

GARAGE MANAGEMENT **SYSTEM**

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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:

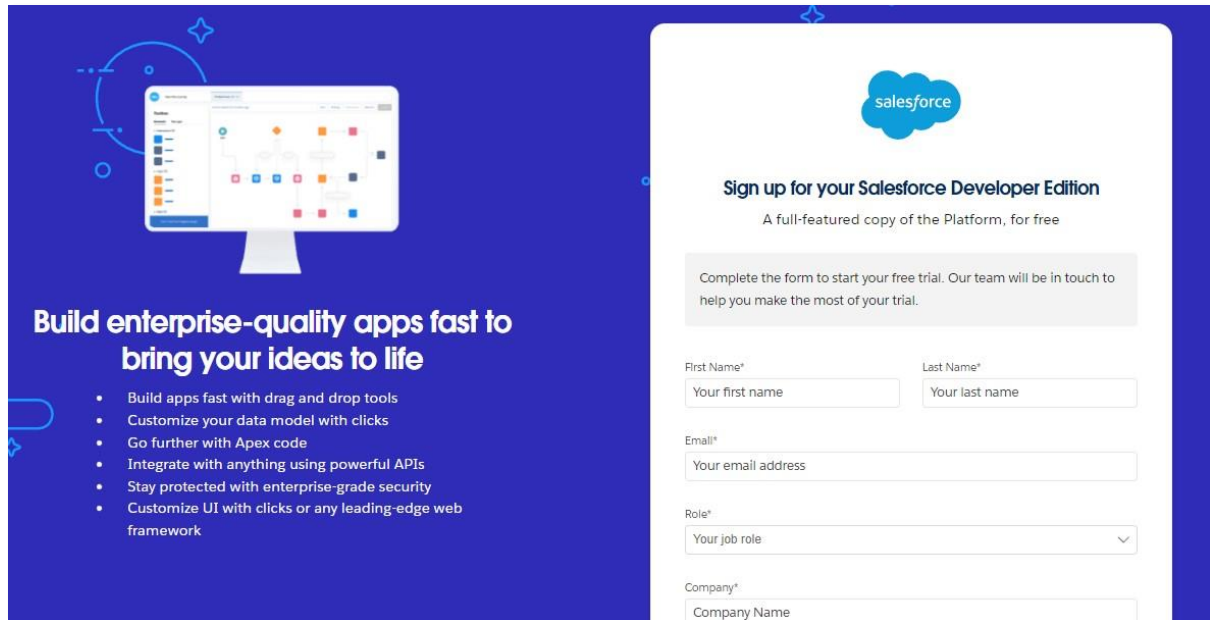
Creating a developer org in salesforce.

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. Country : 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 a promotional banner for Salesforce Developer Edition on the left and a sign-up form on the right. The banner features a blue background with a white monitor displaying a Salesforce interface. The text on the banner reads: "Build enterprise-quality apps fast to bring your ideas to life". Below this, there is a list of bullet points: "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". The sign-up form on the right has a white background with a blue Salesforce logo at the top. The title is "Sign up for your Salesforce Developer Edition" and the subtitle is "A full-featured copy of the Platform, for free". Below this, there is a grey box with the text: "Complete the form to start your free trial. Our team will be in touch to help you make the most of your trial." The form fields are: "First Name*" (text input), "Last Name*" (text input), "Email*" (text input), "Role*" (dropdown menu), and "Company*" (text input).

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

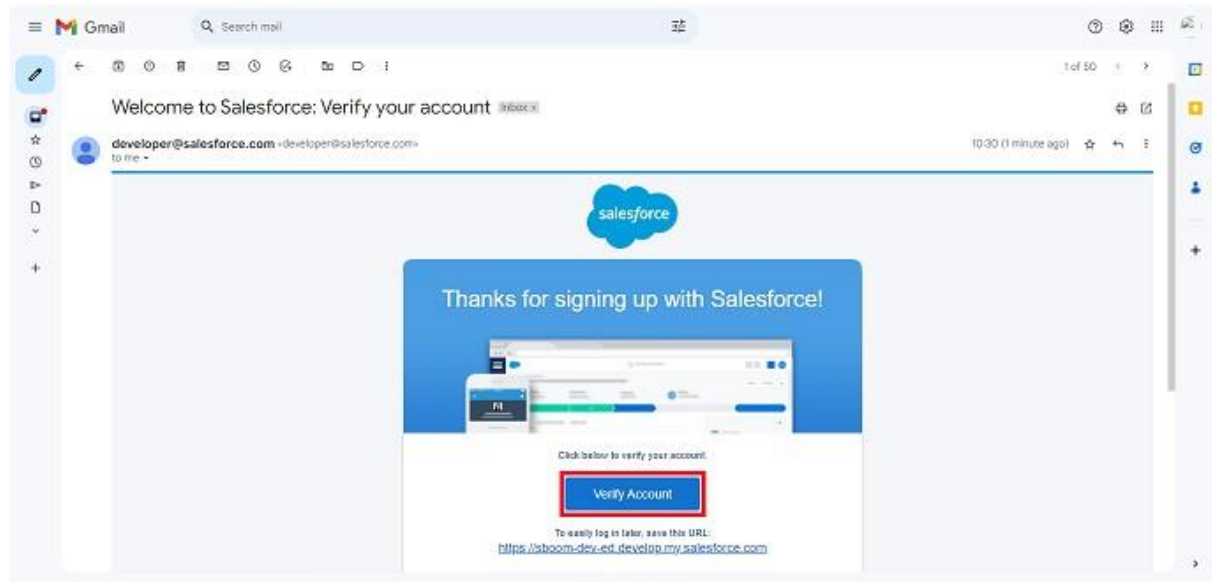
Email*
Your email address

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

asdfghjkl

Change Password

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

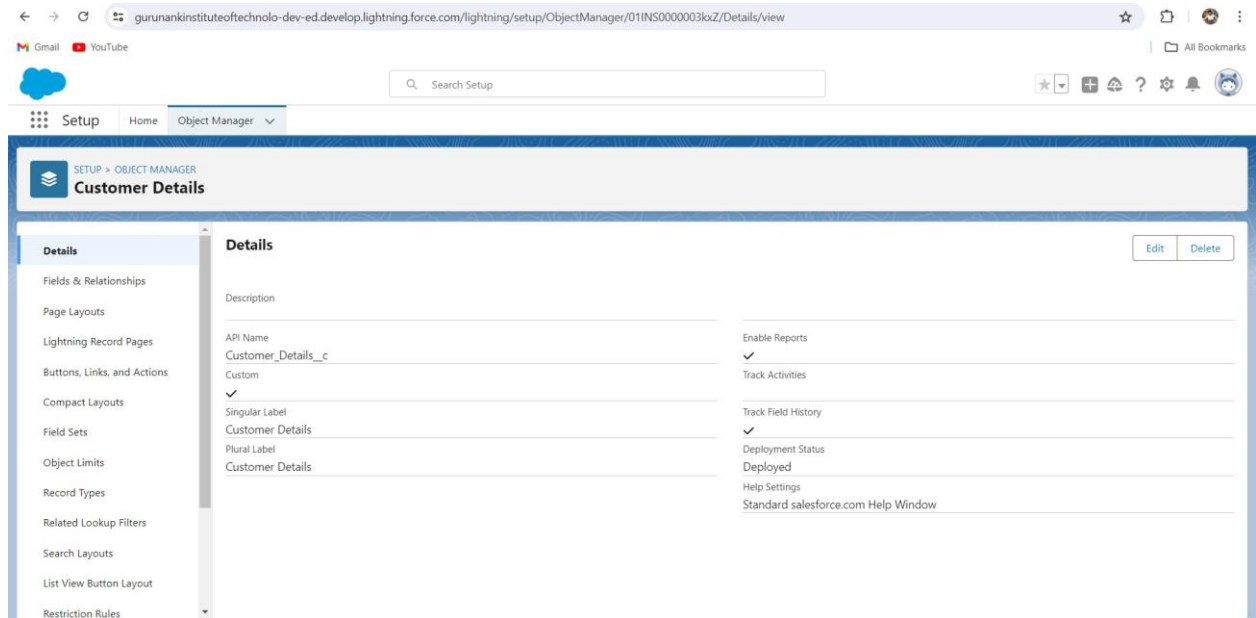
The screenshot displays the Salesforce Setup interface. At the top, there's a search bar labeled 'Search Setup' and a navigation bar with 'Setup', 'Home', and 'Object Manager'. The main content area is titled 'SETUP Home' and features three prominent cards: 'Get Started with Einstein Bots' (with a 'Get Started' button), 'Mobile Publisher' (with a 'Learn More' button), and 'Real-time Collaborative Docs' (with a 'Get Started' button). On the left, a sidebar lists various setup options under 'Setup Home' and 'ADMINISTRATION', including 'Service Setup Assistant', 'Multi-Factor Authentication Assistant', 'Release Updates', 'Lightning Experience Transition Assistant', 'Salesforce Mobile App', 'Lightning Usage', 'Optimizer', and 'Users'.

TASK 2: CREATING THE OBJECTS

i)Create Customer DetailsObject

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.

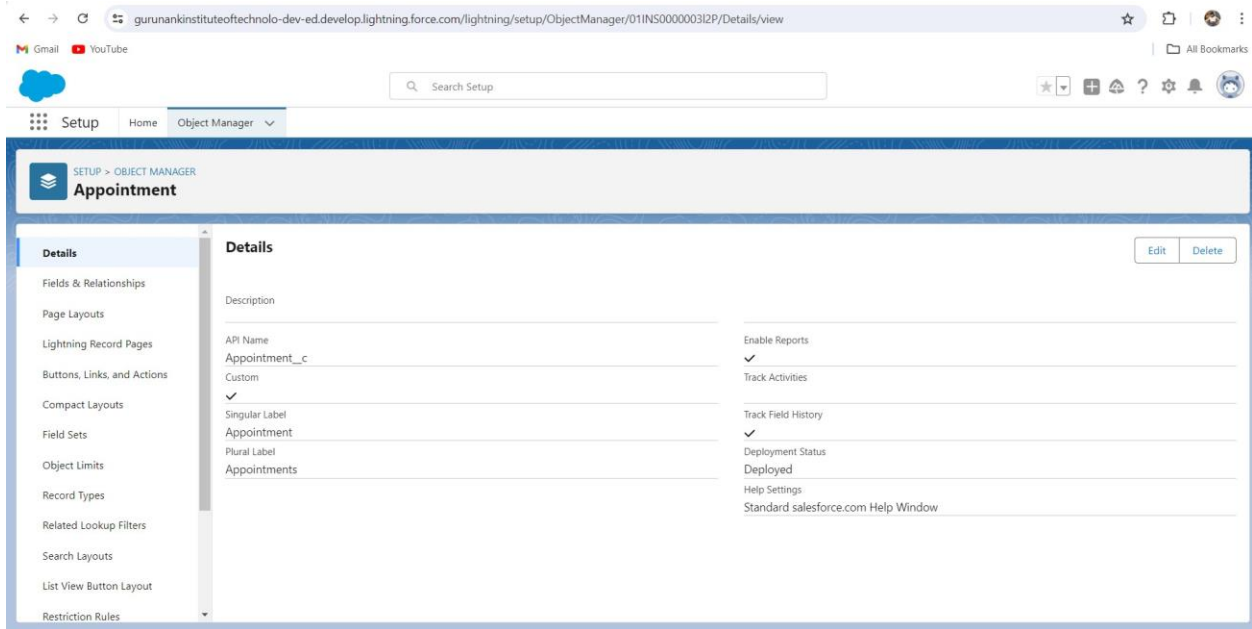


ii)Create Appointment Object

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

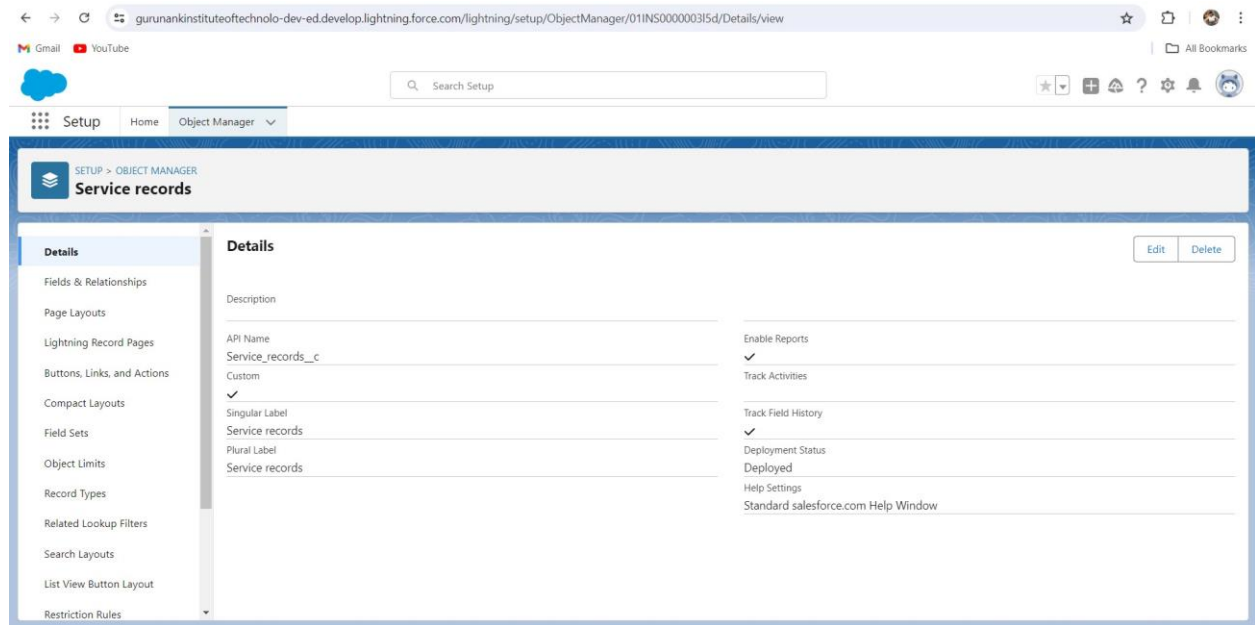
2. Click on Allow reports and Track Field History, 3. Allow search >> Save.



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
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.

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

(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

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)

- Go to setup page >> type Tabs in Quick Find bar >> click on tabs >> New (under custom object tab)
- 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 .
- Make sure that the Append tab to users' existing personal customizations is checked.
- 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)

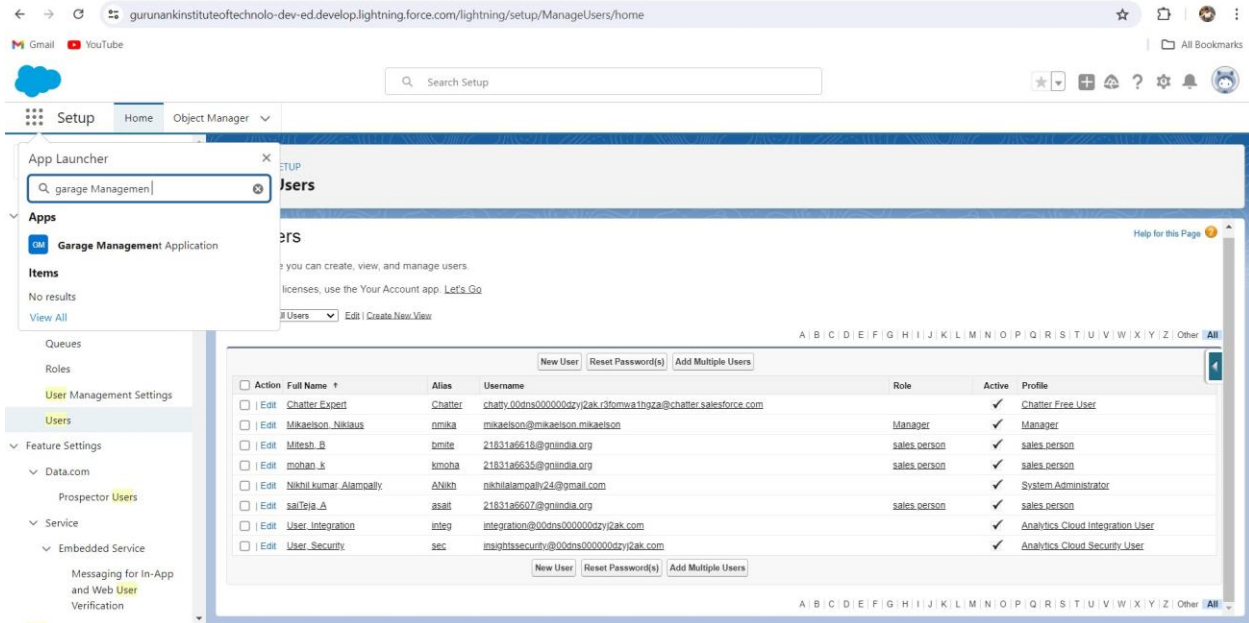
1. Go to setup page >> type Tabs in Quick Find bar >> click on tabs >> New (under custom object tab)
2. Select Object(Billing details and feedback) >> Select the tab style >> Next (Add to profiles page) keep it as default >> Next (Add to Custom App) uncheck the include tab .
3. Make sure that the Append 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.



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.

SETUP > OBJECT MANAGER

Customer Details

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

6 Items, Sorted by Field Label

NewDeleted FieldsField DependenciesSet History Tracking

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		

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

13 Items, Sorted by Field Label

NewDeleted FieldsField DependenciesSet History Tracking

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)		✓

Setup Home Object Manager

Search Setup

Setup > OBJECT MANAGER

Service records

Details

Fields & Relationships
7 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)		✓
service date	service_date__c	Formula (Date)		
Service records Name	Name	Auto Number		✓
Service Status	Service_Status__c	Picklist		

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 Home Object Manager

Search Setup

Setup > OBJECT MANAGER

Billing details and feedback

Details

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
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)		✓

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

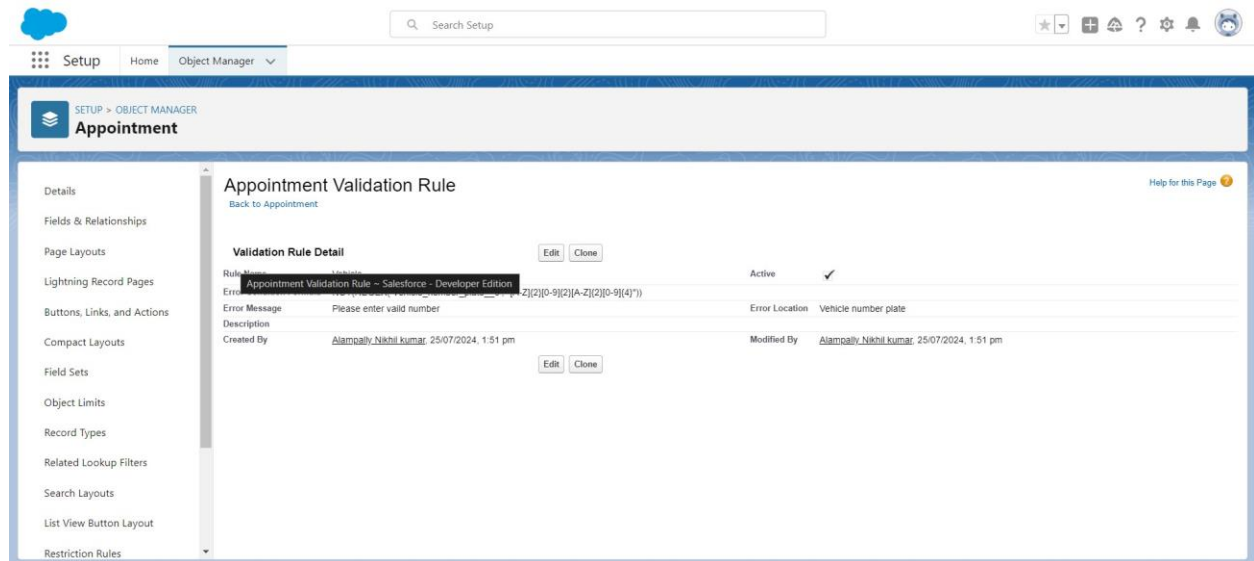
TASK 6: VALIDATION RULES

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 : -

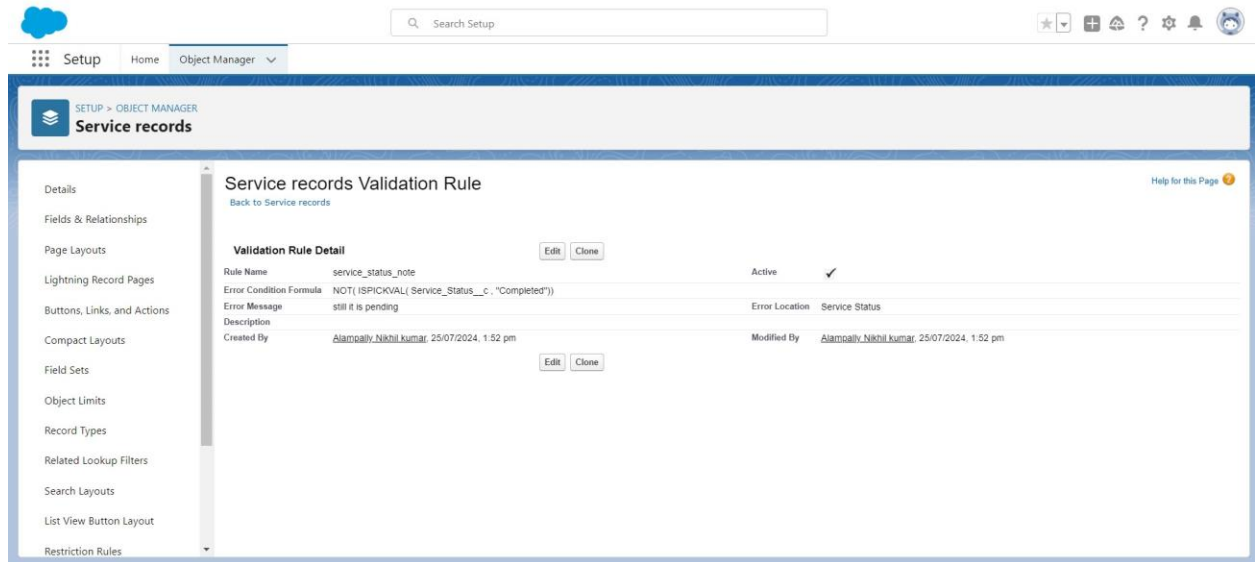
$$\text{NOT}(\text{REGEX}(\text{Vehicle_number_plate_c}, "[A-Z]\{2\}[0-9]\{2\}[A-Z]\{2\}[0-9]\{4\}"))$$
5. Enter the Error Message as "Please enter valid number", select the Error location as

Field and select the field as “Vehicle number plate”, and click Save.



To Create A Validation Rule To An Service Records Object

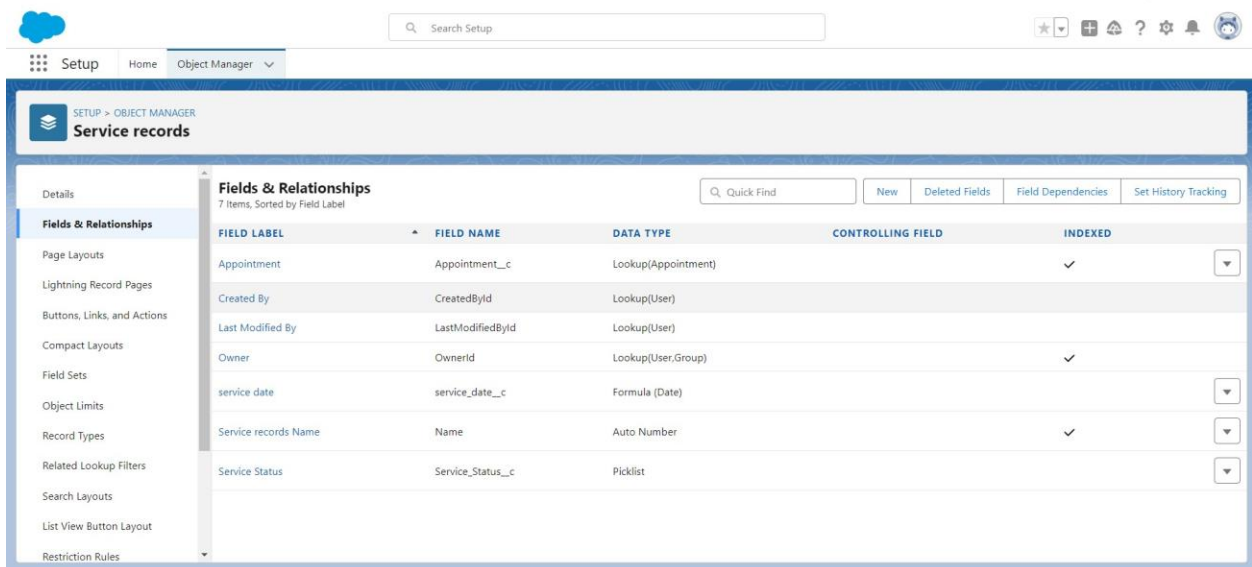
1. Go to the setup page >> click on object manager >> From drop down click edit for Service records object.
2. Click on the validation rule >> click New.
3. Enter the Rule name as “ service_status_note ”.
4. Insert the Error Condition Formula as : -
`NOT(ISPICKVAL(Service_Status__c , "Completed"))`
5. 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, specifically the Object Manager for the 'Service records' object. 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, List View Button Layout, and Restriction Rules. The main content area is titled 'Service records Validation Rule' and includes a 'Back to Service records' link. Below this, the 'Validation Rule Detail' section shows the rule's configuration: Rule Name is 'service_status_note', Error Condition Formula is 'NOT(ISPICKVAL(Service_Status__c, "Completed"))', Error Message is 'still it is pending', Error Location is 'Service Status', and it was created and modified by 'Ajamoally, Nikhil kumar' on 25/07/2024 at 1:52 pm. The rule is currently active, indicated by a checkmark.

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.



The screenshot shows the Salesforce Setup interface, specifically the Object Manager for the 'Service records' object, focusing on the 'Fields & Relationships' section. The left sidebar is the same as in the previous screenshot. The main content area is titled 'Fields & Relationships' and includes a 'Quick Find' search bar and buttons for 'New', 'Deleted Fields', 'Field Dependencies', and 'Set History Tracking'. Below this, a table lists the fields for the 'Service records' object, sorted by field label. The table has five columns: FIELD LABEL, FIELD NAME, DATA TYPE, CONTROLLING FIELD, and INDEXED.

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

EditDeleteCloneActivate

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.

Matching Rules

Define how duplicate records are identified.

Compare Customer Details With:

Matching Rule:

Matching Criteria: (Customer Details: Email EXACT Match/Blank = FALSE) AND (Customer Details: Phone Number EXACT Match/Blank = FALSE)

Field Mapping: ☒ Mapping Selected

Conditions

Optionally, specify the conditions a record must meet for the rule to run.

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

Add Filter Logic...

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.

Setup

Search Setup

Setup

Home

Object Manager

Profiles

Profile Detail

Name: Manager

User License: Salesforce

Description: Custom Profile

Created By: Alampally Nikhil Kumar 25/07/2024, 2:04 pm

Modified By: Alampally Nikhil Kumar 25/07/2024, 2:08 pm

Page Layouts

Standard Object Layouts	Location Group Assignment
Global: Global Layout [View Assignment]	Location Group Assignment Layout [View Assignment]
Email Application: Not Assigned [View Assignment]	Macro: Macro Layout [View Assignment]
Home Page Layout: OE Default [View Assignment]	Object Milestone: Object Milestone Layout [View Assignment]
Account: Account Layout [View Assignment]	Operating Hours: Operating Hours Layout [View Assignment]
Alternative Payment Method: Alternative Payment Method Layout [View Assignment]	Opportunity: Opportunity Layout [View Assignment]
Appointment Invitation: Appointment Invitation Layout [View Assignment]	Opportunity Product: Opportunity Product Layout [View Assignment]
Asset: Asset Layout [View Assignment]	Order: Order Layout [View Assignment]
Asset Action: Asset Action Layout [View Assignment]	Order Product: Order Product Layout [View Assignment]

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. The left sidebar has a search bar with 'profil' and a list of items including 'Users' and 'Profiles'. The main content area is titled 'SETUP Profiles'. It includes a search bar, a list of enabled features (Login IP Ranges, Apex Class Access, Visualforce Page Access, External Data Source Access, Named Credential Access, External Credential Principal Access, Custom Metadata Type Access, Custom Setting Definitions Access, Flow Access, Service Presence Status Access, Custom Permissions), and a 'Profile Detail' section. The 'Profile Detail' section shows the profile name 'sales person', user license 'Salesforce Platform', and a 'Custom Profile' checkbox checked. Below this is the 'Page Layouts' section, which is a table with two columns: 'Standard Object Layouts' and 'Lead'. The table lists various layouts for different objects, including Global Layout, Home Page Default, Account Layout, Alternative Payment Method Layout, Appointment Invitation Layout, Asset Layout, Lead Layout, Location Layout, Location Group Layout, Location Group Assignment Layout, Object Milestone Layout, Operating Hours Layout, and Order Layout. The 'Profile sales person - Salesforce - Developer Edition' is highlighted in the table.

TASK 9: Role & Role Hierarchy

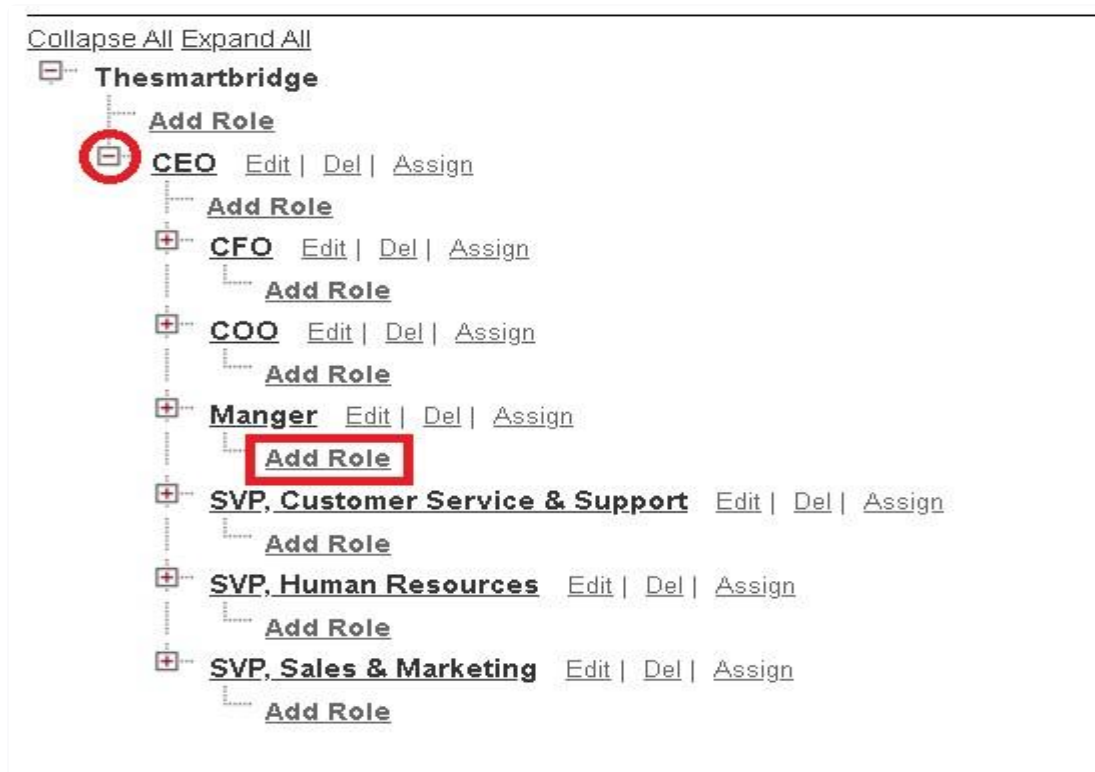
Creating Manager Role:

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.



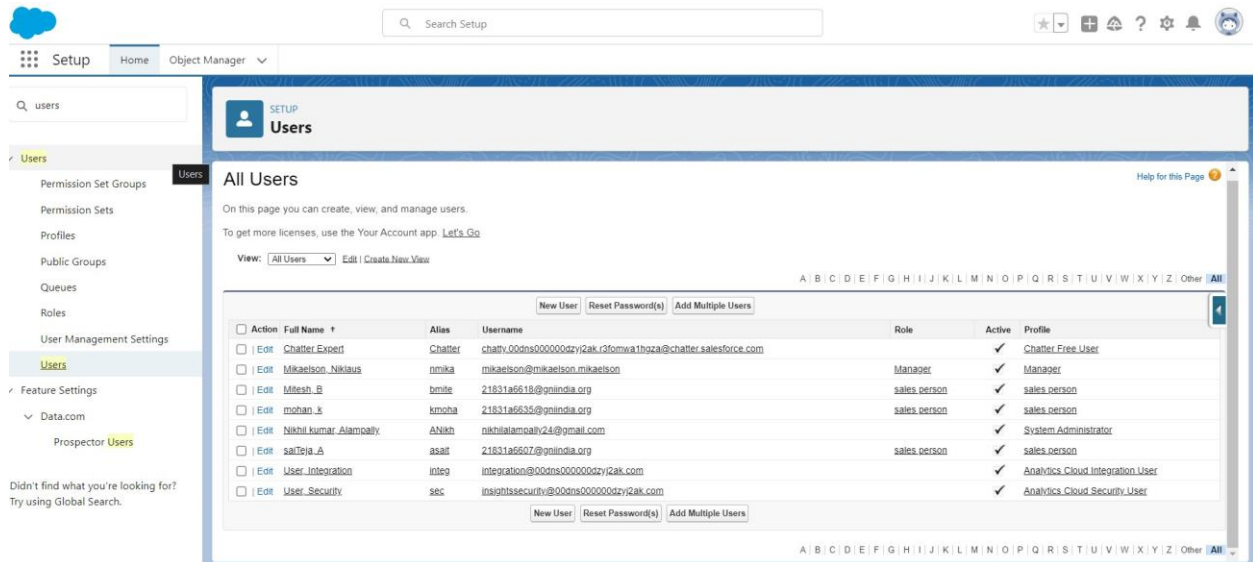
3. Give Label as “sales person” and Role name gets auto populated. Then click on Save.

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.

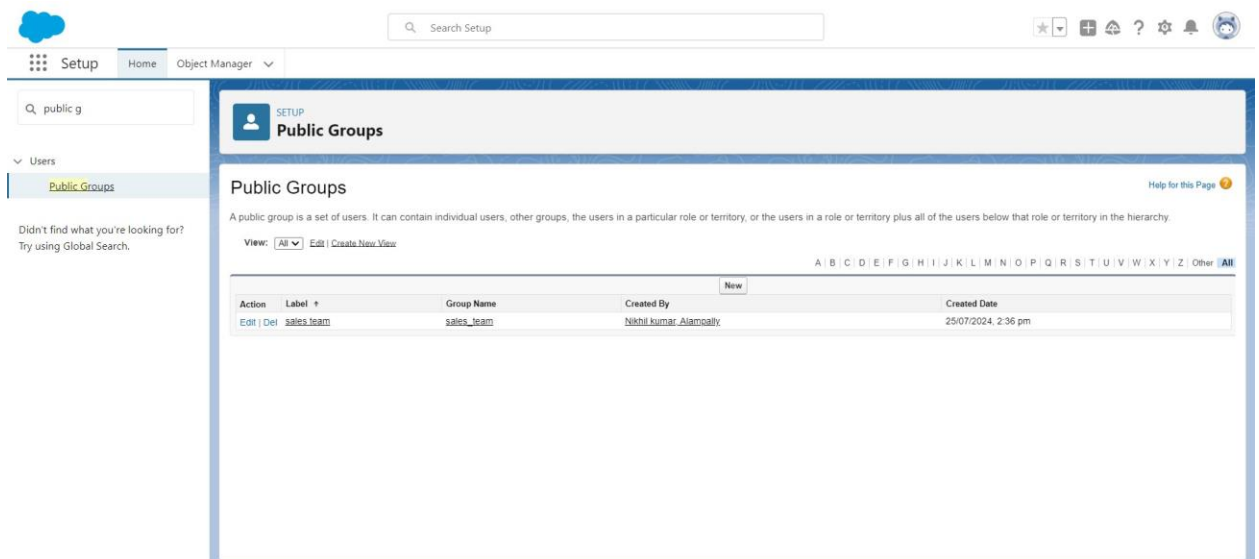


The screenshot shows the Salesforce Setup interface with the 'Users' section selected. The left sidebar contains navigation links: Setup, Home, Object Manager, Users, Permission Set Groups, Permission Sets, Profiles, Public Groups, Queues, Roles, User Management Settings, Feature Settings, Data.com, and Prospector Users. The main content area is titled 'All Users' and includes a search bar, a 'View' dropdown set to 'All Users', and a table of users. The table has columns for Action, Full Name, Alias, Username, Role, Active, and Profile. The users listed are Chatter_Expert, Mikaelson_Niklaus, Mitesh_B, moham_K, Nikhil_kumar_Alammoally, saiteja_A, User_Integration, and User_Security. The bottom of the page shows a navigation bar with links to All, A, B, C, D, E, F, G, H, I, J, K, L, M, N, O, P, Q, R, S, T, U, V, W, X, Y, Z, and Other.

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.

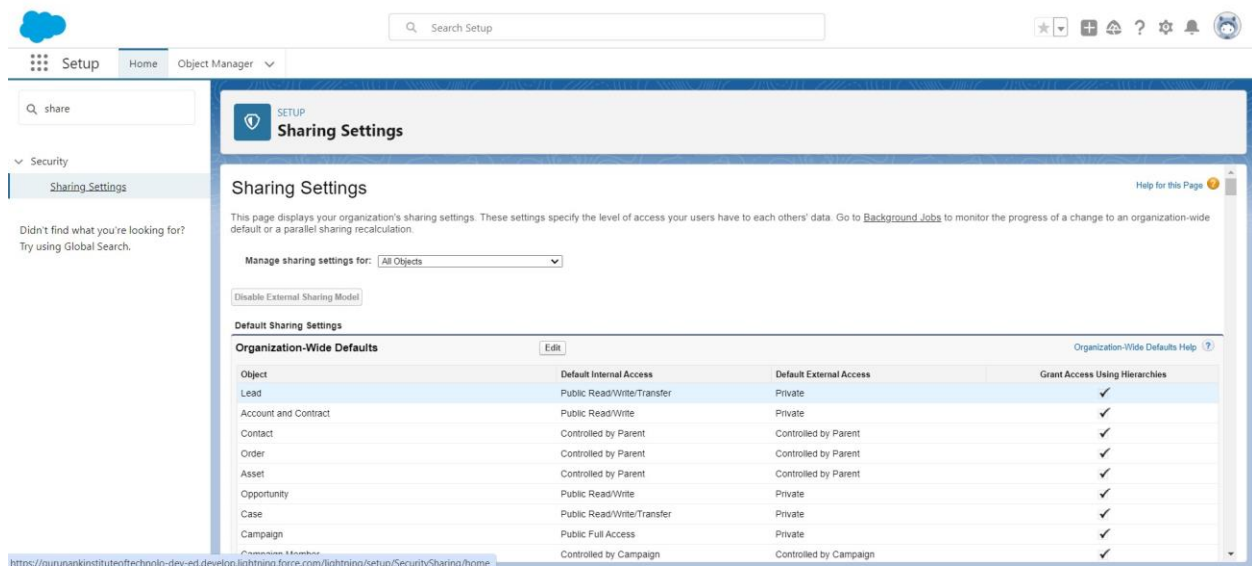


The screenshot shows the Salesforce Setup interface with the 'Public Groups' section selected. The left sidebar contains navigation links: Setup, Home, Object Manager, Users, Public Groups, Queues, Roles, User Management Settings, Feature Settings, Data.com, and Prospector Users. The main content area is titled 'Public Groups' and includes a search bar, a 'View' dropdown set to 'All', and a table of public groups. The table has columns for Action, Label, Group Name, Created By, and Created Date. The public group listed is 'sales_team' created by Nikhil_kumar_Alammoally on 25/07/2024, 2:36 pm. The bottom of the page shows a navigation bar with links to All, A, B, C, D, E, F, G, H, I, J, K, L, M, N, O, P, Q, R, S, T, U, V, W, X, Y, Z, and Other.

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.



The screenshot shows the Salesforce Setup interface for Sharing Settings. The left sidebar includes a search bar with 'share' and a navigation menu with 'Security' and 'Sharing Settings'. The main content area is titled 'Sharing Settings' and includes a 'Manage sharing settings for' dropdown set to 'All Objects'. Below this is a 'Default Sharing Settings' section with a table of organization-wide defaults.

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	✓
	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.

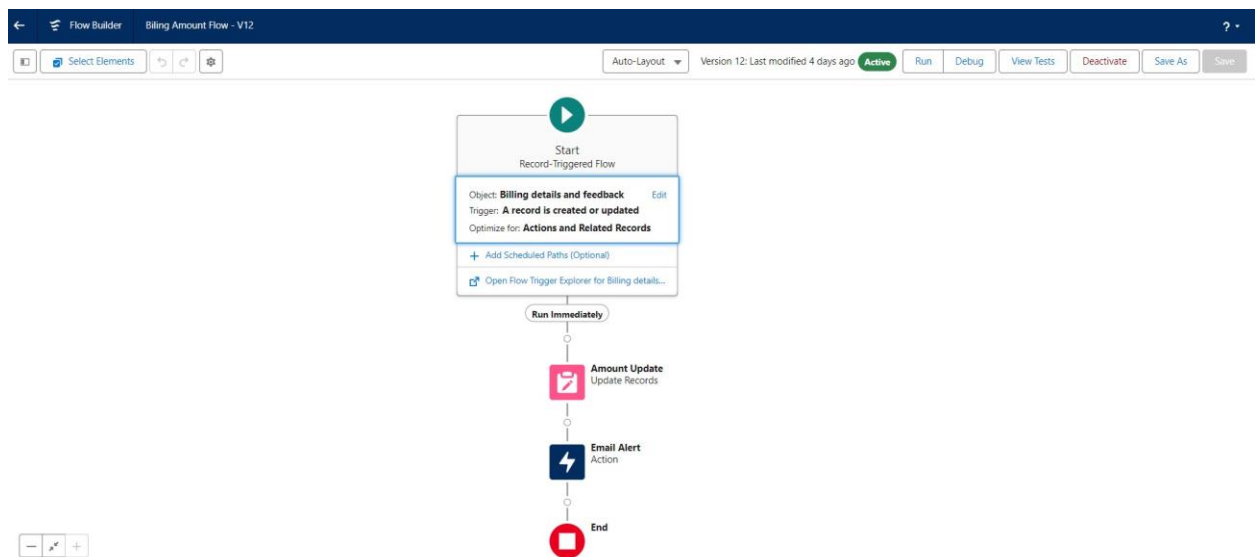
31. RecipientAddressList:

{!\$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.

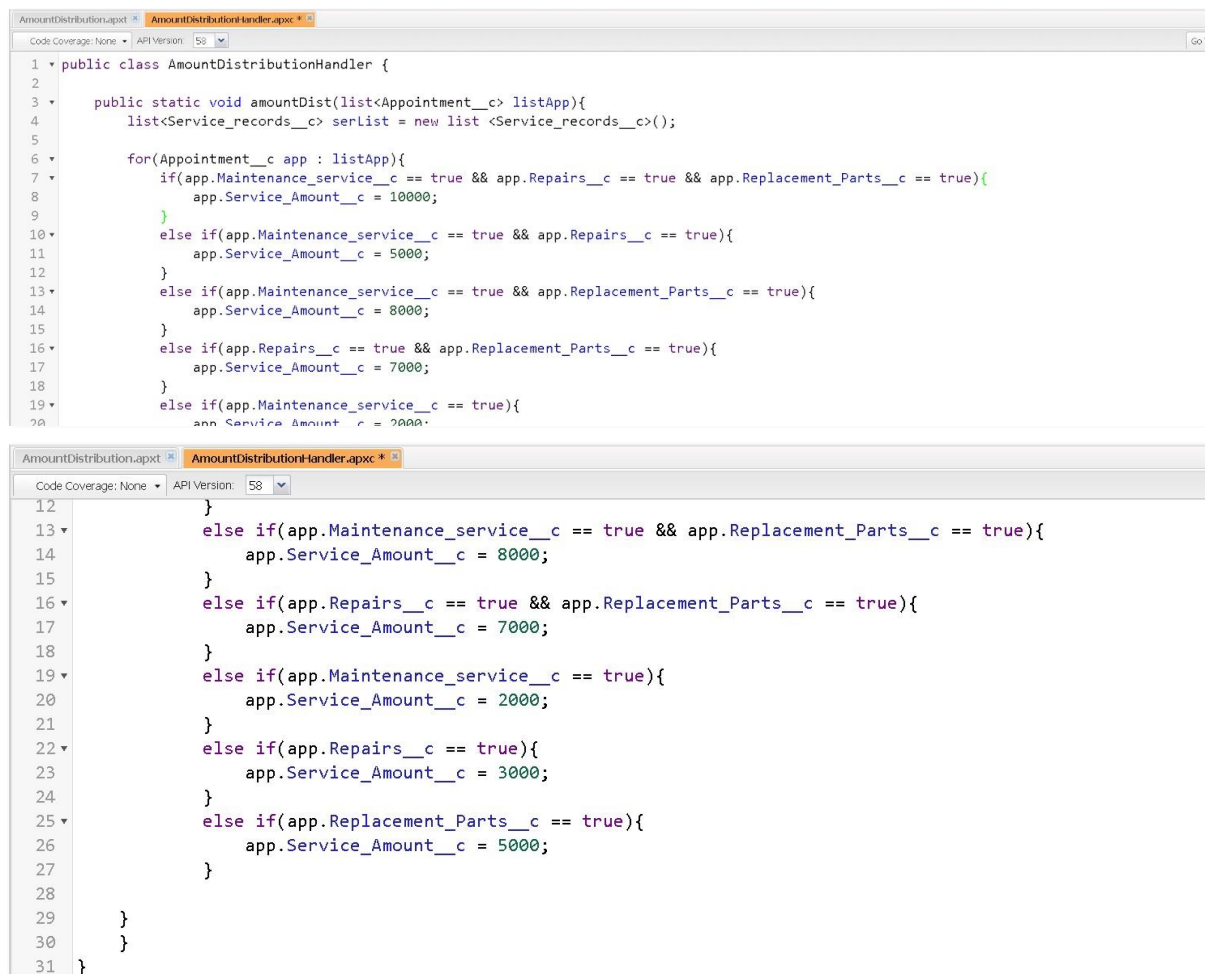


TASK 14:APEX TRIGGER

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”.



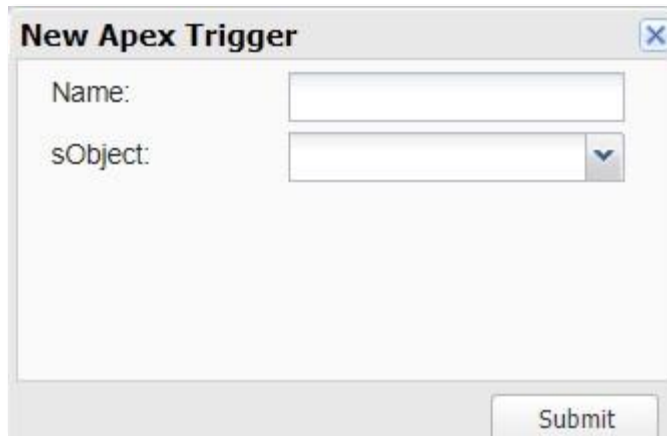
The image shows two screenshots of a code editor, likely Salesforce's IDE, displaying Apex code for a class named `AmountDistributionHandler`. The top screenshot shows the beginning of the class, including a static method `amountDist` that takes a list of `Appointment__c` objects and returns a list of `Service_records__c` objects. The code uses a `for` loop to iterate through the appointments and sets the `Service_Amount__c` field based on various conditions involving `Maintenance_service__c`, `Repairs__c`, and `Replacement_Parts__c`. The bottom screenshot shows the continuation of the `amountDist` method, where the `Service_Amount__c` is set to 8000, 7000, 2000, 3000, or 5000 based on the same conditions. The code is written in a standard Apex syntax with proper indentation and comments.

```
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 with a downward arrow. At the bottom right, there is a 'Submit' button.

Syntax For creating trigger :

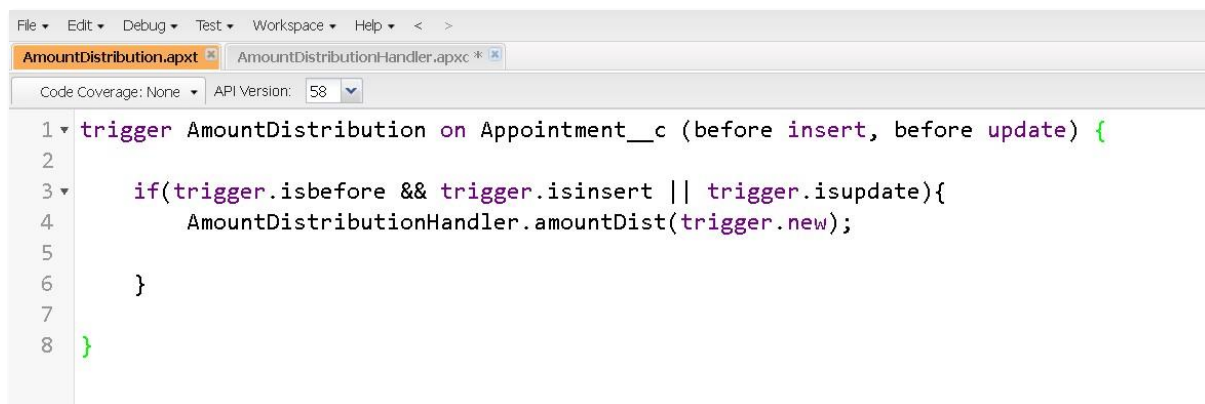
The syntax for creating trigger is :

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 editor area contains 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 }
```

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.

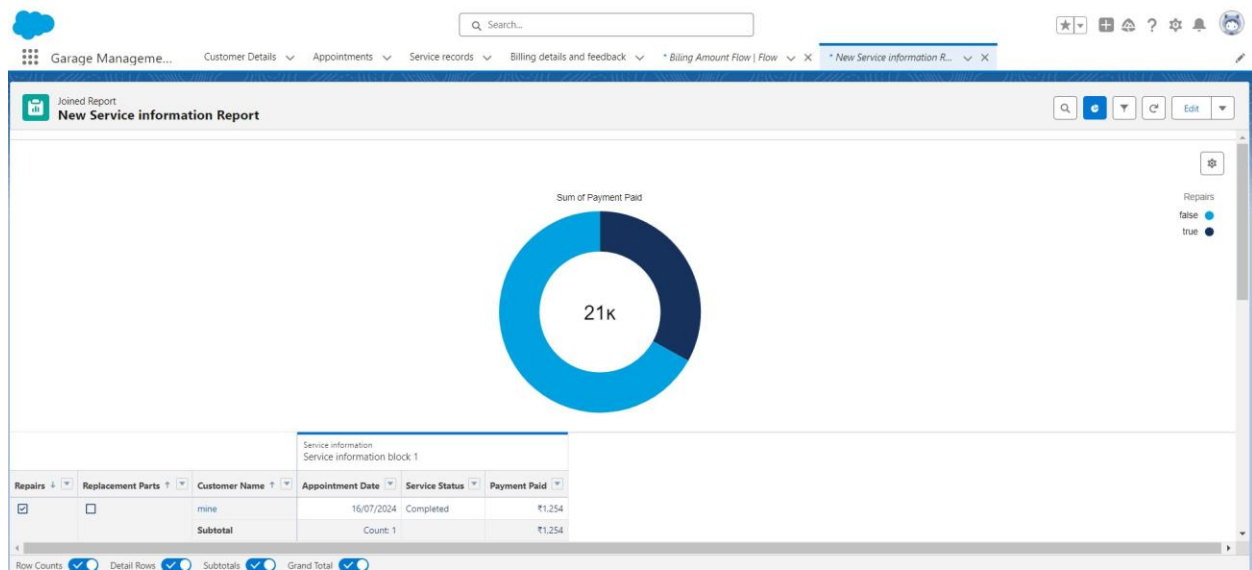
Create Report

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.



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	-
		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


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.



Search...



Garage Manage...Customer Details ▾Appointments ▾Service records ▾Billing details and feedback ▾* Billing Amount Flow | Flow ▾X* New Service information R... ▾X* Customer review ▾X

Dashboard

Customer review

Last refreshed 3 days ago. Refresh this dashboard to see the latest data.
As of 26-Jul-2024, 12:35 am Viewing as Alampally Nikhil kumar

RefreshEditSubscribe ▾

New Service Information Report

Customer Name	Appointment Date	Service Status	Payment Paid
Jalayan	24/07/2024	Completed	-
mine	16/07/2024	Completed	₹1k
Nik	16/07/2024	Completed	-
Nik	16/07/2024	Completed	-
NIKHIL	24/07/2024	Completed	₹10
Nithin	24/07/2024	Completed	-
NTR	21/07/2024	Completed	-

View Report (New Service Information Report)

Edit Subscription

Schedule dashboard refreshes and subscribe to receive results.

Settings

Frequency

DailyWeeklyMonthly

Days

SunMonTueWedThuFriSat

Time

3:00 pm

Recipients

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

Send email to

Me

Edit Recipients

Cancel

Save

THANK YOU