

Project Report



Project Title: Garage Management system

Platform: Salesforce

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Abstract

The Garage Management System is a comprehensive application developed on the Salesforce platform designed to optimize the management and operation of garage services. This system provides a seamless interface for garage owners, technicians, and customers, allowing them to schedule repairs, manage service records, track vehicle maintenance, and handle billing and payments. Leveraging Salesforce's advanced CRM and automation capabilities, the application ensures efficient service management, enhanced customer experience, and real-time tracking for operational insights.

Introduction

In today's fast-paced world, vehicle maintenance and repair services are integral to ensuring that vehicles run smoothly and efficiently. Managing a garage can be complex, with numerous tasks such as service bookings, repair tracking, billing, and inventory management to handle. The Garage Management System addresses these challenges by offering a centralized platform for garage owners, service providers, and customers. Built on the Salesforce platform, the system offers scalability, customization, and real-time data processing, making it a powerful tool for the automotive service industry.

Objectives

1. To create an efficient, user-friendly platform for managing garage operations.
2. To enable seamless service booking and appointment scheduling for customers.
3. To track vehicle repairs, maintenance schedules, and service history.
4. To automate inventory management for spare parts and tools.
5. To integrate customer relationship management (CRM) for better service and retention.
6. To provide real-time analytics and reporting to optimize garage operations.
7. To ensure secure transactions and customer data management.

Scope

The Garage Management System is designed to:

- Serve individual customers, car dealerships, and fleet management companies.
- Manage various types of services, including repairs, routine maintenance, diagnostics, and vehicle customization.
- Handle real-time appointment scheduling, service tracking, and service history.
- Support multiple payment options, invoicing, and billing.
- Automate notifications for scheduled appointments, reminders for upcoming services, and inventory restocking alerts.

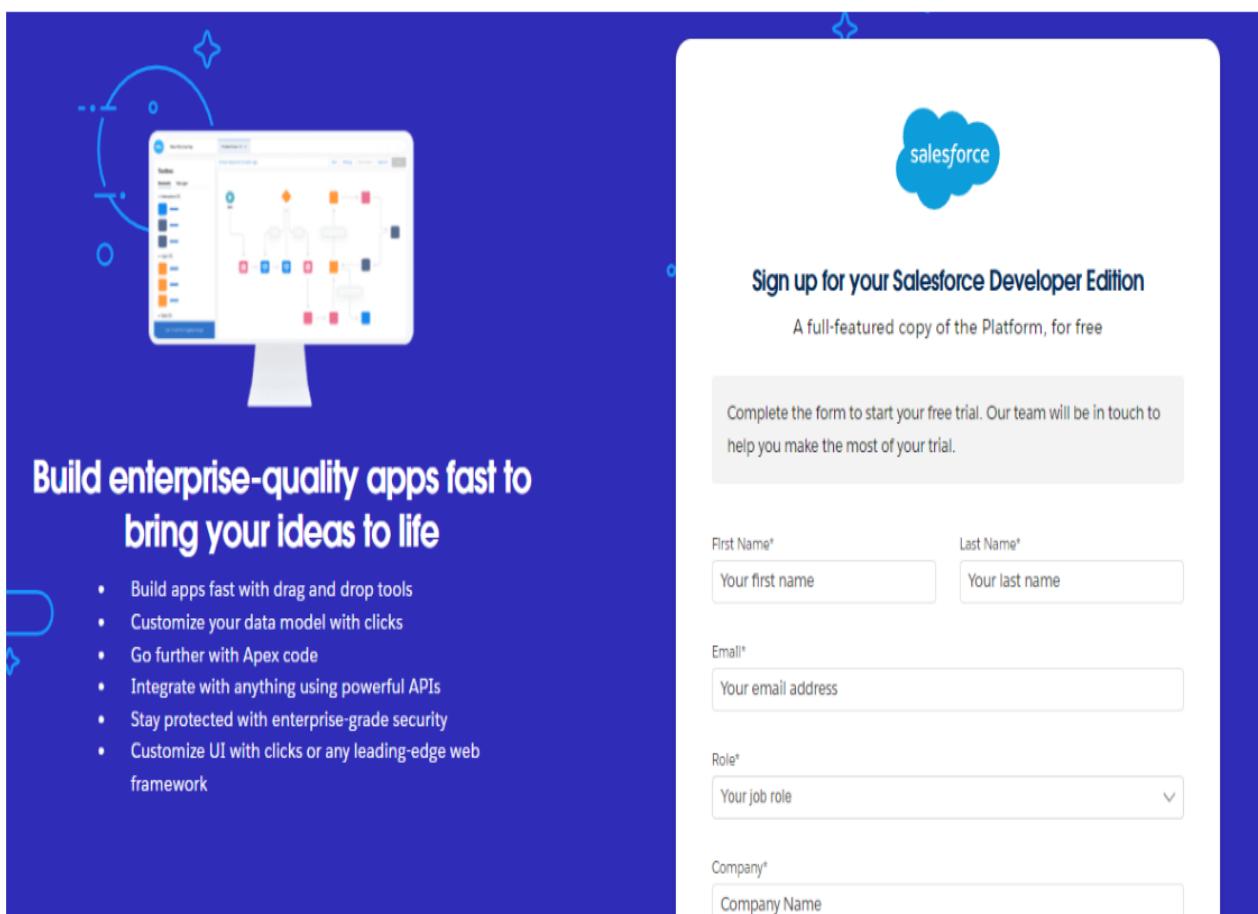
Technologies Used

- **Salesforce:** The core platform for development and deployment.
- **Apex:** Custom business logic and triggers for service management and automation.
- **Lightning Web Components (LWC):** Frontend interface for customer and service staff interactions.
- **Salesforce Flow:** Automation of service request intake, booking processes, and maintenance reminders.
- **Third-party APIs:** For payment gateway integration, SMS/email notifications, and parts inventory management.
- **Salesforce Reports and Dashboards:** For generating real-time operational insights, business performance reports, and customer satisfaction metrics.

1.Creating Developer Account:

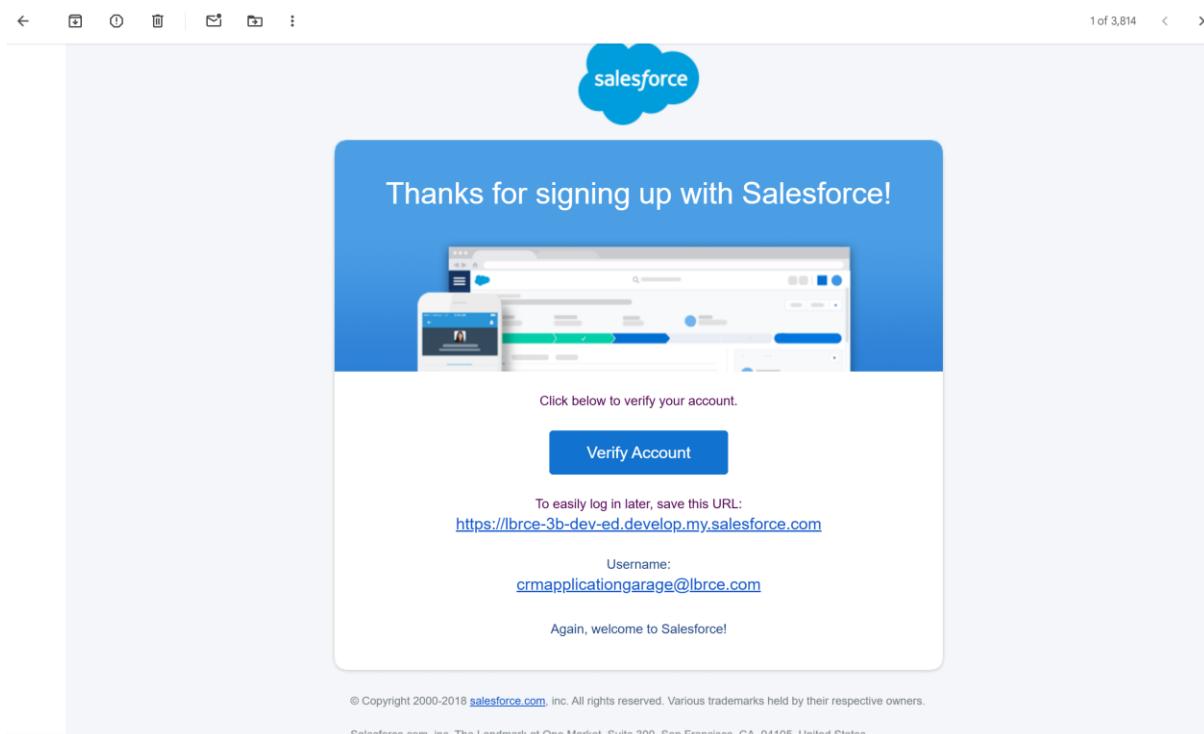
Creating a developer org in salesforce.

1. Go to <https://developer.salesforce.com/signup>
2. On the sign up form, enter the following details :
3. First name & Last name
4. Email
5. Role : Developer
6. Company : College Name
7. County : India
8. Postal Code : pin code
9. Username : should be a combination of your name and company
10. This need not be an actual email id, you can give anything in the format :
username@organization.com
11. Click on sign me up after filling these.



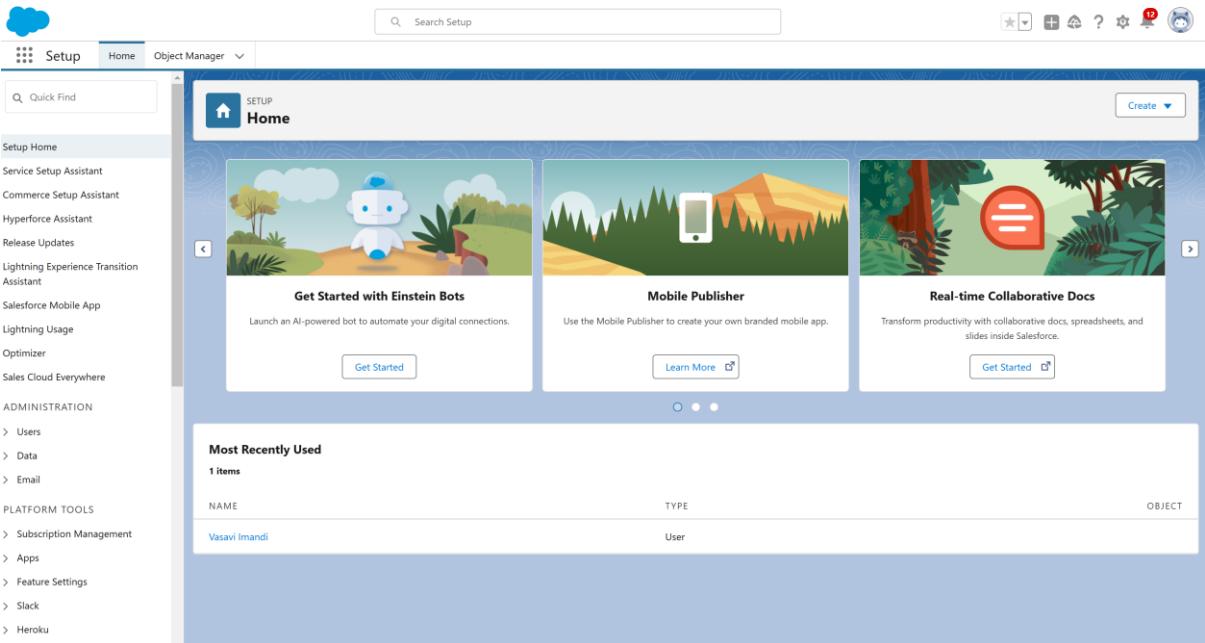
Account Activation

1. Go to the inbox of the email that you used while signing up. Click on the verify account to activate your account. The email may take 5-10mins.



1. Click on Verify Account
2. Give a password and answer a security question and click on change password.
3. Then you will redirect to your salesforce setup page.

A screenshot of the "Change Your Password" page in Salesforce. The title is "Change Your Password". It instructs the user to "Enter a new password for lead@sb.oom. Make sure to include at least:" followed by three requirements: "8 characters", "1 letter", and "1 number", each with a green checkmark. Below these requirements is a red box containing two input fields: "New Password" and "Confirm New Password", both with red asterisks. To the right of the "New Password" field is the word "Good". To the right of the "Confirm New Password" field is the word "Match". Below these fields is a section for "Security Question" with a dropdown menu showing "In what city were you born?". Under "Answer", there is a text input field containing "asdfghjkl". At the bottom of the red box is a blue "Change Password" button.



2.Object

What Is an Object?

Salesforce objects are database tables that permit you to store data that is specific to an organization.
What are the types of Salesforce objects

Salesforce objects are of two types:

- Standard Objects:** Standard objects are the kind of objects that are provided by salesforce.com such as users, contracts, reports, dashboards, etc.
- 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.

Create Customer DetailsObject

To create an object:

- From the setup page >> Click on Object Manager >> Click on Create >> Click on Custom Object.
- Enter the label name >> Customer Details
- Plural label name >> Customer Details
- Enter Record Name Label and Format
 - Record Name >> Customer Name
 - Data Type >> Text
- Click on Allow reports and Track Field History,
- Allow search >> Save.

The screenshot shows the Salesforce Setup interface with the 'Object Manager' selected. The main title is 'Customer Details'. On the left, a sidebar lists various object configuration options like Fields & Relationships, Page Layouts, and Triggers. The right panel displays the 'Details' section for the Customer Details object. It includes fields for API Name (Customer_Details__c), Singular Label (Customer Details), Plural Label (Customer Details), and several checkboxes for reports, activities, and field history. Buttons for 'Edit' and 'Delete' are at the top right.

Create Appointment Object

To create an object:

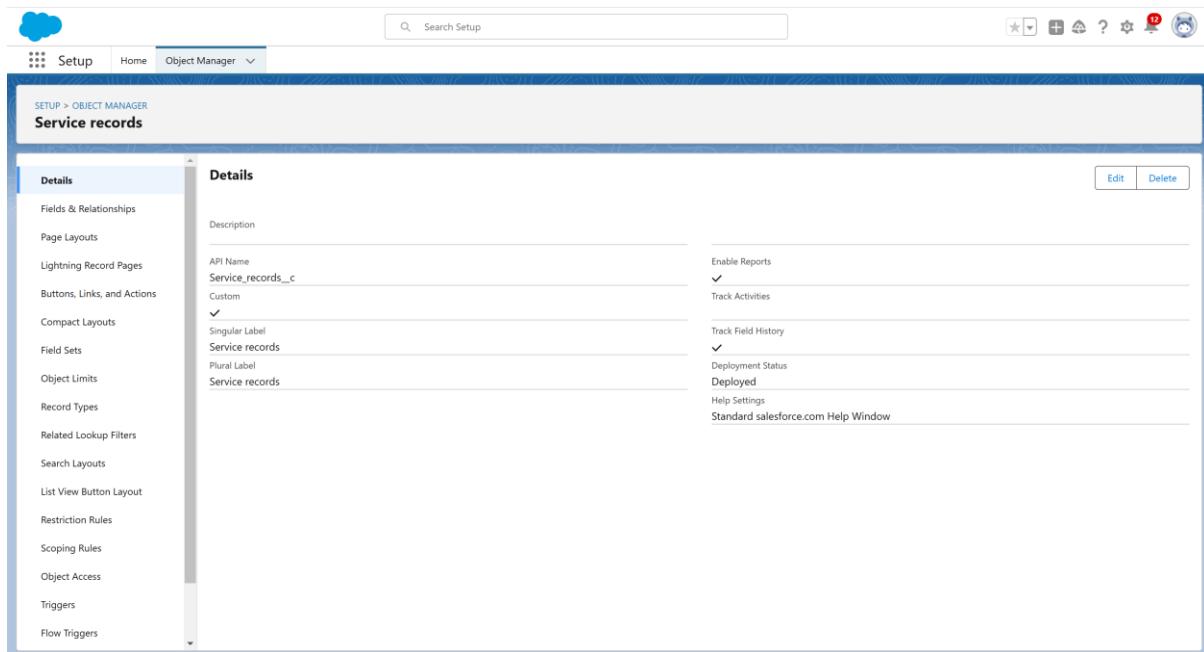
1. From the setup page >> Click on Object Manager >> Click on Create >> Click on Custom Object.
2. Enter the label name >> Appointment
3. Plural label name >> Appointments
4. Enter Record Name Label and Format
 - Record Name >> Appointment Name
 - Data Type >> Auto Number
 - Display Format >> app-{000}
 - Starting number >> 1
5. Click on Allow reports and Track Field History,
6. Allow search >> Save.

The screenshot shows the Salesforce Setup interface with the 'Object Manager' selected. The main title is 'Appointment'. The left sidebar and right panel structure are identical to the 'Customer Details' screenshot, showing the 'Details' section with API Name (Appointment__c), Singular Label (Appointment), Plural Label (Appointments), and configuration for reports, activities, and field history.

Create Service records Object

To create an object:

1. From the setup page >> Click on Object Manager >> Click on Create >> Click on Custom Object.
1. Enter the label name >> Service records
2. Plural label name >> Service records
3. Enter Record Name Label and Format
 - Record Name >>Service records Name
 - Data Type >> Auto Number
 - Display Format >> ser-{000}
 - Starting number >> 1
4. Click on Allow reports and Track Field History,
5. Allow search >> Save.



Create Billing details and feedback Object

To create an object:

1. From the setup page >> Click on Object Manager >> Click on Create >> Click on Custom Object.
1. Enter the label name >> Billing details and feedback
2. Plural label name >> Billing details and feedback
3. Enter Record Name Label and Format
 - Record Name >> Billing details and feedback Name
 - Data Type >> Auto Number
 - Display Format >> bill-{000}

- Starting number >> 1
4. Click on Allow reports and Track Field History,
 5. Allow search >> Save.

3. 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.

Creating a Custom Tab

To create a Tab:(Customer Details)

1. Go to setup page >> type Tabs in Quick Find bar >> click on tabs >> New (under custom object tab)
2. Select Object(Customer Details) >> Select the tab style >> Next (Add to profiles page) keep it as default >> Next (Add to Custom App) uncheck the include tab .
3. Make sure that the Append tab to users' existing personal customizations is checked.
4. Click save.

Creating Remaining Tabs

2. Now create the Tabs for the remaining Objects, they are “Appointments, Service records,Billing details and feedback”.
3. Follow the same steps as mentioned in Activity -1 .

4.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.
2. Fill the app name in app details as Garage Management Application >> Next >> (App option page) keep it as default >> Next >> (Utility Items) keep it as default >> Next.
3. To Add Navigation Items:
 4. Select the items (Customer Details,Appointments, Service records, Billing details and feedback, Reports and Dashboards) from the search bar and move it using the arrow button >> Next.
5. To Add User Profiles:

Search profiles (System administrator) in the search bar >> click on the arrow button >> save & finish.

New Lightning App

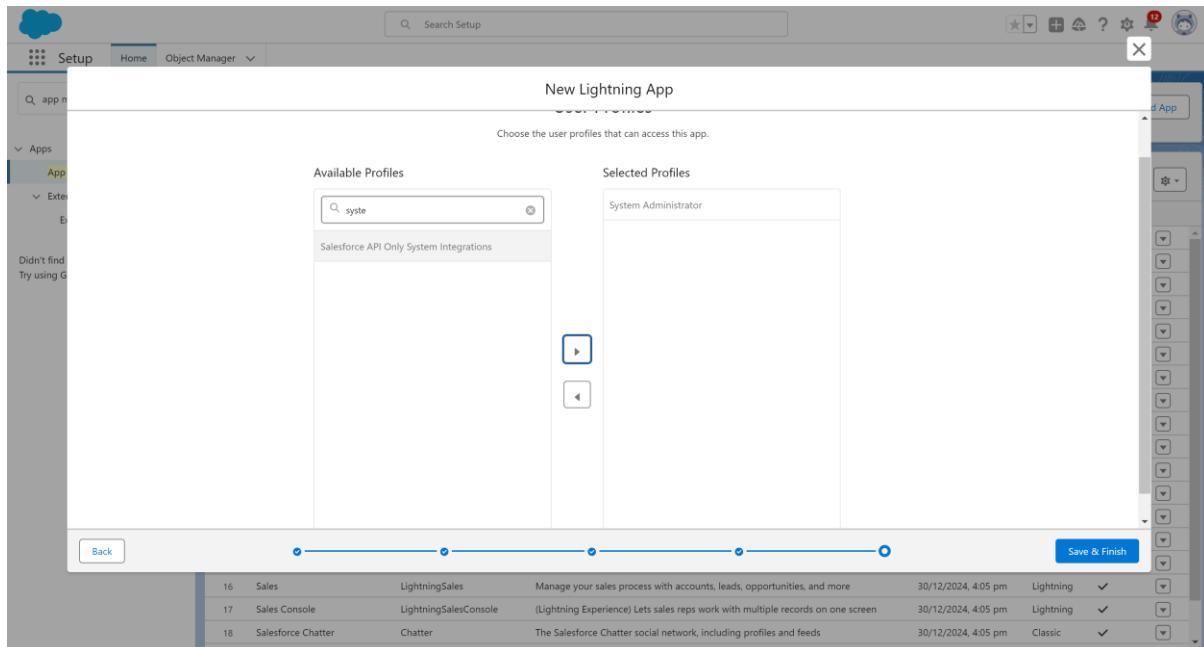
App Details & Branding

Give your Lightning app a name and description. Upload an image and choose the highlight color for its navigation bar.

App Details	App Branding
* App Name <input type="text" value="Garage Management Application"/>	Image <input type="file"/> Primary Color Hex Value <input type="text" value="#78838E"/>
* Developer Name <input type="text" value="Garage_Management_Application"/>	Clear
Description <input type="text" value="This is an Garage management system"/>	Org Theme Options <input type="checkbox"/> Use the app's image and color instead of the org's custom theme

App Launcher Preview

The screenshot shows the 'New Lightning App' configuration screen. The 'App Details & Branding' section includes fields for App Name (Garage Management Application), Developer Name (Garage_Management_Application), and Description (This is an Garage management system). The 'App Branding' section includes an image placeholder for the app icon and a primary color hex value (#78838E). The 'App Launcher Preview' section shows a preview of the app icon and a list of selected items under 'Selected Items', which includes Customer Details, Appointments, Service records, Billing details and feedback, Reports, and Dashboards. The bottom of the screen shows a progress bar with steps 16, 17, and 18 completed, and a 'Next' button.



5.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

Creation of fields for the Customer Details object

1. To create fields in an object:

1. Go to setup >> click on Object Manager >> type object name(Customer Details) in search bar >> click on the object.
2. Now click on “Fields & Relationships” >> New
3. Select Data Type as a “Phone”
4. Click on next.
5. Fill the Above as following:
 - Field Label: Phone number
 - Field Name : gets auto generated
 - Click on Next >> Next >> Save and new.

Note: Follow the above steps for the remaining field for the same object.

2. To create another fields in an object:

1. Go to setup >> click on Object Manager >> type object name(Customer Details) in search bar >> click on the object.
2. Now click on “Fields & Relationships” >> New

3. Select Data type as a “Email” and Click on Next

4. Fill the Above as following:

- Field Label : Gmail
- Field Name : gets auto generated
- Click on Next >> Next >> Save and new.

The screenshot shows the Salesforce Object Manager interface for the 'Customer Details' object. The left sidebar lists various setup options like Details, Page Layouts, Lightning Record Pages, etc. The 'Fields & Relationships' tab is selected. On the right, a list of field types is shown with 'Phone' selected. A detailed description of the 'Phone' field is provided, including its use for tracking calls and its compatibility with various devices. Other field types like Checkbox, Currency, Date, and URL are also listed with their descriptions.

The screenshot shows the process of creating a new custom field named 'Phone number'. The 'Customer Details' object is selected. The 'Fields & Relationships' tab is active. A new field is being created, and the 'Step 2. Enter the details' screen is displayed. The 'Field Label' is set to 'Phone number', and the 'Field Name' is set to 'Phone_number'. The 'Required' checkbox is unchecked. The 'Auto add to custom report type' checkbox is checked. The 'Default Value' is set to 'Show Formula Editor'. The 'Help Text' and 'Description' fields are empty. At the bottom, there are 'Previous', 'Next', and 'Cancel' buttons.

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.

LABEL	API NAME	TYPE	DESCRIPTION	LAST MODIFIED	DEPLOYED
Appointment	Appointment__c	Custom Object		24/06/2023	✓
Appointment Category	AppointmentCategory	Standard Object			
Appointment invitation	AppointmentInvitation	Standard Object			
Appointment invitee	AppointmentInvitee	Standard Object			

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

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

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

Data Type

- None Selected
- Auto Number
- Formula
- Roll-Up Summary
- Lookup Relationship
- Master-Detail Relationship

Select one of the data types below.

A system-generated sequence number that uses a display format you define. The number is automatically incremented for each new record.

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.

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.

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.

Creates a special type of parent-child relationship between this object (the child, or "detail") and another object (the parent, or "master") where:

- The relationship field is required on all detail records.
- The ownership and sharing of a detail record are determined by the master record.

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		
What to do if the lookup record is deleted?	<input checked="" type="radio"/> Delete the value in this field <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
9. Filter type should be Required.

Lookup Filter

Optional, 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](#)

Field	Operator	Value / Field
Appointment: Appointment Date	less than	Field <input style="width: 20px; height: 20px;" type="button" value="..."/> Appointment: Created Date <input style="width: 20px; height: 20px;" type="button" value="..."/> <input style="width: 20px; height: 20px;" type="button" value="Clear"/>
AND <input type="text" value="Begin typing to search for a field..."/> <input style="width: 20px; height: 20px;" type="button" value="..."/> <input style="width: 20px; height: 20px;" type="button" value="None--"/> <input style="width: 20px; height: 20px;" type="button" value="Value"/> <input style="width: 20px; height: 20px;" type="button" value="Clear"/>		
Add Filter Logic...		

Filter Type **Required.** The user-entered value must match filter criteria.
If it doesn't, display this error message on save.

Optional. The user can remove the filter or enter values that don't match criteria.

Lookup Window Text

Active [Enable this filter.](#)

[Change Field Type](#) [Save](#) [Cancel](#)

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

- Roll-Up Summary
- Lookup Relationship
- Master-Detail Relationship
- External Lookup Relationship

Check box

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.

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.

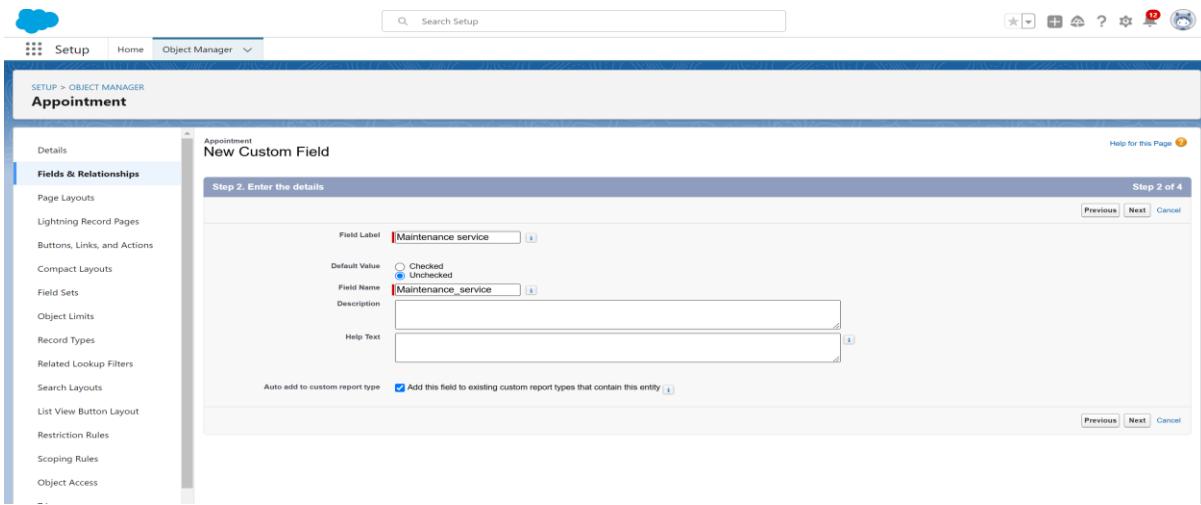
Creates a special type of parent-child relationship between this object (the child, or "detail") and another object (the parent, or "master") where:

- The relationship field is required on all detail records.
- The ownership and sharing of a detail record are determined by the master record.
- When a master record is deleted, all detail records are deleted.
- You can create rollup summary fields on the master record to summarize the detail records.

The relationship field allows users to click on a lookup icon to select a value from a popup list. The master object is the source of the values in the list.

Creates a relationship that links this object to an external object whose data is stored outside the Salesforce org.

4. Give the Field Label : Maintenance service
5. Field Name : is auto populated
6. Default value : unchecked



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

Creation of Another Checkbox Field on Appointment Object :

1. Repeat the steps form 1 to 3.
2. Give the Field Label : Repairs
3. Field Nme : is auto populated
4. Default value : unchecked
5. Click on next >> next >> save.
6. Follow the same and create another checkbox with given names
7. Give the Field Label : Replacement Parts
8. Field Nme : is auto populated
9. Default value : unchecked
10. Click on next >> next >> save.

Creation of Checkbox Field on Service records Object :

1. Go to setup >> click on Object Manager >> type object name(Service records) in search bar >> click on the object.
2. Now click on “Fields & Relationships” >> New.
3. Select “Check box” as data type and click Next.
4. Give the Field Label : Quality Check Status
5. Field Nme : is auto populated
6. Default value : unchecked
7. Click on next >> next>> save

Creation of Currency Fields

Creation of Currency Field on Appointment Object :

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

Step 2. Enter the details Step 2 of 4

Field Label: Service Amount

Length: 18

Decimal Places: 0

Field Name: Service_Amount

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

6. Click on next
7. Give read only for all the profiles in field level security for profile.

Appointment
New Custom Field Step 3 of 4

Step 3. Establish 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"/>

8. Click on next >> save.

Creation of Currency Field on Billing details and feedback Object:

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

Creation of Text Fields

1. Go to setup >> click on Object Manager >> type object name(Appointment) in the search bar >> click on the object.
2. Now click on “Fields & Relationships” >> New.
3. Select “Text” as data type and click Next.
4. Give the Field Label : Vehicle number plate
5. Field Name : is auto populated
6. Length : 10
7. Make field as Required and Unique.

The screenshot shows the 'Step 2. Enter the details' configuration page for creating a new text field. The page has a header 'Step 2 of 4' and navigation buttons 'Previous', 'Next', and 'Cancel'. The form fields are as follows:

- Field Label:** Vehicle number plate
- Length:** 10 (with a note: Please enter the maximum length for a text field below.)
- Field Name:** Vehicle_number_plate
- Description:** (empty text area)
- Help Text:** (empty text area)
- 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

8. Click on next >> next >> save.

Creation of Text Fields in Billing details and feedback object :

1. Go to setup >> click on Object Manager >> type object name(Billing details and feedback) in search bar >> click on the object.
2. Now click on “Fields & Relationships” >> New.
3. Select “text” as data type and click Next.
4. Give the Field Label : Rating for service
5. Field Name : is auto populated
6. Length : 1
7. Make field as Required.
8. Click on next >> next >> save

Creation of Picklist Fields

Creation of Picklist Fields in Service records object :

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

The screenshot shows the 'Step 2. Enter the details' screen in the Salesforce Object Manager. The 'Field Label' is set to 'Service Status'. The 'Values' section has the radio button selected for 'Enter values, with each value separated by a new line', and the text area contains 'Started' and 'Completed'. Other options like 'Display values alphabetically, not in the order entered' and 'Use first value as default value' are unselected. The 'Field Name' is 'Service_Status', and the 'Description' and 'Help Text' fields are empty. Under 'Required', the 'Always require a value in this field in order to save a record' checkbox is unselected, while 'Add this field to existing custom report types that contain this entity' is selected. The 'Default Value' field is empty, and the 'Show Formula Editor' link is visible.

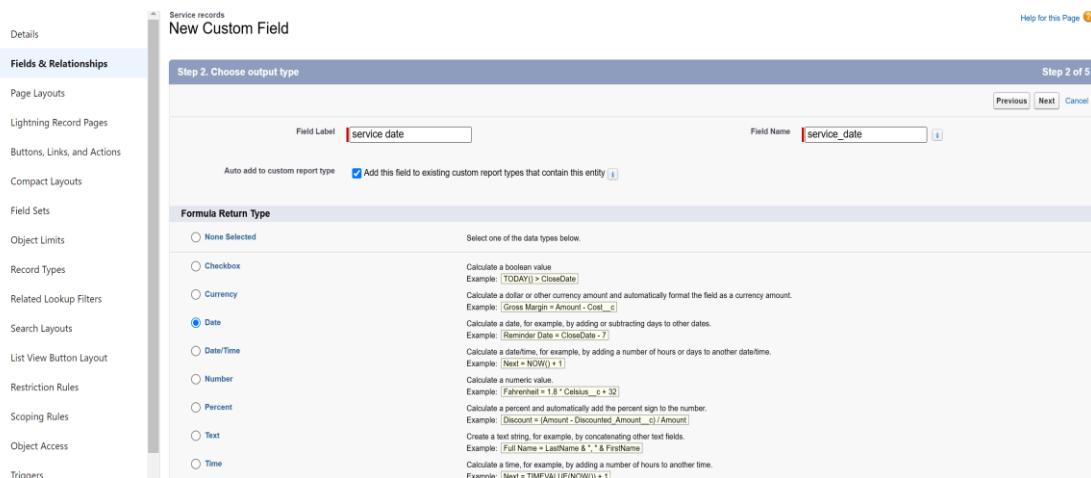
6. Click Next.
7. Next >> Next >> Save.

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.

Creating Formula Field in Service records Object

1. Go to setup >> click on Object Manager >> type object name(Service records) in search bar >> click on the object.
2. Click on fields & relationship >> click on New.
3. Select Data type as “Formula” and click Next.
4. Give Field Label and Field Name as “service date” and select formula return type as “Date” and click next.



5. Insert field formula should be : CreatedDate

The screenshots show the formula editor interface. The top screenshot shows the 'Insert Field' dialog with 'Created Date' selected. The bottom screenshot shows the formula editor with 'CreatedDate' inserted into the formula field, and a function palette on the right showing various mathematical functions like ABS, ACOS, ADDMONTHS, AND, ASCII, ASIN.

6. click “Check Syntax” .
7. Click next >> next >> Save.

6.Validation rule

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 Appointment object.
2. Click on the validation rule >> click New.

RULE NAME	ERROR LOCATION	ERROR MESSAGE	ACTIVE	MODIFIED BY
Vehicle				

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}"))

Validation Rule Edit

Rule Name: Vehicle

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

Functions: All Function Categories

ABS
ACOS
AND
ASCII
ASIN
etc.

Error Message

Example: Discount percent cannot exceed 30%

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.

Example: Discount percent cannot exceed 30%

This message will appear when Error Condition formula is true

Error Message: Please enter valid number

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 Vehicle number plate

Save Save & New Cancel

To create a validation rule to an Billing details and feedback Object

1. Go to the setup page >> click on object manager >> From drop down click edit for Billing details and feedback object.
2. Click on the validation rule >> click New.
3. Enter the Rule name as “ rating_should_be_less_than_5”.
4. Insert the Error Condition Formula as : -

NOT(REGEX(Rating_for_service_c , "[1-5]{1}"))

5. Enter the Error Message as “rating should be from 1 to 5”, select the Error location as Field and select the field as “Rating for Service”, and click Save.

Billing details and feedback Validation Rule

Validation Rule Edit

Rule Name: rating should be less than 5

Active:

Description:

Error Condition Formula

Example: Discount_Percent_c>0.30 More Examples...

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

Insert Field Insert Operator

NOT(REGEX(Rating_for_service_c , "[1-5]{1}"))

Functions

-- All Function Categories --

- 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 No errors found

Error Message

Example: Discount percent cannot exceed 30%

This message will appear when Error Condition formula is true

Error Message: rating should be from 1 to 5

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 Rating for service

Save Save & New Cancel

7. Duplicate rule

To create a matching rule to an Customer details Object

1. Go to quick find box in setup and search for matching Rule.
 2. Click on matching rule >> click on New Rule.

Q matchin

SETUP

d Matching Rules

v Data

v Duplicate Management

Matching Rules

Didn't find what you're looking for?
Try using Global Search.

All Matching Rules

What Are Matching Rules?

View: [All Matching Rules](#) | [Create New View](#)

Action	Rule Name	Object	Status	Description	Last Modified
Deactivate	Standard Account Matching Rule	Account	Active	Matching rule for account records. More info	30/12/2024
Deactivate	Standard Contact Matching Rule	Contact	Active	Matching rule for contact records. More info	30/12/2024
Deactivate	Standard Lead Matching Rule	Lead	Active	Matching rule for lead records. More info	30/12/2024

New Rule

A | B | C | D | E | F | G | H | I | J | K | L | M | N | O

A | B | C | D | E | F | G | H | I | J | K | L | M | N | O

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

d SETUP Matching Rules

Matching Rule Help for this Page ⓘ

New Matching Rule

Step 1: Select object Step 1 of 2

Select the object to which this matching rule applies.

Object

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.

Rule Details

Object	Customer Details	* Required Information
Rule Name	Matching customer details	
Unique Name	Matching_customer_details	
Description		

Matching Criteria

Tell the rule which fields to compare and how.

Field	Matching Method	Match Blank Fields
Gmail	Exact	<input type="checkbox"/> AND
Phone number	Exact	<input type="checkbox"/> AND
-None-	Exact	<input type="checkbox"/> AND
-None-	Exact	<input type="checkbox"/> AND
-None-	Exact	<input type="checkbox"/> AND

[Add Filter Logic...](#)

[Previous](#) [Save](#) [Cancel](#)

Matching customer details

Matching Rule Detail

Object	Customer Details
Rule Name	Matching customer details
Unique Name	Matching_customer_details
Description	
Matching Criteria	(Customer Details: Gmail EXACT MatchBlank = FALSE) AND (Customer Details: Phone_number EXACT MatchBlank = FALSE)
Status	Inactive
Created By	Vasavi Imandi, 30/12/2024, 7:42 pm
Modified By	Vasavi Imandi, 30/12/2024, 7:43 pm

Matching Rule Activation

We're activating your matching rule. We'll send an email to imandivasiv135@gmail.com when the activation process is complete.

[OK](#)

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.

Q: dupl

DUPLEX Duplicate Rules

All Duplicate Rules

What Are Duplicate Rules?

View: All Duplicate Rules

Didn't find what you're looking for?
Try using Global Search.

Rule Name	Description	New Rule	Active	Last Modified By	Last Modified Date
Standard Account Duplicate Rule	Identify accounts that duplicate other accounts.	Account Matching Rule	✓	Viman	30/12/2024
Standard Contact Duplicate Rule	Identify contacts that duplicate other contacts and leads.	Contact Matching Rule	✓	Viman	30/12/2024
Standard Lead Duplicate Rule	Identify leads that duplicate other leads and contacts.	Lead Matching Rule	✓	Viman	30/12/2024

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.

Duplicate Rules

New Duplicate Rule Customer Details

Duplicate Rule Edit

Rule Details

- Rule Name: Customer Detail duplicate
- Description:
- Object: Customer Details
- Record-Level Security: Enforce sharing rules

Actions

- Action On Create: Allow, Alert checked, Report checked
- Action On Edit: Allow, Alert unchecked, Report unchecked
- Alert Text: Use one of these records?

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: Mapping Selected

Add Rule | **Remove Rule**

Duplicate Rules

Customer Details Duplicate Rule Customer Detail duplicate

Duplicate Rule Detail

- Rule Name: Customer Detail duplicate
- Description:
- Object: Customer Details
- Record-Level Security: Enforce sharing rules
- Action On Create: Allow
- Action On Edit: Allow
- Alert Text: Use one of these records?
- Active: checked
- Matching Rule: Matching customer details Mapped
- Operations On Create: Alert checked, Report checked
- Operations On Edit: Alert unchecked, Report unchecked
- Matching Criteria: (Customer Details: Gmail EXACT MatchBlank = FALSE) AND (Customer Details: Phone_number EXACT MatchBlank = FALSE)
- Conditions:
- Created By: Vasavi Imandi, 30/12/2024, 7:47 pm
- Modified By: Vasavi Imandi, 30/12/2024, 7:48 pm

Edit | **Delete** | **Clone** | **Deactivate**

8. 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.

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.

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**

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

The screenshot shows the 'Profile Manager' page. At the top, there's a header with 'Help for this Page' and a 'Profile Manager' section. Below it, a note says '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.' A link to 'Record Types' is provided. A horizontal bar at the top lists various access types. The main area is titled 'Profile Detail' and contains fields for 'Name' (Manager), 'User License' (Salesforce), 'Description' (Garage Management Application), 'Created By' (sunny_1), 'Modified By' (sunny_1), and 'Custom Profile' (selected). Below these are buttons for 'Edit' (highlighted with a red box), 'Clone', 'Delete', and 'View Users'.

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

This screenshot shows the 'Custom App Settings' section of the profile manager. It lists several applications with checkboxes for selecting them as default. The applications include Data Manager (standard_DataManager), Digital Experiences (standard_SalesforceCMS), Garage Management Application (Garage_Management_Application), Laptop Hub (Laptop_Hub), Service (standard_Service), Service Console (standard_LightningService), Site.com (standard_Sites), and Subscription Management (standard_RevenueCloudConsole).

- 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.

This screenshot shows the 'Custom Object Permissions' section for the sales person profile. It displays two tables of permissions for various objects. The first table includes Appointments, Billing details and feedback, Customer Details, Environments, Laptops, Service records, and SessionData. The second table includes Basic Access and Data Administration columns with checkboxes for Read, Create, Edit, Delete, View All, and Modify All. In the first table, most objects have 'Read' checked under Basic Access, while 'Create' is mostly unchecked. Under Data Administration, 'View All' is checked for most objects except Laptops and SessionData. The second table shows similar patterns with some variations in specific object permissions.

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

sales person Profile

- Go to setup >> type profiles in quick find box >> click on profiles >> clone the desired profile (Salesforce Platform User) >> enter profile name (sales person) >> Save.
- While still on the profile page, then click Edit.
- Select the Custom App settings as default for the GArage management.
- Scroll down to Custom Object Permissions and Give access permissions for Appointments,Billing details and feedback , service records and customer details objects as mentioned in the below diagram.

This screenshot shows the 'Custom Object Permissions' section for the sales person profile, identical to the one above but likely a different view or a later state. It displays the same tables of permissions for various objects (Appointments, Billing details and feedback, Customer Details, Environments, Laptops, Service records, SessionData) and the same set of basic and data administration permissions. The checkboxes are in the same state as the previous screenshot, indicating no changes have been made yet.

- And click save.

9. 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 'Users' expanded, with 'Roles' highlighted by a red box. Below 'Users' are sections for Feature Settings, Sales, and Service. The 'Sales' section contains links for Contact Roles on Contracts, Opportunities, and Cases. The 'Service' section contains links for Case Teams and Case Team Roles. At the bottom of the sidebar, there is a note: 'Didn't find what you're looking for? Try using Global Search.' The main content area is titled 'Understanding Roles' with a sub-section 'Sample Role Hierarchy'. It shows a hierarchy diagram with nodes like 'Executive Staff', 'CEO', 'President', 'CFO', 'VP, Sales', 'Western Sales Director', 'Eastern Sales Director', 'International Sales Director', 'Western Sales Rep', 'Eastern Sales Rep', 'International Sales Rep', and 'Asian Sales Rep', 'European Sales Rep'. Each node has a description of its permissions. A red box highlights the 'Set Up Roles' button at the bottom right of the content area.

2. Click on Expand All and click on add role under whom this role works.

The screenshot shows the 'Your Organization's Role Hierarchy' page. At the top, there is a 'Collapse All' and 'Expand All' button, with 'Expand All' highlighted by a red box. The tree view shows 'Nick Enterprises' expanded, with 'Add Role' buttons next to 'CFO', 'HR', 'Manager', 'On Site Emp', and 'Remote Emp'. Other collapsed nodes include 'SVP', 'Customer Support', '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', and 'Z'. A red box also highlights the 'Add Role' button next to 'Manager'.

3. Give Label as "Manager" and Role name gets auto populated. Then click on Save.

The screenshot shows the 'Role Edit New Role' page. The 'Label' field is filled with 'Manager' (highlighted by a red box). The 'Role Name' field also contains 'Manager' (highlighted by a red box). The 'This role reports to' dropdown is set to 'CEO'. Below these fields are 'Save', 'Save & New', and 'Cancel' buttons. A red box highlights the 'Label' field.

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.

The screenshot shows the Salesforce Setup Roles page. On the left, there's a sidebar with a search bar and sections for Users, Feature Settings, Sales, Service, and Case Teams. Under Sales, there are links for Contact Roles on Contracts, Contact Roles on Opportunities, Case Team Roles, and Contact Roles on Cases. A note says "Didn't find what you're looking for? Try using Global Search." The main area is titled "Your Organization's Role Hierarchy" and shows a tree view of roles. At the top level is "LBRE". Below it is "CEO", which has "Add Role" options. Further down the tree are "CFO", "COO", "Manager", and several SVP-level roles like "SVP. Customer Service & Support", "SVP. Human Resources", and "SVP. Sales & Marketing". Each role node has "Edit | Del | Assign" buttons. A "Show in tree view" dropdown is visible in the top right corner.

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

The screenshot shows the "Role Edit" page for creating a new role. The sidebar is identical to the previous screenshot. The main area is titled "New Role". It has a "Role Edit" section with fields for "Label" (set to "sales person"), "Role Name" (auto-filled as "sales_person"), "This role reports to" (set to "Manager"), and "Role Name as displayed on reports" (empty). At the bottom are "Save", "Save & New", and "Cancel" buttons. A "Help for this Page" link is in the top right.

10.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
 1. First Name : Niklaus
 2. Last Name : Mikaelson
 3. Alias : Give a Alias Name
 4. Email id : Give your Personal Email id
 5. Username : Username should be in this form: text@text.text
 6. Nick Name : Give a Nickname
 7. Role : Manager
 8. User licence : Salesforce
 9. Profiles : Manager

3. Save.

creating another users

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

Note : create atleast 3 users with these permissions.

SETUP **Users**

New User

User Edit Save Save & New Cancel

General Information Required Information

First Name	raju	Role	sales person
Last Name	mullangi	User License	Salesforce Platform
Alias	rajumull	Profile	sales person
Email	rajumullangi5@gmail.com	Active	<input checked="" type="checkbox"/>
Username	rajumullangi5@gmail.com	Marketing User	<input type="checkbox"/>
Nickname	raj	Offline User	<input type="checkbox"/>
Title		Knowledge User	<input type="checkbox"/>
Company		Flow User	<input type="checkbox"/>
Department		Service Cloud User	<input type="checkbox"/>
Division		Site.com Contributor User	<input type="checkbox"/>

Site.com Publisher User
 WDC User
 Data.com User Type --None-- Default Limit (300)
 Data.com Monthly Addition Limit Default Limit (300)
 Accessibility Mode (Classic Only)
 High-Contrast Palette on Charts

SETUP **Users**

New User

User Edit Save Save & New Cancel

General Information Required Information

First Name	Maria	Role	sales person
Last Name	Figueroa	User License	Salesforce Platform
Alias	mfigu	Profile	sales person
Email	maria@gmail.com	Active	<input checked="" type="checkbox"/>
Username	maria12@gmail.com	Marketing User	<input type="checkbox"/>
Nickname	mar	Offline User	<input type="checkbox"/>
Title		Knowledge User	<input type="checkbox"/>
Company		Flow User	<input type="checkbox"/>
Department		Service Cloud User	<input type="checkbox"/>
Division		Site.com Contributor User	<input type="checkbox"/>

Site.com Publisher User
 WDC User
 Data.com User Type --None-- Default Limit (300)
 Data.com Monthly Addition Limit Default Limit (300)
 Accessibility Mode (Classic Only)
 High-Contrast Palette on Charts

SETUP **Users**

New User

User Edit Save Save & New Cancel

General Information Required Information

First Name	Jose	Role	sales person
Last Name	Mikaelson	User License	Salesforce Platform
Alias	jnika	Profile	sales person
Email	joseme@gmail.com	Active	<input checked="" type="checkbox"/>
Username	josemejhdbf@gmail.com	Marketing User	<input type="checkbox"/>
Nickname	JOSSS	Offline User	<input type="checkbox"/>
Title		Knowledge User	<input type="checkbox"/>
Company		Flow User	<input type="checkbox"/>
Department		Service Cloud User	<input type="checkbox"/>
Division		Site.com Contributor User	<input type="checkbox"/>

Site.com Publisher User
 WDC User
 Data.com User Type --None-- Default Limit (300)
 Data.com Monthly Addition Limit Default Limit (300)
 Accessibility Mode (Classic Only)
 High-Contrast Palette on Charts

11. 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.

The screenshot shows the Salesforce Setup interface. On the left, there is a navigation sidebar with a search bar at the top containing "users". Below it, under the "Users" section, "Public Groups" is selected and highlighted in blue. The main content area is titled "Public Groups" and contains the following text: "A public group is a set of users. It can contain individual users, other groups, the users in a particular role or territory, or the users in a role or territory plus all of the users below". Below this is a table header with columns: "Label" (with a dropdown arrow), "Group Name", and "Created By". A "New" button is located in the top right corner of the table area. The table body is currently empty, displaying "No records to display." At the bottom right of the table area, there are links labeled A, B, C, D, E, F, G, H, I, J, K.

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.

The screenshot shows the "New Group" creation dialog in the Salesforce Setup interface. The title bar says "Group Membership" and "New Group". The "Group Information" section includes fields for "Label" (set to "sales team") and "Group Name" (set to "sales_team"). There is also a checked checkbox for "Grant Access Using Hierarchies". Below this is a "Description" field which is empty. Underneath the "Group Information" section is a search bar with "Roles" selected and a "Find" button. To the right of the search bar are two lists: "Available Members" and "Selected Members". The "Available Members" list contains various roles like CEO, CFO, COO, etc., with "Role: sales person" selected and highlighted. The "Selected Members" list contains "Role: sales person". Between the two lists are "Add" and "Remove" buttons. At the bottom of the dialog are sections for "Add to Delegated Administration Groups" and "Available Delegated Groups" and "Selected Delegated Groups", both of which are currently empty.

12.Sharing Setting

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.

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.

The screenshot shows the 'Sharing Settings' page in Salesforce. Under the 'Sharing Settings' section, there is a table where rows represent different objects. The 'Service records' row has its 'OWD' dropdown set to 'Private', which is highlighted with a red box. Other objects like 'Work Plan Template', 'Work Step Template', 'Work Type', etc., have their OWD set to 'Public Read/Write'. Below the table, there are sections for 'User Visibility Settings' and 'Other Settings'. At the bottom, there are 'Save' and 'Cancel' buttons, with 'Save' also highlighted with a red box.

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

The screenshot shows the 'Service records Sharing Rules' page. At the top, there is a header with 'Service records Sharing Rules', a 'New' button (which is highlighted with a red arrow), and a 'Recalculate' button. Below the header, it says 'No sharing rules specified.' and 'Service records Sharing Rules Help'.

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

The screenshot shows the 'Service records Sharing Rule' configuration page. It consists of several steps:
Step 1: Rule Name - Label: 'Sharing setting', Rule Name: 'Sharing_setting'.
Step 2: Select your rule type - Rule Type: 'Based on record owner'.
Step 3: Select which records to be shared - Service records: owned by members of 'Roles' (selected) and 'sales person'.
Step 4: Select the users to share with - Share with 'Roles' (selected) and 'Manager'.
Step 5: Select the level of access for the users - Access Level: 'Read/Write'.
At the bottom, there are 'Save' and 'Cancel' buttons.

13.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.

The screenshot shows the Salesforce Setup interface. In the left sidebar, under 'Process Automation', the 'Flows' item is selected and highlighted with a red box, labeled '2'. At the top right, there is a 'New Flow' button highlighted with a red box, labeled '3'. The main area displays a list of flow definitions with columns for Flow Label, Process Type, Package State, Last Modified By, and Last Modified Date. The first few entries are: 'Ac Amount update' (Autolaunched Flow, Unmanaged), 'Book Appointment from Invitation' (Salesforce Scheduler Flow, Managed-installed), 'Cancel Item Flow' (Screen Flow, Managed-installed), 'Change Case Owner to Incident Owner' (Screen Flow, Managed-installed), and 'Close Change Request & Related Issues' (Screen Flow, Managed-installed).

2. Select the Record-triggered flow and Click on Create.

The screenshot shows the 'New Flow' creation page. Under the 'Core' tab, there are several flow types listed: 'Screen Flow', 'Record-Triggered Flow', 'Schedule-Triggered Flow', 'Platform Event—Triggered Flow', 'Autolaunched Flow (No Trigger)', and 'Record-Triggered Orchestration'. The 'Record-Triggered Flow' option is highlighted with a red box and labeled '1'. At the bottom right, there is a 'Create' button highlighted with a red box, labeled '2'.

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 creating a new flow. It has two main sections: 'Select Object' and 'Configure Trigger'. In the 'Select Object' section, the 'Object' dropdown is set to 'Billing details and feedback', which is highlighted with a green box. In the 'Configure Trigger' section, the 'Trigger the Flow When:' dropdown has three options: 'A record is created', 'A record is updated', 'A record is created or updated' (which is selected and highlighted with a green box), and 'A record is deleted'. A green arrow points to the 'A record is created or updated' option.

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

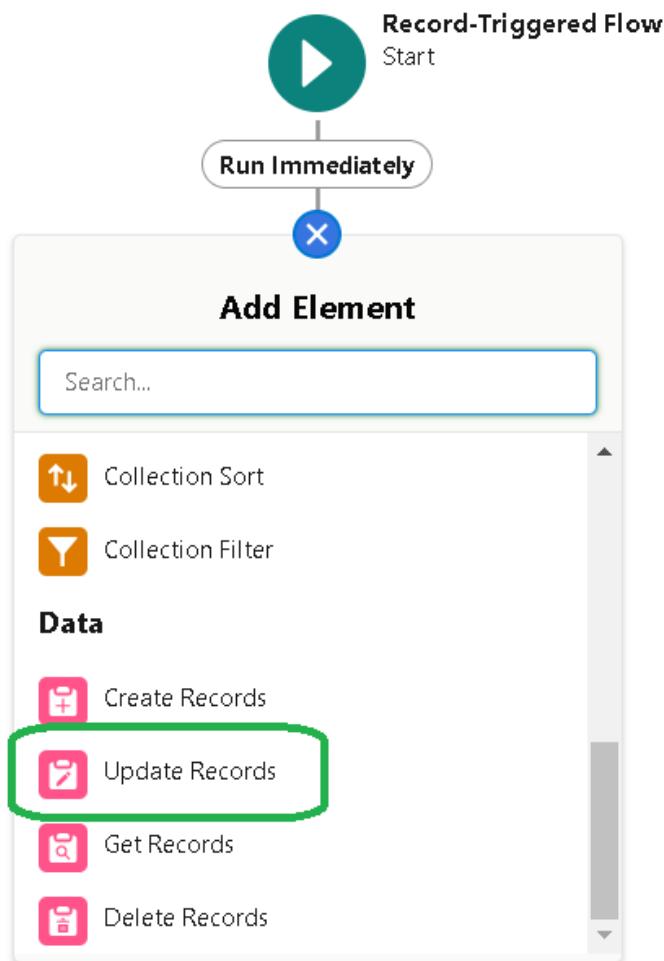
3

4

Cancel

Done

- Under the Record-triggered Flow Click on “+” Symbol and In the Drop down List select the “Update records Element”.



- Give the Label Name : Amount Update
- 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) ▾

Cancel Done

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

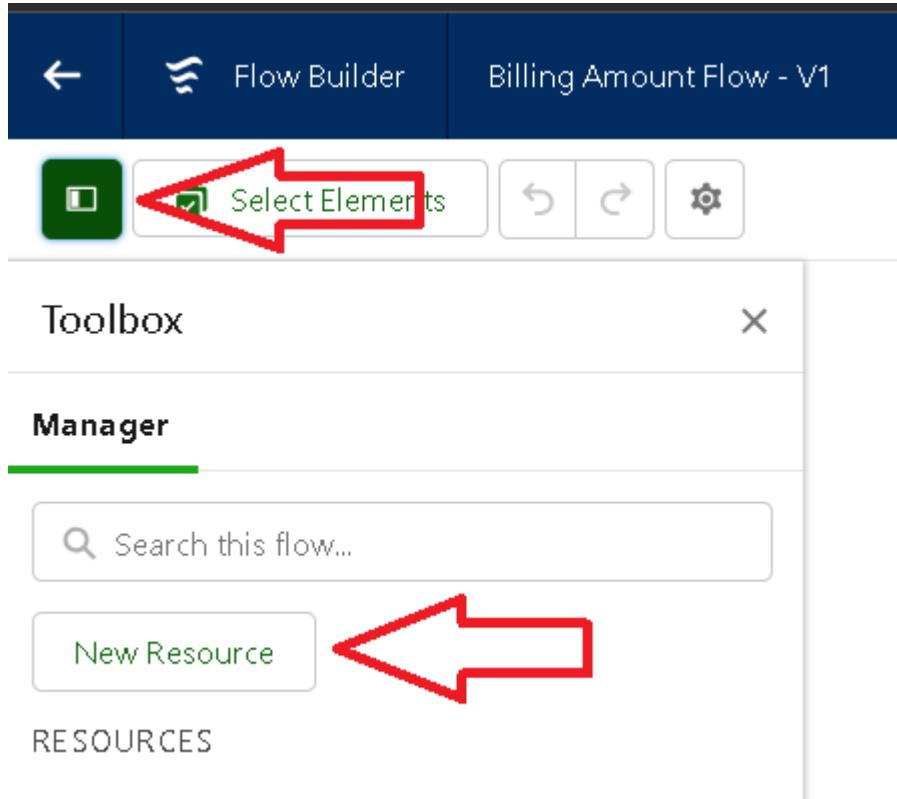
Field	Value
Payment_Paid__c	\$Record > Service records > Appointment > Service A... X

+ 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},

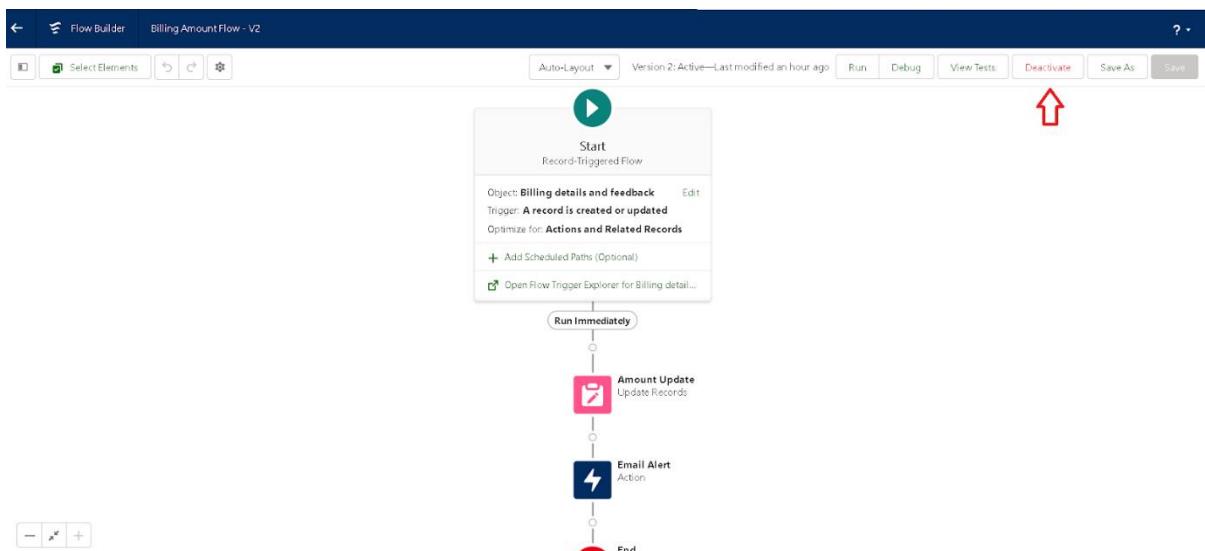
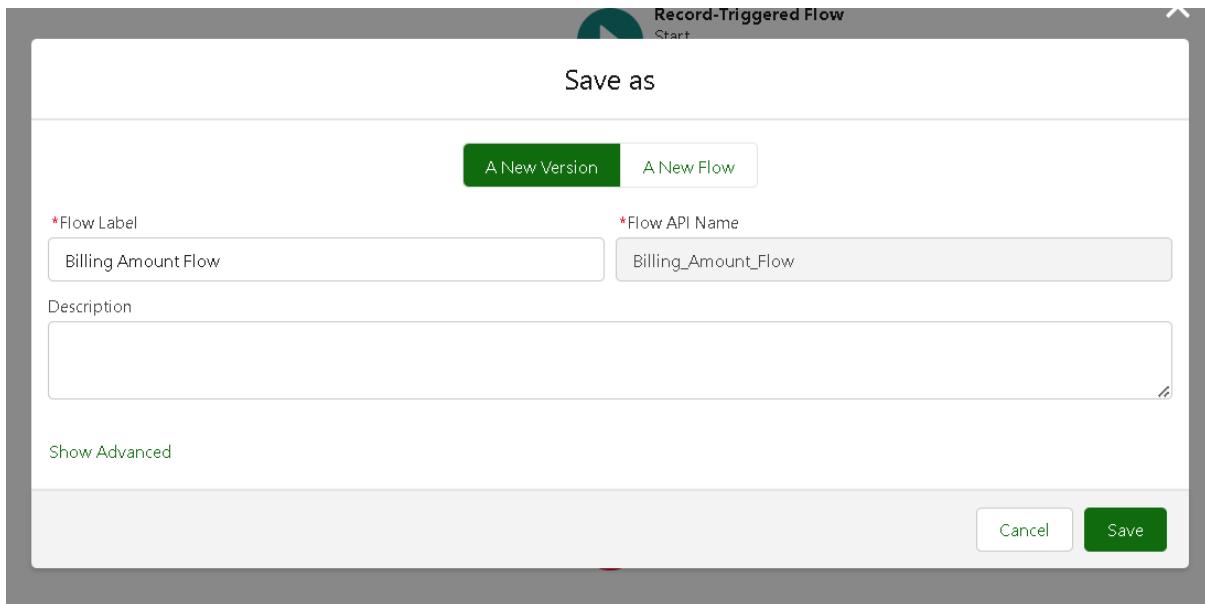
I hope this message finds you well. I wanted to take a moment to express my sincere gratitude for your recent payment for the services provided by our garage management team. Your prompt payment is greatly appreciated, and it helps us continue to provide top-notch services to you and all our valued customers.

Amount paid : {!\$Record.Payment_Paid__c}

Thank you for Coming .

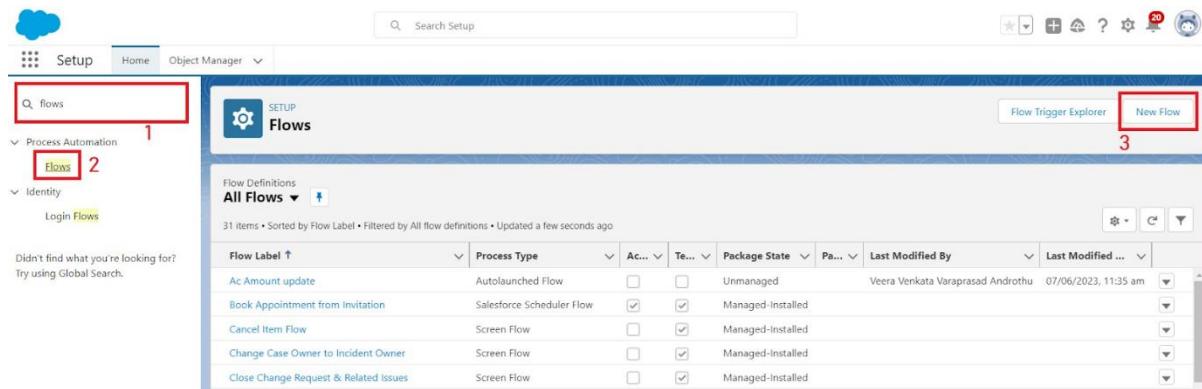
23. Click done.
24. Now Click on Add Element , select Action.
25. Their action bar will be opened in that search for “ send email ” and click on it.
26. Give the label name as “ Email Alert”
27. API name will be auto populated.

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.
34. Click on save. Give the Flow label , Flow Api name will be autopopulated.
35. And click save, and click on activate.

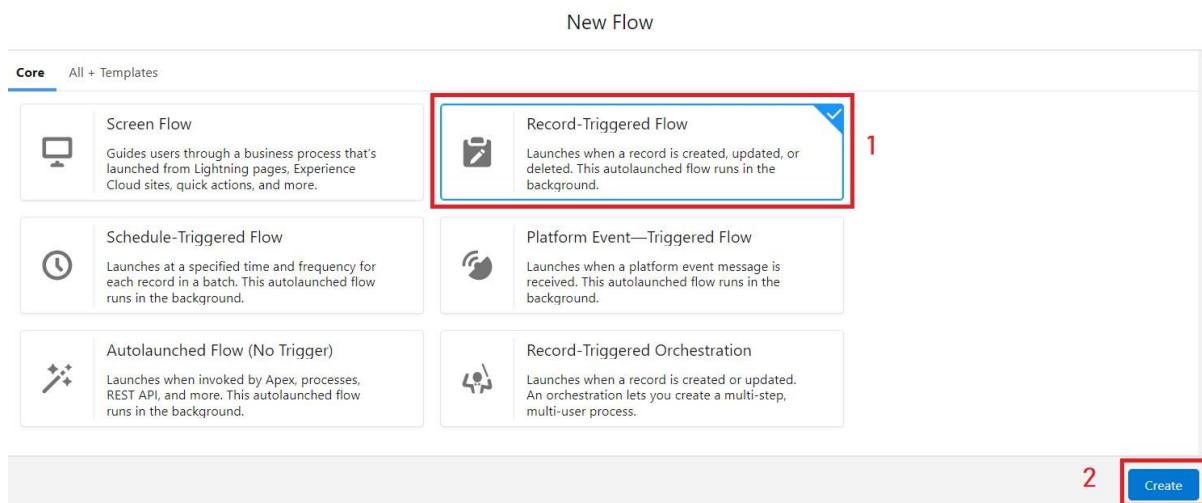


Create another Flow

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 “Service records” in the Drop down list.
4. Select the Trigger Flow when: “A record is Created or Updated”.
5. Select the Optimise the flow for: “Actions and Related Records” and Click on Done.
6. Under the Record-triggered Flow Click on “+” Symbol and In the Drop down List select the “Update records Element”.
7. Set a filter condition : All Conditions are met(AND)
8. Field : Quality_Check_Status__c
9. Operator : Equals
10. Value : True
11. And Set Field Values for the Billing details and feedback Record
12. Field : Service_Status__c
13. Value : Completed

Set Filter Conditions

Condition Requirements to Update Record

All Conditions Are Met (AND) ▾

Field	Operator	Value
Quality_Check_Status_c	Equals	True X

[+ Add Condition](#)

Set Field Values for the Service record Record

Field	Value
Service_Status_c	Completed X

[+ Add Field](#)

14. Click On Done.
15. Click on save
16. Given the Flow label as Update Service Status , Flow Api name will be auto populated.
17. And click save, and click on activate.

14.Apex Trigger

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

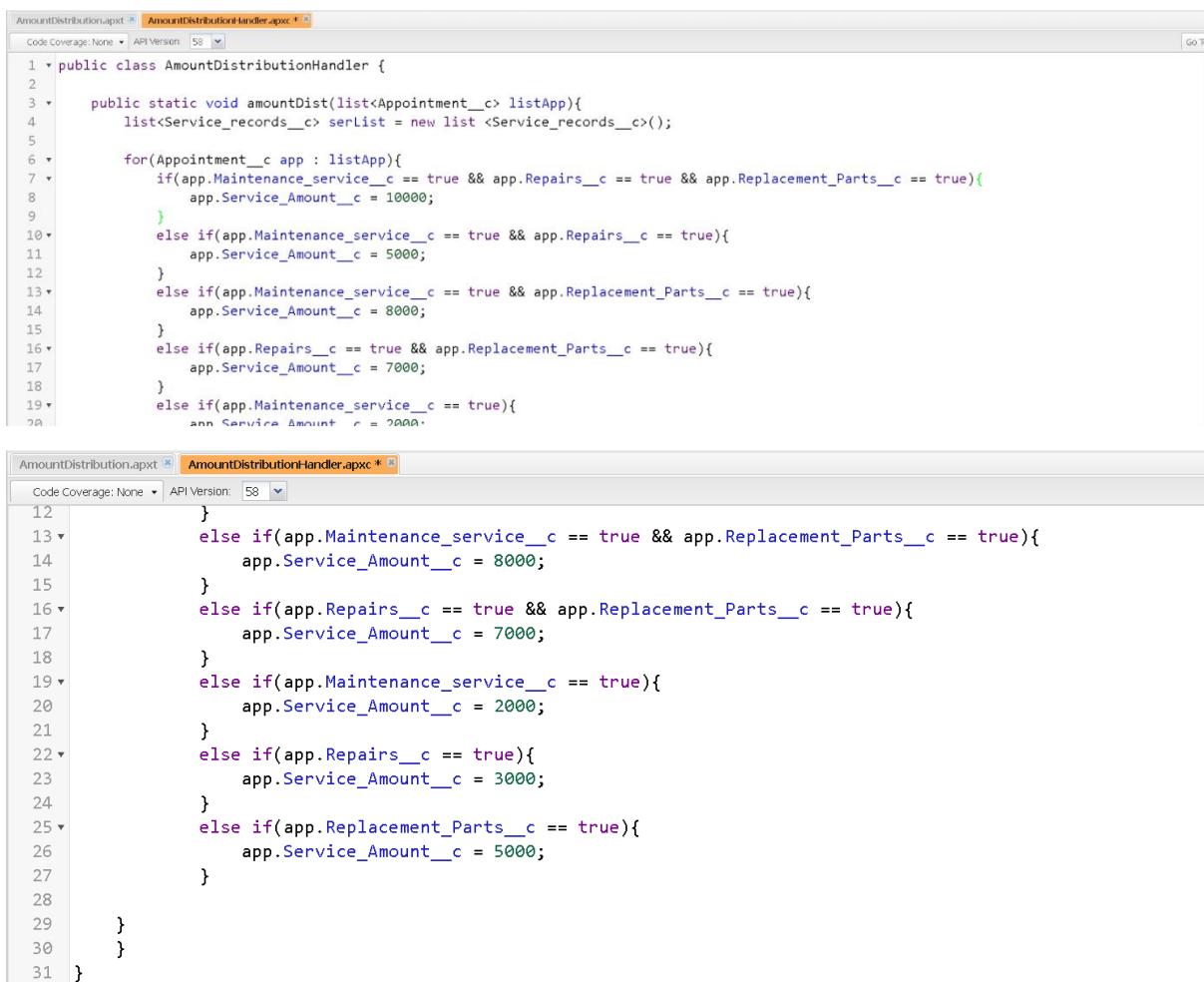
For example, you can have a trigger run before an object's records are inserted into the database, after records have been deleted, or even after a record is restored from the Recycle Bin.

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.

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”.



```
AmountDistribution.apxt AmountDistributionHandler.apxc * 
Code Coverage: None API Version: 58 Go To
1 public class AmountDistributionHandler {
2
3     public static void amountDist(list<Appointment__c> listApp){
4         list<Service_records__c> serList = new list <Service_records__c>();
5
6         for(Appointment__c app : listApp){
7             if(app.Maintenance_service__c == true && app.Repairs__c == true && app.Replacement_Parts__c == true){
8                 app.Service_Amount__c = 10000;
9             }
10            else if(app.Maintenance_service__c == true && app.Repairs__c == true){
11                app.Service_Amount__c = 5000;
12            }
13            else if(app.Maintenance_service__c == true && app.Replacement_Parts__c == true){
14                app.Service_Amount__c = 8000;
15            }
16            else if(app.Repairs__c == true && app.Replacement_Parts__c == true){
17                app.Service_Amount__c = 7000;
18            }
19            else if(app.Maintenance_service__c == true){
20                app.Service_Amount__c = 2000;
21            }
22            else if(app.Repairs__c == true){
23                app.Service_Amount__c = 3000;
24            }
25            else if(app.Replacement_Parts__c == true){
26                app.Service_Amount__c = 5000;
27            }
28        }
29    }
30 }
31 
```

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;
    }

}

}
}

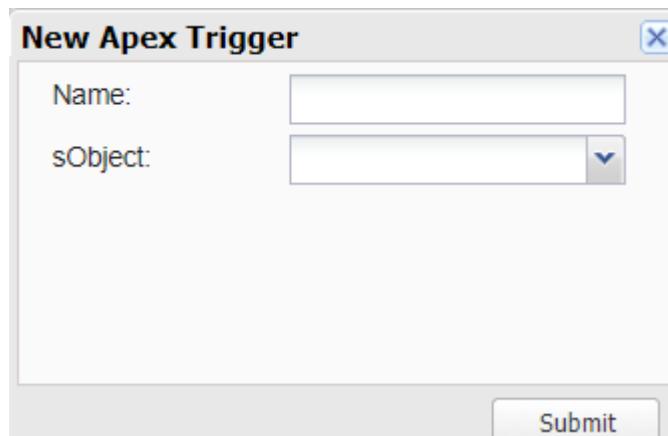
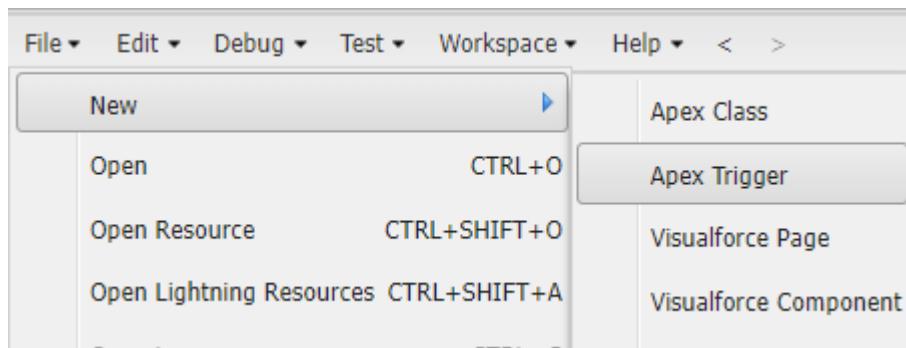
}

```

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

```

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

```

Code:

```

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

```

```
}
```

```
}
```

15. Reports

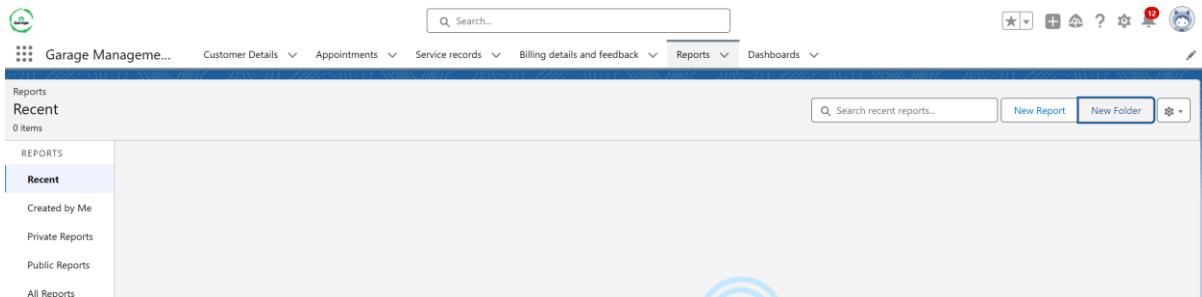
Reports give you access to your Salesforce data. You can examine your Salesforce data in almost infinite combinations, display it in easy-to-understand formats, and share the resulting insights with others. Before building, reading, and sharing reports, review these reporting basics.

Types of Reports in Salesforce

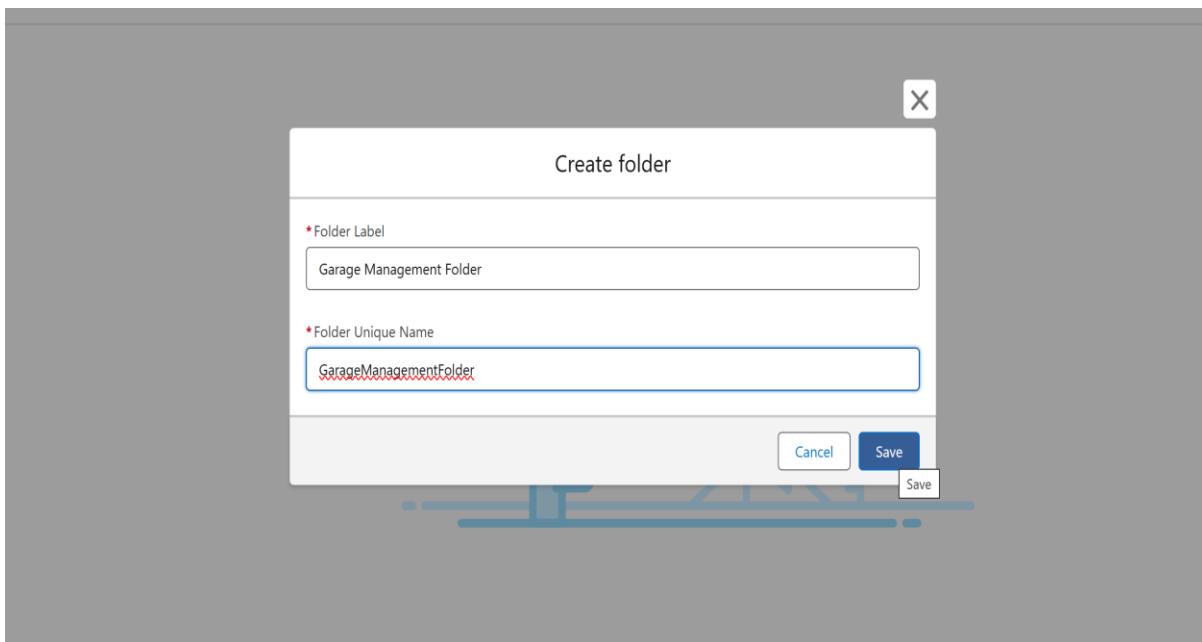
1. Tabular
2. Summary
3. Matrix
4. Joined Reports

Create a Report Folder

1. Click on the app launcher and search for reports.
2. Click on the report tab, click on new folder.

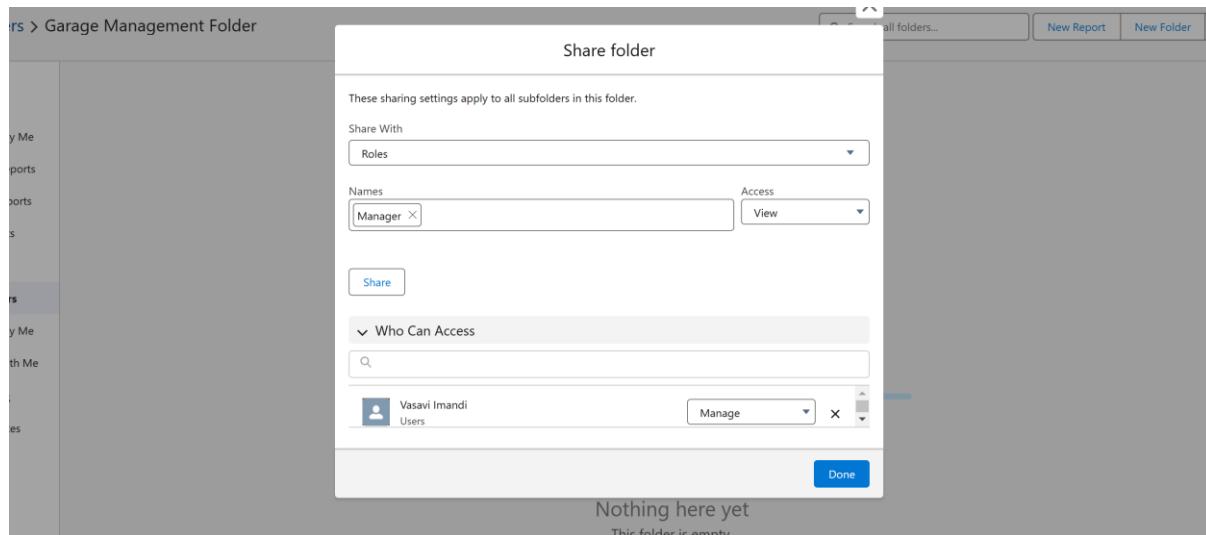


3. Give the Folder label as "Garage Management Folder", Folder unique name will be auto populated.
4. Click save.



Sharing a report folder

1. Go to the app >> click on the reports tab.
2. Click on the All folder , click on the Drop down arrow for Garage Management folder, and Click on share.
3. Select the share with as “roles”, in name field search for “manager”, give “view” as access for that role.
4. Then click share, and click on Done.



Create Report Type

1. Go to setup >> type users in quick find box >> select Report Type >> click on Continue.
2. Click on new custom report type.

Action	Label	Description	Category	Deployed	Created By Alias	Created Date
Edit Del	Orchestration Run Logs Spring_24	Find out which orchestration run logs were created and what happened in their associated orchestration runs.	Other Reports	✓	autproc	30/12/2024
Edit Del	Orchestration Runs Spring_24	Find out which orchestration runs were created.	Other Reports	✓	autproc	30/12/2024
Edit Del	Orchestration Stage Runs Spring_24	Find out which orchestration stage runs were created and the current status of each run.	Other Reports	✓	autproc	30/12/2024
Edit Del	Orchestration Step Runs Spring_24	Find out which orchestration step runs were created and the current status of each run.	Other Reports	✓	autproc	30/12/2024
Edit Del	Orchestration Work Items Spring_24	Find out which orchestration work items were created, who's the associated assignee, and what's the current status of each work item.	Other Reports	✓	autproc	30/12/2024
Edit Del	Program Definition Spring_24	Review your analytics with a program-like structure. See each program task, target day, results, and more directly in a report and dashboard.	Other Reports	✓	autproc	30/12/2024
Edit Del	Program Definition Summer_24	Review your analytics with a program-like structure. See each program task, target day, results, and more directly in a report and dashboard.	Other Reports	✓	autproc	30/12/2024
Edit Del	Program Item Progress Spring_24	Report on tasks like exercises, milestones, and outcomes progress. Overall program progress isn't captured in this report.	Other Reports	✓	autproc	30/12/2024
Edit Del	Program Item Progress Sub	All Custom Report Types - Salesforce - Developer Edition	Other Reports	✓	autproc	30/12/2024
Edit Del	Program Progress Spring_24	Report on program progress. Specific progress on milestones and exercises aren't captured in this report.	Other Reports	✓	autproc	30/12/2024
Edit Del	Program Progress Summer_24	Report on program progress. Specific progress on milestones and exercises aren't captured in this report.	Other Reports	✓	autproc	30/12/2024
Edit Del	Screen Flows	Find out which flows get executed and how long users take to complete each flow screen.	Other Reports	✓	autproc	30/12/2024

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.

New Custom Report Type

Step 1. Define the Custom Report Type

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: 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: Deployed

9. now , Click on Related object box.
10. Click on Select Object, choose Appointment Object as shown in fig.

New Custom Report Type

Step 2. Define Report Records Set

This report type will generate reports about Customer Details. You may define which related records from other objects are returned in report results by choosing a relationship to another object.

A Customer Details
Primary Object

B Selected Object:
Appointments

A to B Relationship:
 Each "A" record must have at least one related "B" record.
 "A" records may or may not have related "B" records.

(Click to relate another object)

Step 2. Define Report Records Set

This report type will generate reports about Customer Details. You may define which related records from other objects are returned in report results by choosing a relationship to another object.

A Customer Details
Primary Object

B Appointments

A to B Relationship:

Each "A" record must have at least one related "B" record.
 "A" records may or may not have related "B" records.

(Click to relate another object)

Relationship Diagram:
A blue circle labeled 'A' overlaps with an orange circle labeled 'B'. An arrow points downwards to a grid where the first column has blue horizontal bars and the second column has orange horizontal bars.

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.

The screenshot shows the 'Report Types' setup screen. A new report type is being defined, specifically 'Service information'. The 'Step 2. Define Report Records Set' is active. The primary object is 'Customer Details'. Relationships are defined as follows:

- A to B Relationship:** Each "A" record must have at least one related "B" record. This is exemplified by the relationship between 'Customer Details' (A) and 'Appointments' (B).
- B to C Relationship:** Each "B" record must have at least one related "C" record. This is exemplified by the relationship between 'Appointments' (B) and 'Service records' (C).
- C to D Relationship:** Each "C" record must have at least one related "D" record. This is exemplified by the relationship between 'Service records' (C) and 'Billing details and feedback' (D).

An explanatory diagram shows four overlapping circles labeled A, B, C, and D. Below the diagram is a legend with four colored bars corresponding to A, B, C, and D. A note at the bottom states: 'Object Limit Reached. You can associate up to four objects to a custom report type.' Navigation buttons 'Previous', 'Save', and 'Cancel' are visible at the top right.

Create Report

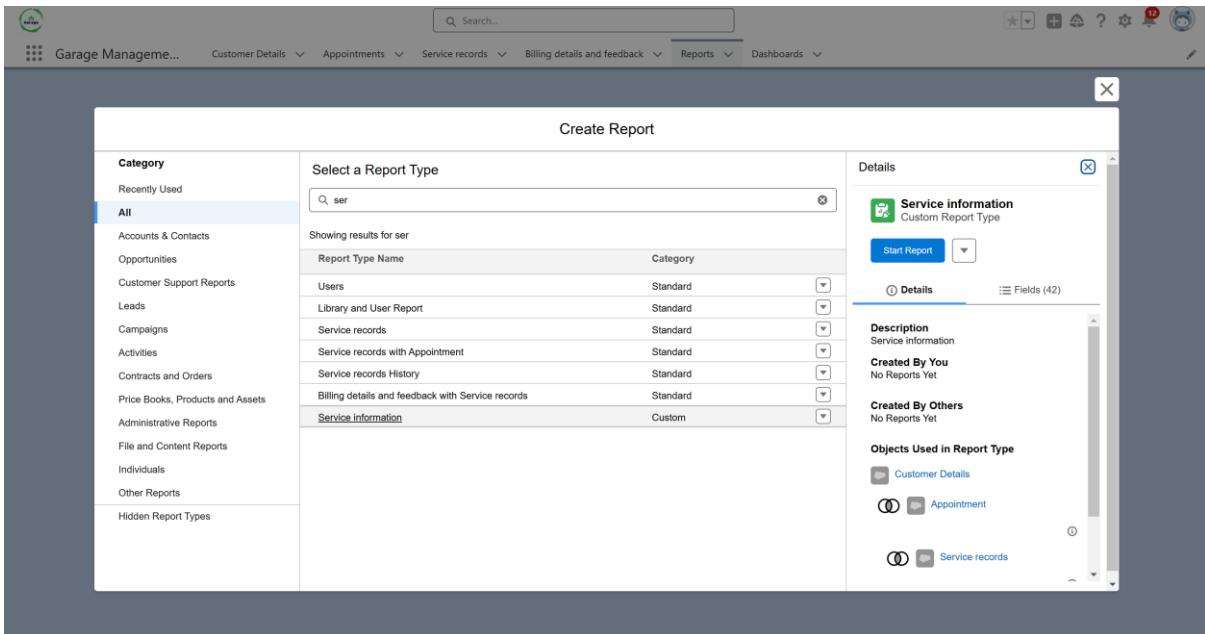
Note : Before creating report, create latest “10” records in every object.

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

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

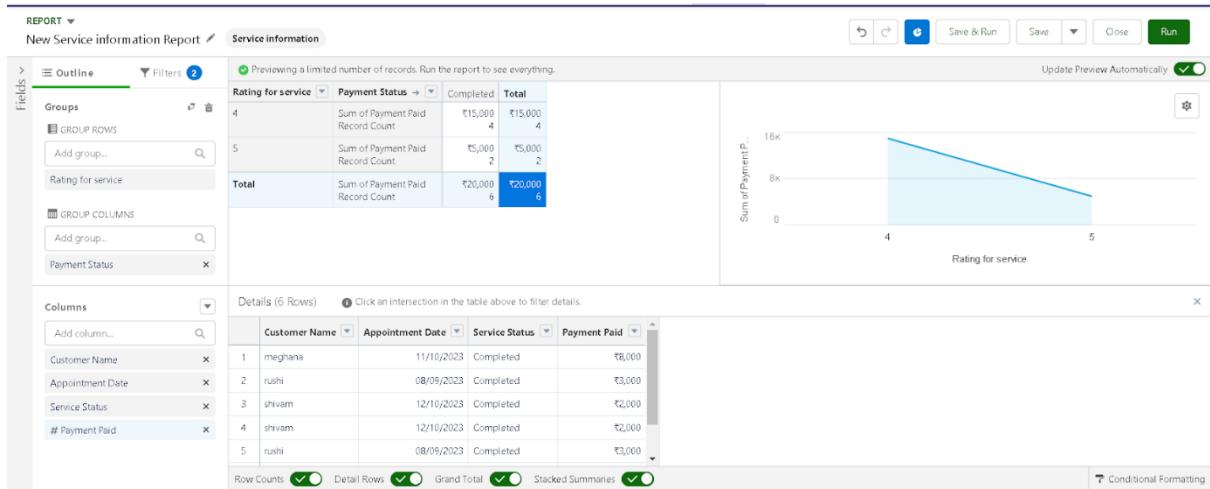
The screenshot shows the 'Reports' section of the Garage Management app. The 'Recent' tab is selected. A search bar at the top right allows searching for recent reports. Below the search bar are buttons for 'New Report' and 'New Folder'. The left sidebar lists categories: 'REPORTS' (Recent, Created by Me, Private Reports, Public Reports, All Reports), 'FOLDERS' (All Folders, Created by Me), and other navigation items like 'Customer Details', 'Appointments', 'Service records', 'Billing details and feedback', 'Reports', and 'Dashboards'.

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



4. Their outline pane is opened already, select the fields that mentioned below in column section.
 - a. Customer name
 - b. Appointment Date
 - c. Service Status
 - d. Payment paid
5. Remove the unnecessary fields.
6. Select the fields that mentioned below in GROUP ROWS section.
 - a. Rating for Service
7. Select the fields that mentioned below in GROUP ROWS section.
 - a. Payment Status
8. Click on Add Chart , Select the Line Chart.

9. Click on save, Give the report Name : New Service information Report
10. Report unique Name is auto populated.
11. Select the folder the created and Click on save.



The screenshot shows a "Save Report" dialog box. It contains fields for "Report Name" (New Service information Report), "Report Unique Name" (New_Service_information_Report_oVu), "Report Description" (empty), and "Folder" (Garage Management Folder). A green double-headed arrow points to the "Folder" field. At the bottom right are "Cancel" and "Save" buttons.

16.Dashboards

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.

Create folder

* Folder Label
Service Rating

* Folder Unique Name
ServiceRating

Cancel **Save**

- Follow the same steps, from Reports Milestone and Activity 2, and provide the sharing settings for the folder that was just created.

Create Dashboard

- Go to the app >> click on the Dashboards tabs.
- Give a Name and select the folder that created, and click on create.

New Dashboard

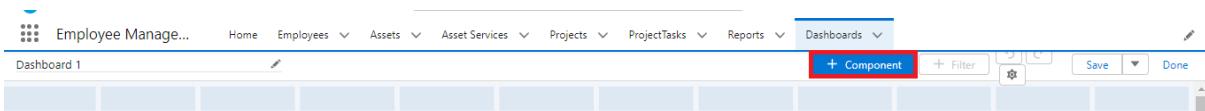
* Name
Customer review

Description

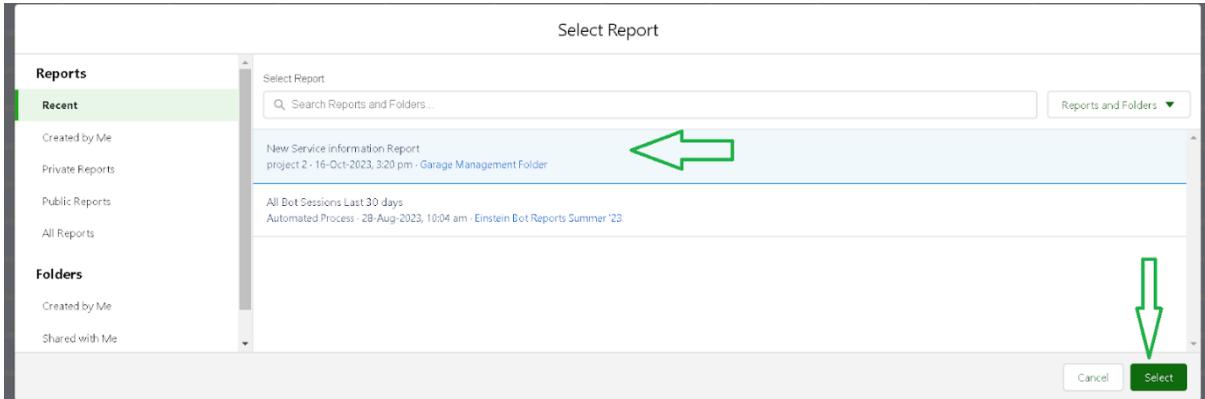
Folder
Service Rating **Select Folder**

Cancel **Create**

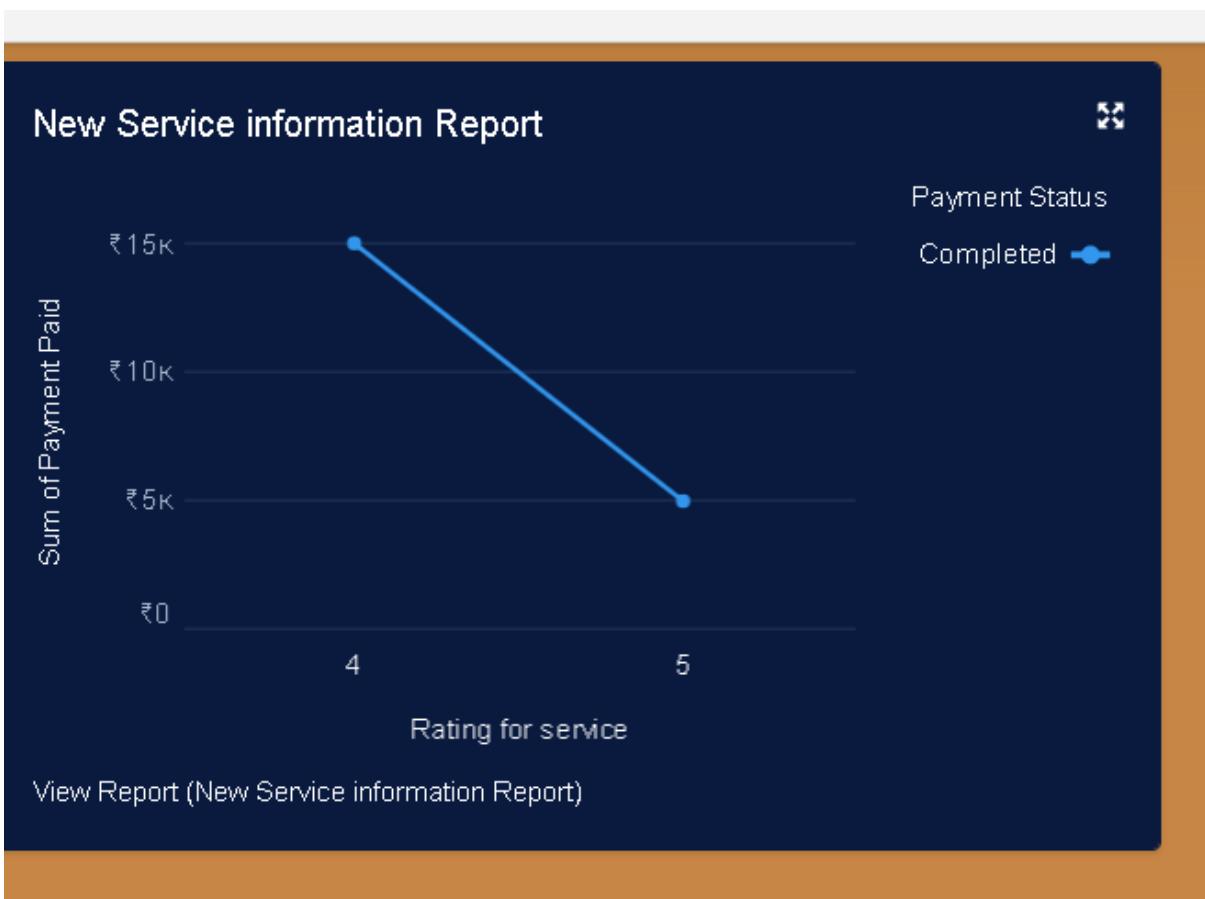
- Select add component.



- Select a Report and click on select.



5. Select the Line Chart. Change the theme.
6. Click Add then click on Save and then click on Done.
7. Preview is shown below.



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

17.Creating records

To create a record in the follow objects follow these steps

1. Click on the app launcher located at the left side of the screen.
2. Search for “**Garage Management**” and click on it.
3. Click on the “**Consumer details tab**”.
4. Click on new and fill the details as shown below figs, and click save.

Now, Create the Appointment Record

1. Click on the “**Appointment tab**”.
2. Enter the customer details as created, while entering Appointment Date enter the date less than the created date.
3. Match the validation while entering the vehicle number plate.
4. Select the services you need.
5. Click on save to see the Service Amount.

Now, Create a service Record

1. Click on the “**Service record tab**”.
2. Enter the Appointment, and started is selected as default.
3. Click on save.
4. Open the record and click on Quality check status as true.
5. Click on save.
6. Now automatically Service status will be moved to completed.