  
NOT( REGEX( Rating\_for\_service\_\_c , "[1-5]{1}" ))
5. Enter the Error Message as “rating should be from 1 to 5”, select the Error location as Field and select the field as “Rating for Service”, and click Save.

SETUP > OBJECT MANAGER  
Service records

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

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)		✓
service date	service_date_c	Formula (Date)		
Service records Name	Name	Auto Number		✓
Service Status	Service_Status_c	Picklist		

## TASK 7:DUPLICATE RULE

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

1. Go to quick find box in setup and search for matching Rule.
2. Click on matching rule >> click on New Rule.
3. Select the object as Customer details and click Next.
4. Give the Rule name : Matching customer details
5. Unique name : is auto populated
6. Define the matching criteria as
7. Field Matching Method
 

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

Matching Rule  
matching Customer details

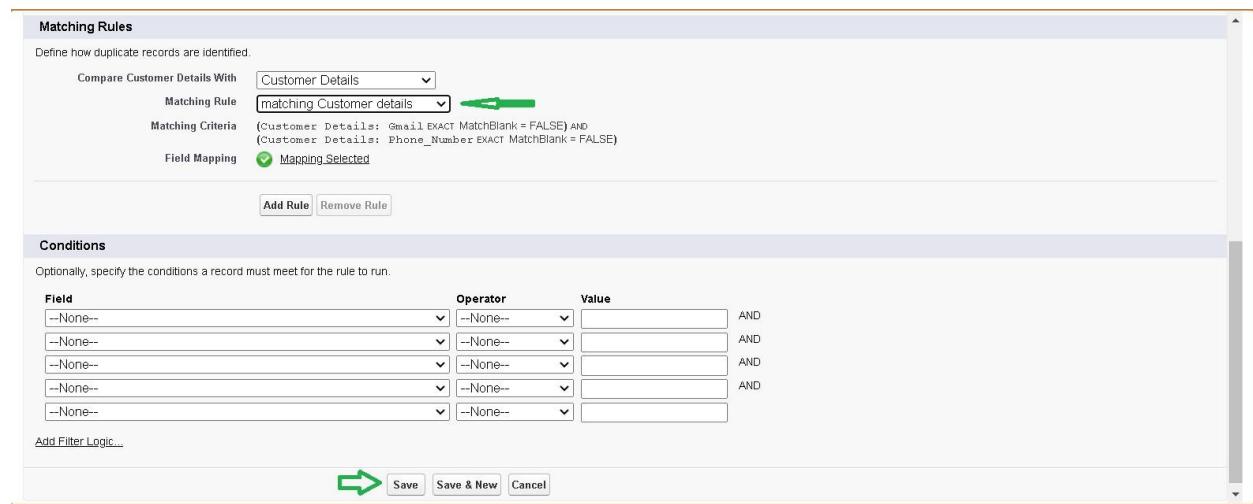
Help for this Page ?

**Matching Rule Detail**

	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	Inactive	
Created By	project_2, 25/09/2023, 10:15 am	Modified By project_2, 10/10/2023, 3:32 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.



## TASK 8: CREATE PROFILES

### 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.

## Sales Person Profile

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

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

- Profile Detail:**
  - Name: sales person
  - User License: Salesforce Platform
  - Description: (empty)
  - Created By: Alampally\_Nikhil kumar, 25/07/2024, 2:10 pm
  - Modified By: Alampally\_Nikhil kumar, 25/07/2024, 2:11 pm
  - Custom Profile: checked
- Page Layouts:**

Standard Object Layouts	Global	Lead
Profile: sales person - Salesforce - Developer Edition	Global Layout [View Assignment]	Lead Layout [View Assignment]
Home Page Layout	Home Page Default [View Assignment]	Location Layout [View Assignment]
Account	Account Layout [View Assignment]	Location Group Layout [View Assignment]
Alternative Payment Method	Alternative Payment Method Layout [View Assignment]	Object Milestone Layout [View Assignment]
Appointment Invitation	Appointment Invitation Layout [View Assignment]	Operating Hours Layout [View Assignment]
Asset	Asset Layout [View Assignment]	Order Layout [View Assignment]

## TASK 9:Role & Role Hierarchy

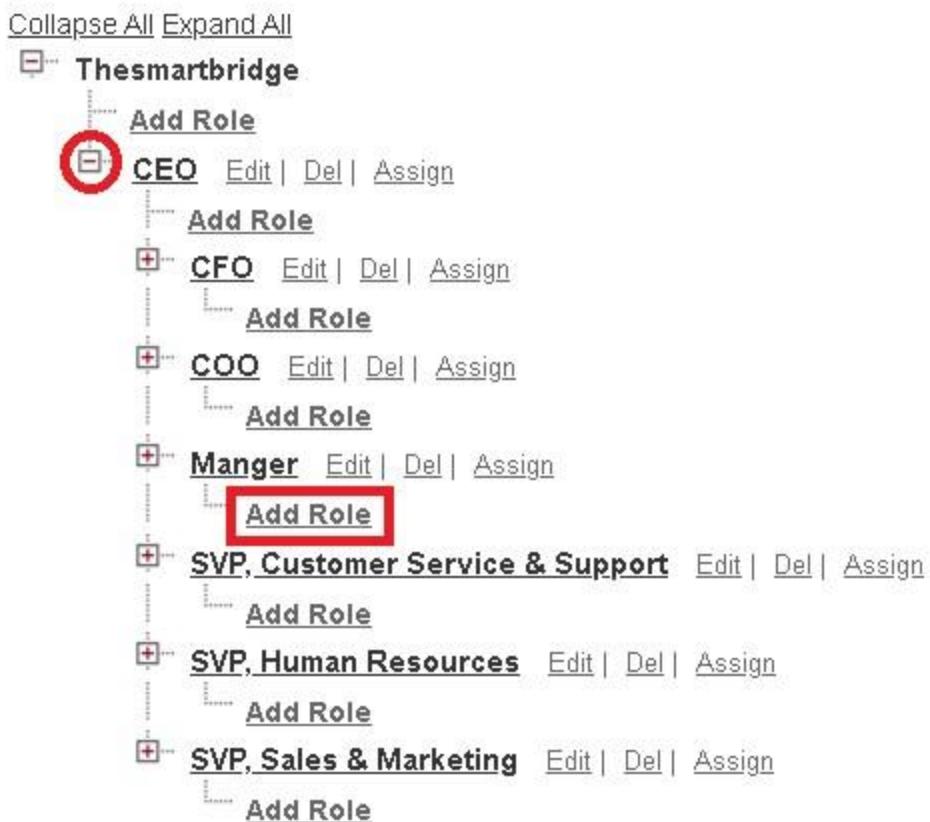
Creating Manager Role:

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.

Action	Full Name	Alias	Username	Role	Active	Profile
<input type="checkbox"/>	Chatter_Expert	Chatter	chatty.000ns00000000000zv12ak.r3fomwaih0za@chatter.salesforce.com		<input checked="" type="checkbox"/>	Chatter Free User
<input type="checkbox"/>	Mikaelson_Niklaus	nmika	mikaelson@mikaelson.mikaelson	Manager	<input checked="" type="checkbox"/>	Manager
<input type="checkbox"/>	Mitesh_B	bmitc	21631a6518@gmindi.org	sales person	<input checked="" type="checkbox"/>	sales_person
<input type="checkbox"/>	mohan_X	kmoha	21631a6535@gmindi.org	sales person	<input checked="" type="checkbox"/>	sales_person
<input type="checkbox"/>	Nikhil kumar_Alampally	ANikhil	nikhilamalay24@gmail.com	System Administrator	<input checked="" type="checkbox"/>	
<input type="checkbox"/>	saiTeja_A	asail	21631a6507@gmindi.org	sales person	<input checked="" type="checkbox"/>	sales_person
<input type="checkbox"/>	User_Integration	integ	integration@000ns00000000000zv12ak.com		<input checked="" type="checkbox"/>	Analytics Cloud Integration User
<input type="checkbox"/>	User_Security	sec	insightssecurity@000ns00000000000zv12ak.com		<input checked="" type="checkbox"/>	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.

## 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.
5. Give the Label name as “ Sharing setting”
6. Rule name is auto populated.
7. In step 3 : Select which records to be shared, members of “ Roles ” >> “ 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.

The screenshot shows the Salesforce Sharing Settings page. The left sidebar has a search bar and navigation links for Security and Sharing Settings. The main content area is titled "Sharing Settings" and displays a table of sharing defaults for different object types. The table columns are: Object, Default Internal Access, Default External Access, and Grant Access Using Hierarchies. Most objects have "Controlled by Parent" as their internal access, while external access varies by object type (e.g., Lead is Private, Contact is Controlled by Parent). The "Grant Access Using Hierarchies" column contains checked boxes for most rows.

Object	Default Internal Access	Default External Access	Grant Access Using Hierarchies
Lead	Public Read/Write/Transfer	Private	✓
Account and Contract	Public Read/Write	Private	✓
Contact	Controlled by Parent	Controlled by Parent	✓
Order	Controlled by Parent	Controlled by Parent	✓
Asset	Controlled by Parent	Controlled by Parent	✓
Opportunity	Public Read/Write	Private	✓
Case	Public Read/Write/Transfer	Private	✓
Campaign	Public Full Access	Private	✓
Opportunity Line Item	Controlled by Campaign	Controlled by Campaign	✓

## 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.

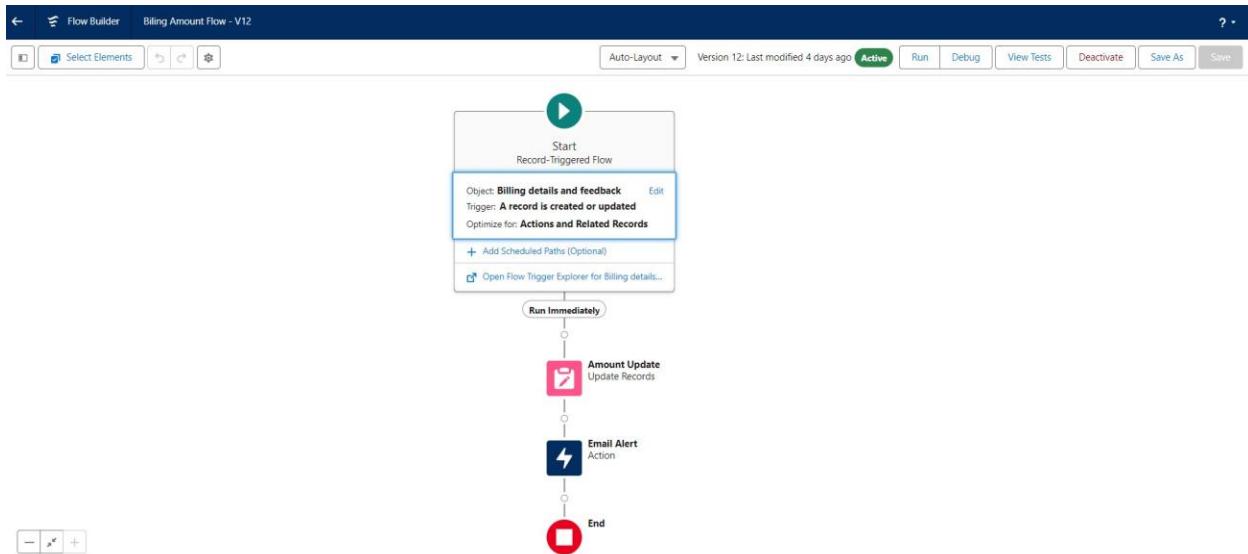
RecipientAddressList:

{!\$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        }
23    }
24
25 }
```

```
AmountDistribution.apxtx AmountDistributionHandler.apxc * 58
Code Coverage: None API Version: 58
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



Syntax For creating trigger :

The syntax for creating trigger is :

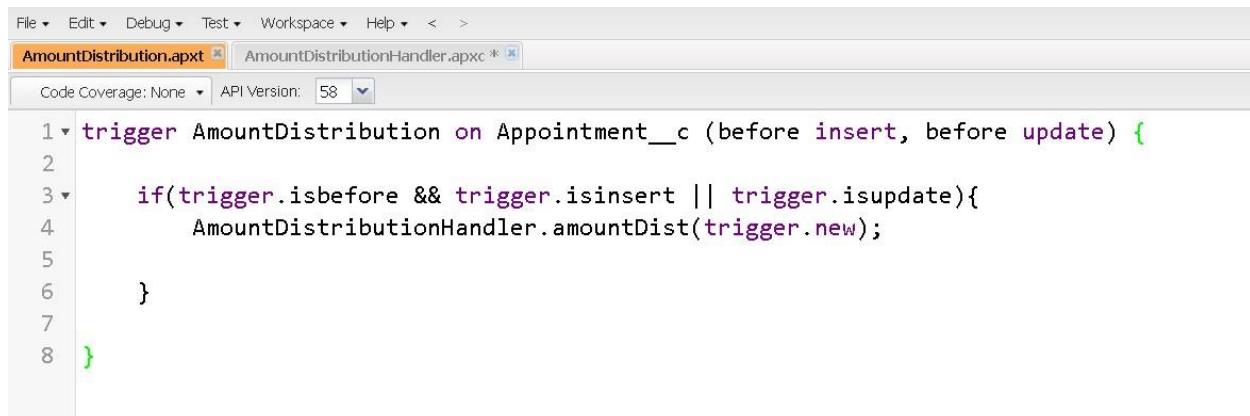
Trigger [trigger name] on [object name]( Before/After event)

{

}

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



A screenshot of a Salesforce IDE interface. The top navigation bar includes File, Edit, Debug, Test, Workspace, Help, and tabs for 'AmountDistribution.apxt' and 'AmountDistributionHandler.apxc'. Below the tabs, there are dropdowns for 'Code Coverage: None' and 'API Version: 58'. The main code editor area contains the following Apex trigger:

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

# TASK 15: REPORTS

## 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.

## 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.

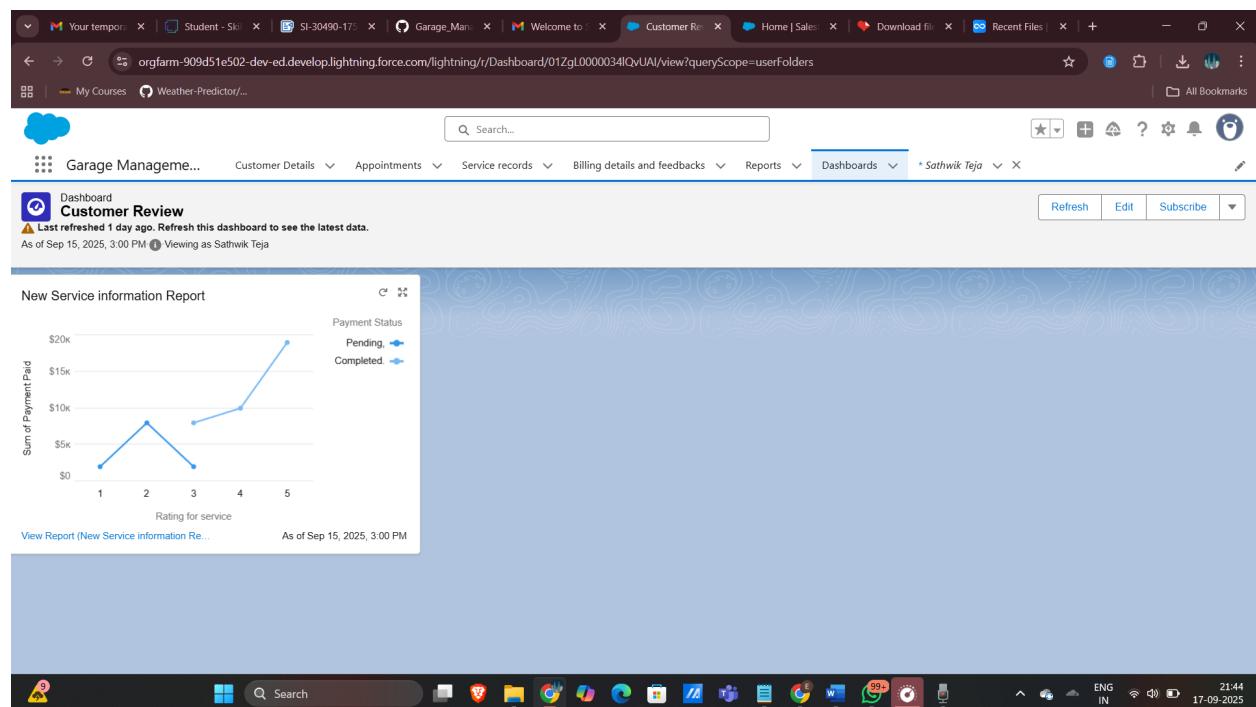
1. Payment Status

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 Microsoft Dynamics 365 Business Central interface. At the top, there's a navigation bar with links like 'Garage Management...', 'Customer Details', 'Appointments', 'Service records', 'Billing details and feedback', and 'Billing Amount Flow | Flow'. Below the navigation is a search bar and a toolbar with icons for search, refresh, and edit. The main area is titled 'Joined Report New Service information Report'. The report itself is a grid with columns: 'Repairs', 'Replacement Parts', 'Customer Name', 'Appointment Date', 'Service Status', and 'Payment Paid'. The data is grouped by customer name, showing multiple entries for each. Subtotals are present for each customer group.

Service information Service information block 1					
Repairs	Replacement Parts	Customer Name	Appointment Date	Service Status	Payment Paid
<input checked="" type="checkbox"/>	<input type="checkbox"/>	mine	16/07/2024	Completed	₹1,254
		Subtotal		Count: 1	₹1,254
		ramu	24/07/2024	Completed	-
			24/07/2024	Completed	-
		Subtotal		Count: 2	₹0
		Subtotal		Count: 3	₹1,254
	<input checked="" type="checkbox"/>	B.Mitesh	25/07/2024	Completed	₹5,689
		Subtotal		Count: 1	₹5,689
		Subtotal		Count: 1	₹5,689
		Subtotal		Count: 4	₹6,943
<input type="checkbox"/>	<input type="checkbox"/>	kalyan	24/07/2024	Completed	-
		Subtotal		Count: 1	₹0
		NIKHIL	24/07/2024	Completed	₹10

Row Counts  Detail Rows  Subtotals  Grand Total

## TASK 16: DASHBOARD

### Create Dashboard Folder

1. Click on the app launcher and search for dashboard.
2. Click on dashboard tab.
3. Click new folder, give the folder label as “ Service Rating dashboard”.
4. Folder unique name will be auto populated.
5. Click save.
6. Follow the same steps, form milestone 15, and activity 2, and provide the sharing settings for the folder that just created.

### 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.

The screenshot shows a software interface for 'Garage Management'. At the top, there's a navigation bar with links like 'Customer Details', 'Appointments', 'Service records', 'Billing details and feedback', 'Billing Amount Flow | Flow', 'New Service Information R...', and 'Customer review'. Below the navigation bar, a message says 'Last refreshed 3 days ago. Refresh this dashboard to see the latest data.' and 'As of 26-Jul-2024, 12:35 am Viewing as Alampally Nalin Kumar'. On the left, there's a sidebar with a 'Customer review' section. The main area displays a table titled 'New Service Information Report' with the following data:

Customer Name	Appointment Date	Service Status	Payment Paid
Kalyan	24/07/2024	Completed	₹10
mine	16/07/2024	Completed	₹10
Nik	16/07/2024	Completed	₹10
Nik	16/07/2024	Completed	₹10
Nikhil	24/07/2024	Completed	₹10
Nitin	24/07/2024	Completed	₹10
NTR	21/07/2024	Completed	₹10

At the bottom left of the table area, there's a link 'View Report (New Service Information Report)'. The overall background is light blue.

**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**

**THANK YOU**

