

GARAGE MANAGEMENT SYSTEM

BY

AYYEESHA KHANNA

ayyeeshakhanna@gmail.com

ABSTRACT

Salesforce is a leading customer relationship management (CRM) software, has been transforming the way businesses interact with their customers across various industries. One such industry that has greatly benefited from Salesforce's innovative solutions is the automotive sector. The Garage Management System (GMS), a specialized tool developed by Salesforce, has been designed to cater to the unique needs of automotive repair facilities. By providing a comprehensive platform to manage customer relationships, streamline operations, and boost sales, GMS has empowered garages to deliver exceptional service, increase efficiency, and drive growth.

With GMS, garages can automate routine tasks, optimize workflows, and gain real-time visibility into their operations. The system's user-friendly interface and powerful features enable staff to work more efficiently, reducing errors and increasing productivity. Additionally, GMS provides a 360-degree view of customers, enabling garages to personalize interactions, build strong relationships, and drive loyalty. By leveraging Salesforce's advanced analytics and reporting capabilities, garages can gain valuable insights into customer behavior, sales performance, and marketing effectiveness, making data-driven decisions to drive business growth.

The GMS has been instrumental in helping automotive repair facilities stay ahead of the competition. By providing a seamless and satisfying experience for customers and staff, garages can build a positive reputation, attract new business, and increase revenue. As the automotive industry continues to evolve, Salesforce's GMS remains a vital tool for garages looking to thrive in a competitive market. With its cutting-edge technology and customer-centric approach, Salesforce is revolutionizing the way automotive businesses operate, enabling them to deliver exceptional service, drive growth, and succeed in an ever-changing landscape.

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GARAGE MANAGEMENT SYSTEM

What is the Garage Management System (GMS)?

The GMS is a comprehensive software solution designed specifically for automotive repair facilities. Its primary goal is to help garages deliver exceptional service, streamline operations, and foster long-term customer relationships.

Key Benefits of GMS:

1. **Deliver Top-Notch Service:** GMS enables garages to provide an outstanding customer experience by streamlining service workflows, automating tasks, and ensuring that all customer interactions are prompt and professional.
2. **Increase Operational Efficiency:** By automating routine tasks, optimizing workflows, and providing real-time visibility into operations, GMS helps garages reduce waste, minimize errors, and maximize productivity.
3. **Build Lasting Customer Relationships:** GMS empowers garages to build strong, lasting relationships with their customers by providing a seamless and satisfying experience. This includes automated reminders, personalized communication, and transparent service updates.

How Does GMS Achieve These Benefits?

1. **User-Friendly Interface:** GMS features an intuitive and user-friendly interface that makes it easy for staff to navigate and use, reducing the learning curve and minimizing errors.
2. **Powerful Features:** GMS offers a range of powerful features, including:
 - a. Automated workflows and task management

- b. Real-time reporting and analytics
- c. Customer relationship management (CRM) tools
- d. Inventory management and control
- e. Integration with other business systems (e.g., accounting, marketing)

Competitive Advantage:

By implementing GMS, garages can gain a competitive edge in the market by:

- 1. **Improving Customer Satisfaction:** Delivering exceptional service and building strong relationships with customers leads to increased loyalty and retention.
- 2. **Increasing Efficiency:** Streamlining operations and reducing waste enables garages to reduce costs, increase productivity, and improve profitability.
- 3. **Enhancing Reputation:** Providing a seamless and satisfying experience for customers and staff helps to build a positive reputation and attract new business.

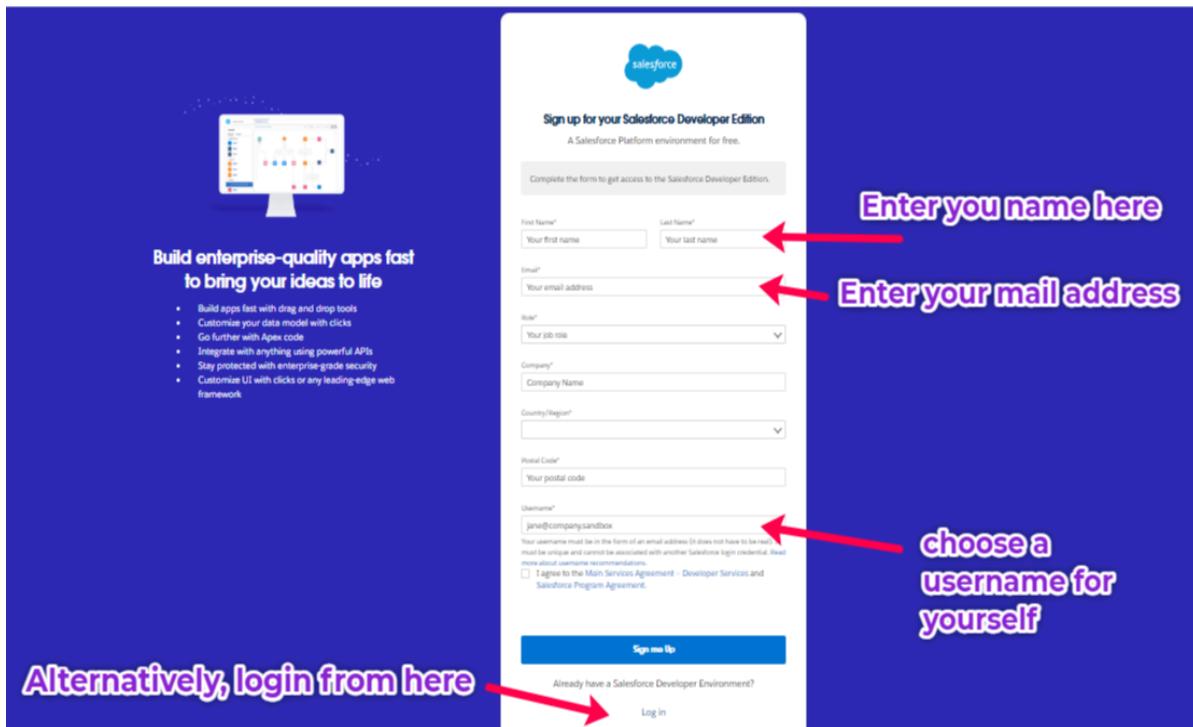
In summary, the Garage Management System is a powerful tool that helps automotive repair facilities deliver top-notch service, increase operational efficiency, and build lasting customer relationships. Its user-friendly interface and powerful features make it an essential solution for garages looking to thrive in a competitive market.

Creating Developer Account:

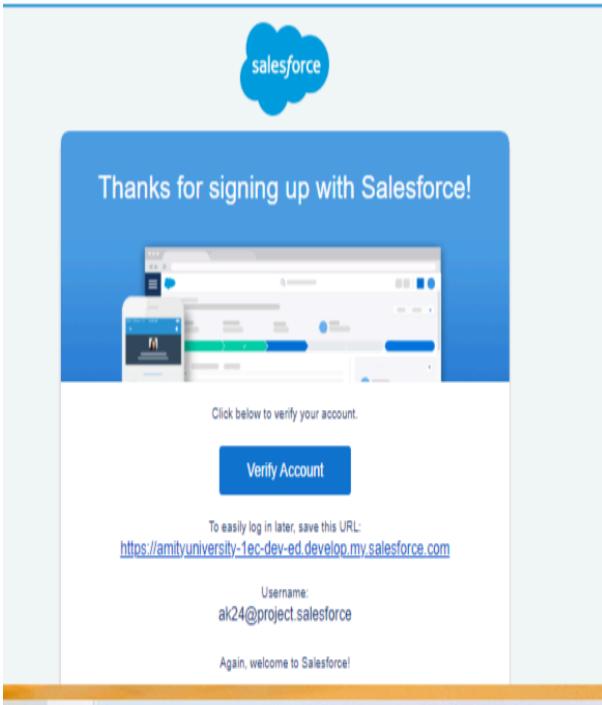
1. Go to <https://developer.salesforce.com/signup>
2. On the sign up form, enter the following details :
 - a. First name & Last name
 - b. Email
 - c. Role : Developer
 - d. Company : College Name
 - e. County : India
 - f. Postal Code : your area pin code
 - g. Username : should be a combination of your name and company (This need not be an actual email id, you can give anything in the format : username@organization.com)

Click on sign me up after filling all the details

3. Alternately, you can even login to your already existing developer account.



Account Activation
(if you have created a new developer account)



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 might take 5-10mins.
2. Click on Verify Account
3. Enter a password and answer a security question.
4. Click on change password.

Change Your Password

Enter a new password for lead@sb.com.
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
asdfghjk!

Change Password

5. Then you will be redirected to your salesforce setup page.

Search Setup

Home Object Manager

Setup

Quick Find

Setup Home

Service Setup Assistant

Multi-Factor Authentication Assistant

Release Updates

Lightning Experience Transition Assistant

Salesforce Mobile App

Lightning Usage

Optimizer

ADMINISTRATION

> Users

SETUP Home

Get Started with Einstein Bots

Launch an AI-powered bot to automate your digital connections.

Get Started

Mobile Publisher

Use the Mobile Publisher to create your own branded mobile app.

Learn More

Real-time Collaborative Docs

Transform productivity with collaborative docs, spreadsheets, and slides inside Salesforce.

Get Started

Starting with the SALESFORCE platform:

To get started with building the GMS you'll start by building the following:

1. Objects
2. Tabs
3. The Lightning App
4. Fields
5. Validation Rules
6. Duplicate Rules
7. Profiles
8. Roles & Role Hierarchy
9. Users
10. Public Groups
11. Sharing Settings
12. Flows
13. Apex Triggers
14. Reports
15. Dashboards

Let's dive into each one of them and see how the platform is built bit by bit.

CHAPTER-1

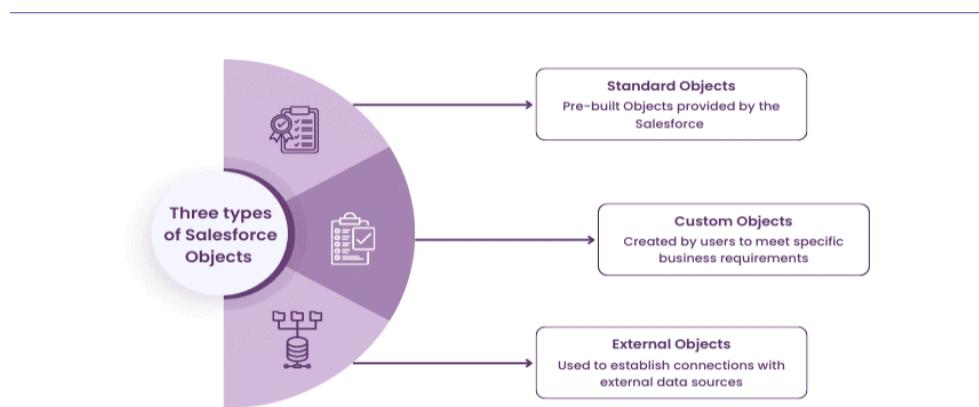
CREATION OF AN OBJECT

What Is an Object?

Salesforce objects are database tables that permit you to store data that is specific to an organization. Objects are the way you store your records in Salesforce. They are basically a container for spreadsheet data, account details, customer contacts, location and regional info, tracking status, and more, but are easier on the eyes and more customizable than a database.

Salesforce objects are of two types:

1. **Standard Objects:** Standard objects are the kind of objects that are provided by salesforce.com such as users, contracts, reports, dashboards, etc.
2. **Custom Objects:** Custom objects are those objects that are created by users. They supply information that is unique and essential to their organization. They are the heart of any application and provide a structure for sharing data.
3. **External Objects:** External Objects enable integration with external data sources, accessing and interacting with data stored outside of Salesforce.



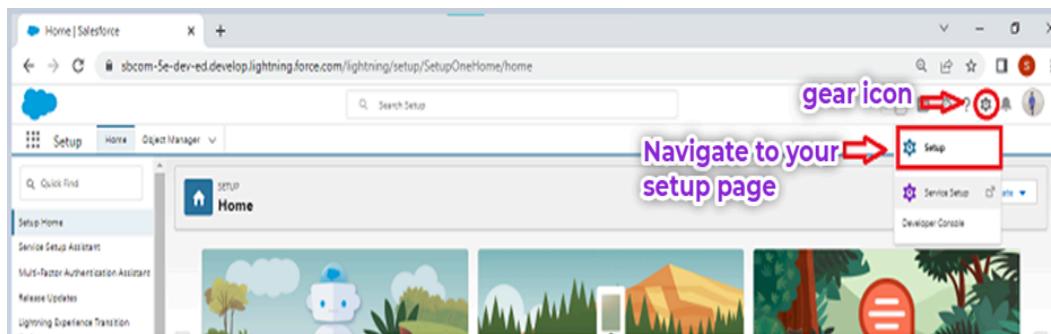
How to create an Object in salesforce ??

Object can be created in 3 ways in the Salesforce:

1. Create >> Custom Object
2. Create >> Custom Object from Spreadsheet
3. Schema Builder

Let's START !! From the home page navigate by following the instructions:

1. Navigate to Setup page:
2. Click on gear  icon.
3. Then click setup.



To create an object:

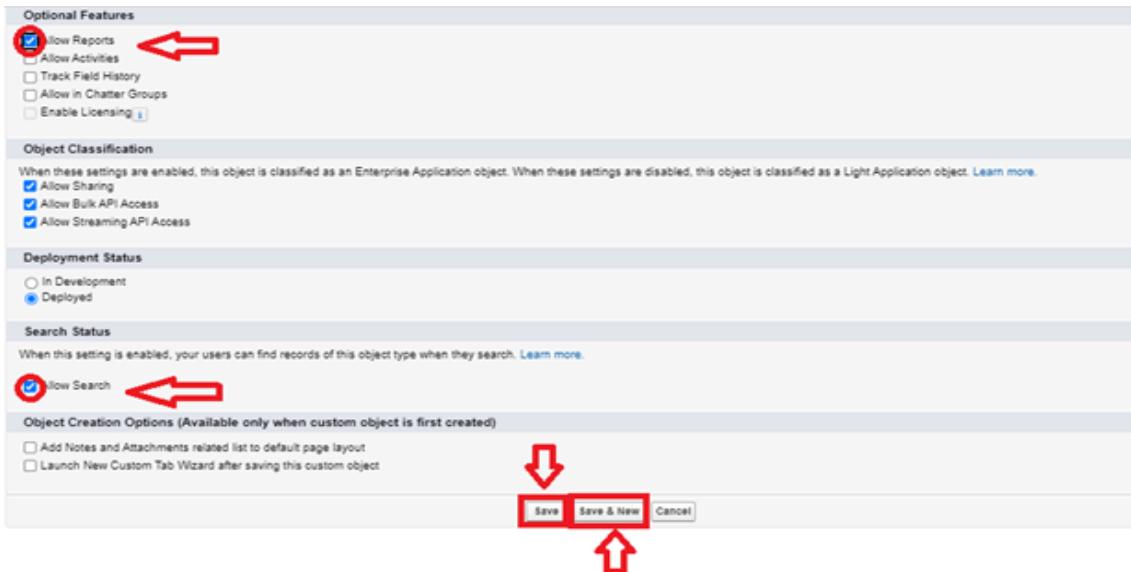
1. From the setup page
2. Click on Object Manager

3. Click on Create
4. Click on Custom Object.

5. On Custom object defining page:

 - a. Enter the label name
 - b. Plural label name
 - c. Click on Allow reports
 - d. Allow search.

Notice that the Object Name and Record Name fields auto-fill.



6. Now, click on Save

We just learnt how to create a custom object in Salesforce. Now, we will follow the above steps to create the objects for our GMS.

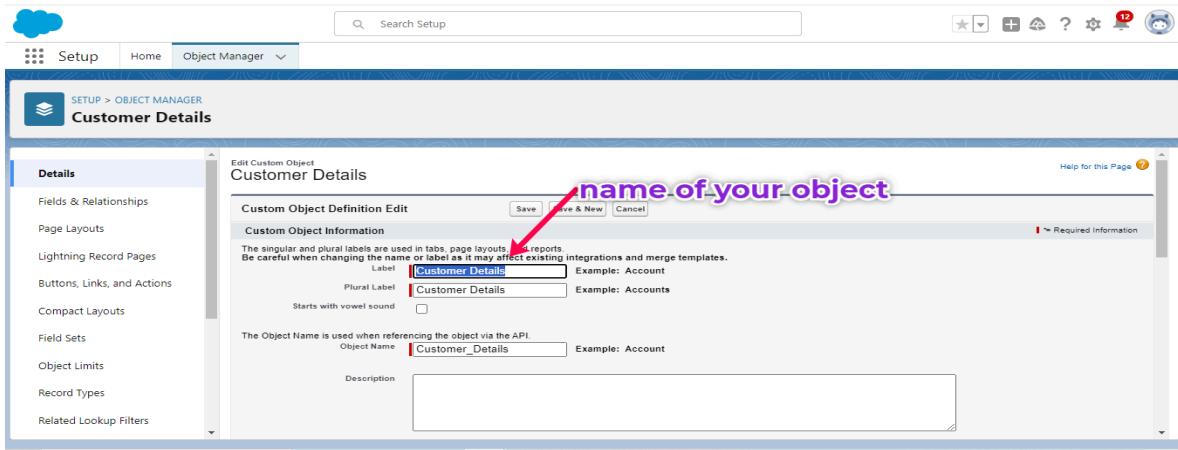
1. Create Customer Details Object
2. Create Appointment Object
3. Create Service Records Object
4. Create Billing Details and Feedback Object

Creating each of these objects and filling the appropriate details.

➤ Creating the Customer Details Object

To create an object:

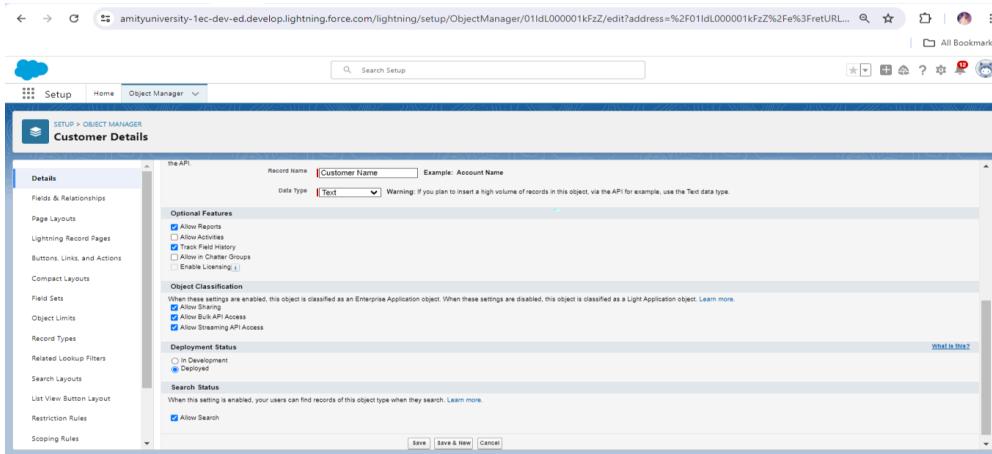
1. From the setup page >> Click on Object Manager >> Click on Create >> Click on Custom Object.
 - a. Enter the label name >> Customer Details
 - b. Plural label name >> Customer Details



c. 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.

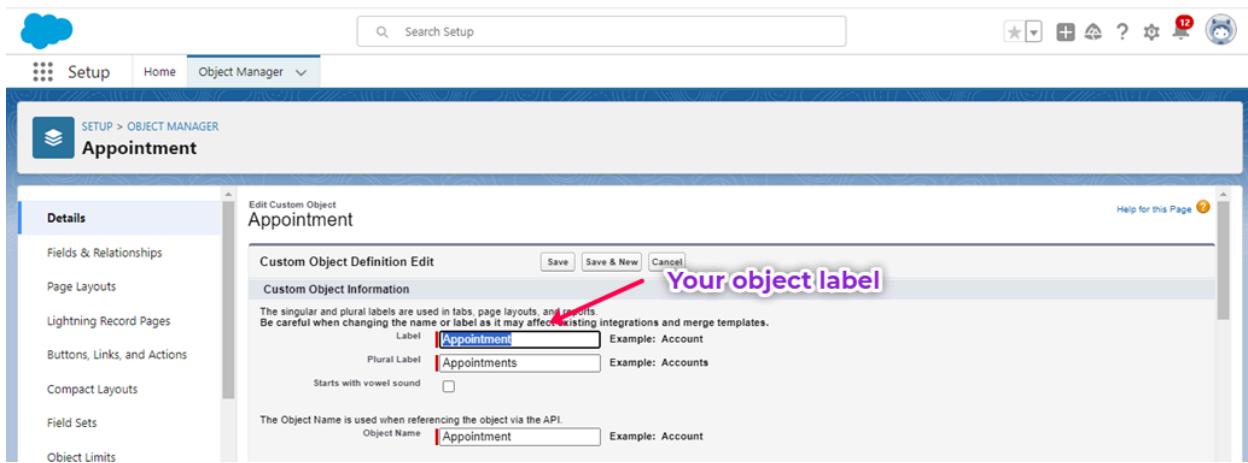


Your new Customer Details object just got created.

➤ Create the Appointment Object

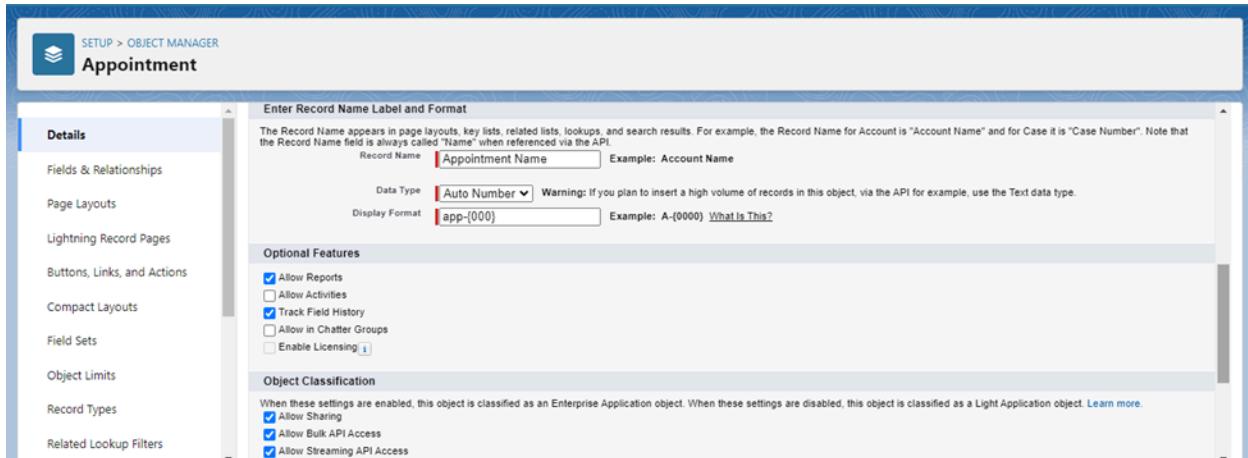
To create an object:

1. From the setup page >> Click on Object Manager >> Click on Create >> Click on Custom Object.
 - a. Enter the label name >> Appointment
 - b. Plural label name >> Appointments



c. 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

Your new Appointment object just got created.

➤ Create Service Records Object

To create an object:

1. From the setup page >> Click on Object Manager >> Click on Create >> Click on Custom Object.
 - a. Enter the label name >> Service records
 - b. Plural label name >> Service records

The screenshot shows the 'Edit Custom Object' screen for the 'Service records' object. The 'Label' field contains 'Service records', and the 'Plural Label' field also contains 'Service records'. The 'Object Name' field is set to 'Service_records'. Other fields like 'Starts with vowel sound' and 'Description' are visible but empty.

- c. Enter Record Name Label and Format

- Record Name >>Service records Name
- Data Type >> Auto Number
- Display Format >> ser-{000}
- Starting number >> 1

The screenshot shows the 'Edit Custom Object' screen for the 'Service records' object. Under 'Record Name Label and Format', the 'Record Name' field is set to 'Service records Name', the 'Data Type' is 'Auto Number', and the 'Display Format' is 'ser-{000}'. Under 'Optional Features', 'Allow Reports' and 'Track Field History' are checked. Other optional features like 'Allow Activities' and 'Allow in Chatter Groups' are unchecked.

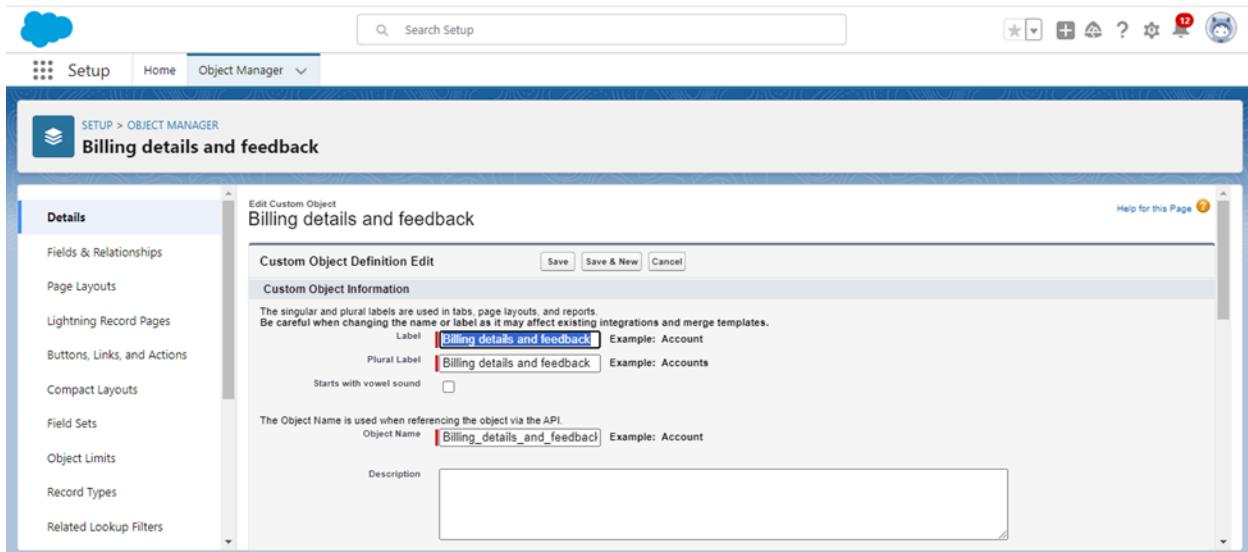
2. Click on Allow reports and Track Field History,
3. Allow search >> Save.

Your new Service Records object just got created.

➤ Create Billing Details and Feedback Object

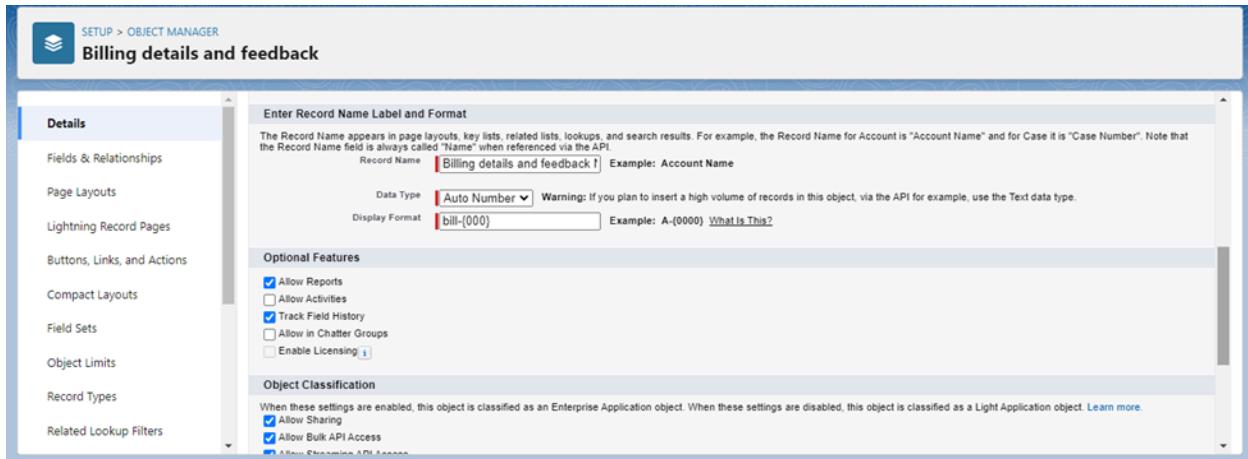
To create an object:

1. From the setup page >> Click on Object Manager >> Click on Create >> Click on Custom Object.
 - a. Enter the label name >> Billing details and feedback
 - b. Plural label name >> Billing details and feedback



c. 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.

Your new Billing Details & Feedback object just got created.

CHAPTER-2

CREATING TABS

What is Tab ??

A tab is like a user interface that is used to build records for objects and to view the records in the objects.

Types of Tabs:

1. Custom Tabs

Custom object tabs are the user interface for custom applications that you build in salesforce.com. They look and behave like standard salesforce.com tabs such as accounts, contacts, and opportunities.

2. Web Tabs

Web Tabs are custom tabs that display web content or applications embedded in the salesforce.com window. Web tabs make it easier for your users to quickly access content and applications they frequently use without leaving the salesforce.com application.

3. Visualforce Tabs

Visualforce Tabs are custom tabs that display a Visualforce page. Visualforce tabs look and behave like standard salesforce.com tabs such as accounts, contacts, and opportunities.

4. Lightning Component Tabs

Lightning Component tabs allow you to add Lightning components to the navigation menu in Lightning Experience and the mobile app.

5. Lightning Page Tabs

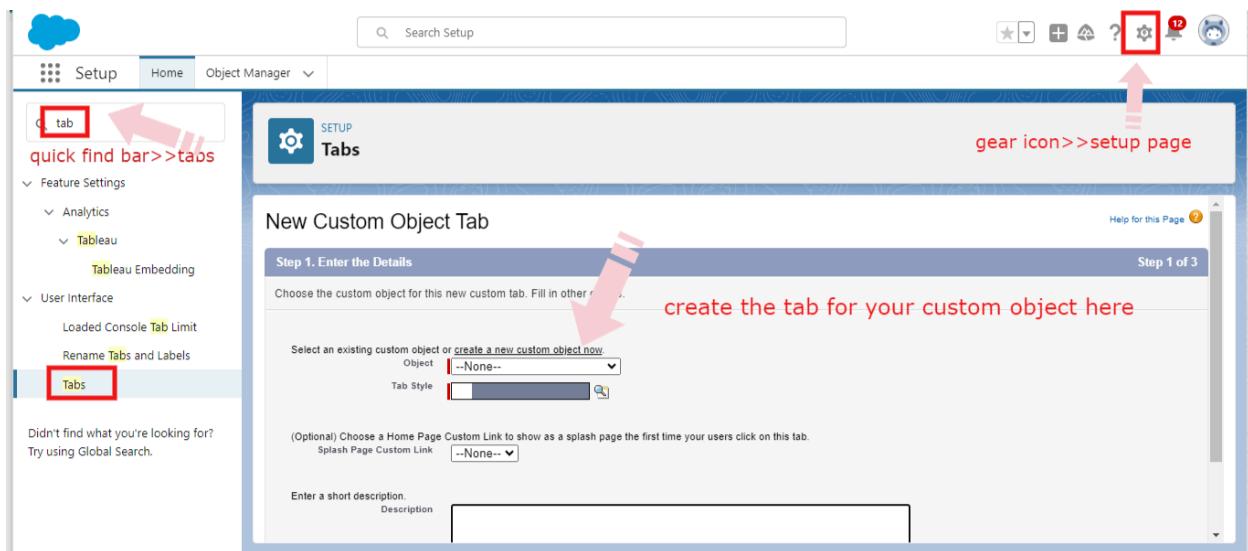
Lightning Page Tabs let you add Lightning Pages to the mobile app navigation menu.

Lightning Page tabs don't work like other custom tabs. Once created, they don't show up on the All Tabs page when you click the Plus icon that appears to the right of your current tabs. Lightning Page tabs also don't show up in the Available Tabs list when you customise the tabs for your apps.

➤ Creating 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 .

Tab Style: Selecting your own style for the 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 under the 'Tabs' section. On the left, there's a sidebar with a search bar and sections for Feature Settings, Analytics, Tableau Embedding, User Interface, and Tabs. The 'Tabs' section is currently selected. The main area is titled 'Edit Custom Object Tab Customer Details'. It contains fields for 'Tab Label' (Customer Details), 'Object' (Customer Details), and 'Tab Style' (People). A note says '(Optional) Choose a Home Page Custom Link to show as a splash page the first time your users click on this tab.' Below that is a dropdown for 'Splash Page Custom Link' set to 'None'. There's also a text input for 'Description'.

➤ Creating Remaining Tabs

1. Now create the Tabs for the remaining Objects, they are "Appointments, Service records, Billing details and feedback".
2. We need to follow the same steps as mentioned in above, while creating Customer Detail Tab.

➤ Appointment Tab

The screenshot shows the Salesforce Setup interface under the 'Tabs' section. The sidebar is identical to the previous one. The main area is titled 'Custom Object Tab Appointments'. It displays information for the custom tab, including the tab definition detail. The table shows the following data:

Tab Label	Appointments	Edit	Delete
Object	Appointment	Tab Style	
Description		Splash Page Custom Link	
Created By	Aryeesta Khanna, 25/07/2024, 8:20 pm	Modified By	Aryeesta Khanna, 25/07/2024, 8:20 pm

➤ Service Record Tab

The screenshot shows the Salesforce Setup interface under the 'Tabs' section. On the left sidebar, 'Analytics' and 'Tableau Embedding' are expanded, while 'Tableau' is selected. The main content area displays a 'Service records' tab definition. The 'Tab Label' is 'Service records', 'Object' is 'Service records', and 'Tab Style' is 'Gears'. The tab was created by Ayveesha Khanna on 25/07/2024, 8:21 pm, and modified by the same user on the same date and time.

Custom Tab Definition Detail	Tab Label	Service records	Object	Service records	Tab Style	Gears
Description	Ayveesha Khanna	25/07/2024, 8:21 pm	Created By	Ayveesha Khanna	Modified By	Ayveesha Khanna

➤ Billing Details & Feedback Tab

The screenshot shows the Salesforce Setup interface under the 'Tabs' section. 'Tableau Embedding' is selected in the sidebar. The main content area displays a 'Billing details and feedback' tab definition. The 'Tab Label' is 'Billing details and feedback', 'Object' is 'Billing details and feedback', and 'Tab Style' is 'Treasure chest'. The tab was created by Ayveesha Khanna on 25/07/2024, 8:21 pm, and modified by the same user on the same date and time.

Custom Tab Definition Detail	Tab Label	Billing details and feedback	Object	Billing details and feedback	Tab Style	Treasure chest
Description	Ayveesha Khanna	25/07/2024, 8:21 pm	Created By	Ayveesha Khanna	Modified By	Ayveesha Khanna

You have successfully created your tabs for all your custom objects

The screenshot shows the Salesforce Setup interface. The left sidebar has a search bar and navigation links: Home, Object Manager, and Setup. Under Setup, the 'Feature Settings' section is expanded, showing 'Analytics', 'Tableau' (which is selected), 'Tableau Embedding', 'User Interface', 'Loaded Console Tab Limit', 'Rename Tabs and Labels', and 'Tabs'. A message at the bottom says 'Didn't find what you're looking for? Try using Global Search.' The main content area is titled 'Custom Tabs' and contains two sections: 'Custom Object Tabs' and 'Web Tabs'. The 'Custom Object Tabs' section has a table with columns: Action, Label, Tab Style, and Description. It lists five tabs: 'Appointments' (Alarm clock style), 'Billing details and feedback' (Treasure chest style), 'Customer Details' (People style), and 'Service records' (Gears style). Each row includes 'Edit | Del' actions. The 'Web Tabs' section is currently empty.

Action	Label	Tab Style	Description
Edit Del	Appointments	Alarm clock	
Edit Del	Billing details and feedback	Treasure chest	
Edit Del	Customer Details	People	
Edit Del	Service records	Gears	

CHAPTER-3

CREATING THE LIGHTNING APP

The Lightning App

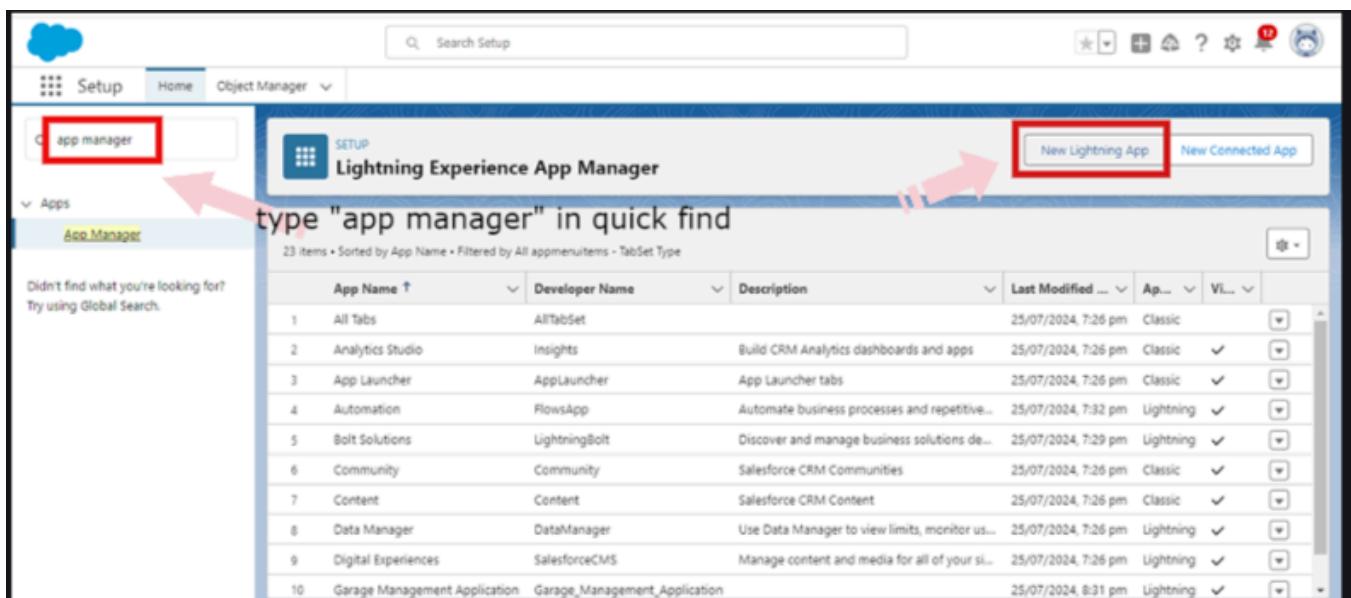
An app is a collection of items that work together to serve a particular function. In Lightning Experience, Lightning apps give your users access to sets of objects, tabs, and other items all in one convenient bundle in the navigation bar.

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

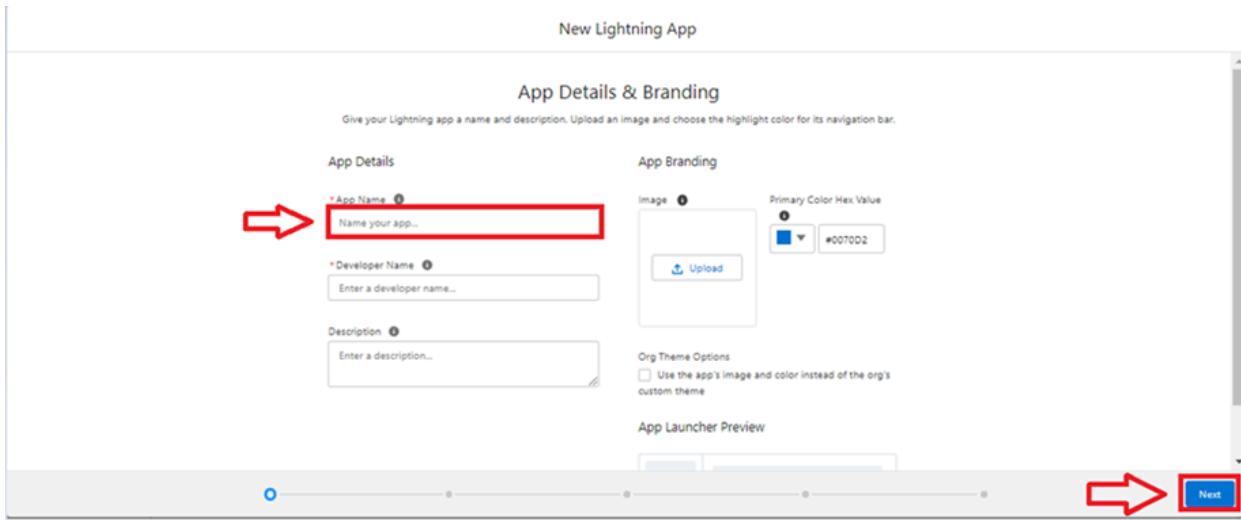
➤ Create a Lightning App

To create a lightning app page:

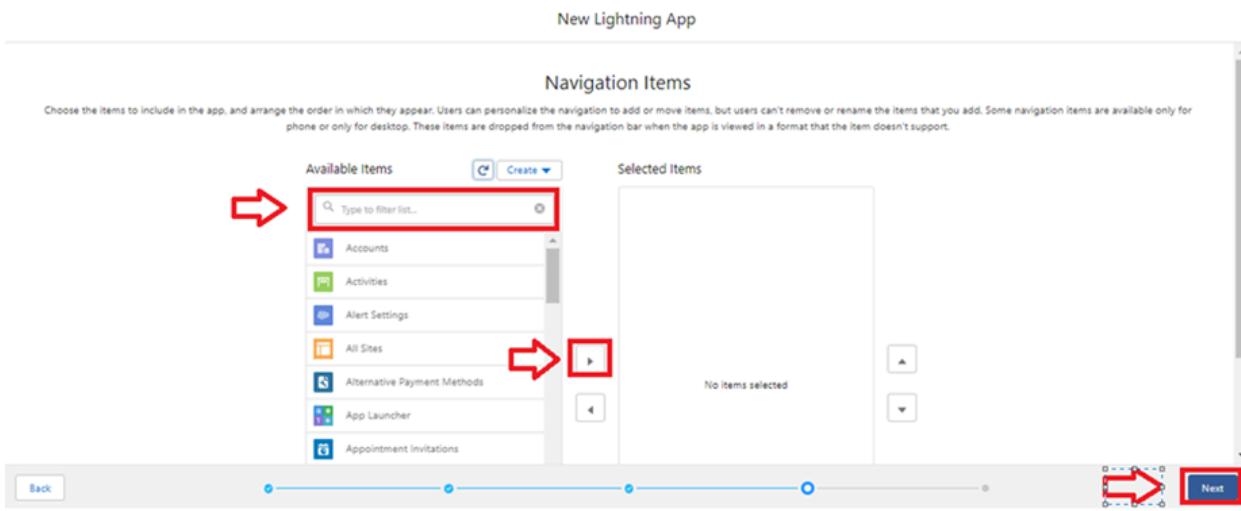
1. Go to setup page >> search “app manager” in quick find >> select “app manager” >> click on New lightning App.



- 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.

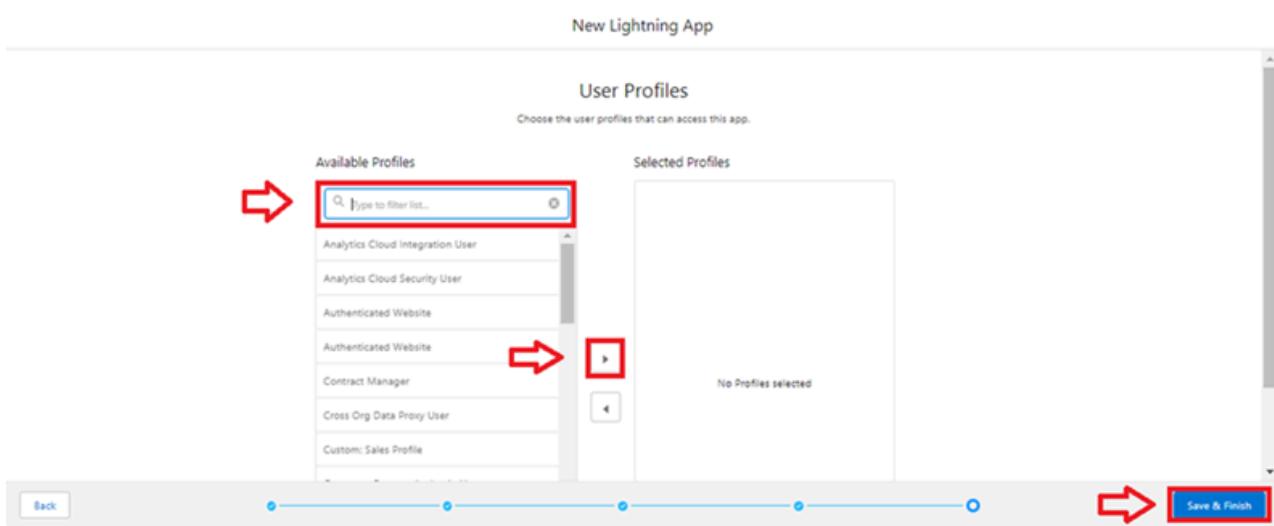


- To Add Navigation Items:



- 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.

CHAPTER- 4

CREATING FIELDS

Fields

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

Types of Fields

1. Standard Fields
2. Custom Fields

Standard Fields:

As the name suggests, the Standard Fields are the predefined fields in Salesforce that perform a standard task. The main point is that you can't simply delete a Standard Field until it is a non-required standard field. Otherwise, users have the option to delete them at any point from the application freely. Moreover, we have some fields that you will find common in every Salesforce application. They are,

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

Custom Fields:

On the other side of the coin, Custom Fields are highly flexible, and users can change them according to requirements. Moreover, each organiser or company can use them if necessary. It means you need not always include them in the records,

unlike Standard fields. Hence, the final decision depends on the user, and he can add/remove Custom Fields of any given form.

► Creation Of Fields For The Customer Details Object

To create fields in an object:

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

The screenshot shows the Salesforce Object Manager interface. At the top, there's a search bar with 'cus' typed into it. Below the search bar, there are buttons for 'Schema Builder' and 'Create'. A red box highlights the 'Customer Details' row in the main table. The table has columns for Label, API Name, Type, Description, Last Modified, and Deployed. The 'Customer Details' row has 'Customer_Details__c' in the API Name column and 'Custom Object' in the Type column. The 'Last Modified' column shows '05/10/2023'.

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

The screenshot shows the Salesforce Fields & Relationships page for the 'Customer1' object. On the left, there's a sidebar with various options like Details, Fields & Relationships (which is selected and highlighted with a red box), Page Layouts, Lightning Record Pages, etc. At the top right, there's a 'New' button (also highlighted with a red box). The main area shows a table of existing fields. The table has columns for Field Label, Field Name, Data Type, Controlling Field, and Indexed. Fields listed include 'Created By', 'current Status', 'Customer Name', 'Email id', 'Last Modified By', 'Owner', 'Permanent Address', and 'Phone no'. Red arrows point from the 'Customer1' label in the header to the 'Customer1' label in the sidebar, and from the 'Fields & Relationships' link in the sidebar to the 'New' button.

3. Select Data Type as a “Phone”

Customer

Fields & Relationships

- Currency
- Date
- Date/Time
- Email
- Geolocation
- Number
- Percent
- Phone** (highlighted with a red box)
- Picklist
- Picklist (Multi-Select)
- Text
- Text Area
- Text Area (Long)
- Text Area (Rich)
- Text (Encrypted) 1
- Time
- URL

Allows users to enter any phone number. Automatically formats it as a phone number.

4. Click on next.

Customer1

Fields & Relationships

Custom Field Definition Edit

Field Information

Field Label	Phone no
Field Name	Phone_no

Help Text

Data Type: Phone

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

Default Value:

Compliance Categorization:

General Options

Save Cancel

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

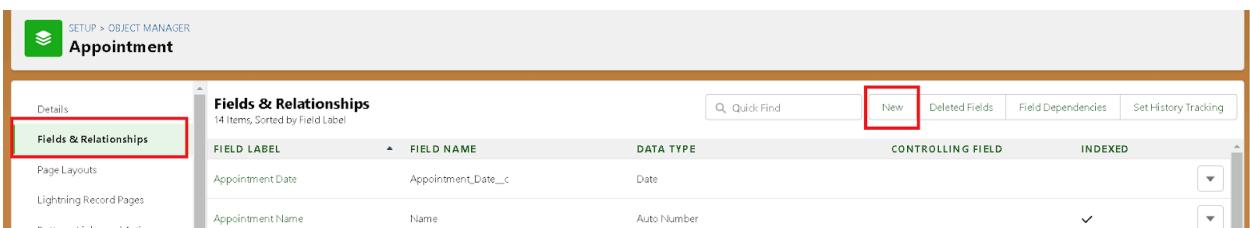
➤ Creation of Lookup Field on Appointment Object :

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



The screenshot shows the Salesforce Object Manager interface. The top navigation bar has tabs for Setup, Home, and Object Manager. The Object Manager tab is active. A search bar at the top right contains the text "app". Below the search bar, there are buttons for Schema Builder and Create. The main area is titled "Object Manager" and shows a list of objects. The "Appointment" object is highlighted with a red border. The columns in the list are labeled: LABEL, API NAME, TYPE, DESCRIPTION, LAST MODIFIED, and DEPLOYED. The "Appointment" row shows: Appointment, Appointment_c, Custom Object, and 24/08/2023. Other objects listed are Appointment Category, Appointment Invitation, and Appointment Invitee.

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



The screenshot shows the "Fields & Relationships" section for the Appointment object. The top navigation bar shows "SETUP > OBJECT MANAGER" and the object name "Appointment". On the left, there is a sidebar with options: Details, Fields & Relationships (which is selected and highlighted with a red box), Page Layouts, and Lightning Record Pages. The main content area is titled "Fields & Relationships" and shows a table of existing fields. The table has columns: FIELD LABEL, FIELD NAME, DATA TYPE, CONTROLLING FIELD, and INDEXED. Two fields are listed: "Appointment Date" (Appointment_Date_c, Date) and "Appointment Name" (Name, Auto Number). At the top right of the table, there are buttons for New (highlighted with a red box), Deleted Fields, Field Dependencies, and Set History Tracking.

3. Select “Look-up relationship” as data type and click Next.

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

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

 [Next](#) [Cancel](#)

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

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

 [Next](#) [Cancel](#)

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.

Lookup Options

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

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.

Note:- You'll have to create a field with data type as 'date' for the Appointment Date

9. Filter type should be Required.

Lookup Filter

Optionally, create a filter to limit the records available to users in the lookup field. [Tell me more!](#)

[▼ Hide Filter Settings](#)

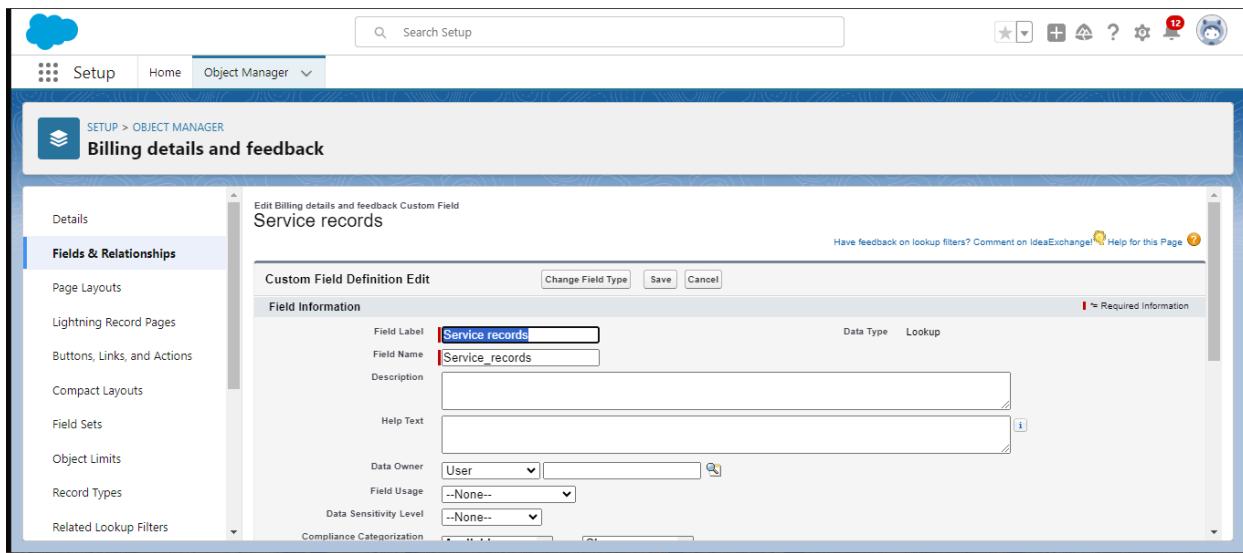
Filter Criteria	Insert Suggested Criteria	Clear Filter Criteria												
<table border="1"> <tr> <td>Field</td> <td>Operator</td> <td>Value / Field</td> </tr> <tr> <td>Appointment: Appointment Date</td> <td>less than</td> <td>Field ▾ Appointment: Created Date</td> </tr> <tr> <td>AND</td> <td>None</td> <td>Value ▾</td> </tr> <tr> <td colspan="3">Add typing to search for a field... ▾</td> </tr> </table>			Field	Operator	Value / Field	Appointment: Appointment Date	less than	Field ▾ Appointment: Created Date	AND	None	Value ▾	Add typing to search for a field... ▾		
Field	Operator	Value / Field												
Appointment: Appointment Date	less than	Field ▾ Appointment: Created Date												
AND	None	Value ▾												
Add typing to search for a field... ▾														
<p>Filter Type</p> <p><input checked="" type="radio"/> Required. The user-entered value must match filter criteria. If it doesn't, display this error message on save: <input type="text" value="Value does not exist or does not match filter criteria."/> </p> <p><input type="radio"/> Optional. The user can remove the filter or enter values that don't match criteria.</p>														
<p>Lookup Window Text</p> <p>Add this informational message to the lookup window.</p>														
<p>Active <input checked="" type="checkbox"/> Enable this filter </p>														
<p>Change Field Type Save Cancel</p>														

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.

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

Data Type

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

4. Give the Field Label : Maintenance service

5. Field Name : is auto populated

6. Default value : unchecked

Appointment
New Custom Field

Help for this Page ?

Step 2. Enter the details Step 2 of 4

Previous Next Cancel ?

Field Label ?

Default Value Checked Unchecked ?

Field Name ?

Description

Help Text

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

Previous Next Cancel

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

➤ Creation of Another Checkbox Field on Appointment Object :

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

The screenshot shows the Salesforce Setup interface. The top navigation bar includes 'Setup', 'Home', and 'Object Manager'. A search bar at the top right contains the text 'Search Setup'. On the far right, there are several icons for navigation and help.

The main content area is titled 'SETUP > OBJECT MANAGER' and 'Appointment'. On the left, a sidebar under 'Fields & Relationships' lists various options like Page Layouts, Lightning Record Pages, Buttons, etc. The central panel is titled 'Edit Appointment Custom Field Repairs' and contains the 'Custom Field Definition Edit' form. The 'Field Information' section shows the following details:

- Field Label: Repairs
- Field Name: Repairs
- Description: (empty)
- Help Text: (empty)
- Data Owner: User
- Field Usage: --None--
- Data Sensitivity Level: --None--
- Compliance Categorization: Available PII, Chosen

A note at the top right of the form says 'Required Information'.

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

This screenshot shows the continuation of the custom field creation process. The setup interface is identical to the previous one, with the 'Object Manager' tab selected for the 'Appointment' object.

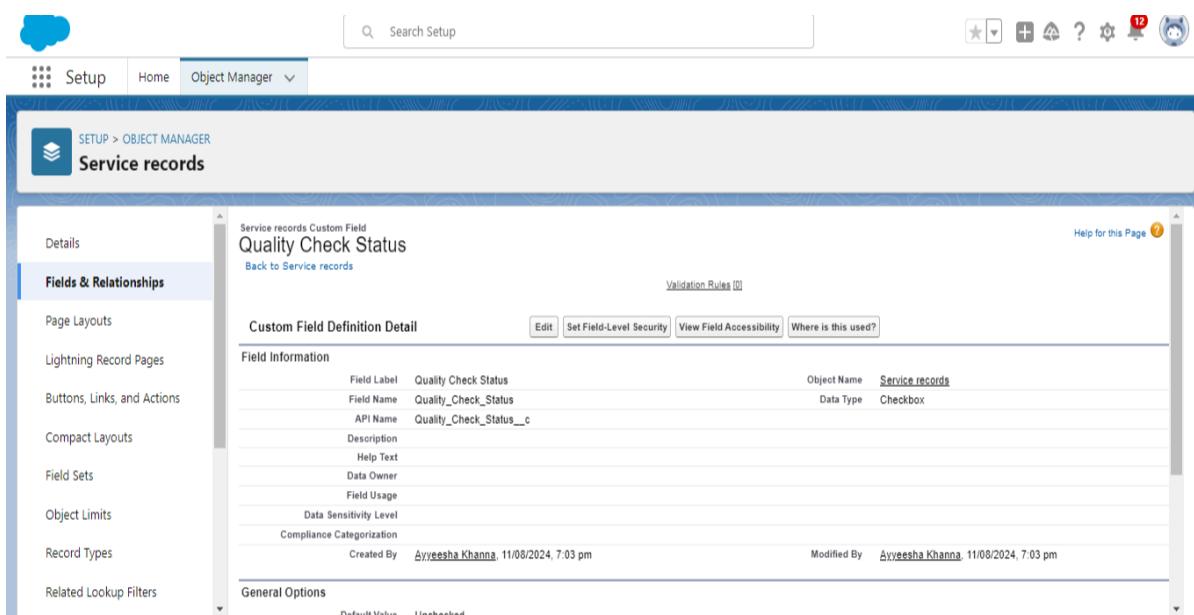
The central panel is titled 'Edit Appointment Custom Field Replacement Parts'. The 'Custom Field Definition Edit' form shows the following details:

- Field Label: Replacement Parts
- Field Name: Replacement_Parts
- Description: (empty)
- Help Text: (empty)
- Data Owner: User
- Field Usage: --None--
- Data Sensitivity Level: --None--
- Compliance Categorization: Available PII, Chosen

A note at the top right of the form says 'Required Information'.

➤ 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 Nme : is auto populated
6. Default value : unchecked
7. Click on next >> next >> save



Creation of Date Field

➤ Creation of Date Field on Appointment Object :

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

5. Field Nme : is auto populated
6. Make it as a Required field by click on the Required option.
7. Click on next >> save

Appointment
New Custom Field

Help for this Page 

Step 2. Enter the details Step 2 of 4

Field Label 

Field Name 

Description

Help Text

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

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

Default Value Show Formula Editor



Previous Next Cancel

Creation of Currency Field

➤ Creation of Currency Field on Appointment Object :

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

Step 2. Enter the details

Field Label 

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

Length Number of digits to the left of the decimal point

Decimal Places Number of digits to the right of the decimal point

Field Name 

Description

Help Text

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

6. Click on next

7. Give read only for all the profiles in field level security for profile.

Appointment
New Custom Field

Help for this Page ?

Step 3 of 4

Previous Next Cancel

Field Label: Service Amounts
Data Type: Currency
Field Name: Service_Amounts
Description:

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

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

➤ Creation of Currency Field on Billing details and feedback Object :

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

SETUP > OBJECT MANAGER
Billing details and feedback

Help for this Page ?

Billing details and feedback Custom Field
Payment Paid
Back to Billing details and feedback

Validation Rules [?]

Custom Field Definition Detail
Edit Set Field-Level Security View Field Accessibility Where is this used?

Field Information

Field Label: Payment Paid	Object Name: Billing details and feedback
Field Name: Payment_Paid	Data Type: Currency
API Name: Payment_Paid_c	
Description:	
Help Text:	
Data Owner:	
Field Usage:	
Data Sensitivity Level:	
Compliance Categorization:	
Created By: Ayveesha Khanna, 11/08/2024, 7:05 pm	Modified By: Ayveesha Khanna, 11/08/2024, 7:05 pm

Creation of Text Field

➤ Creation of Text 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 “Text” as data type and click Next.
4. Give the Field Label : Vehicle number plate
5. Field Name : is auto populated
6. Length : 10
7. Make field as Required and Unique.

Step 2. Enter the details Step 2 of 4

Field Label i

Length Please enter the maximum length for a text field below.

Field Name i

Description

Help Text

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

Unique Do not allow duplicate values

Treat “ABC” and “abc” as duplicate values (case insensitive)

Treat “ABC” and “abc” as different values (case sensitive)

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

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

Previous Next Cancel

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

The screenshot shows the Salesforce Object Manager interface. On the left, there's a sidebar with options like Details, Fields & Relationships (which is selected), Page Layouts, Lightning Record Pages, Buttons, Links, and Actions, Compact Layouts, Field Sets, Object Limits, and Record Types. The main area is titled 'Field Information'. It shows the 'Field Label' as 'Rating for service' and the 'Field Name' as 'Rating_for_service'. There are also fields for Description, Help Text, Data Owner (set to User), Field Usage (set to --None--), Data Sensitivity Level (set to --None--), and Compliance Categorization (with options like Available, PII, HIPAA, GDPR, PCI, and Chosen). A red box highlights the 'Field Label' input field.

6. Length : 1

7. Make field as Required and Unique.

8. Click on next >> next >> save

This screenshot continues the field configuration process. In the 'General Options' section, under 'Required', the 'Always require a value in this field in order to save a record' checkbox is checked. Under 'Unique', both 'Do not allow duplicate values' and 'Treat "ABC" and "abc" as duplicate values (case insensitive)' checkboxes are checked. Under 'Text Options', the 'Length' is set to 1. At the bottom, there are 'Change Field Type', 'Save', and 'Cancel' buttons. A red box highlights the 'Length' input field in the 'Text Options' section.

Creation of Picklist Fields

➤ Creation of Picklist Fields inService 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.

New Custom Field

Step 2. Enter the details

Field Label: Service Status

Values:

- Use global picklist value set
- Enter values, with each value separated by a new line

Started
Completed

Display values alphabetically, not in the order entered

Use first value as default value

Restrict picklist to the values defined in the value set

Field Name: Service_Status

Description:

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

➤ Creation of Picklist Fields in Billing details and feedback object :

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

Creation of Formula Field

➤ Creation of Formula Field on the Service Record 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.

Step 2. Choose output type

Step 2 of 5

Previous Next Cancel

Field Label Field Name

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

Formula Return Type

None Selected Select one of the data types below.

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

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

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

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

5. Insert field formula should be : CreatedDate

The screenshot shows two overlapping interface elements. The top element is the 'Insert Field' dialog, which displays a tree view of fields under 'Service records >'. The path 'Created Date' is selected and highlighted in blue. To the right, a summary panel shows 'You have selected: CreatedDate', 'Type: Date/Time', and 'API Name: CreatedDate', with an 'Insert' button. The bottom element is 'Step 3. Enter formula', part of a five-step process. It contains a text input field with the formula 'service dates (Date) = CreatedDate', where 'CreatedDate' is underlined in red. A green arrow points from the 'CreatedDate' underlined text to the formula input field. On the right side of this step, there's a 'Quick Tips' box with links to 'Getting Started' and 'Operators & Functions', and a 'Functions' dropdown menu showing options like ABS, ACOS, ADDMONTHS, AND, and ASCII.

6. click “Check Syntax” , if no syntax error then proceed.

7. Click next >> next >> Save.

CHAPTER-5

VALIDATION RULES

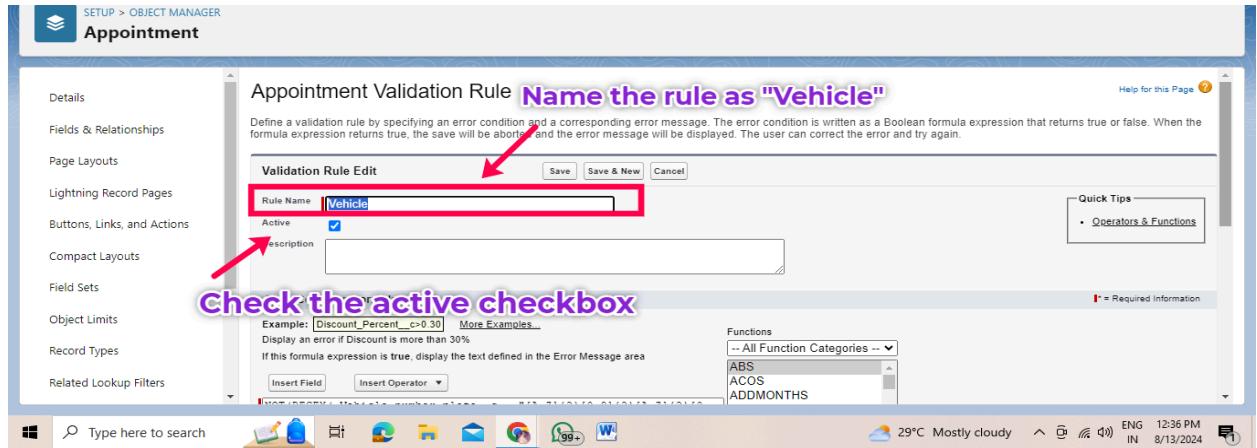
Validation rules are applied when a user tries to save a record and are used to check if the data meets specified criteria. If the criteria are not met, the validation rule triggers an error message and prevents the user from saving the record until the issues are resolved.

➤ To create a validation rule to an Appointment Object

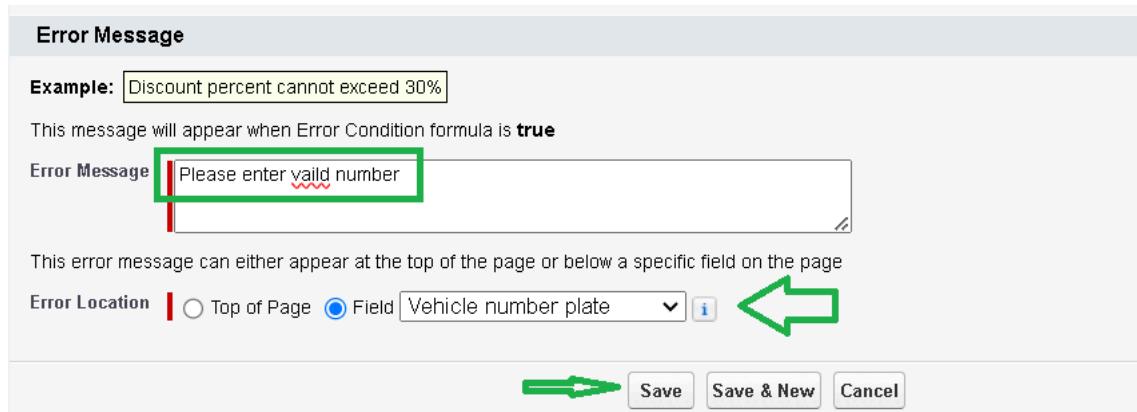
1. Go to the setup page >> click on object manager >> From drop down click edit for Appointmentobject.
2. Click on the validation rule >> click New.

The screenshot shows the Salesforce Object Manager interface for the 'Appointment' object. The left sidebar lists various configuration options: Details, Fields & Relationships, Page Layouts, Lightning Record Pages, Buttons, Links, and Actions, Compact Layouts, Field Sets, Object Limits, Record Types, and Related Lookup Filters. The main content area is titled 'Validation Rules' and displays one item: 'Vehicle'. The table columns are RULE NAME, ERROR LOCATION, ERROR MESSAGE, ACTIVE, and MODIFIED BY. The 'Vehicle' row has 'Vehicle' in the RULE NAME column, 'Vehicle number plate' in the ERROR LOCATION column, 'Please enter valid number' in the ERROR MESSAGE column, an active checkmark in the ACTIVE column, and 'Ayyeisha Khanna, 11/08/2024, 7:13 pm' in the MODIFIED BY column. A 'New' button is located in the top right corner of the table header.

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"))

The screenshot shows the 'Validation Rule Edit' screen. At the top, there are buttons for 'Save', 'Save & New', and 'Cancel'. Below these, the 'Rule Name' field contains 'service_status_note' (highlighted with a green box). A red arrow points from the text 'Your rule name' to this field. To the right of the rule name is a 'Quick Tips' box with a link to 'Operators & Functions'. The 'Active' checkbox is checked. The 'Description' field is empty.

The next section is titled 'Error Condition Formula'. It includes an example 'Discount_Percent_c>0.30' and a link to 'More Examples...'. A note says 'Display an error if Discount is more than 30%' and 'If this formula expression is true, display the text defined in the Error Message area'. A formula editor window is open, containing the formula 'NOT(ISPICKVAL(Service_Status_c , "Completed"))'. This formula is highlighted with a green box. A red arrow points from the text 'Enter the formula in the box given' to this formula. Below the formula editor are 'Insert Field' and 'Insert Operator' buttons. To the right is a 'Functions' dropdown menu with various mathematical and logical functions listed, such as ABS, ACOS, ADDMONTHS, AND, ASCII, ASIN, and ABS(number). A 'Check Syntax' button is located at the bottom left of the formula editor.

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 'Error Message' configuration screen. At the top, there is an 'Example' field with the value 'Discount percent cannot exceed 30%'. Below it is a note: 'This message will appear when Error Condition formula is true'. The 'Error Message' field contains the text 'still it is pending' (highlighted with a green box). Below this is a note: 'This error message can either appear at the top of the page or below a specific field on the page'. The 'Error Location' section has a radio button selected for 'Field' (highlighted with a green box), and the dropdown menu shows 'Service Status'. At the bottom are 'Save' and 'Save & New' buttons, with a large green arrow pointing to the 'Save' button.

➤ 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}"))`

Validation Rule Edit

Rule Name: service_status_note

Active:

Description:

Error Condition Formula

Example: `Discount_Percent_c>0.30` More Examples...

Display an error if Discount is more than 30%

If this formula expression is true, display the text defined in the Error Message area

`NOT(ISPICKVAL(Service_Status__c , "Completed"))`

Enter the formula here

Functions

ABS
ACOS
ADDMONTHS
AND
ASCII
ASIN

Insert Selected Function

ABS(number)
Returns the absolute value of a number, a number without its sign

Check Syntax

Check if there are any syntax errors

Help on this function

Required Information

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.

Error Message

Example: Discount percent cannot exceed 30%

This message will appear when Error Condition formula is true

Error Message: still it is pending

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

Error Location: Top of Page Field Service Status

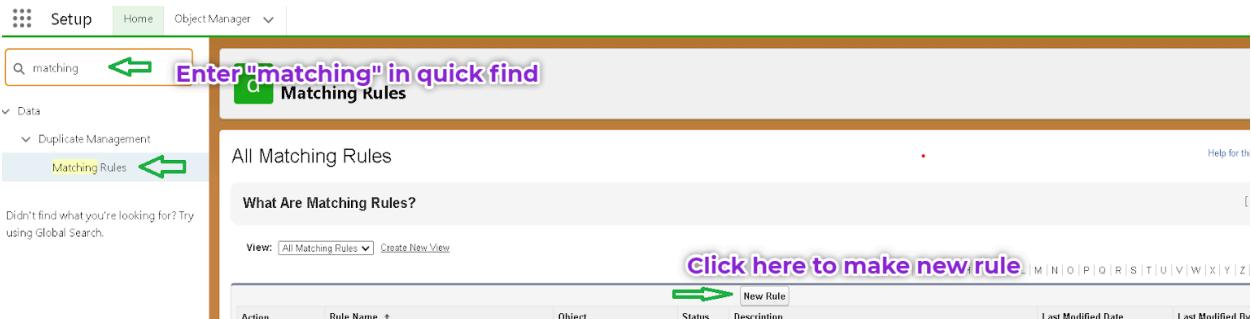
Save Save & New Cancel

CHAPTER-6

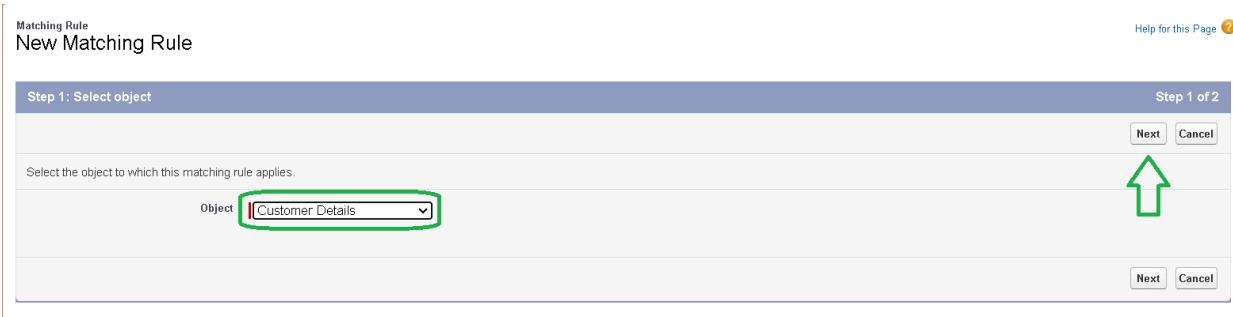
DUPLICATE RULES

➤ 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.

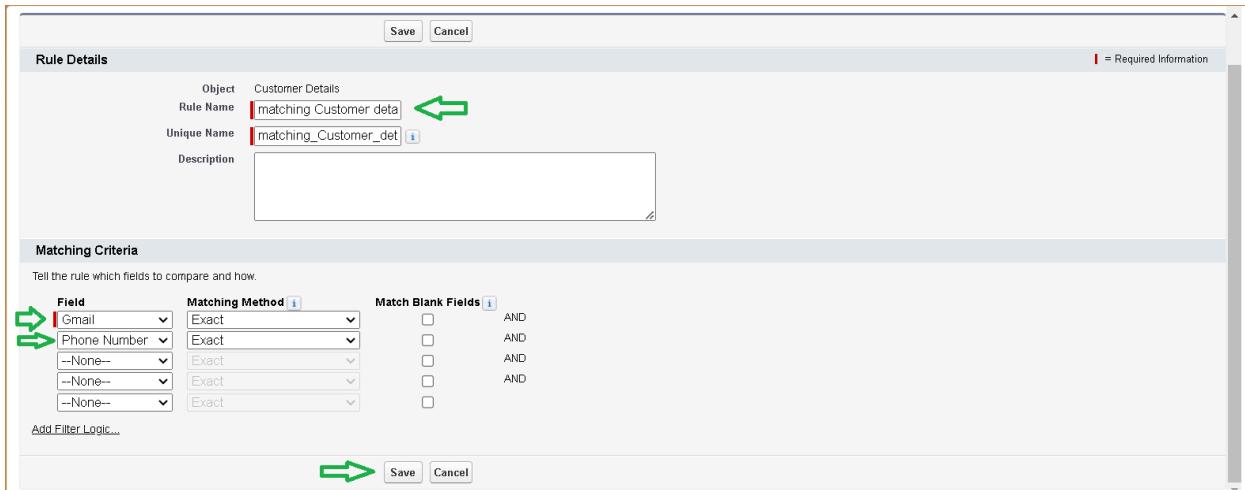


3. Select the object as Customer details and click Next.



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.



The screenshot shows the 'Rule Details' section of the Matching Rule configuration. It includes fields for Object (Customer Details), Rule Name (matching Customer details), Unique Name (matching_Customer_det), and Description. The 'Matching Criteria' section lists fields: Gmail (Exact Match), Phone Number (Exact Match), and three additional fields all set to Exact Match. Below these are 'Match Blank Fields' checkboxes and an 'Add Filter Logic...' button. At the bottom are 'Save' and 'Cancel' buttons, with a green arrow pointing to the 'Save' button.



The screenshot shows the 'Matching Rule Detail' page for the rule named 'matching Customer details'. It displays the rule's details: Object (Customer Details), Rule Name (matching Customer details), Unique Name (matching_Customer_details), and Description. The 'Matching Criteria' section shows the logic: (Customer Details: Gmail EXACT MatchBlank = FALSE) AND (Customer Details: Phone_Number EXACT MatchBlank = FALSE). It also shows the Status (Inactive), Created By (project_2, 25/09/2023, 10:15 am), and Modified By (project_2, 10/10/2023, 3:32 pm). A green arrow points to the 'Activate' button at the top right of the detail view.

➤ 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.

Search for "duplicate rules" in the quick find

All Duplicate Rules

What Are Duplicate Rules?

New Rule

Rule Name	Description	Matching Rule	Active	Last Modified By	Last Modified Date
Customer Detail duplicate	Identify accounts that duplicate other accounts	Matching Customer details	<input type="checkbox"/>	R2	10/10/2023
Standard Account Duplicate Rule	Identify contacts that duplicate other contacts and leads.	Standard Account Matching Rule	<input checked="" type="checkbox"/>	R2	24/09/2023
Standard Contact Duplicate Rule	Identify leads that duplicate other leads and contacts.	Standard Lead Matching Rule	<input checked="" type="checkbox"/>	R2	24/09/2023
Standard Lead Duplicate Rule		Standard Contact Matching Rule	<input checked="" type="checkbox"/>	R2	24/09/2023
Appointment	Billing details and feedback				
Contact					
Customer Details					
Environment					
Individual					
Laptop					
Lead					

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.

Edit Duplicate Rule
Customer Detail duplicate

Duplicate Rule Edit

Rule Details

Rule Name: Customer Detail duplicate

Description:

Object: Customer Details

Record-Level Security:

- Enforce sharing rules
- Bypass sharing rules

Actions

Specify what happens when a user tries to save a duplicate record.

Action On Create	Allow <input type="button" value="▼"/> <input checked="" type="checkbox"/> Alert <input type="checkbox"/> Report
Action On Edit	Allow <input type="button" value="▼"/> <input type="checkbox"/> Alert <input type="checkbox"/> Report
Alert Text	Use one of these records? <input type="button" value="i"/>

Matching Rules

Define how duplicate records are identified.

Compare Customer Details With	Customer Details	↙
Matching Rule	matching Customer details	↖
Matching Criteria	(Customer Details: Gmail EXACT MatchBlank = FALSE) AND (Customer Details: Phone_Number EXACT MatchBlank = FALSE)	
Field Mapping	<input checked="" type="checkbox"/> Mapping Selected	

Add Rule **Remove Rule**

Conditions

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

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

[Add Filter Logic...](#)

 **Save** **Save & New** **Cancel**

CHAPTER-7

PROFILES

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

Types of profiles in salesforce

1. Standard profiles:

By default salesforce provides below standard profiles.

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

We cannot deleted standard ones

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

2. Custom Profiles:

Custom ones defined by us.

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

➤ Manager Profile

To create a new profile:

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

Setup Home Object Manager

Search for profiles in the quick find

Profiles

Clone Profile

Enter the name of the new profile.

You must select an existing profile to clone from.

Existing Profile: Standard User

User License: Salesforce

Profile Name: Manager

Save Cancel

2. While still on the profile page, then click Edit.

Profile Manager

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

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

Record Types: [Edit the profile](#)

Permissions: [Login IP Ranges](#) | [Enabled Apex Class Access](#) | [Enabled Visualforce Page Access](#) | [Enabled External Data Source Access](#) | [Enabled Named Credential Access](#) | [Enabled External Credential Principal Access](#) | [Enabled Custom Metadata Type Access](#) | [Enabled Custom Setting Definitions Access](#) | [Enabled Flow Access](#) | [Enabled Service Presence Status Access](#) | [Enabled Custom Permissions](#)

Profile Detail

Name	Manager
User License	Salesforce
Description	
Created By	sunny_1, 13/06/2023, 2:40 pm
Modified By	sunny_1, 13/06/2023, 2:40 pm

Edit Clone Delete View Users

3. Select the Custom App settings as default for the Garage management.

Data Manager (standard__DataManager)	<input checked="" type="checkbox"/>	<input type="radio"/>	Service (standard__Service)	<input checked="" type="checkbox"/>	<input type="radio"/>
Digital Experiences (standard__SalesforceCMS)	<input checked="" type="checkbox"/>	<input type="radio"/>	Service Console (standard__LightningService)	<input checked="" type="checkbox"/>	<input type="radio"/>
Garage Management Application (Garage_Management_Application)	<input checked="" type="checkbox"/>	<input checked="" type="radio"/>	Site.com (standard__Sites)	<input checked="" type="checkbox"/>	<input type="radio"/>
Laptop Hub (Laptop_Hub)	<input type="checkbox"/>	<input type="radio"/>	Subscription Management (standard__RevenueCloudConsole)	<input checked="" type="checkbox"/>	<input type="radio"/>

4. Scroll down to Custom Object Permissions and Give access permissions for Appointments,Billing details and feedback , service records and customer details objects as mentioned in the below diagram.

Custom Object Permissions						
	Basic Access			Data Administration		
	Read	Create	Edit	Delete	View All	Modify All
Appointments	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Billing details and feedback	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Customer Details	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Environments	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Laptops	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Service records	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
SessionData	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

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

➤ 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.

Search for profile in the quick find

click to edit

3. Select the Custom App settings as default for the Garage management.
4. Scroll down to Custom Object Permissions and give access permissions for Appointments,Billing details and feedback , service records and customer details objects as mentioned in the below diagram.

Custom Object Permissions							
	Basic Access				Data Administration		
	Read	Create	Edit	Delete	View All	Modify All	
Appointments	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Billing details and feedback	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Customer Details	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Environments	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Laptops	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Service records	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>				
SessionData	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

5. And click save.

CHAPTER-8

ROLE & ROLE HIERARCHY

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

➤ Creating Manager Role

Creating Manager Role:

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

The screenshot shows the Salesforce Setup interface. In the top navigation bar, 'Setup' is selected. The left sidebar has a search bar ('roles') and a 'Roles' link highlighted with a red box. The main content area is titled 'Understanding Roles' and contains a 'Sample Role Hierarchy' diagram. The hierarchy is as follows:

- Executive Staff**: CEO President, CFO VP Sales
- Western Sales Director**: Director of W. Sales
 - Western Sales Rep**: CA Sales Rep, OR Sales Rep
- Eastern Sales Director**: Director of E. Sales
 - Eastern Sales Rep**: NY Sales Rep, MA Sales Rep
- International Sales Director**: Director of Int'l Sales
 - International Sales Rep**: Asian Sales Rep, European Sales Rep

Each role is associated with specific permissions:

- CEO President, CFO VP Sales**: View & edit data, roll up forecasts, & generate reports for all users below; Can't access data of other Executive Staff
- Western Sales Director**: View & edit data, roll up forecasts, & generate reports for all users directly below; Can't access data of users above or at same level
- Eastern Sales Director**: View & edit data, roll up forecasts, & generate reports only for own data; Can't access data of users above or at same level
- International Sales Director**: View & edit data, roll up forecasts, & generate reports only for own data; Can't access data of users above or at same level
- Western Sales Rep**: View & edit data, roll up forecasts, & generate reports only for own data; Can't access data of users above or at same level
- Eastern Sales Rep**: View & edit data, roll up forecasts, & generate reports only for own data; Can't access data of users above or at same level
- International Sales Rep**: View & edit data, roll up forecasts, & generate reports only for own data; Can't access data of users above or at same level

At the bottom right of the main content area, there is a 'Set Up Roles' button and a checkbox for 'Don't show this page again'.

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.

Role Edit

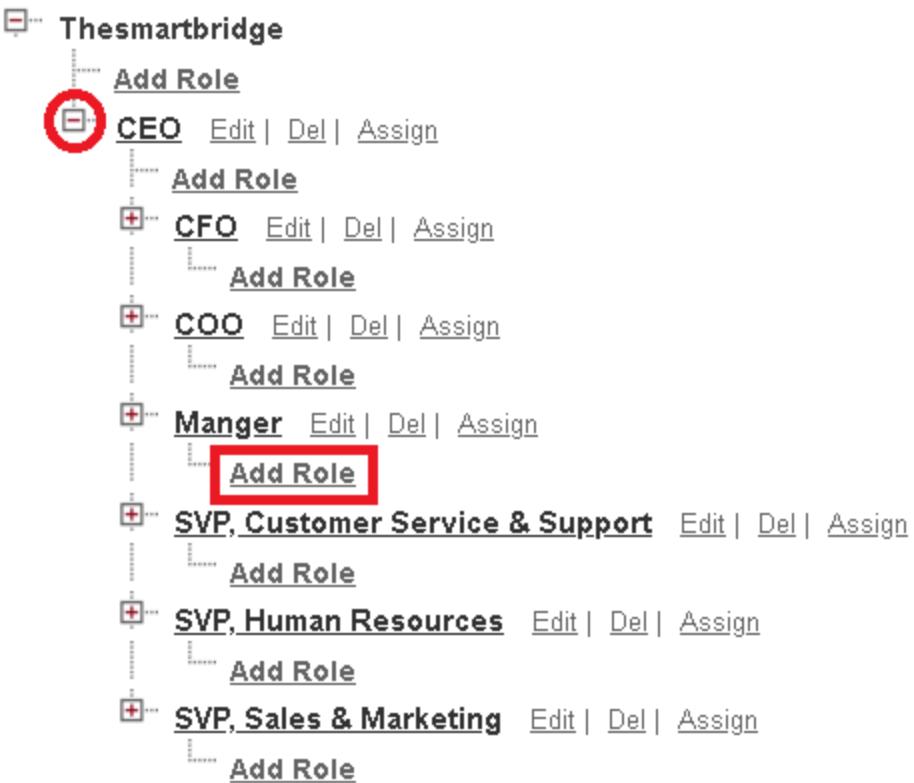
Label	<input type="text" value="Manger"/>
Role Name	<input type="text" value="Manger"/>
This role reports to	<input type="text" value="CEO"/>
Role Name as displayed on reports	<input type="text"/>
<input type="button" value="Save"/> <input type="button" value="Save & New"/> <input type="button" value="Cancel"/>	

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.

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



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

CHAPTER-9

USERS

A user is anyone who logs in to Salesforce. Users are employees at your company, such as sales reps, managers, and IT specialists, who need access to the company's records. Every user in Salesforce has a user account. The user account identifies the user, and the user account settings determine what features and records the user can access.

➤ Create User

1. Go to setup >> type users in quick find box >> select users >> click New user.
2. Fill in the fields
 - i. First Name : Niklaus
 - ii. Last Name : Mikaelson
 - iii. Alias : Give a Alias Name
 - iv. Email id : Give your Personal Email id
 - v. Username : Username should be in this form: text@text.text
 - vi. Nick Name : Give a Nickname
 - vii. Role : Manager
 - viii. User licence : Salesforce
 - ix. Profiles : Manager

New User

User Edit

Save Save & New Cancel

General Information

First Name	Niklaus
Last Name	Mikaelson
Alias	nmika
Email	
Username	Mikaelson@Niklaus
Nickname	nik
Title	
Company	
Department	
Division	

Required Information

Role	Manger
User License	Salesforce
Profile	Manager
Active	✓
Marketing User	
Offline User	
Knowledge User	
Flow User	
Service Cloud User	
Site.com Contributor User	
Site.com Publisher User	
WDC User	
Data.com User Type	

3. Save.

➤ Creating Another Users

1. Repeat the steps and create another user using

1. Role : sales person
2. User licence : Salesforce Platform
3. Profile : sales person

Note : create atleast 3 users with these permissions.

The screenshot shows the Salesforce Setup - Users page. A red arrow points from the "3 users created" message at the top right to the list of users below. The list includes the following users:

Action	Full Name	Alias	Username	Role	Active	Profile
<input type="checkbox"/>	Aditya	adit	adityasp@gmail.com	sales_person	✓	sales_person
<input type="checkbox"/>	Aradhya	arad	aradhva1@gmail.com	sales_person	✓	sales_person
<input type="checkbox"/>	Chatter Expert	Chatter	chatty:00dd000000a47gbuz.vjeokoekn15v@chatter.salesforce.com		✓	Chatter Free User
<input type="checkbox"/>	Khanna Ayeesha	AKhan	ak@project.salesforce		✓	System Administrator
<input type="checkbox"/>	Mikaelson, Niklaus	nmika	ayeesha@gmail.com	Manager	✓	Manager
<input type="checkbox"/>	Mohit	mohit	mohith@gmail.com	sales_person	✓	sales_person
<input type="checkbox"/>	User Integration	integ	integration@00dd000000a47gbuz.com		✓	Analytics Cloud Integration User
<input type="checkbox"/>	User Security	sec	insightssecurity@00dd000000a47gbuz.com		✓	Analytics Cloud Security User

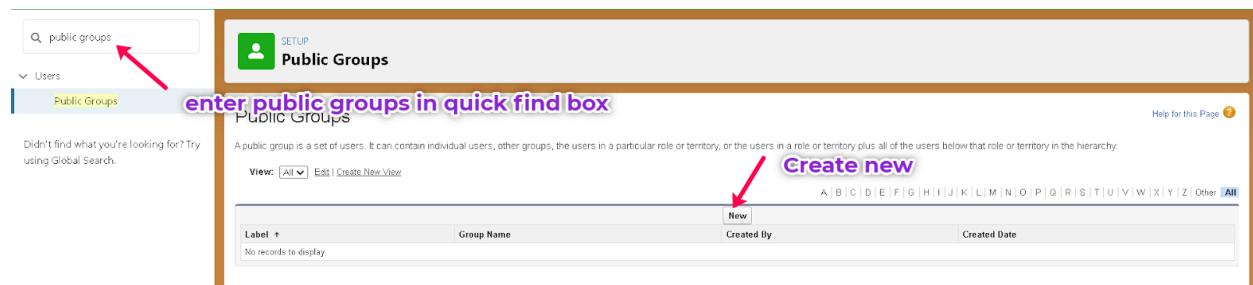
CHAPTER-10

PUBLIC GROUPS

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

➤ Creating New Public Group

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



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

Group Information

New Public Group

Label: Sales Team
Group Name: Sales_Team

Grant Access Using Hierarchies

Search: Roles for Find

Available Members

- Role: Customer Support, North America
- Role: Director, Channel Sales
- Role: Director, Direct Sales
- Role: Eastern Sales Team
- Role: Installation & Repair Services
- Role: Manager
- Role: Marketing Team
- Role: SVP, Customer Service & Support
- Role: SVP, Human Resources
- Role: SVP, Sales & Marketing
- Role: VP, International Sales
- Role: VP, Marketing
- Role: VP, North American Sales
- Role: Western Sales Team

Selected Members

- Role: Sales person

Add Remove

Selected area

Add to Delegated Administration Groups

CHAPTER-11

SHARING SETTINGS

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

Organization-Wide Default (OWD) Settings:

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

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

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

Role Hierarchy:

Salesforce uses a role hierarchy to determine record access.

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

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

Profiles and Permission Sets:

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

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

Sharing Rules:

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

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

Manual Sharing:

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

➤ 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.

SETUP

Sharing Settings

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

User Visibility Settings

Portal User Visibility ⓘ Site User Visibility ⓘ

Other Settings

Standard Report Visibility ⓘ Manual User Record Sharing ⓘ Manager Groups ⓘ

Minimize the number of roles created, which improves performance by cutting down processing loads ⓘ

Grant site users access to related cases ⓘ Secure guest user record access ⓘ Require permission to view record names in lookup fields ⓘ

Turn service records as private

Save **Cancel**

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

Service records Sharing Rules

No sharing rules specified.

New **Recalculate**



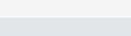
5. Give the Label name as “ Sharing setting”
6. Rule name is auto populated.
7. In step 3 : Select which records to be shared, members of “ Roles ” >> “ Sales person”
8. In step 4: share with, select “ Roles ” >> “ Manager ”
9. In step 5 : Change the access level to “ Read / write ”.
10. Click on save.

SETUP

Sharing Settings

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

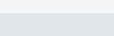
Step 1: Rule Name

Label: sharing settings 
Rule Name: sharing_settings 
Description: 

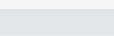
Step 2: Select your rule type

Rule Type: Based on record owner Based on criteria

Step 3: Select which records to be shared

Service records: owned by members of: Roles  Sales person 

Step 4: Select the users to share with

Share with: Roles  Manager 

Step 5: Select the level of access for the users

Access Level: Read/Write 

 Save Cancel

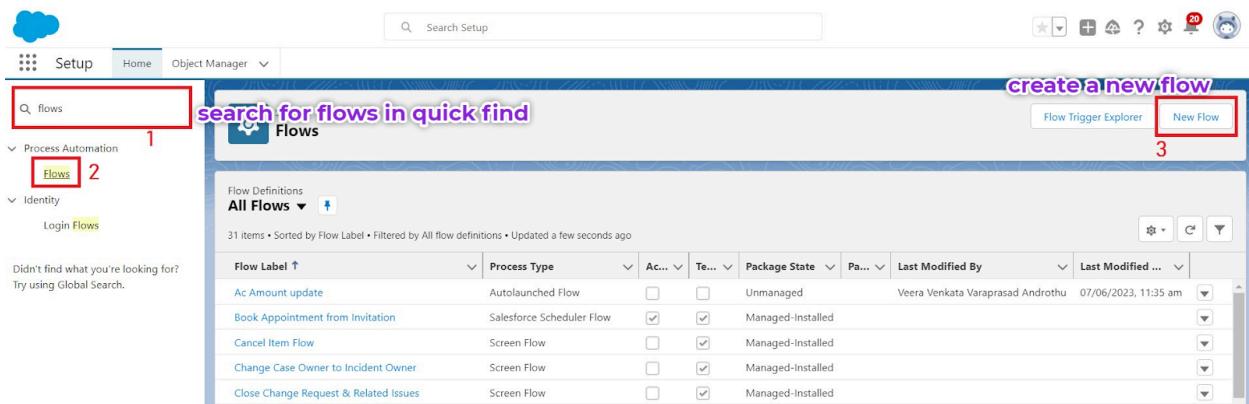
CHAPTER-12

FLOWs

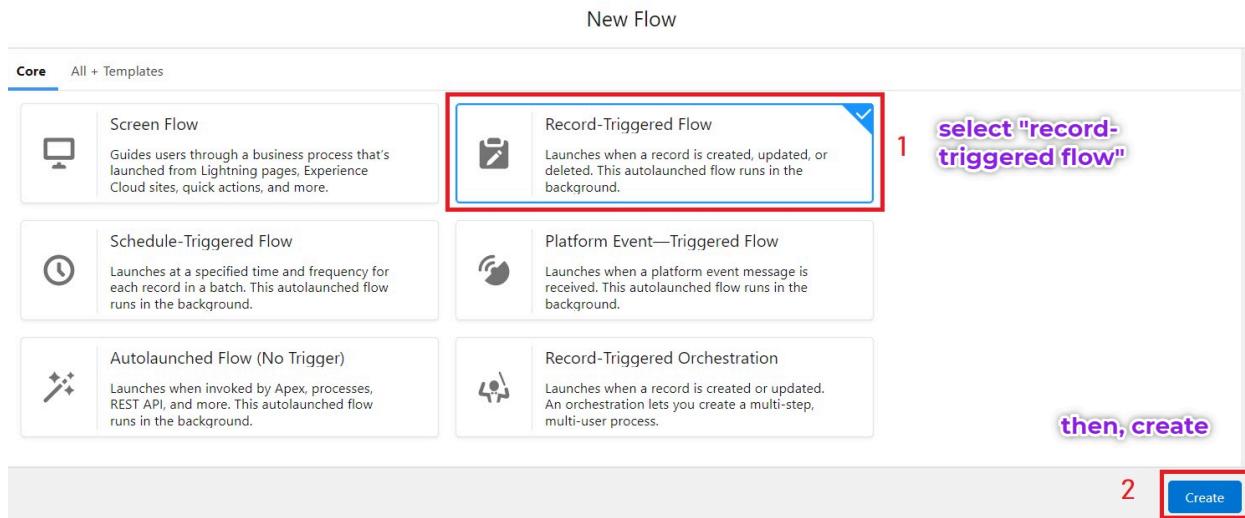
In Salesforce, a flow is a powerful tool that allows you to automate business processes, collect and update data, and guide users through a series of screens or steps. Flows are built using a visual interface and can be created without any coding knowledge.

➤ 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.

The screenshot shows the 'Configure Start' screen for a Record-Triggered Flow. It has two main sections:

- Select Object**: A dropdown menu labeled 'Object' containing 'Billing details and feedback', which is highlighted with a green box.
- Configure Trigger**: A section with the heading 'Trigger the Flow When:' and four radio buttons:
 - A record is created
 - A record is updated
 - A record is created or updated (highlighted with a green arrow pointing to it)
 - A record is deleted

Set Entry Conditions

Specify entry conditions to reduce the number of records that trigger the flow and the number of times the flow is executed. Minimizing unnecessary flow executions helps to conserve your org's resources.

If you create a flow that's triggered when a record is updated, we recommend first defining entry conditions. Then select the **Only when a record is updated to meet the condition requirements** option for When to Run the Flow for Updated Records.

Condition Requirements

None

*Optimize the Flow for:

Fast Field Updates

Update fields on the record that triggers the flow to run. This high-performance flow runs *before* the record is saved to the database.

Actions and Related Records

Update any record and perform actions, like send an email. This more flexible flow runs *after* the record is saved to the database.

Include a Run Asynchronously path to access an external system after the original transaction for the triggering record is successfully committed

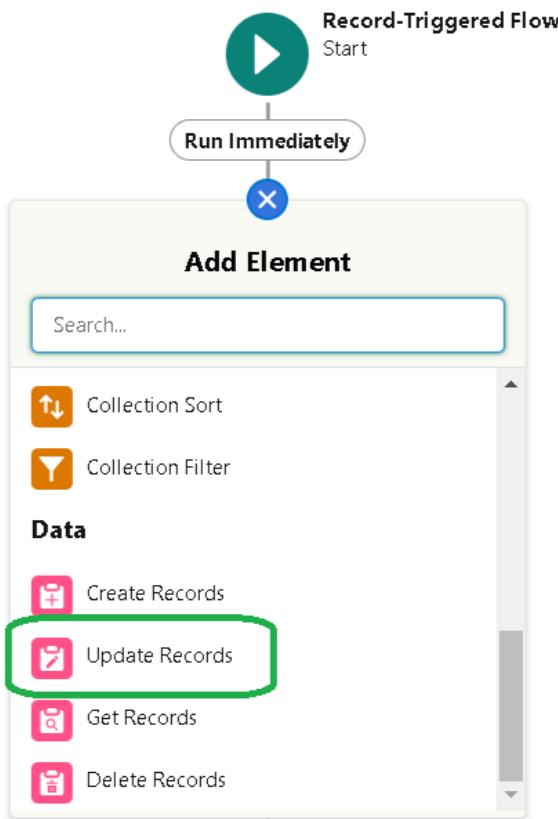
3

Cancel

Done

4

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

Edit Update Records

Update Salesforce records using values from the flow.

*Label	*API Name
Amount Update	Amount_Update

Description

*** How to Find Records to Update and Set Their Values**

- Use the billing details and feedback record that triggered the flow
- Update records related to the billing details and feedback record that triggered the flow
- Use the IDs and all field values from a record or record collection
- Specify conditions to identify records, and set fields individually

Set Filter Conditions

Condition Requirements to Update Record

All Conditions Are Met (AND)

Set Filter Conditions

Condition Requirements to Update Record

All Conditions Are Met (AND)

Field	Operator	Value
Payment_Status__c	Equals	Completed

+ Add Condition

Set Field Values for the Billing details and feedback Record

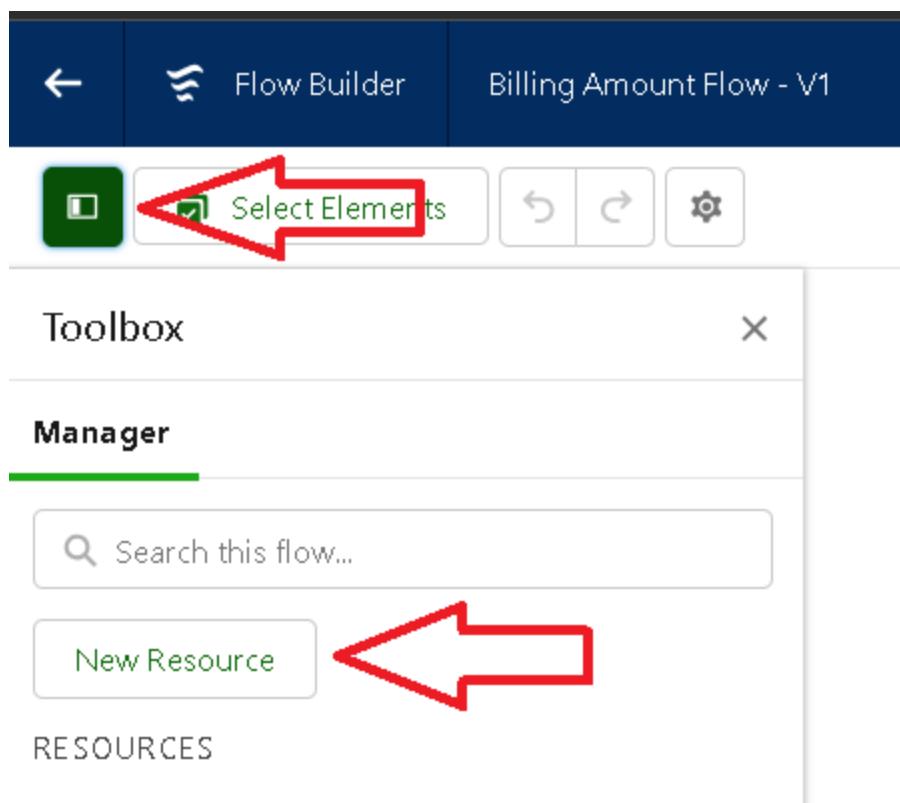
Field	Value
Payment_Paid__c	\$Record > Service records > Appointment > Service A...

+ Add Field

Cancel Done

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

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



18. Click on the New Resource, And select Variable.
19. Select the resource type as text template.

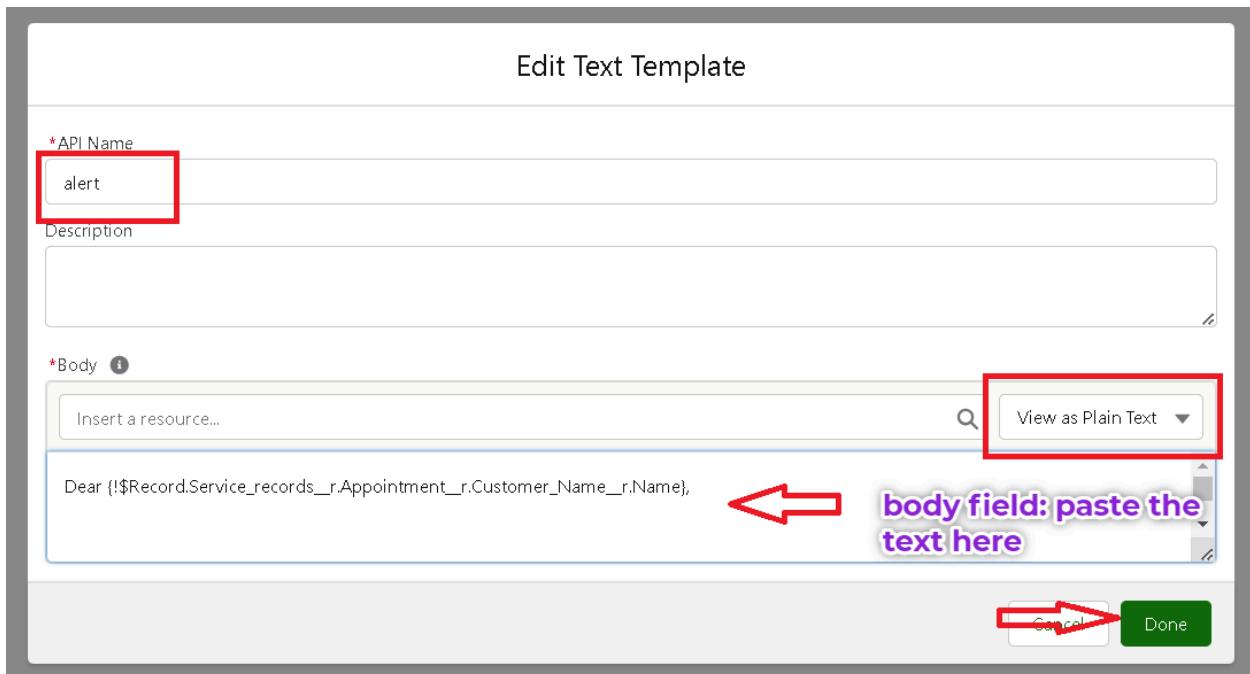
- 20.Enter the API name as “ alert”.
 - 21.Change the view as Rich Text ? View to Plain Text.
 - 22.In body field paste the syntax that given below.
- Dear {!\$Record.Service_records__r.Appointment__r.Customer_Name__r.Name},

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:

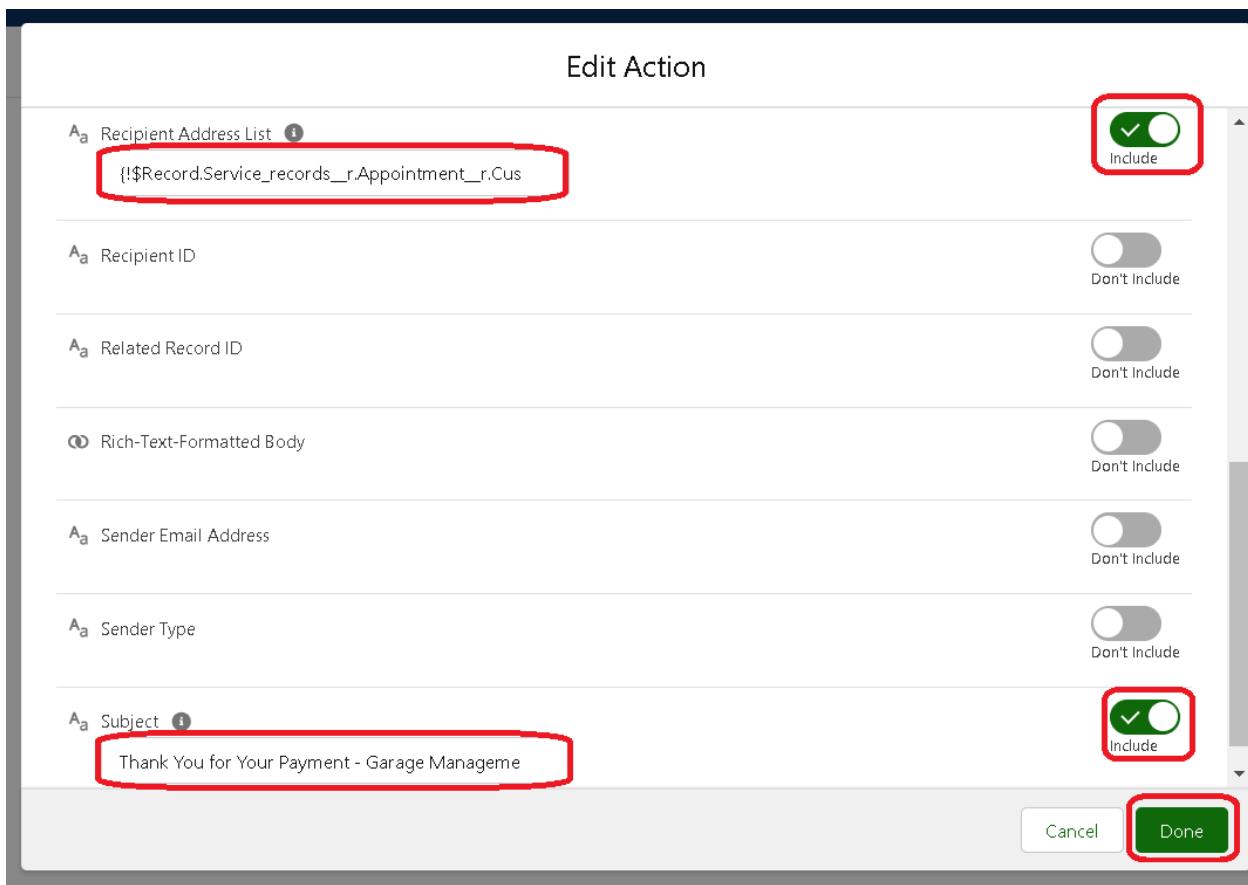
{!\$Record.Service_records__r.Appointment__r.Customer_Name__r.Gmail__c}

32. Include subject as “ Thank You for Your Payment - Garage Management”.
33. Click done.

Edit Action

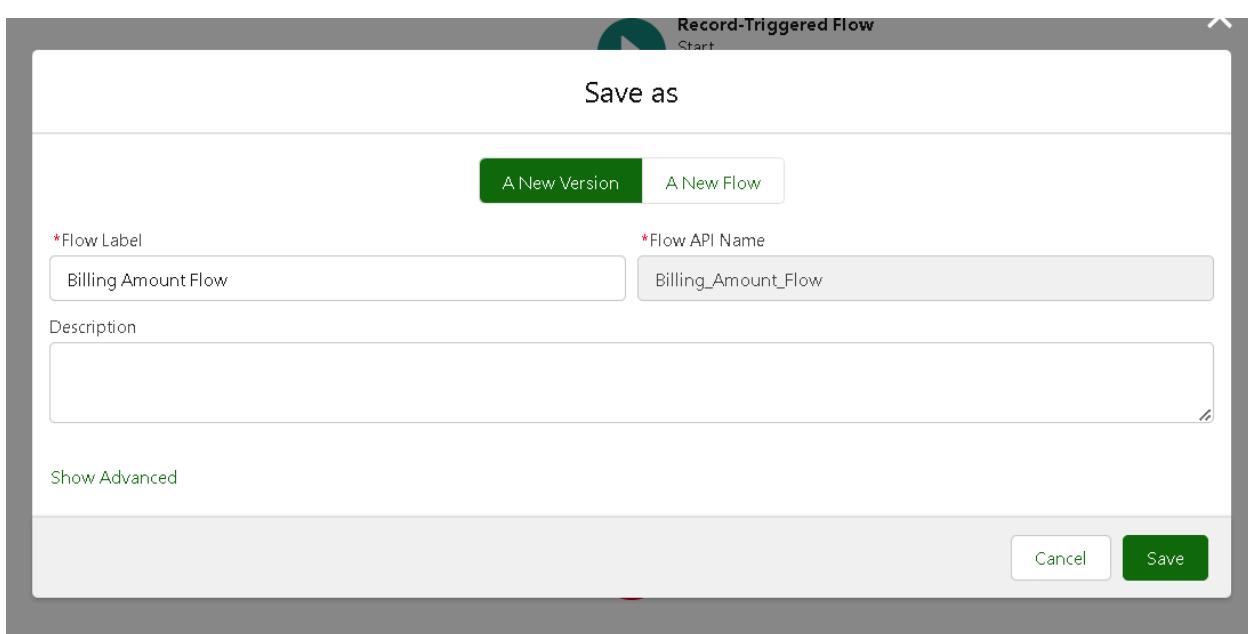
Use values from earlier in the flow to set the inputs for the "Send Email" core action. To use its outputs later in the flow, store them in variables.

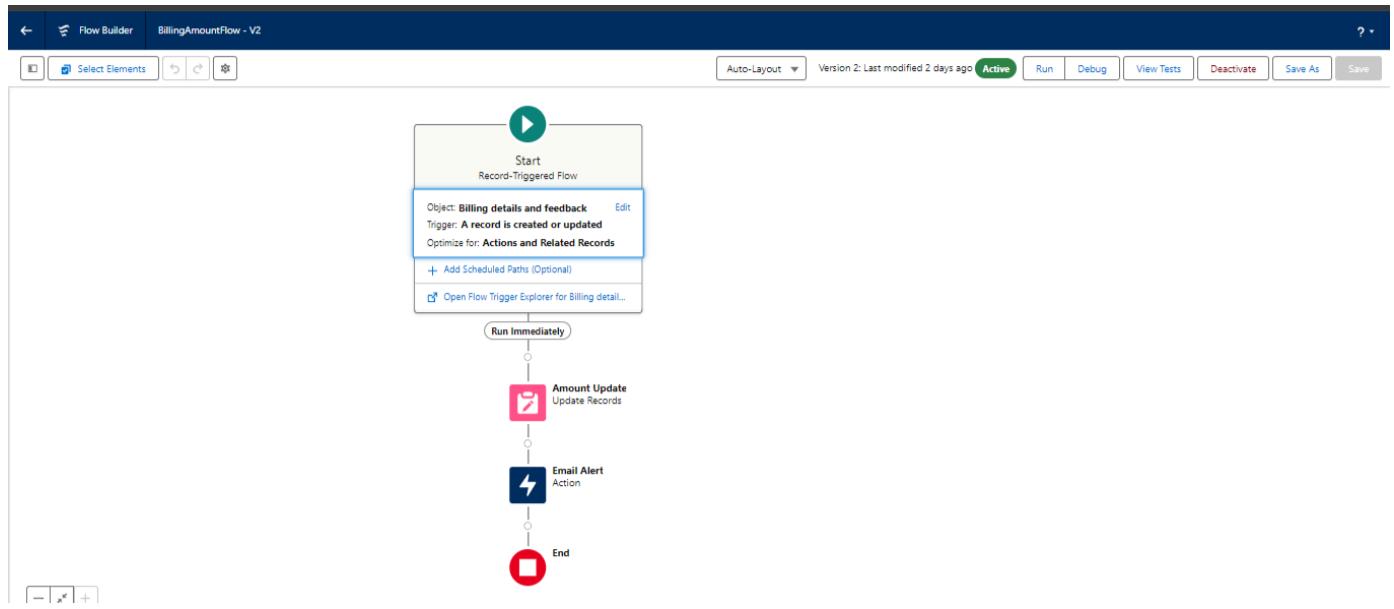
*Label <input type="text" value="Email Alert"/>	*API Name <input type="text" value="Email_Alert"/>
Description <input type="text"/>	
Set Input Values for the Selected Action	
A_a Body <input type="text" value="={!alert}"/>	<input checked="" type="checkbox"/> Include
A_a Email Template ID	<input type="checkbox"/> Don't Include
A_a Log Email on Send	<input type="checkbox"/> Don't Include



34. Click on save. Give the Flow label , Flow Api name will be autopopulated.

35. And click save, and click on activate.





CHAPTER-13

APEX TRIGGERS

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

before or after changes to Salesforce records, such as insertions, updates, or deletions.

A trigger is Apex code that executes before or after the following types of operations:

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

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

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

There are primarily two types of Apex Triggers:

Before Trigger: This type of trigger in Salesforce is used either to update or validate the values of a record before they can be saved into the database. So,

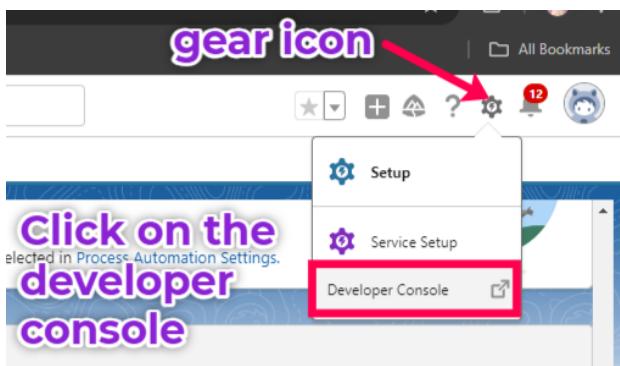
basically, the before trigger validates the record first and then saves it. Some criteria or code can be set to check data before it gets ready to be inserted into the database.

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

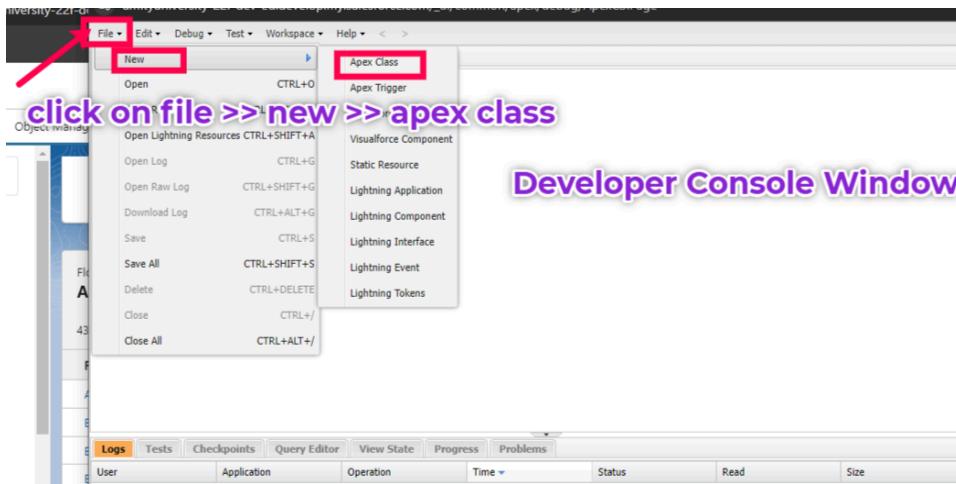
➤ Apex Handler

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    else if(app.Maintenance_service__c == true && app.Replacement_Parts__c == true){
26        app.Service_Amount__c = 8000;
27    }
28
29    else if(app.Repairs__c == true && app.Replacement_Parts__c == true){
30        app.Service_Amount__c = 7000;
31    }
}

```

```

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 }

```

Code:

```
public class AmountDistributionHandler {  
  
    public static void amountDist(list<Appointment__c> listApp){  
        list<Service_records__c> serList = new list <Service_records__c>();  
  
        for(Appointment__c app : listApp){  
            if(app.Maintenance_service__c == true && app.Repairs__c == true &&  
app.Replacement_Parts__c == true){  
                app.Service_Amount__c = 10000;  
            }  
            else if(app.Maintenance_service__c == true && app.Repairs__c == true){  
                app.Service_Amount__c = 5000;  
            }  
            else if(app.Maintenance_service__c == true &&  
app.Replacement_Parts__c == true){  
                app.Service_Amount__c = 8000;  
            }  
            else if(app.Repairs__c == true && app.Replacement_Parts__c == true){  
                app.Service_Amount__c = 7000;  
            }  
            else if(app.Maintenance_service__c == true){  
                app.Service_Amount__c = 2000;  
            }  
            else if(app.Repairs__c == true){  
                app.Service_Amount__c = 3000;  
            }  
        }  
    }  
}
```

```
    }

    else if(app.Replacement_Parts__c == true){

        app.Service_Amount__c = 5000;

    }

}

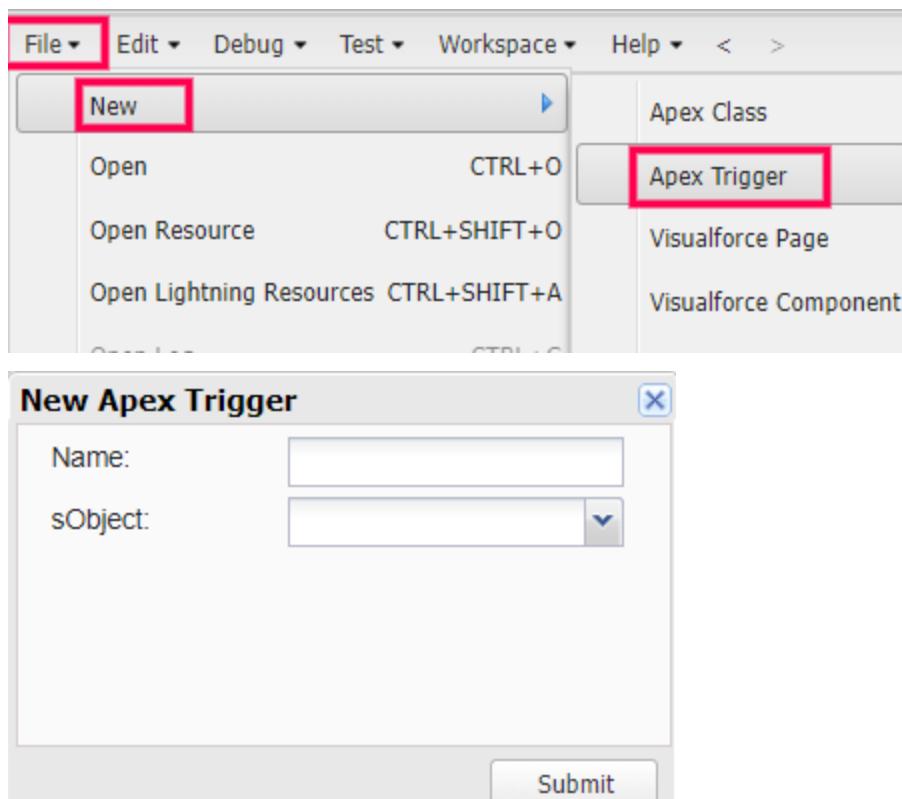
}

}
```

Trigger Handler :

How to create a new trigger :

1. While still in the trailhead account, navigate to the gear icon in the top right corner.
2. Click on developer console and you will be navigated to a new console window.
3. Click on File menu in the tool bar, and click on new? Trigger.
4. Enter the trigger name and the object to be triggered.
5. Name : AmountDistribution
6. sObject : Appointment__c



Syntax For creating trigger :

The syntax for creating trigger is :

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

```
{  
}
```

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

1. Handler for the Appointment Object

The screenshot shows a Salesforce IDE interface with the following details:

- Menu bar: File, Edit, Debug, Test, Workspace, Help.
- Tab bar: AmountDistribution.apxt (selected), AmountDistributionHandler.apxc *.
- Status bar: Code Coverage: None, API Version: 58.
- Code editor content:

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

Code:

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

CHAPTER-14

REPORTS

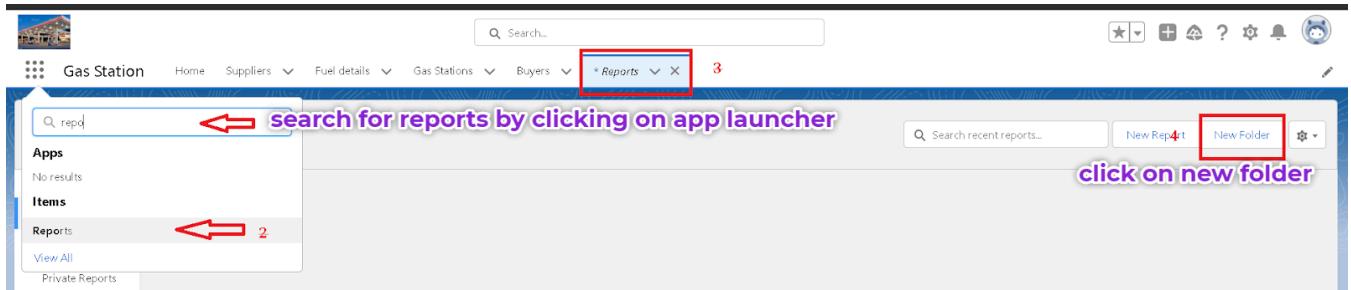
Reports give you access to your Salesforce data. You can examine your Salesforce data in almost infinite combinations, display it in easy-to-understand formats, and share the resulting insights with others. Before building, reading, and sharing reports, review these reporting basics.

Types of Reports in Salesforce

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

➤ 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.

Create folder

* Folder Label
Garage Management Folder

* Folder Unique Name
GarageManagementFolder

Cancel **Save**

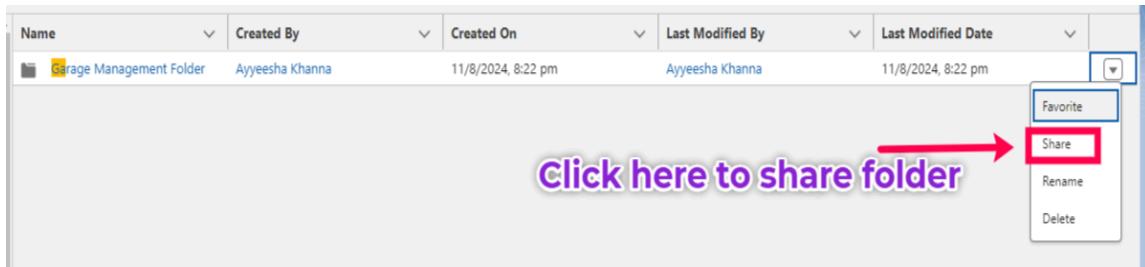
➤ Sharing a report folder

1. Go to the app >> click on the reports tab.
2. Click on the All folder , click on the Drop down arrow for Garage Management folder, and Click on share.

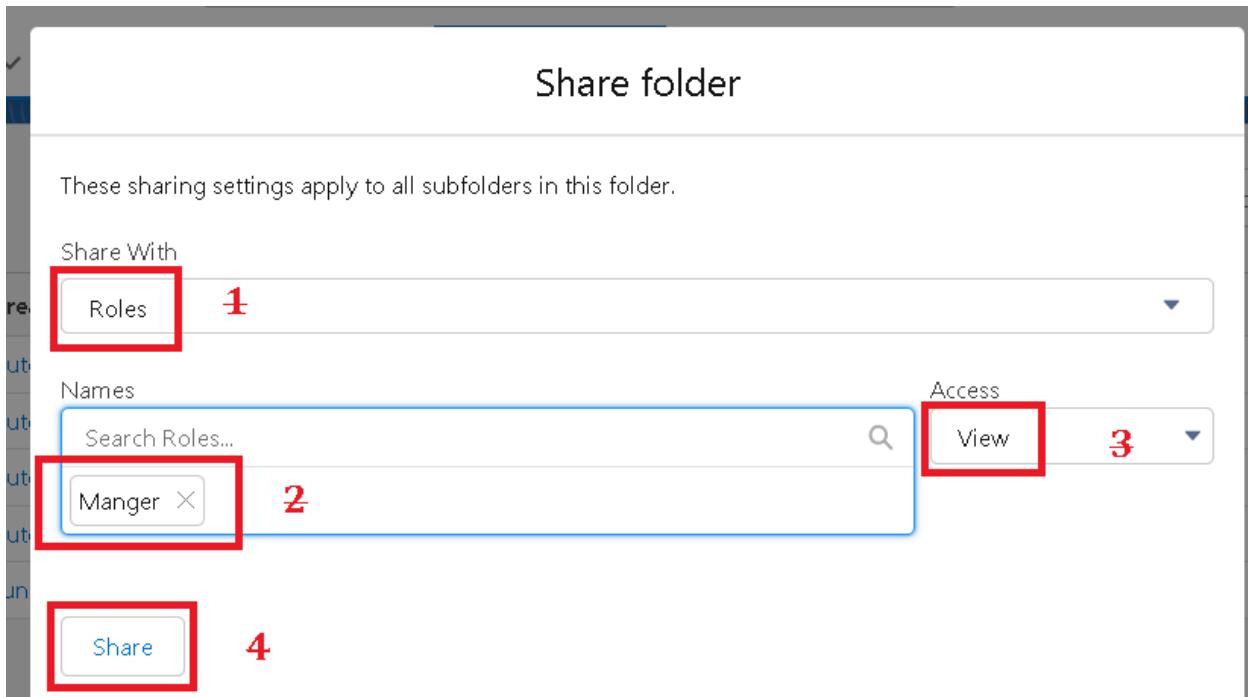
Search for garage management folder

Name	Created By	Created On	Last Modified By	Last Modified Date
Garage Management Folder	Ayyesha Khanna	11/8/2024, 8:22 pm	Ayyesha Khanna	11/8/2024, 8:22 pm

click on the drop down menu



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.

Setup Home Object Manager

Report Types

All Custom Report Types

With custom report types, you can enable users to create reports from the predefined objects, object relationships, and fields that you specify.

View: All Custom Report Types | Edit | Create | New View

Action	Label +	Description	Category	Deployed	Created By Alias	Created Date
Edit Del	Bot Metrics Daily Summer '23	Einstein Bot metrics aggregated by day.	Other Reports	<input checked="" type="checkbox"/>	autopro	28/09/2023
Edit Del	Bot Metrics Hourly Summer '23	Einstein Bot metrics aggregated by hour	Other Reports	<input checked="" type="checkbox"/>	autopro	28/09/2023
Edit Del	Screen Flows	Find out which flows get executed and how long users take to complete each flow screen.	Other Reports	<input checked="" type="checkbox"/>	autopro	24/09/2023
Edit Del	Session Metrics Summer '23	Einstein Bot session metrics	Other Reports	<input checked="" type="checkbox"/>	autopro	28/09/2023

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 | Other | All

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

Report Type Focus

Specify what type of records (rows) will be the focus of reports generated by this report type.

Example: If reporting on "Contacts with Opportunities with Partners," select "Contacts" as the primary object.

Primary Object: Customer Details

Identification

Report Type Label: Service information

Report Type Name: Service_information

Description: Service information

Note: Description will be visible to users who create reports.

Store in Category: Other Reports

Deployment

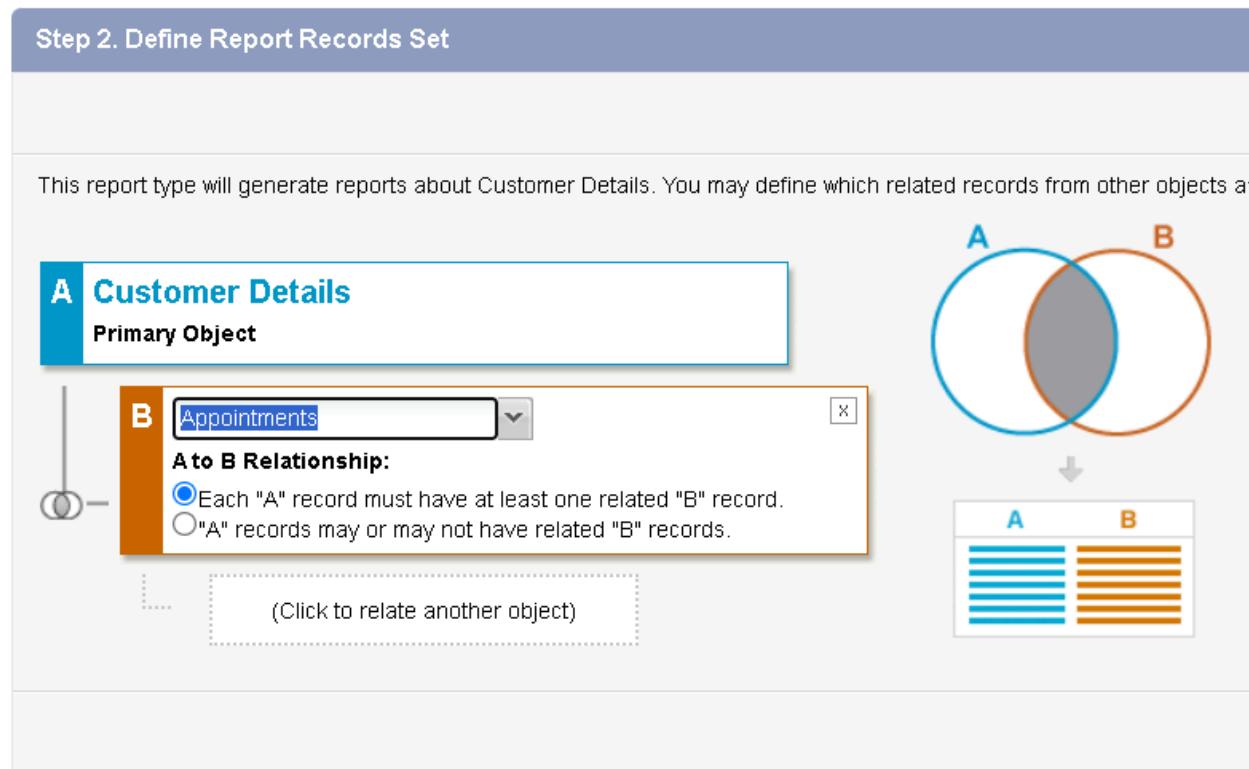
A report type with deployed status is available for use in the report wizard. While in development, report types are visible only to authorized administrators and their delegates.

Deployment Status: In Development Deployed

Next Cancel

9. Now , Click on Related object box.

10. Click on Select Object, choose Appointment Object as shown in fig.



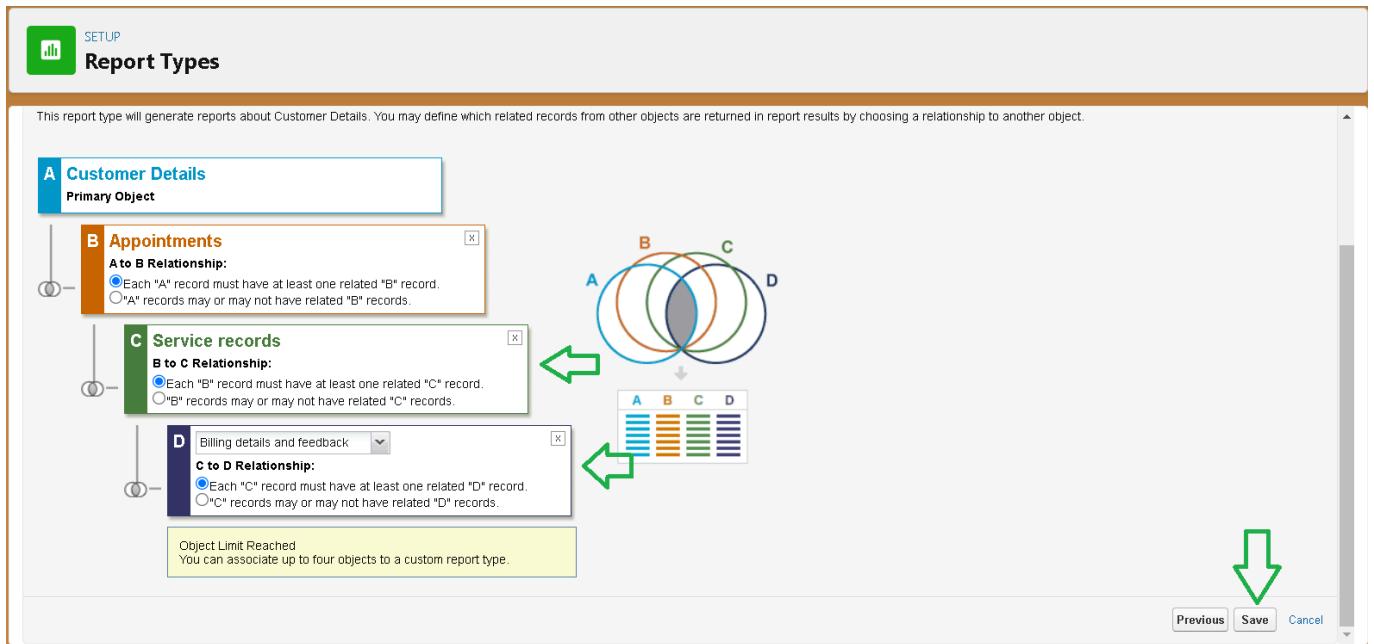
11. Again Click to relate another object.

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.



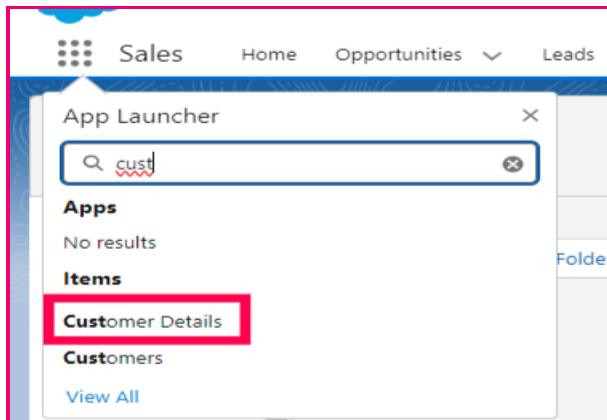
Note : Before creating report, create latest “10” records in every object.

Try to fill every field in each record for better experience.

Lets start with creating records for every object first.

➤ Records for Customer Detail Object

1. Go to App Launcher and then search for the object "Customer Details"



2. Click on the Customer Details and then click on new

already created records for the customer detail object

New Import Change Owner Assign Label

	Customer Details Name
1	ruhi
2	shaurya
3	Babbar
4	Shwetank
5	Raina
6	Abha

3. Then, enter all the details:- name, phone no. and gmail
(Create any user of your choice)
4. After entering all details, click on save

New Customer Details

* = Required Information

Information

* Customer Details Name:

Owner: Ayyeesha Khanna

Phone number:

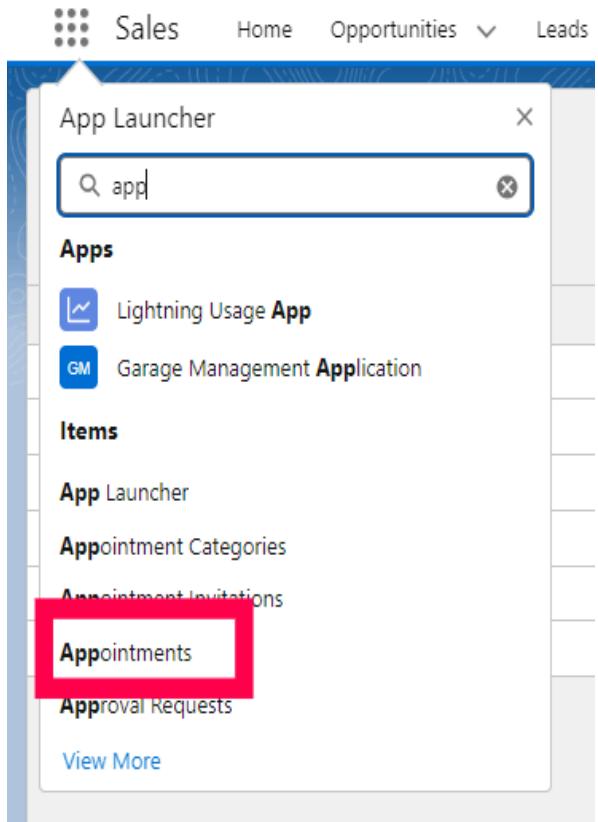
Gmail:

Cancel Save & New Save

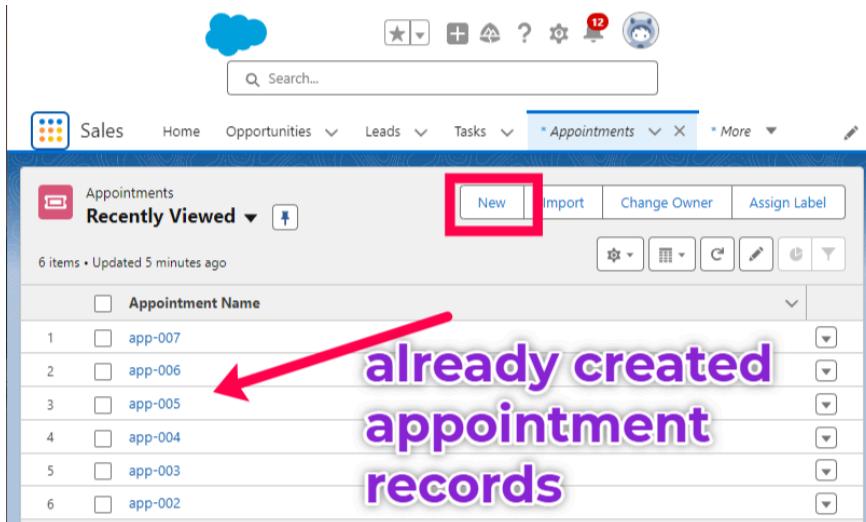
5. Now, Repeat the same for all the remaining objects (Appointments, Service records, Billing details and feedback)

➤ Records for Appointments Object

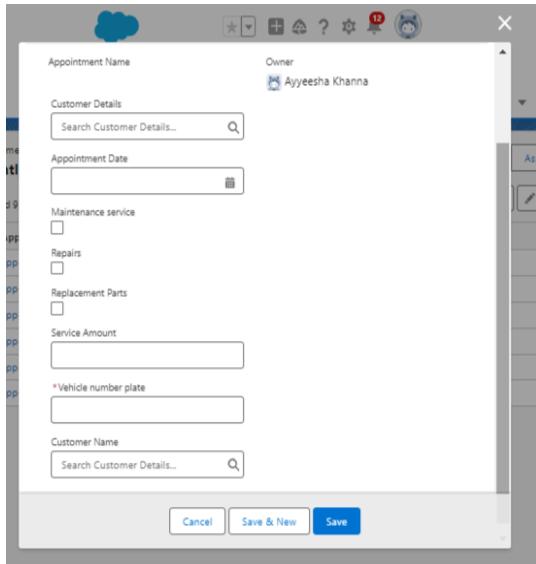
1. Go to App Launcher and then search for the object "Appointments"



2. Click on the Appointments and then click on new



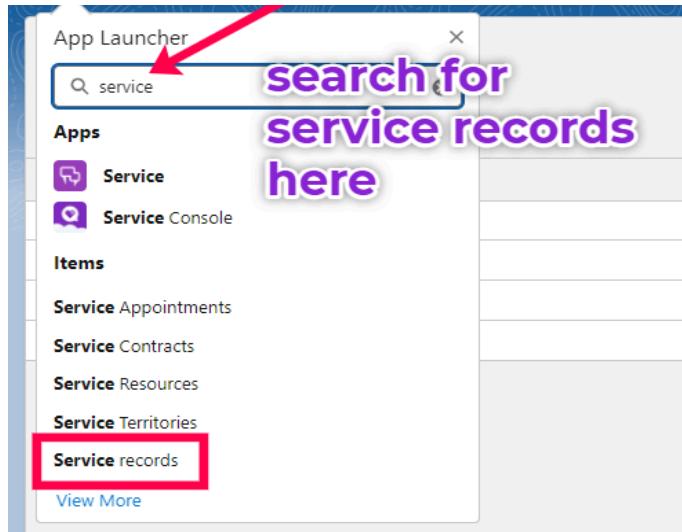
3. Enter all details in the fields mentioned below



4. Select the customer in Customer details
5. Choose an Appointment date before the current date(Suppose the current date is 14/08/24 then choose any date before the 14th of Aug 2024)
6. Check atmost one from the given options Maintenance service, Replacement Parts n Repairs.
7. Enter the Service Amount
8. Enter a unique number for the Vehicle Number Plate.
9. Now, click on save.

➤ Records for Service Record Object

1. Go to App Launcher and then search for the object "Service Record"



2. Click on the Service Records and then click on new

Service records
Recently Viewed ▾

New Import Change Owner Assign Label

click on new to create a new record

3. Enter all details in the fields mentioned below

New Service records

* = Required Information

Information

Service records Name Owner

* Appointment

Search Appointments...

Complete this field.

Quality Check Status

Service Status

--None--

Cancel Save & New Save

4. Select the appointment record

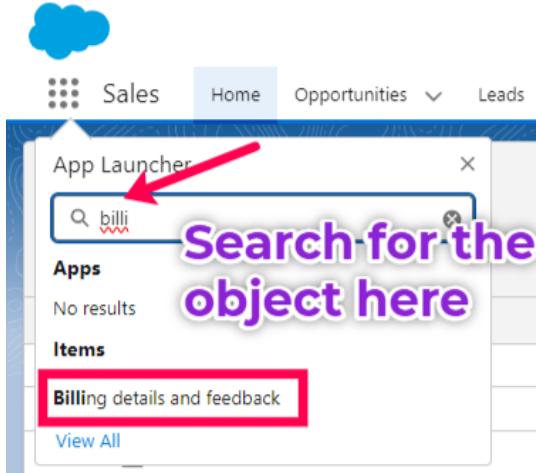
5. Check the uality Check Status.

6. Now, select the service startus from as pending or complete.

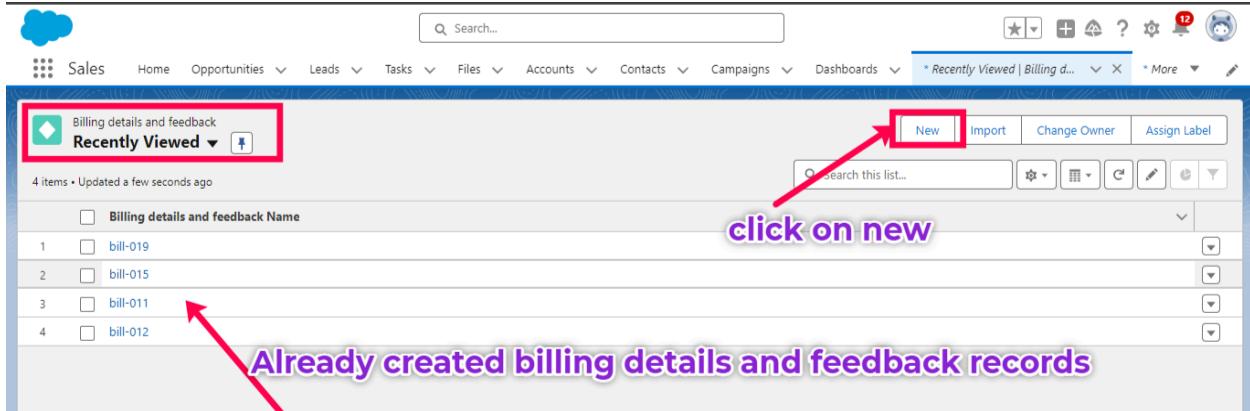
7. Now, save the record

➤ Records for Billing Details and Feedback Object

1. Go to App Launcher and then search for the object "Billing Detail and feedback " object



2. Click on the Billing Detail and feedback and then click on new



3. Enter all details in the fields mentioned below

A screenshot of the 'New Billing details and feedback' form. The title bar says 'New Billing details and feedback'. Below it, a note says '* = Required Information'. The form has several sections: 'Information' (Billing details and feedback Name: 'Ayyeesha Khanna', Owner: 'Ayyeesha Khanna'), 'Service records' (Search Service records...), 'Payment Paid' (a text input field), 'Rating for service' (a text input field), and 'Payment Status' (a dropdown menu with options including '--None--'). At the bottom are 'Cancel', 'Save & New', and 'Save' buttons.

4. Enter the service records

5. Enter the same amount as you did while creating the Appointment record for that particular customer
6. Select the rating for the service ranging between 0-5
7. Select the payment status as either pending or completed.

Billing details and feedback
Recently Viewed ▾

4 Items • Updated 8 minutes ago

	Billing details and feedback Name
1	<input type="checkbox"/> bill-019
2	<input type="checkbox"/> bill-015
3	<input type="checkbox"/> bill-011
4	<input type="checkbox"/> bill-012

your created records for billing details and feedback object

You have successfully made records for each object.

Now, let's start by creating the report

➤ Create Report

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

Employee Manage... Home Employees Assets Asset Services Projects ProjectTasks Reports Dashboards

Reports Recent 2 Items

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

Click to create a new report

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

Create Report

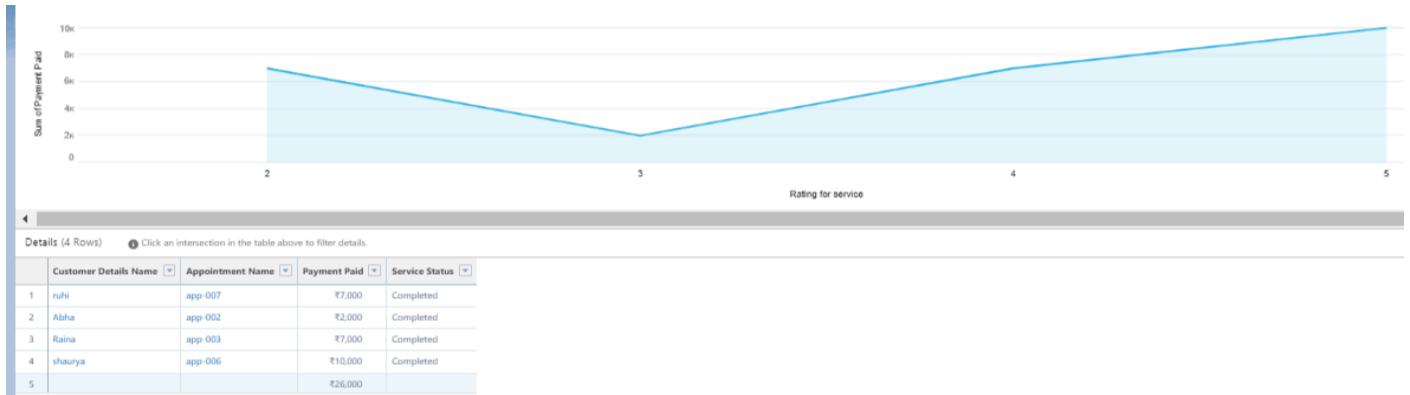
Category	Report Type Name	Category
Customer Support Reports	Service records	Standard
Leads	Service records with Appointment	Standard
Campaigns	Service records History	Standard
Activities	Billing details and feedback with Service records	Standard
Contracts and Orders	Service information	Custom
Price Books, Products and Assets		
Administrative Reports		
File and Content Reports		
Individuals		
Other Reports		
Hidden Report Types		

Details

- Service information** Custom Report Type
- Description** Service information
- Created By You** No Reports Yet
- Created By Others** No Reports Yet

Fields (49)

4. Their outline pane is opened already, select the fields that mentioned below in column section.
 - Customer name
 - Appointment Date
 - Service Status
 - Payment paid
5. Remove the unnecessary fields.
6. Select the fields that mentioned below in GROUP ROWS section.
 - Rating for Service
7. Select the fields that mentioned below in GROUP COLUMN section.
 - Payment Status
8. Click on Add Chart , Select the Line Chart.
9. Click on save, Give the report Name : New Service information Report
10. Report unique Name is auto populated.
11. Select the folder the created and Click on save.



Save Report

*Report Name
New Service information Report

Report Unique Name New_Service_information_Report_oVu

Report Description

Folder
Garage Management Folder

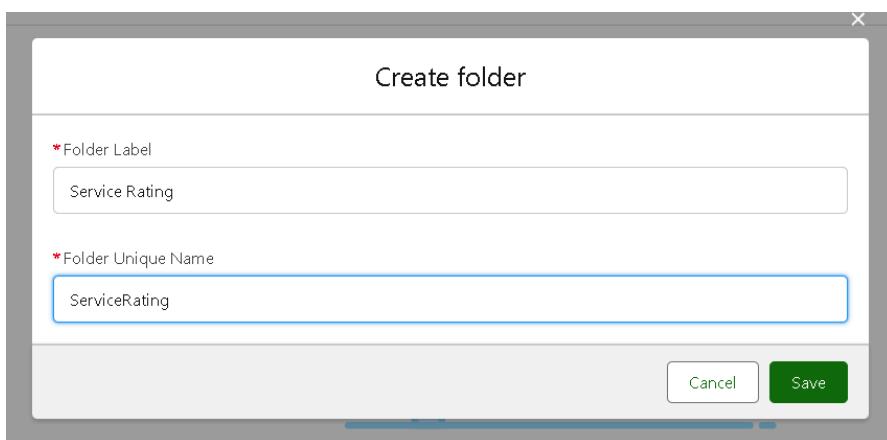
CHAPTER- 15

DASHBOARD

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

➤ 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 14(i.e., Repprt --> Sharing a Report) , 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.

New Dashboard

* Name
Customer review

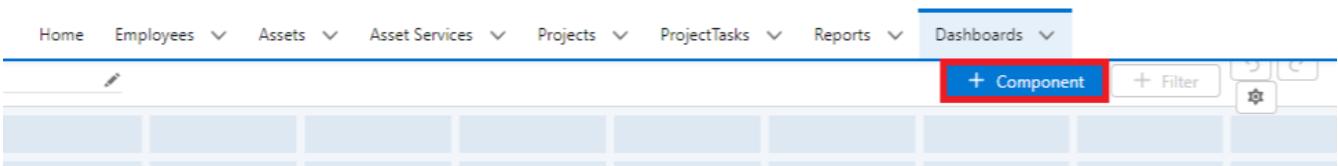
Description

Folder
Service Rating

Select Folder

Cancel Create

3. Select add component.



4. Select a Report and click on select.

Select Report

Reports

- Recent
- Created by Me
- Private Reports
- Public Reports
- All Reports

Folders

- Created by Me
- Shared with Me

Select Report

Search Reports and Folders...

New Service information Report
project 2 - 16-Oct-2023, 3:20 pm - Garage Management Folder

All Bot Sessions Last 30 days
Automated Process - 28-Aug-2023, 10:04 am - Einstein Bot Reports Summer '23

Cancel Select

5. Select the Line Chart. Change the theme.

6. Click Add then click on Save and then click on Done.

7. Preview is shown below.



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

Edit Subscription

Schedule dashboard refreshes and subscribe to receive results.

Settings

Frequency

Days

Time

3:00 pm

Recipients

Receive new results by email when dashboard is refreshed. i

Send email to
Me

