

Garage Management system

INTRODUCTION:

The **Garage Management System (GMS)** is a robust software solution designed to enhance the efficiency and functionality of automotive repair shops, service centers, and garages. By offering a wide range of features tailored to the needs of mechanics, service advisors, and business owners, GMS ensures streamlined workflows and improved customer satisfaction. Its intuitive interface and advanced capabilities empower garages to excel in a competitive environment, fostering strong customer relationships and operational excellence.

Key Features of GMS:

1. Appointment Scheduling:

- Simplifies the process of booking service appointments for customers.
- Helps staff efficiently organize daily schedules, minimizing idle time and optimizing resource utilization.

2. Vehicle Management:

- Keeps comprehensive records of each vehicle, including service history, repair details, and maintenance schedules.
- Monitors the status of vehicles during servicing, enhancing communication with customers.

3. Customer Relationship Management (CRM):

- Stores essential customer information and preferences.
- Sends reminders for services, follow-up messages, and promotional offers to foster customer loyalty.

4. Inventory and Spare Parts Management:

- Monitors stock levels of spare parts and automates reordering to avoid shortages.
- Ensures mechanics have the required tools and parts readily available.

5. Billing and Invoicing:

- Creates accurate and professional invoices with ease.
- Supports various payment options, discounts, and tax calculations.

6. Work Order Management:

- Generates detailed work orders that include tasks, estimated costs, and deadlines.

- Assists staff in prioritizing tasks and completing jobs on time.

7. Reporting and Analytics:

- Delivers insights into key performance metrics such as revenue, job completion rates, and customer feedback.
- Identifies patterns and highlights opportunities for improvement.

GMS serves as a comprehensive tool to enhance service quality, streamline operations, and strengthen customer engagement, enabling automotive repair facilities to thrive while offering a seamless experience for both customers and staff.

Salesforce

Introduction:

Are you new to Salesforce and unsure about what it is or how to get started? Wondering where to begin your learning journey? If you said yes to any of these, you're in the right place! This module is here to guide you.

Welcome to Salesforce! It's a revolutionary platform equipped with productivity-enhancing tools designed to help you work smarter and faster. As you progress through this module, you'll explore its key features and answer the fundamental question, "*What exactly is Salesforce?*"

What Is Salesforce?

Salesforce is a platform designed to ensure customer success, helping you with selling, servicing, marketing, analyzing, and connecting with your customers.

It provides all the tools you need to manage your business from anywhere. By leveraging its standard products and features, you can:

- Maintain relationships with prospects and customers.
- Collaborate effectively with employees and partners.
- Securely store your data in the cloud.

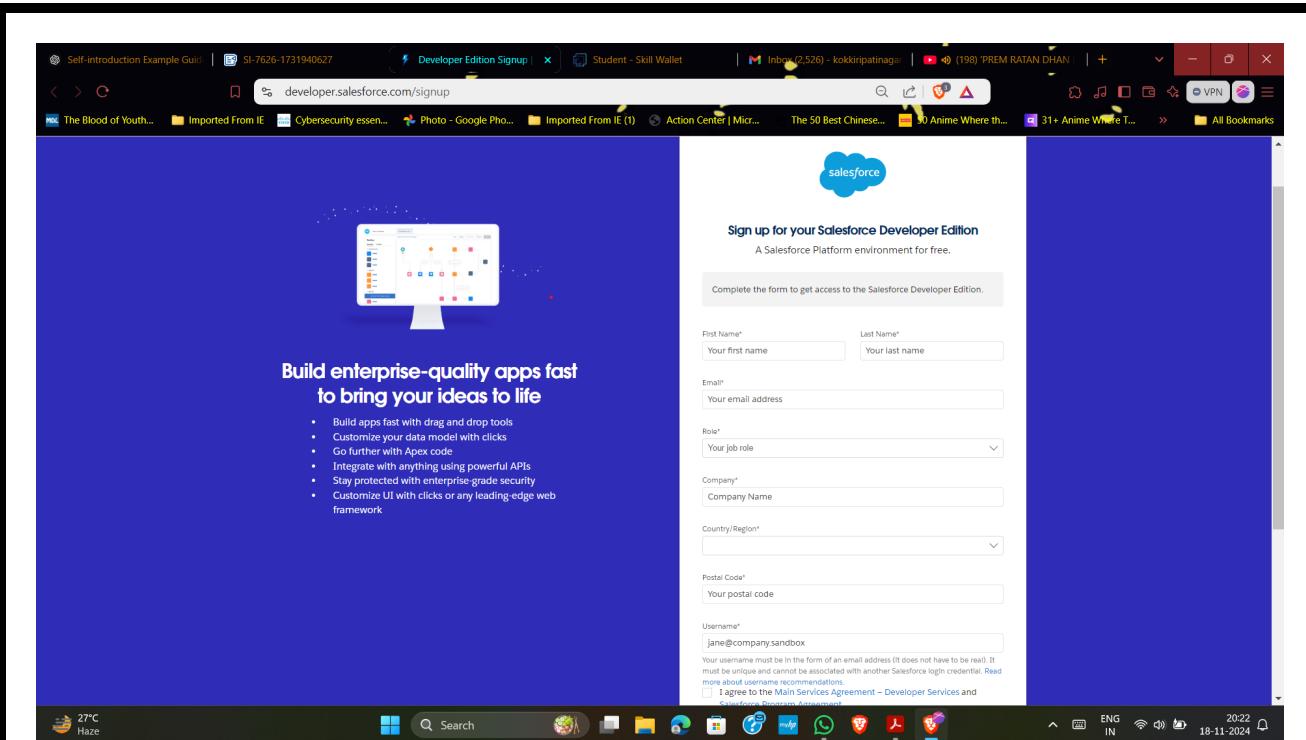
Before Salesforce, your tasks like managing contacts, emails, follow-ups, and deals might have been scattered and unorganized. Salesforce simplifies these operations into one cohesive platform.

Creating Developer Account:

How to Create a Developer Account in Salesforce:

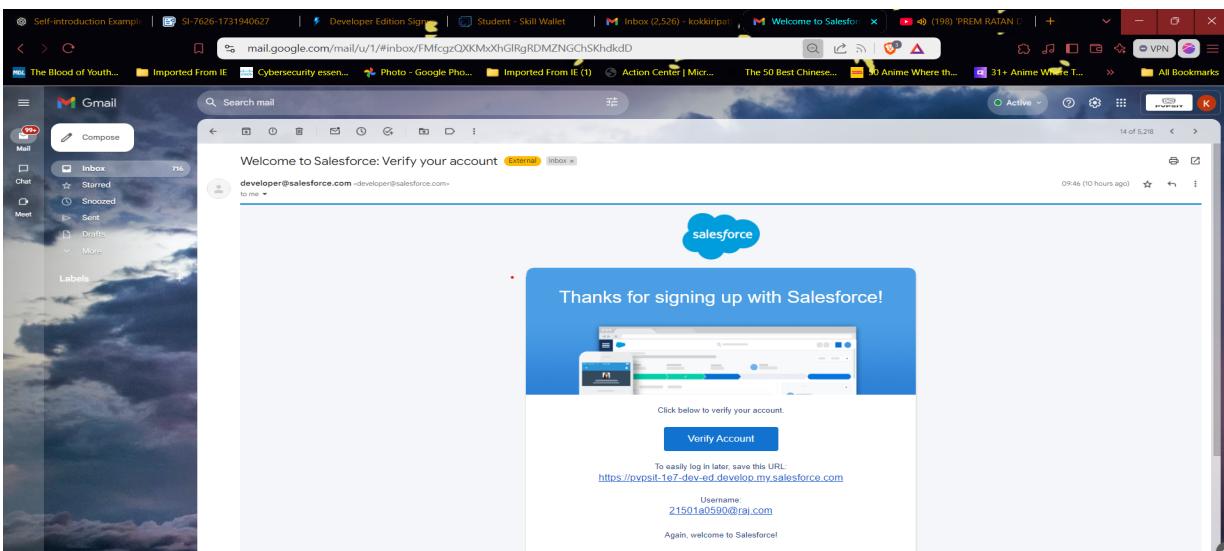
Follow these steps to set up a developer account:

1. Visit [Salesforce Developer Signup](#).
2. Fill out the sign-up form with the following details:
 - **First Name & Last Name:** Your full name.
 - **Email Address:** Provide a valid email.
 - **Role:** Select "Developer."
 - **Company:** Enter your college name.
 - **Country:** Choose "India."
 - **Postal Code:** Enter your area's pin code.
 - **Username:** Create a username using the format *yourname@organization.com*. It doesn't have to be a real email.
3. Once all the details are entered, click **Sign Me Up** to complete the process.



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.



OBJECT

What Is an Object?

In Salesforce, objects are database tables that allow you to store data specific to an organization. They form the foundation of how Salesforce organizes and manages data.

Types of Salesforce Objects:

1. Standard Objects:

- These are pre-built objects provided by Salesforce, such as Users, Contracts, Reports, Dashboards, and more.

2. Custom Objects:

- These are user-created objects tailored to the unique needs of an organization. Custom objects are at the core of any application, enabling data sharing and customization specific to the business requirements.

Steps to Create Objects:

1. Customer Details Object

1. Navigate to **Setup Page > Object Manager > Create > Custom Object**.

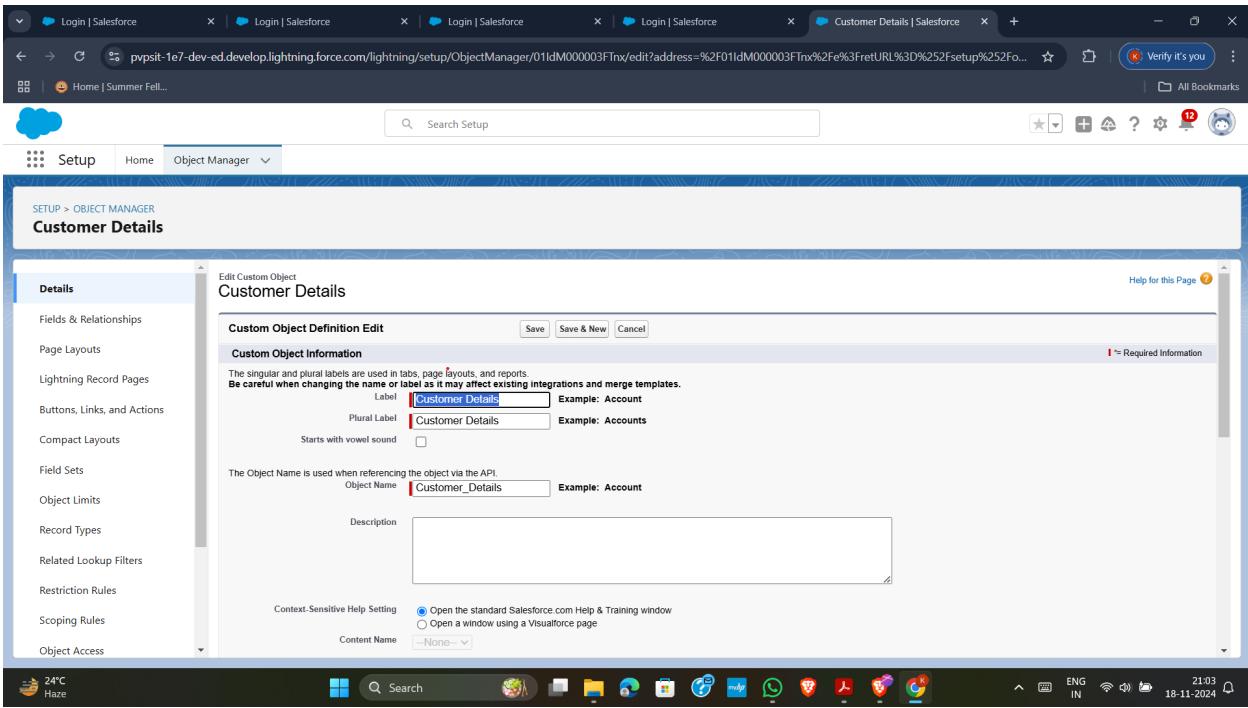
2. Fill in the following details:

- **Label Name:** Customer Details
- **Plural Label Name:** Customer Details
- **Record Name Label:** Customer Name
- **Data Type:** Text

3. Enable the following options:

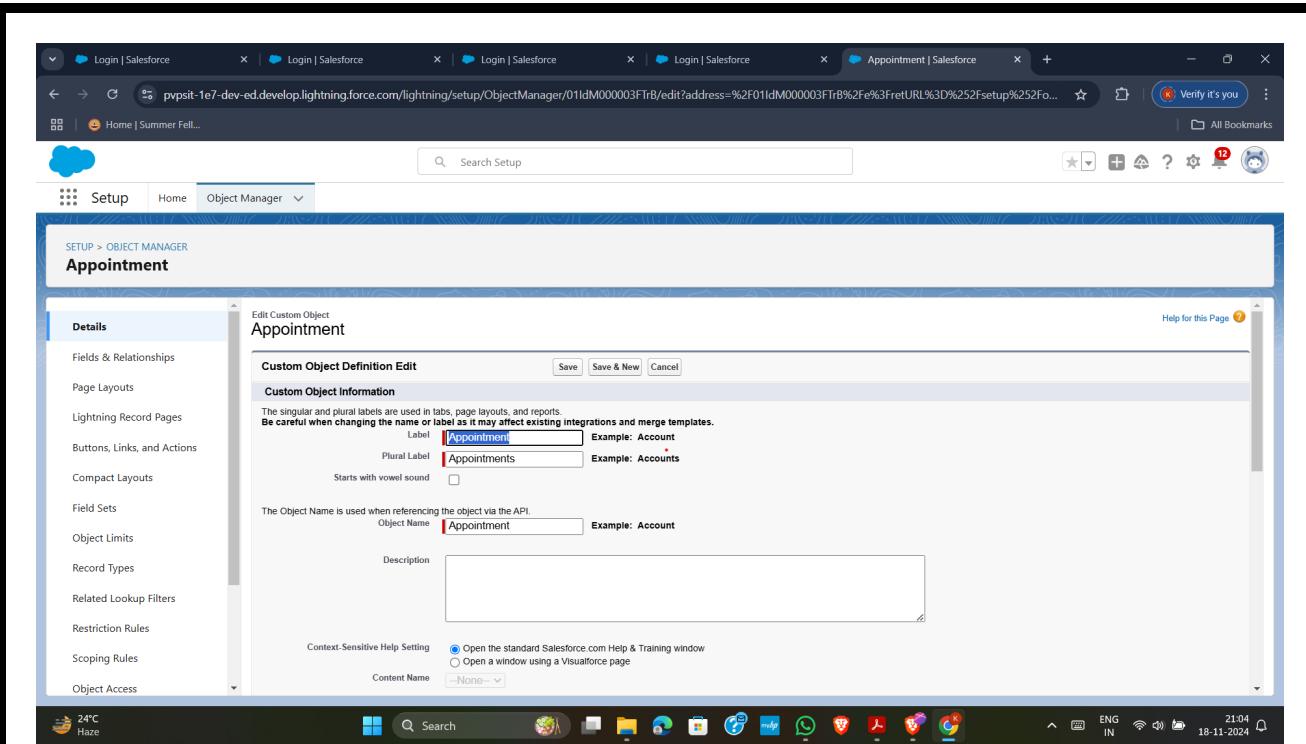
- **Allow Reports**
- **Track Field History**
- **Allow Search**

4. Click **Save**.



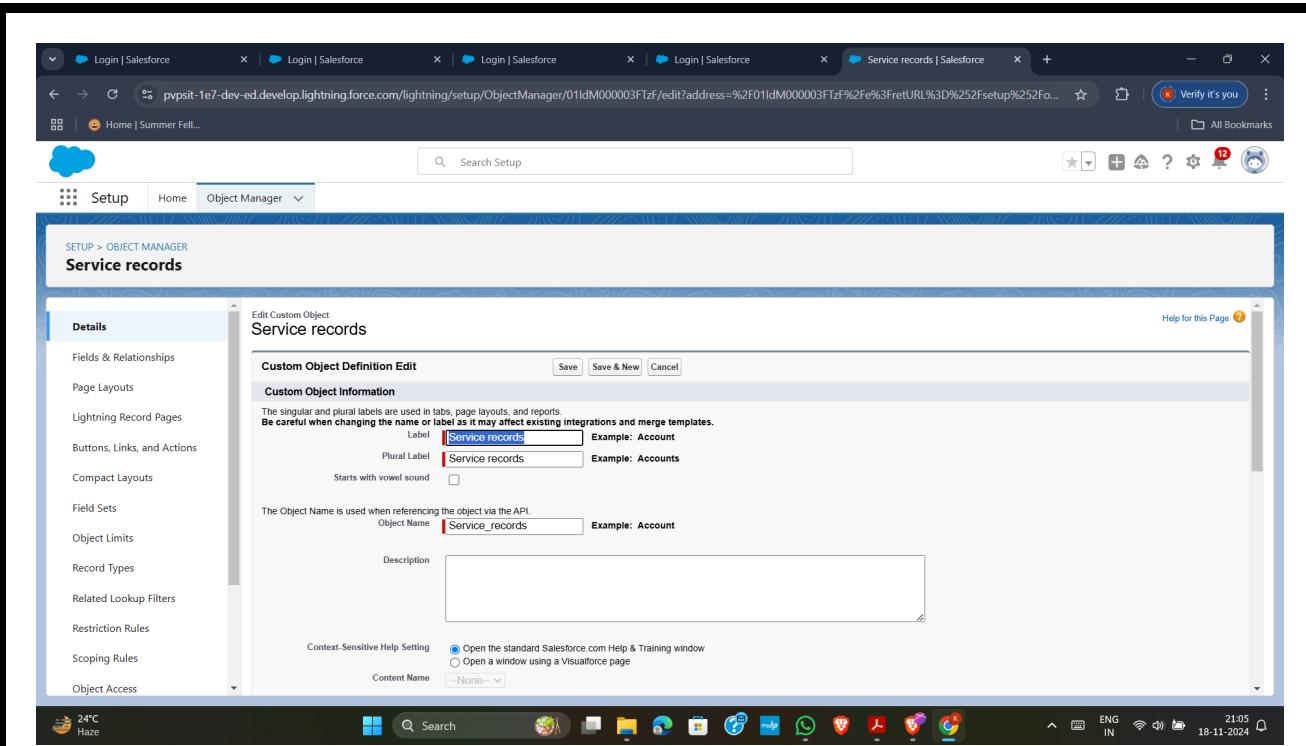
2. Appointment Object

1. Navigate to **Setup Page > Object Manager > Create > Custom Object**.
2. Fill in the following details:
 - **Label Name:** Appointment
 - **Plural Label Name:** Appointments
 - **Record Name Label:** Appointment Name
 - **Data Type:** Auto Number
 - **Display Format:** app-{000}
 - **Starting Number:** 1
3. Enable the following options:
 - **Allow Reports**
 - **Track Field History**
 - **Allow Search**
4. Click **Save**.



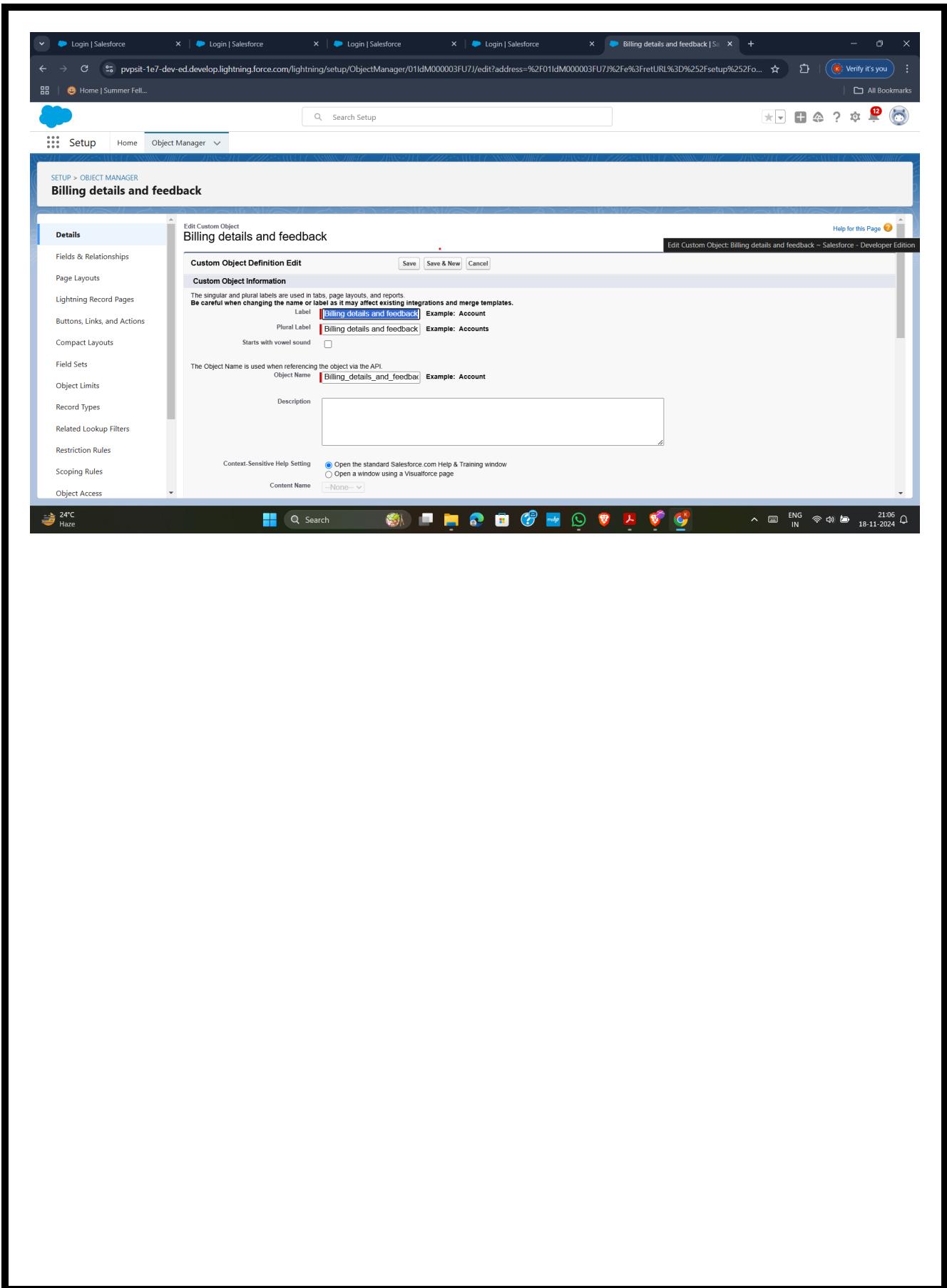
3. Service Records Object

1. Navigate to **Setup Page > Object Manager > Create > Custom Object**.
2. Fill in the following details:
 - **Label Name:** Service Records
 - **Plural Label Name:** Service Records
 - **Record Name Label:** Service Records Name
 - **Data Type:** Auto Number
 - **Display Format:** ser-{000}
 - **Starting Number:** 1
3. Enable the following options:
 - **Allow Reports**
 - **Track Field History**
 - **Allow Search**
4. Click **Save**.



4. Billing Details and Feedback Object

1. Navigate to **Setup Page > Object Manager > Create > Custom Object**.
2. Fill in the following details:
 - **Label Name:** Billing Details and Feedback
 - **Plural Label Name:** Billing Details and Feedback
 - **Record Name Label:** Billing Details and Feedback Name
 - **Data Type:** Auto Number
 - **Display Format:** bill-{000}
 - **Starting Number:** 1
3. Enable the following options:
 - **Allow Reports**
 - **Track Field History**
 - **Allow Search**
4. Click **Save**.



Tabs

What Is a Tab?

A tab is a user interface element in Salesforce that allows you to create and view records associated with objects. Tabs provide an organized way to interact with data stored in Salesforce objects.

Types of Tabs

1. Custom Tabs

- Custom object tabs serve as the interface for custom applications you create in Salesforce.
- These tabs function similarly to standard Salesforce tabs like Accounts, Contacts, and Opportunities.

2. Web Tabs

- Web tabs display embedded web content or applications within the Salesforce window.
- They help users quickly access frequently used content or tools without leaving the Salesforce application.

3. Visualforce Tabs

- Visualforce tabs display custom Visualforce pages.
- They look and behave like standard Salesforce tabs, such as Accounts and Opportunities.

4. Lightning Component Tabs

- These tabs enable you to integrate Lightning components into the navigation menu for Lightning Experience and the mobile app.

5. Lightning Page Tabs

- Lightning Page tabs allow you to add Lightning Pages to the mobile app navigation.
- They differ from other custom tabs as they don't appear on the All Tabs page or in the Available Tabs list when customizing app tabs.

Steps to Create Tabs

1. Creating a Custom Tab (Customer Details)

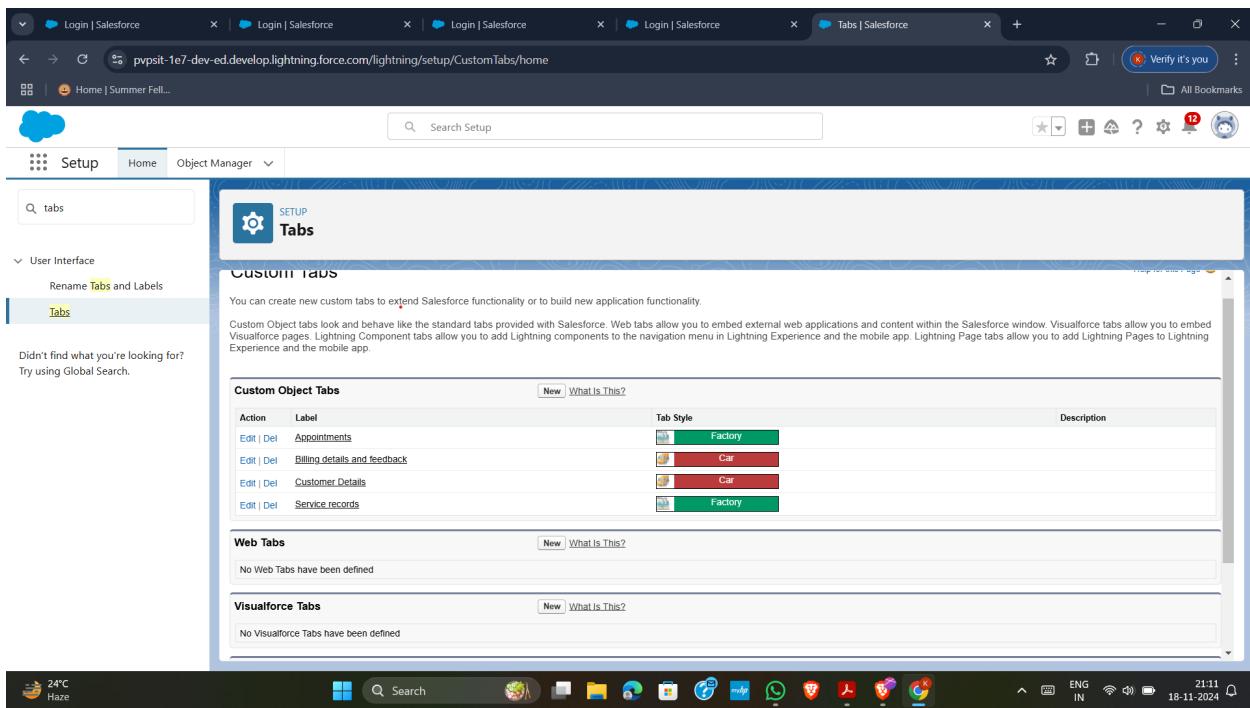
1. Go to the **Setup Page**, type **Tabs** in the Quick Find bar, and click on **Tabs**.
2. Under **Custom Object Tabs**, click **New**.

3. Select the object **Customer Details** and choose a tab style.
4. Click **Next** to proceed to the profiles page and leave the default settings.
5. Click **Next** again for the Custom App settings and uncheck the option to include the tab.
6. Ensure the option **Append tab to users' existing personal customizations** is checked.
7. Click **Save** to create the tab.

2. Creating Tabs for Remaining Objects

- Repeat the above steps for the following objects:
 - Appointments
 - Service Records
 - Billing Details and Feedback

By following the same process, you can add tabs for all necessary custom objects to your Salesforce environment.



The Lightning App

What Is a Lightning App?

A Lightning app is a collection of tools, objects, tabs, and other resources bundled together to serve a specific purpose. In Lightning Experience, these apps provide users with a convenient navigation bar that offers seamless access to everything they need for their tasks.

Lightning apps also allow for customization, such as branding with custom colors and logos, as well as the inclusion of utility bars and Lightning page tabs. This helps users work more efficiently and switch between apps effortlessly.

Steps to Create a Lightning App

1. Access the App Manager

- Navigate to the **Setup Page**.
- Search for **App Manager** in the Quick Find bar and select it.
- Click **New Lightning App** to begin.

2. Fill App Details

- Enter the **App Name** as **Garage Management Application**.
- Proceed by clicking **Next**.
- On the **App Options Page**, keep the settings as default and click **Next**.
- On the **Utility Items Page**, keep the default settings and click **Next** again.

3. Add Navigation Items

- Search for the items you want to include in the app (e.g., **Customer Details, Appointments, Service Records, Billing Details and Feedback, Reports, and Dashboards**) in the search bar.
- Use the arrow button to add them to the navigation menu.
- Click **Next** to continue.

4. Assign User Profiles

- In the **User Profiles** section, search for **System Administrator** in the search bar.
- Use the arrow button to assign this profile to the app.
- Click **Save & Finish** to complete the setup.

The screenshot shows the Salesforce App Manager interface. The left sidebar has a search bar and navigation links for Home, Object Manager, and Setup. Under Apps, the 'App Manager' link is selected. A message says ' Didn't find what you're looking for? Try using Global Search.' The main area is titled 'Lightning Experience App Manager' and displays a table of 24 items. The columns are: App Name (sorted), Developer Name, Description, Last Modified, App Type, and Visibility. The table includes rows for various Salesforce core apps like Analytics Studio, App Launcher, Automation, etc., and a custom app named 'Garage Management Application'. The 'Garage Management Application' row is highlighted with a blue border.

App Name ↑	Developer Name	Description	Last Modified ...	Ap... ▾	Vi... ▾
2 Analytics Studio	Insights	Build CRM Analytics dashboards and apps	18/11/2024, 9:12 am	Classic ▾	
3 App Launcher	AppLauncher	App Launcher tabs	18/11/2024, 9:12 am	Classic ▾	
4 Automation	FlowsApp	Automate business processes and repetitive tasks.	18/11/2024, 9:18 am	Lightning ▾	
5 Bolt Solutions	LightningBolt	Discover and manage business solutions designed for your industry.	18/11/2024, 9:15 am	Lightning ▾	
6 Business Rules Engine	ExpressionSetConsole	Create and maintain business rules that perform complex lookups and ca...	18/11/2024, 9:12 am	Lightning ▾	
7 Community	Community	Salesforce CRM Communities	18/11/2024, 9:12 am	Classic ▾	
8 Content	Content	Salesforce CRM Content	18/11/2024, 9:12 am	Classic ▾	
9 Data Manager	DataManager	Use Data Manager to view limits, monitor usage, and manage recipes.	18/11/2024, 9:12 am	Lightning ▾	
10 Digital Experiences	SalesforceCMS	Manage content and media for all of your sites.	18/11/2024, 9:12 am	Lightning ▾	
11 Garage Management Application	Garage_Management_Application		18/11/2024, 10:09 am	Lightning ▾	
12 Lightning Usage App	LightningInstrumentation	View Adoption and Usage Metrics for Lightning Experience	18/11/2024, 9:12 am	Lightning ▾	
13 Marketing CRM Classic	Marketing	Track sales and marketing efforts with CRM objects.	18/11/2024, 9:12 am	Classic ▾	
14 Platform	Platform	The fundamental Lightning Platform	18/11/2024, 9:12 am	Classic ▾	

Fields

What Are Fields in Salesforce?

In Salesforce, fields represent the data stored within the columns of a relational database. They hold critical information related to specific objects, making it easier to search, edit, or delete records efficiently.

Types of Fields in Salesforce:

1. Standard Fields:

- Predefined fields provided by Salesforce, such as Name, Created By, and Last Modified.

2. Custom Fields:

- User-created fields tailored to store additional, specific data relevant to the organization's needs.

Steps to Create Fields for the Customer Details Object

1. Creating a Field (Phone):

1. Navigate to **Setup > Object Manager**.
2. In the search bar, type the object name **Customer Details**, and click on it.
3. Select **Fields & Relationships** from the left menu and click **New**.
4. Choose **Phone** as the data type and click **Next**.
5. Fill in the following details:
 - **Field Label:** Phone Number
 - **Field Name:** Auto-generated by Salesforce.
6. Click **Next > Next > Save & New** to save the field and create another.

2. Creating Another Field (Email):

1. Follow the same steps as above:
 - **Setup > Object Manager > Customer Details > Fields & Relationships > New**.
2. Choose **Email** as the data type and click **Next**.
3. Fill in the following details:
 - **Field Label:** Gmail
 - **Field Name:** Auto-generated by Salesforce.

4. Click **Next > Next > Save & New** to continue or **Save** to finish.

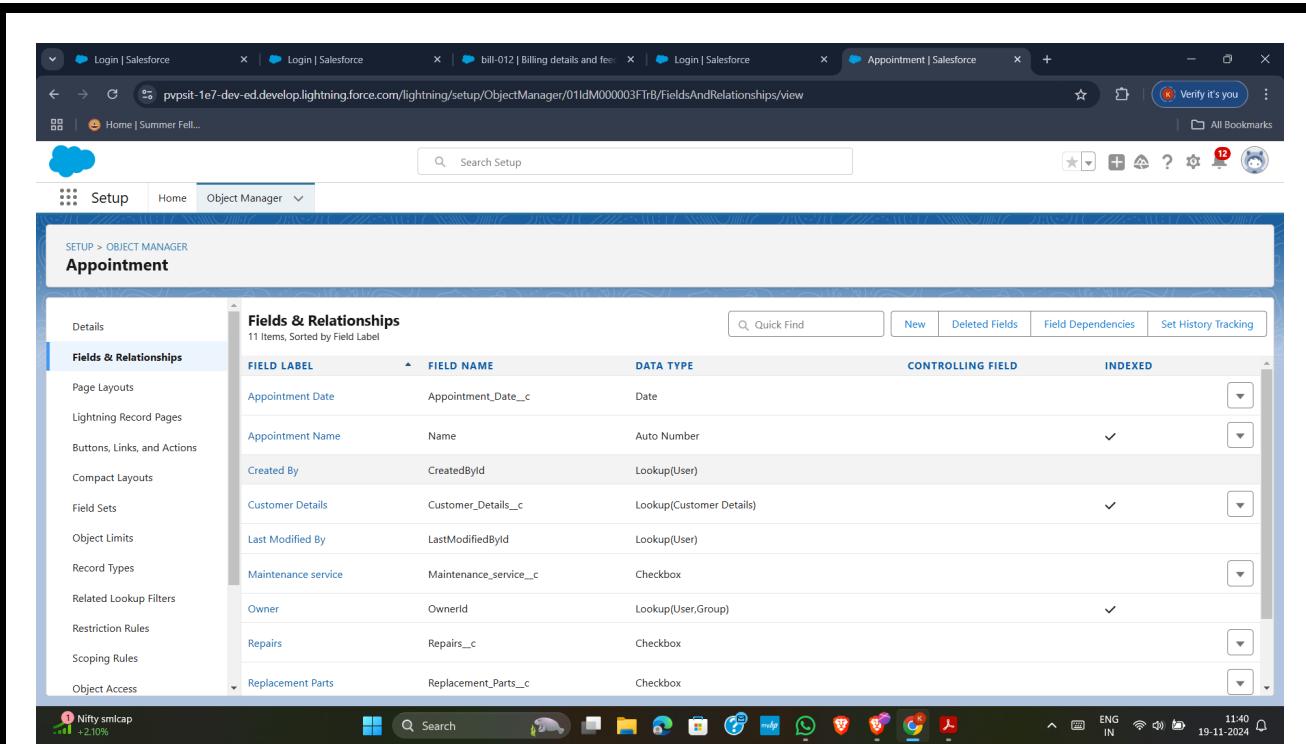
The screenshot shows the Salesforce Setup interface with the path **SETUP > OBJECT MANAGER > Customer Details**. On the left, a sidebar lists various setup categories like Details, Fields & Relationships, Page Layouts, etc. The main area displays a table titled **Fields & Relationships** with 6 items. The columns are **FIELD LABEL**, **FIELD NAME**, **DATA TYPE**, **CONTROLLING FIELD**, and **INDEXED**. The data is as follows:

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

Creation of Lookup Fields:

Creating a Lookup Field on the Appointment Object

1. Go to **Setup > Object Manager** and search for the object name **Appointment** in the search bar.
2. Click on the **Appointment** object.
3. Select **Fields & Relationships** from the left menu and click **New**.
4. Choose **Lookup Relationship** as the data type and click **Next**.
5. Select the related object **Customer Details** and click **Next**.
6. Proceed by clicking **Next > Next > Save**.



Creating a Lookup Field on the Service Records Object

1. Go to **Setup > Object Manager** and search for the object name **Service Records** in the search bar.
2. Click on the **Service Records** object.
3. Select **Fields & Relationships** and click **New**.
4. Choose **Lookup Relationship** as the data type and click **Next**.
5. Select the related object **Appointment** and click **Next**.
6. Make the field required by selecting the **Required** checkbox.
7. Scroll down to **Lookup Filter** and click **Show Filter Settings**.
8. Add the following filter criteria:
 - **Field:** Appointment: Appointment Date
 - **Operator:** Less than
 - **Select Field:** Appointment: Created Date
9. Set the **Filter Type** to **Required** and add an error message:
 - **Error Message:** Value does not match the criteria.
10. Activate the filter by selecting **Active**.
11. Click **Next > Next > Save**.

Service records

Fields & Relationships

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

Creating a Lookup Field on the Billing Details and Feedback Object

1. Go to **Setup > Object Manager** and search for the object name **Billing Details and Feedback** in the search bar.
2. Click on the **Billing Details and Feedback** object.
3. Select **Fields & Relationships** and click **New**.
4. Choose **Lookup Relationship** as the data type and click **Next**.
5. Select the related object **Service Records** and click **Next**.
6. Proceed by clicking **Next > Next > Save & New**.

Billing details and feedback

Fields & Relationships

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

Creation of Checkbox Fields:

1. Creating a Checkbox Field on the Appointment Object (Maintenance Service)

1. Go to **Setup > Object Manager** and search for the object **Appointment** in the search bar.
2. Click on the **Appointment** object.
3. Select **Fields & Relationships** and click **New**.
4. Choose **Checkbox** as the data type and click **Next**.
5. Fill in the details:
 - **Field Label:** Maintenance Service
 - **Field Name:** Auto-populated
 - **Default Value:** Unchecked
6. Click **Next > Next > Save**.

2. Creating Another Checkbox Field on the Appointment Object (Repairs)

1. Repeat steps 1 to 3 from the previous section.
2. Fill in the details:
 - **Field Label:** Repairs
 - **Field Name:** Auto-populated
 - **Default Value:** Unchecked
3. Click **Next > Next > Save**.

3. Creating Another Checkbox Field on the Appointment Object (Replacement Parts)

1. Repeat steps 1 to 3 from the previous section.
2. Fill in the details:
 - **Field Label:** Replacement Parts
 - **Field Name:** Auto-populated
 - **Default Value:** Unchecked
3. Click **Next > Next > Save**.

The screenshot shows the Salesforce Setup interface with the Object Manager for the Appointment object. The left sidebar lists various setup categories. The main area displays the 'Fields & Relationships' section for the Appointment object, which contains 11 items. The table includes columns for Field Label, Field Name, Data Type, Controlling Field, and Indexed status.

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

4. Creating a Checkbox Field on the Service Records Object (Quality Check Status)

1. Go to **Setup > Object Manager** and search for the object **Service Records** in the search bar.
2. Click on the **Service Records** object.
3. Select **Fields & Relationships** and click **New**.
4. Choose **Checkbox** as the data type and click **Next**.
5. Fill in the details:
 - **Field Label:** Quality Check Status
 - **Field Name:** Auto-populated
 - **Default Value:** Unchecked

6. Click **Next > Next > Save**.

The screenshot shows the Salesforce Setup interface with the Object Manager for the Service records object. The left sidebar lists various setup categories. The main area displays the 'Fields & Relationships' section for the Service records object, which contains 8 items. The table includes columns for Field Label, Field Name, Data Type, Controlling Field, and Indexed status.

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

Creation of date Fields:

Creating a Date Field on the Appointment Object

1. Navigate to **Setup > Object Manager** and search for the object **Appointment** in the search bar.
2. Click on the **Appointment** object.
3. Select **Fields & Relationships** from the left-hand menu and click **New**.
4. Choose **Date** as the data type and click **Next**.
5. Fill in the following details:
 - **Field Label:** Appointment Date
 - **Field Name:** Auto-populated
6. Make the field **Required** by selecting the **Required** checkbox.
7. Click **Next > Next > Save**.

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

- URL:** pvpsit-1e7-dev-ed.lightning.force.com/lightning/setup/ObjectManager/01lM000003TrB/FieldsAndRelationships/view
- Page Title:** Appointment | Salesforce
- Section:** SETUP > OBJECT MANAGER
- Object:** Appointment
- Left Sidebar:** Fields & Relationships (selected), followed by Page Layouts, Lightning Record Pages, Buttons, Links, and Actions, Compact Layouts, Field Sets, Object Limits, Record Types, Related Lookup Filters, Restriction Rules, Scoping Rules, and Object Access.
- Table Headers:** FIELD LABEL, FIELD NAME, DATA TYPE, CONTROLLING FIELD, INDEXED.
- Table Data:** A list of fields including Appointment Date, Appointment Name, Created By, Customer Details, Last Modified By, Maintenance service, Owner, Repairs, and Replacement Parts.

Creation of Currency Fields:

Creating a Currency Field on the Appointment Object

1. Go to **Setup > Object Manager** and search for the object **Appointment** in the search bar.
2. Click on the **Appointment** object.
3. Select **Fields & Relationships** from the left-hand menu and click **New**.
4. Choose **Currency** as the data type and click **Next**.

5. Fill in the following details:
 - **Field Label:** Service Amount
 - **Field Name:** Auto-populated
6. Click **Next**.
7. Set the field level security to **Read Only** for all profiles.
8. Click **Next > Save**.

The screenshot shows the Salesforce Object Manager interface. The left sidebar lists various setup categories like Details, Fields & Relationships, Page Layouts, etc. The main content area is titled 'Fields & Relationships' for the 'Appointment' object. It displays a table with columns: FIELD LABEL, FIELD NAME, DATA TYPE, CONTROLLING FIELD, and INDEXED. The table contains several fields such as Appointment Date, Appointment Name, Created By, Customer Details, Last Modified By, Maintenance service, Owner, Repairs, and Replacement Parts. The 'CONTROLLING FIELD' column shows relationships like 'Customer Details' and 'Maintenance service' which are lookup fields.

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

1. Currency Field on Billing Details and Feedback Object

1. Navigate to **Setup > Object Manager** and search for the object **Billing Details and Feedback**.
2. Select the object and click on **Fields & Relationships > New**.
3. Choose **Currency** as the data type and click **Next**.
4. Fill in the details:
 - **Field Label:** Payment Paid
 - **Field Name:** Auto-populated.
5. Click **Next > Save**.

Creation of Text Fields:

a. Text Field on Appointment Object:

1. Navigate to **Setup > Object Manager** and search for the object **Appointment**.
2. Select **Fields & Relationships > New**.
3. Choose **Text** as the data type and click **Next**.
4. Fill in the details:
 - **Field Label:** Vehicle Number Plate
 - **Field Name:** Auto-populated
 - **Length:** 10
 - Mark the field as **Required** and **Unique**.
5. Click **Next > Next > Save**.

b. Text Field on Billing Details and Feedback Object:

1. Navigate to **Setup > Object Manager** and search for the object **Billing Details and Feedback**.
2. Select **Fields & Relationships > New**.
3. Choose **Text** as the data type and click **Next**.
4. Fill in the details:
 - **Field Label:** Rating for Service
 - **Field Name:** Auto-populated
 - **Length:** 1
 - Mark the field as **Required** and **Unique**.
5. Click **Next > Next > Save**.

The screenshot shows the Salesforce Setup interface with the URL <https://pvpst-1e7-dev-ed.lightning.force.com/lightning/setup/ObjectManager/01lM000003FU7J/FieldsAndRelationships/view>. The page title is "Billing details and feedback". The left sidebar shows "Fields & Relationships" selected. The main content area displays a table of fields:

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

Creation of Picklist Fields:

a. Picklist on Service Records Object:

1. Navigate to **Setup > Object Manager** and search for the object **Service Records**.
2. Select **Fields & Relationships > New**.
3. Choose **Picklist** as the data type and click **Next**.
4. Enter the details:
 - **Field Label:** Service Status
 - **Values:**
 - Started
 - Completed
5. Click **Next > Next > Save**.

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

b. Picklist on Billing Details and Feedback Object:

1. Navigate to **Setup > Object Manager** and search for the object **Billing Details and Feedback**.
2. Select **Fields & Relationships > New**.
3. Choose **Picklist** as the data type and click **Next**.
4. Enter the details:
 - **Field Label:** Payment Status
 - **Values:**
 - Pending
 - Completed
5. Click **Next > Next > Save**.

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

Creating Formula Field in Service records Object:

4 Formula Field on Service Records Object

1. Navigate to **Setup > Object Manager** and search for the object **Service Records**.
2. Select **Fields & Relationships > New**.
3. Choose **Formula** as the data type and click **Next**.
4. Enter the details:
 - **Field Label:** Service Date
 - **Field Name:** Auto-populated
 - **Formula Return Type:** Date
5. In the formula editor, insert: **CreatedDate**.
6. Click **Check Syntax**, then **Next > Next > Save**.

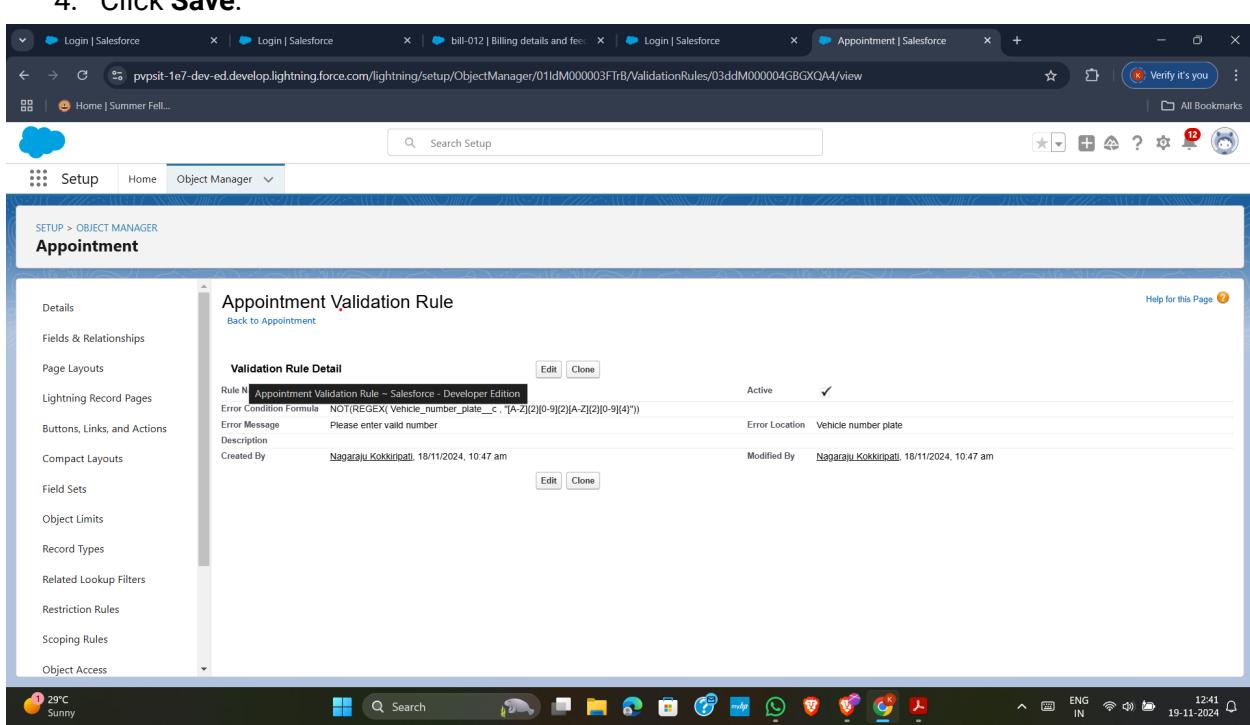
FIELD LABEL	FIELD NAME	DATA TYPE	CONTROLLING FIELD	INDEXED
Appointment	Appointment__c	Lookup(Appointment)		✓
Created By	CreatedById	Lookup(User)		
Last Modified By	LastModifiedById	Lookup(User)		
Owner	OwnerId	Lookup(User,Group)		✓
Quality Check Status	Quality_Check_Status__c	Checkbox		
service date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

Validation rule

Creating Validation Rules

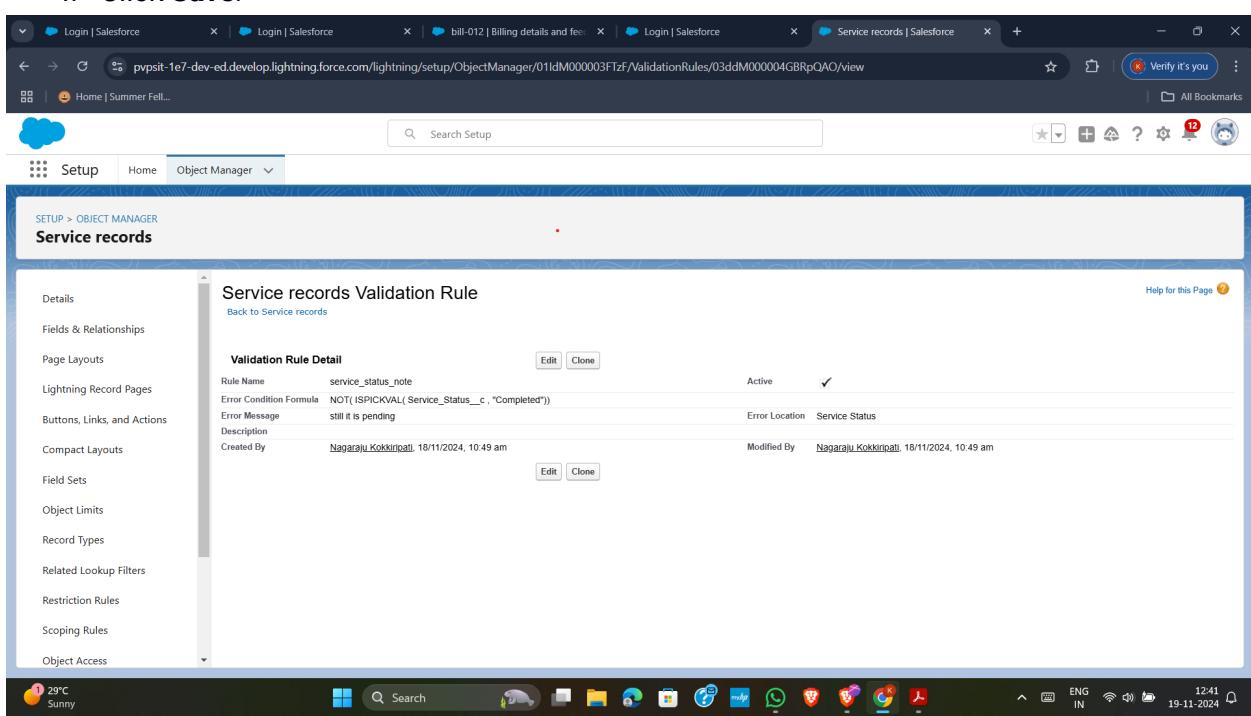
a. On Appointment Object:

1. Navigate to **Setup > Object Manager** and select **Appointment**.
2. Go to **Validation Rules > New**.
3. Enter the details:
 - **Rule Name:** Vehicle
 - **Error Condition Formula:**
 - CSS
 - Copy code
 - NOT (REGEX (Vehicle_number_plate__c , " [A-Z] {2} [0-9] {2} [A-Z] {2} [0-9] {4} "))
 - **Error Message:** Please enter a valid number.
 - **Error Location:** Field > Vehicle Number Plate.
4. Click **Save**.



b. On Service Records Object:

1. Navigate to **Setup > Object Manager** and select **Service Records**.
2. Go to **Validation Rules > New**.
3. Enter the details:
 - **Rule Name:** Service Status Note
 - **Error Condition Formula:**
 - less
 - Copy code
 - NOT (ISPIKVAL(Service_Status__c , "Completed"))
 - **Error Message:** Still it is pending.
 - **Error Location:** Field > Service Status.
4. Click **Save**.



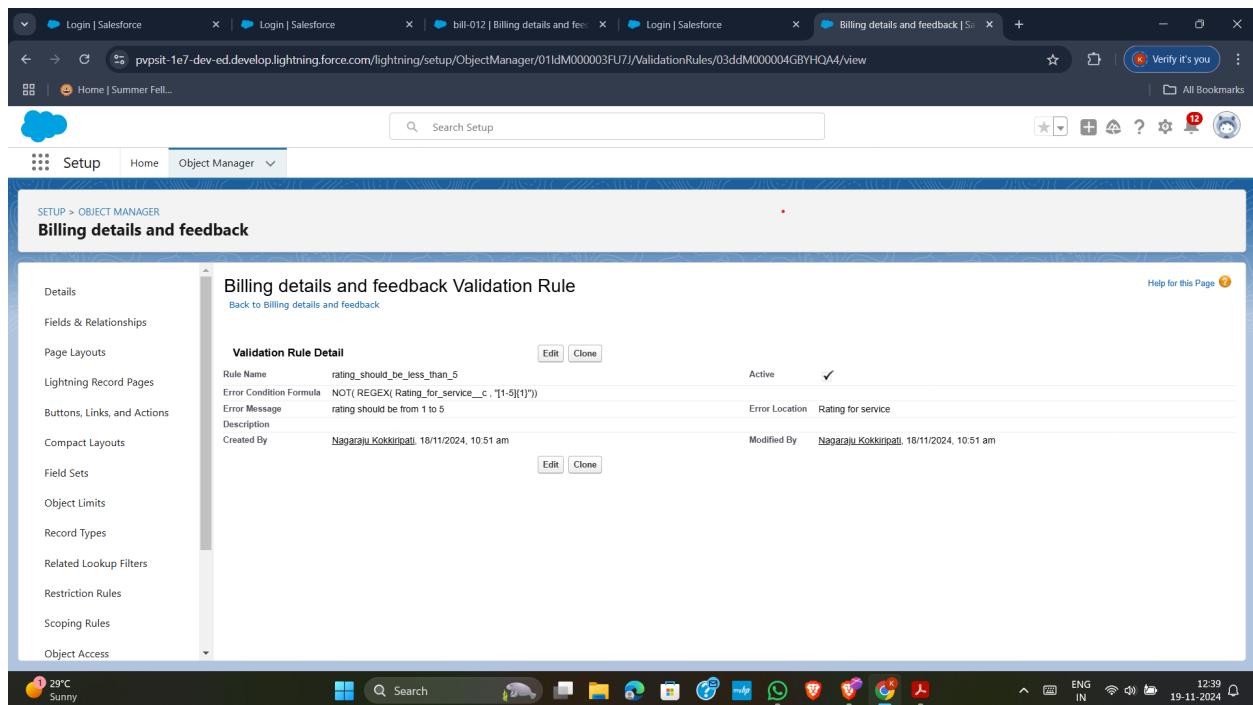
c. On Billing Details and Feedback Object:

1. Navigate to **Setup > Object Manager** and select **Billing Details and Feedback**.
2. Go to **Validation Rules > New**.
3. Enter the details:
 - **Rule Name:** Rating Should Be Less Than 5
 - **Error Condition Formula:**
 - less
 - Copy code
 - NOT (REGEX(Rating_for_service__c , "[1-5]{1}"))

■ **Error Message:** Rating should be from 1 to 5.

■ **Error Location:** Field > Rating for Service.

4. Click Save.



The screenshot shows the Salesforce Setup interface for Object Manager. The left sidebar lists various setup categories like Details, Fields & Relationships, Page Layouts, etc. The main content area displays a Validation Rule named "rating_should_be_less_than_5". The rule is active and has the formula `NOT(REGEX(Rating_for_service__c , '[1-5]{1}'))`. The error message is "rating should be from 1 to 5". The error location is "Rating for service". The rule was created by Nagaraju Kokkinapati on 18/11/2024, 10:51 am, and modified by the same user on the same date and time. The status bar at the bottom shows the date as 19-11-2024 and the time as 12:39.

Duplicate rule

a. Matching Rule for Customer Details Object:

1. Go to **Setup > Matching Rules** and click **New Rule**.
2. Select the object **Customer Details** and click **Next**.
3. Enter the details:
 - **Rule Name:** Matching Customer Details
 - **Field Matching Criteria:**
 - Gmail: Exact
 - Phone Number: Exact
4. Click **Save**, then **Activate**.

b. Duplicate Rule for Customer Details Object:

1. Go to **Setup > Duplicate Rules** and click **New Rule**.
2. Select the object **Customer Details**.
3. Enter the details:
 - **Rule Name:** Customer Detail Duplicate
 - **Matching Rule:** Matching Customer Details
4. Click **Save**, then **Activate**.

The screenshot shows the Salesforce Duplicate Rules page. A new rule named "Customer Detail Duplicate" has been created. The rule is set to run on "Customer Details" objects and uses the "Matching Customer Details" matching rule. It is active and has an order of 1. The matching criteria are defined as "Customer Details: Gmail EXACT MatchBlank = FALSE AND Customer Details: Phone_number EXACT MatchBlank = FALSE". The rule was created by Nagaraju Kokkinapati on 18/11/2024 at 10:58 am and modified by the same user on the same date and time.

Profiles

A **profile** is a collection of settings and permissions that define what a user can do in Salesforce. Profiles control access to:

- Object permissions
- Field permissions
- User permissions
- Tab settings
- App settings
- Apex class and Visualforce page access
- Page layouts and record types
- Login hours and IP ranges

Profiles are typically defined by a user's job role, such as **System Administrator**, **Developer**, or **Sales Representative**.

1. Manager Profile

1. Go to **Setup > Profiles** and type **Profiles** in the Quick Find box.
2. Clone the **Standard User** profile, name it **Manager**, and click **Save**.
3. On the profile page, click **Edit**.
4. Set the default app to **Garage Management**.
5. Under **Custom Object Permissions**, grant access to:
 - Appointments
 - Billing Details and Feedback
 - Service Records
 - Customer Details
6. Set the **Session Timeout** to **8 hours of inactivity**.
7. Update password policies:
 - **User Passwords Expire:** Never
 - **Minimum Password Length:** 8
8. Click **Save**.

The screenshot shows the Salesforce Setup interface with the 'Profiles' tab selected. On the left, a sidebar lists various setup categories like 'Setup Home', 'Service Setup Assistant', and 'Administration'. Under 'Administration', 'Profiles' is selected. The main content area displays the 'Manager' profile. The 'Profile Detail' section shows the profile's name is 'Manager', user license is 'Salesforce', and it is a 'Custom Profile'. The 'Page Layouts' section shows standard object layouts for various objects like Global, Email Application, Home Page Layout, and Account, each with their respective global layouts assigned.

2. Salesperson Profile

1. Repeat the steps above, but clone the **Salesforce Platform User** profile.
2. Name it **Salesperson** and assign permissions for the same objects.
3. Click **Save**.

The screenshot shows the Salesforce Setup interface with the 'Profiles' tab selected. The left sidebar shows 'Profiles' is also selected. The main content area displays the 'sales person' profile. The 'Profile Detail' section shows the profile's name is 'sales person', user license is 'Salesforce Platform', and it is a 'Custom Profile'. The 'Page Layouts' section shows standard object layouts for various objects like Global, Email Application, Home Page Layout, and Account, each with their respective global layouts assigned.

Role & Role Hierarchy

What Is a Role?

A role defines a user's access to records based on the organizational hierarchy. Higher-level roles have broader access to records than lower-level roles.

1. Creating the Manager Role

1. Go to **Setup > Roles** and click **Set Up Roles**.
2. Expand the hierarchy and add a role under the relevant position.
3. Name the role **Manager** and click **Save**.

The screenshot shows the Salesforce Setup interface with the 'Roles' page open. The left sidebar shows 'Users' expanded, with 'Roles' selected. The main area displays the 'Role Detail' for the 'Manager' role. The 'Label' is set to 'Manager'. The 'This role reports to' field is set to 'CEO'. The 'Modified By' field shows 'Nagaraju Kokkiripati' with a timestamp of '16/11/2024, 11:20 am'. The 'Opportunity Access' section indicates users can edit all opportunities associated with accounts they own. The 'Case Access' section indicates users can edit all cases associated with accounts they own. Below the detail table is a sub-table titled 'Users in Manager Role' with one row for 'Niklaus Mikaelson'. The status is 'Active' with a checked checkbox. The bottom of the screen shows the Windows taskbar with various icons and system status.

2. Creating the Salesperson Role

1. Add a role under **Manager**.
2. Name the role **Salesperson** and click **Save**.

The screenshot shows the Salesforce Setup interface with the 'Roles' page open. The left sidebar navigation includes 'Setup', 'Home', and 'Object Manager'. Under 'Users', 'Roles' is selected. Other sections like 'Feature Settings', 'Sales', 'Service', and 'Case Teams' are also listed. A search bar at the top right says 'Search Setup'.

Role Detail

Role
sales person

Below is the list of users assigned to this role. Click Edit to modify the role name. Click Assign Users to Role to assign existing users to this role. Click New User to create a user for this role.

Hierarchy: PVPSIT > CEO > Manager > sales person

[Users in sales person Role](#)

Role Detail

	Label	Role Name as displayed on reports	Sharing Groups	Role	Role and Internal Subordinates
This role reports to	Manager				
Modified By	Nagaraju Kokkinapati	18/11/2024, 11:21 am			
Opportunity Access		Users in this role can edit all opportunities associated with accounts that they own, regardless of who owns the opportunities			
Case Access		Users in this role can edit all cases associated with accounts that they own, regardless of who owns the cases			

Users in sales person Role

Action	Full Name	Alias	Username	Active
Edit	Manoj Movva	mmovv	munnabhai@gmail.com	✓
Edit	Tarun Kandula	tkand	tarunanthia@gmail.com	✓
Edit	Kumar Manikonda	kmani	tyre@gmail.com	✓

Bottom status bar: BSE smcap +1.77%, Search, Home, Notifications, Date: 19-11-2024, Time: 13:18, Language: ENG IN.

Users

A **user** is anyone who logs into Salesforce. Each user has a unique account with specific access rights.

Steps to Create a User

1. Go to **Setup > Users** and click **New User**.
2. Fill in the following details:
 - **First Name:** Niklaus
 - **Last Name:** Mikaelson
 - **Alias:** Custom alias
 - **Email:** Your personal email address
 - **Username:** Format: `text@text.text`
 - **Nickname:** Custom nickname
 - **Role:** Manager
 - **User License:** Salesforce
 - **Profile:** Manager

3. Click **Save**.

The screenshot shows the Salesforce Setup interface with the 'Users' tab selected. A new user record is being created for 'Niklaus Mikaelson'. The 'User Detail' section displays the following information:

Name	Niklaus Mikaelson	Role	Manager
Alias	nmika	User License	Salesforce
Email	nagarajukokkipati2002@gmail.com [Verify]	Profile	Manager
Username	nagarajukokkipati2002@gmail.com	Active	<input checked="" type="checkbox"/>
Nickname	User17319091312762514285	Marketing User	<input type="checkbox"/>
Title		Offline User	<input type="checkbox"/>
Company		Knowledge User	<input type="checkbox"/>
Department		Flow User	<input type="checkbox"/>
Division		Service Cloud User	<input type="checkbox"/>
Address		Site.com Contributor User	<input type="checkbox"/>
Time Zone	(GMT+05:30) India Standard Time (Asia/Kolkata)	Site.com Publisher User	<input type="checkbox"/>
Locale	English (India)	WDC User	<input type="checkbox"/>
Language	English	Mobile Push Registrations	<input type="checkbox"/> View
Delegated Approver		Data.com User Type	<input type="checkbox"/> View
Manager		Accessibility Mode (Classic Only)	<input type="checkbox"/> View
		Debug Mode	<input type="checkbox"/> View

The left sidebar shows the navigation menu with 'Users' selected. The bottom status bar indicates it's 13:20, ENG, IN, and the date is 19-11-2024.

Creating Additional Users

1. Repeat the above steps to create:

- Users with the **Salesperson** role, **Salesforce Platform License**, and **Salesperson Profile**.
- Create at least three users.

The screenshot shows the Salesforce Setup interface with the 'Users' tab selected. On the left, a sidebar lists various setup categories like Permission Set Groups, Profiles, and Roles. The main content area displays the 'User Detail' page for a user named 'Tarun Kandra'. The 'Role' is listed as 'sales person'. Other details include 'User License: Salesforce Platform' and 'Profile: sales person'. The 'Active' checkbox is checked. The 'Edit' button is visible at the top right of the form. The bottom of the screen shows a taskbar with various application icons and system status indicators.

Public groups

Steps to Create a Public Group

1. Go to **Setup > Public Groups** and click **New**.
2. Name the group **Sales Team** (auto-populated).
3. Under **Available Members**, add users with the **Salesperson** role.
4. Click **Save**.

The screenshot shows the Salesforce Setup interface. On the left, there's a sidebar with categories like Users, Feature Settings, User Interface, and Company Settings. The 'Users' category is expanded, and 'Public Groups' is selected. In the main content area, a 'Public Groups' page is displayed with a header 'sales team'. The page shows details such as Label: sales team, Group Name: sales_team, and Grant Access Using Hierarchies checked. Below this, there's a table for 'Available Members' with one row: Name: sales_person, Type: Role. At the bottom of the page, there's a note: 'Didn't find what you're looking for? Try using Global Search.' The browser's address bar shows the URL for the Public Groups page.

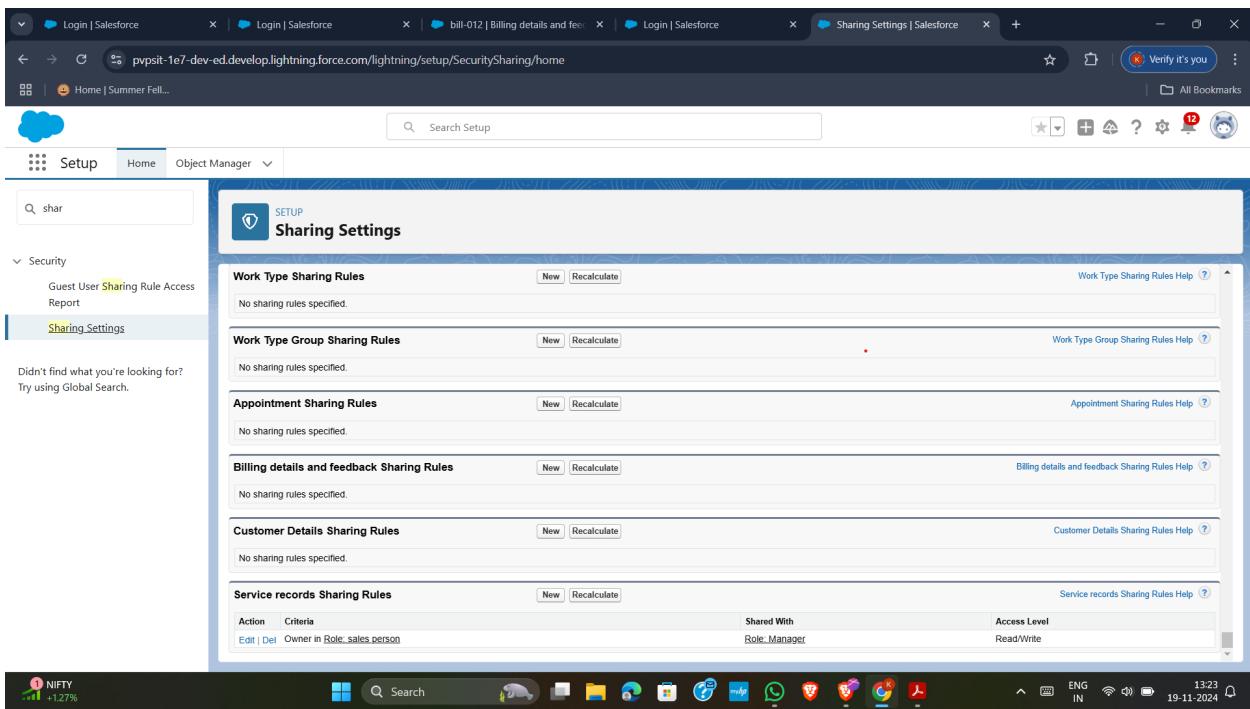
Sharing Setting

What Are Sharing Settings?

- **Organization-Wide Default (OWD):** Controls baseline access for objects (e.g., Private, Public Read-Only).
- **Role Hierarchy:** Grants broader access based on the organizational hierarchy.
- **Profiles and Permission Sets:** Specify object and field permissions for users.

Steps to Create Sharing Settings

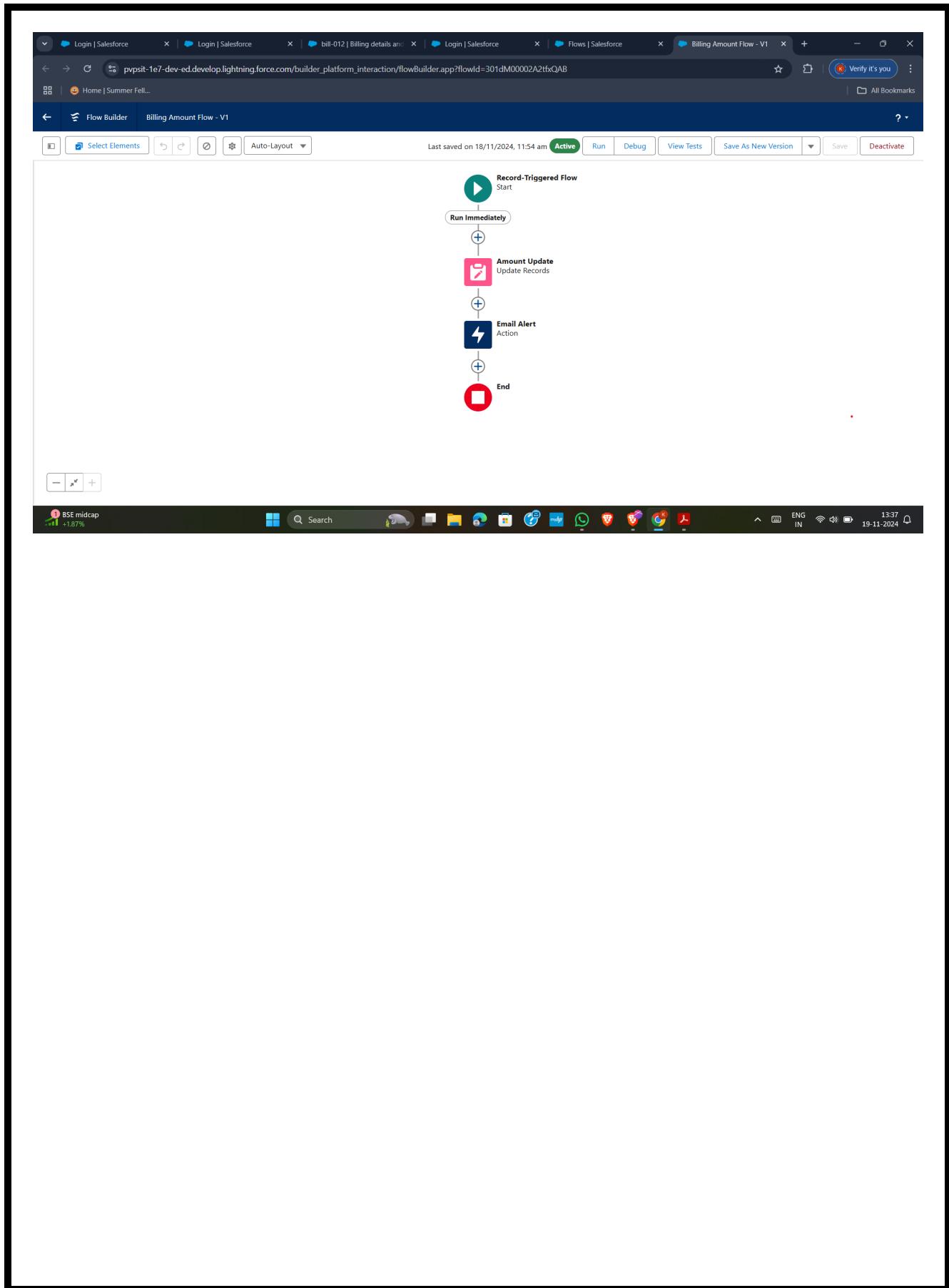
1. Go to **Setup > Sharing Settings** and click **Edit**.
2. Set **Service Records Object** to **Private** and save.
3. Create a new sharing rule:
 - **Label Name:** Sharing Setting
 - **Which Records to Share:** Roles > Salesperson
 - **Share With:** Roles > Manager
 - **Access Level:** Read/Write
4. Save the rule.



Flows

Steps to Create a Flow

1. Go to **Setup > Flows** and click **New Flow**.
2. Select **Record-Triggered Flow** and click **Create**.
3. Set the object to **Billing Details and Feedback**.
4. Trigger the flow when: **A record is created or updated**.
5. Optimize for **Actions and Related Records** and click **Done**.
6. Add an **Update Records** element:
 - **Label Name:** Amount Update
 - **Filter Condition:**
 - **Field:** Payment_Status__c
 - **Operator:** Equals
 - **Value:** Completed
 - **Field Values to Update:**
 - **Field:** Payment_Paid__c
 - **Value:**
 - bash
 - **Copy code**
 - `{ !$Record.Service_records__r.Appointment__r.Service_Amount__c }`
7. Add a **Text Template Resource** for the email body.
8. Configure an **Email Alert** action:
 - **Recipient:**
 - markdown
 - **Copy code**
 - `{ !$Record.Service_records__r.Appointment__r.Customer_Name__r.Gmail__c }`
 - **Subject:** Thank You for Your Payment - Garage Management



Apex Trigger

What Are Apex Triggers?

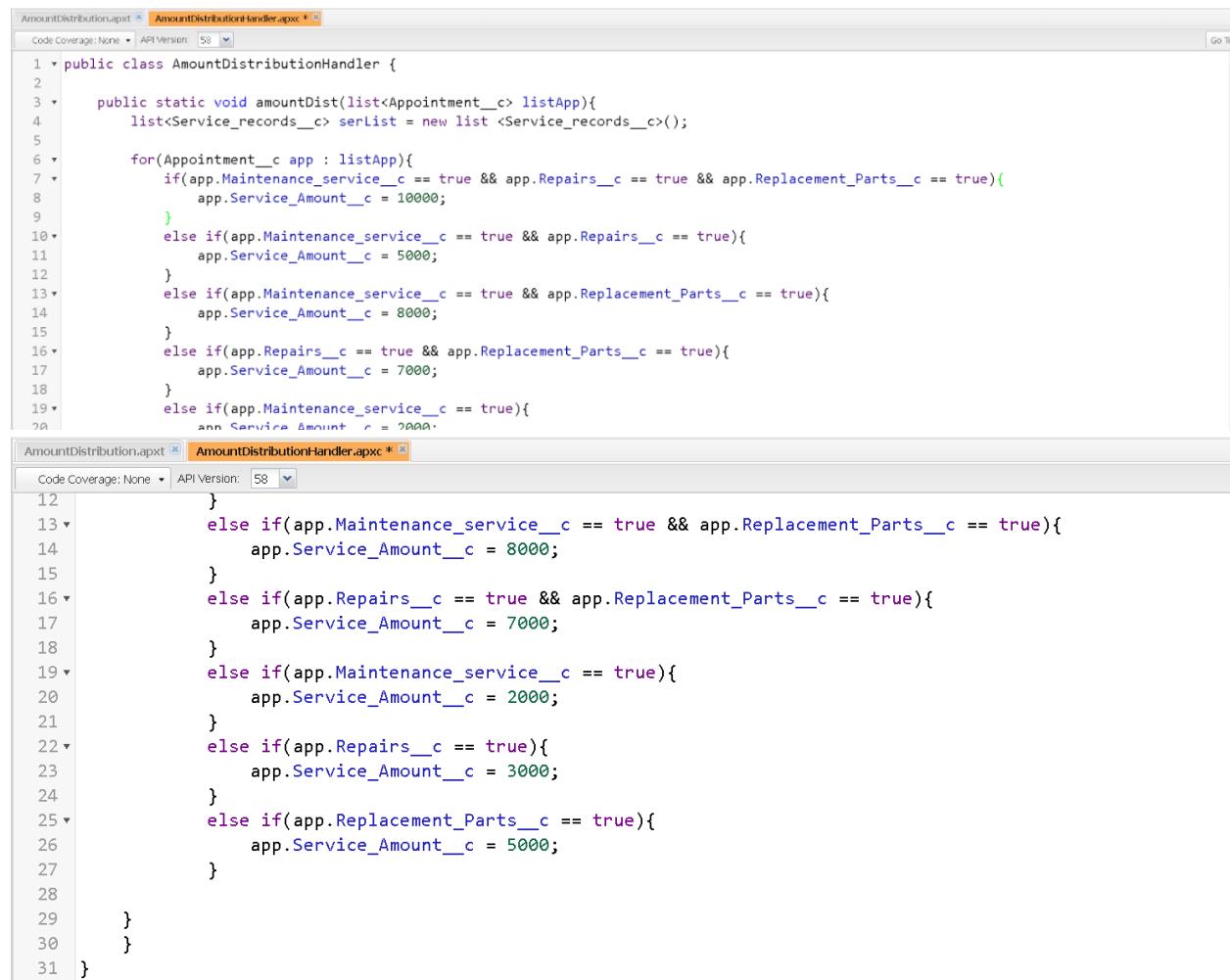
Apex triggers execute custom actions before or after specific database operations (e.g., insert, update).

- **Before Triggers:** Validate or update values before saving records.
- **After Triggers:** Access system-set values and modify related records.

Trigger Example

1. Create a class:

2. apex



```
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    }  
32  
33    else if(app.Maintenance_service__c == true){  
34        app.Service_Amount__c = 2000;  
35    }  
36  
37    else if(app.Repairs__c == true){  
38        app.Service_Amount__c = 3000;  
39    }  
40  
41    else if(app.Replacement_Parts__c == true){  
42        app.Service_Amount__c = 5000;  
43    }  
44  
45}
```

3. Copy code

4. public class AmountDistributionHandler {

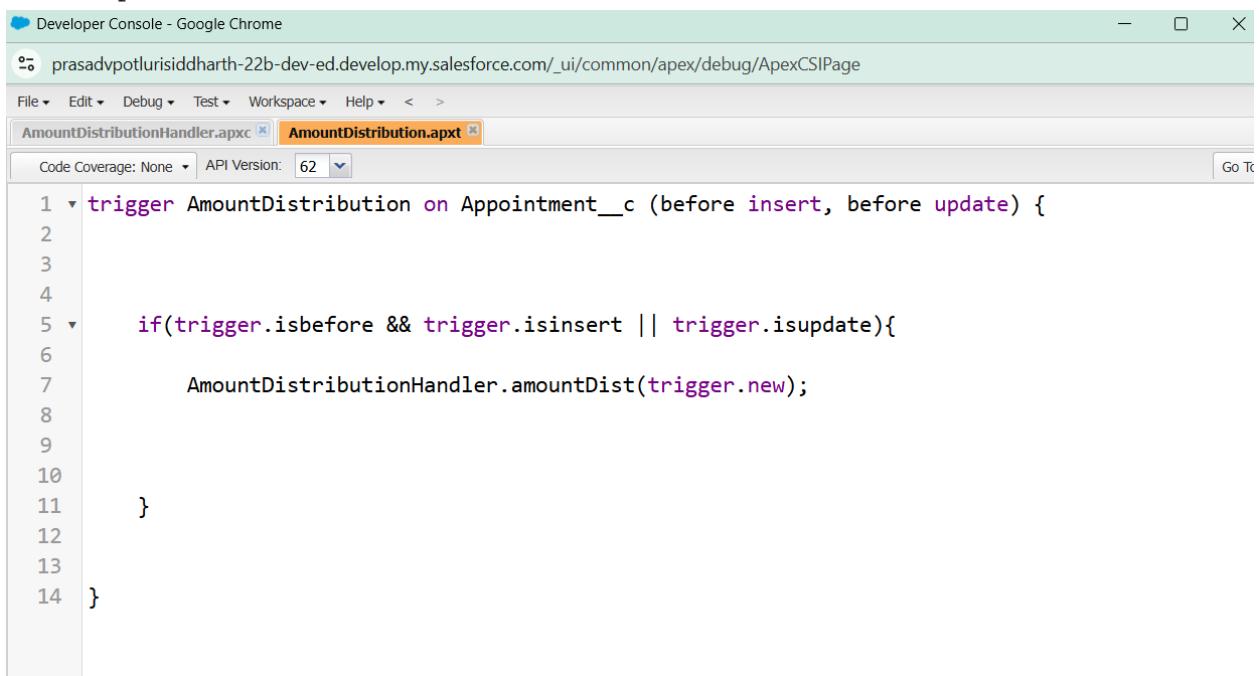
```

        public static void amountDist(list<Appointment__c> listApp) {
            for (Appointment__c app : listApp) {
                if (app.Maintenance_service__c && app.Repairs__c &&
app.Replacement_Parts__c) {
                    app.Service_Amount__c = 10000;
                }
                // Other conditions omitted for brevity.
            }
        }
    }
}

```

5. Create a trigger:

6. apex



The screenshot shows the Salesforce Developer Console in Google Chrome. The URL is https://prasadvpotlurisiddharth-22b-dev-ed.develop.my.salesforce.com/_ui/common/apex/debug/ApexCSIPage. The tab bar shows 'AmountDistributionHandler.apxc' and 'AmountDistribution.apxt'. The code editor displays the following Apex trigger:

```

1 trigger AmountDistribution on Appointment__c (before insert, before update) {
2
3
4
5     if(trigger.isbefore && trigger.isinsert || trigger.isupdate){
6
7         AmountDistributionHandler.amountDist(trigger.new);
8
9
10    }
11
12
13 }

```

7. Copy code

```

8. trigger AmountDistribution on Appointment__c (before insert,
before update) {
    if (trigger.isBefore && (trigger.isInsert || trigger.isUpdate)) {
        AmountDistributionHandler.amountDist(trigger.new);
    }
}

```

Reports

Reports in Salesforce

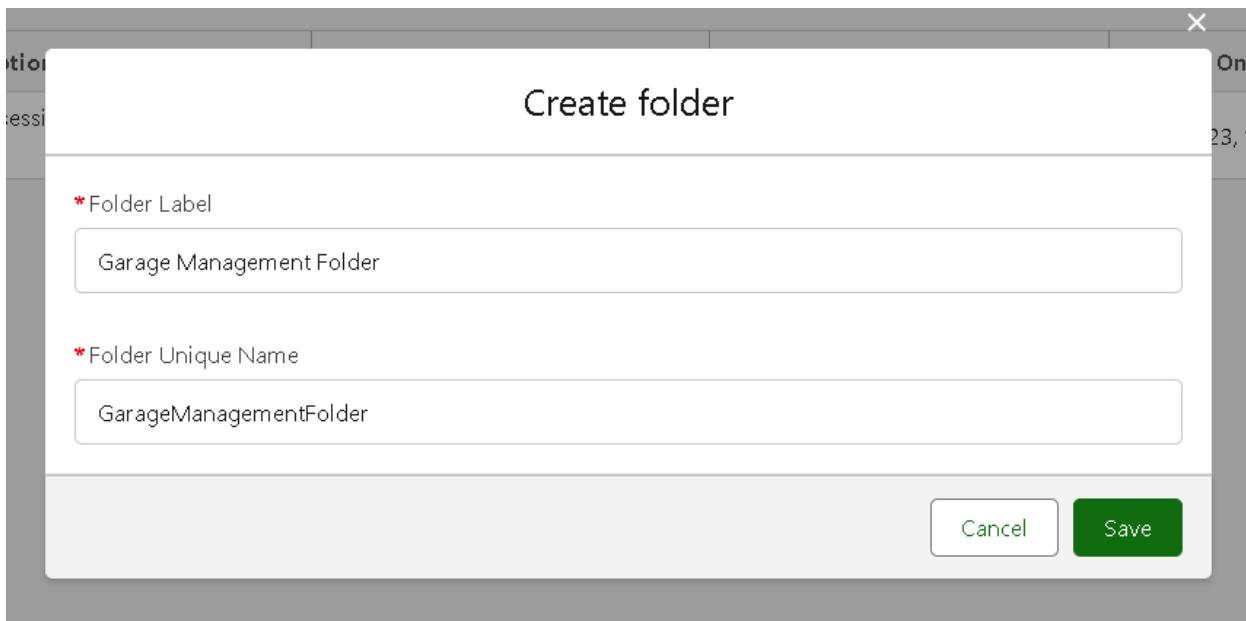
Reports allow you to access, analyze, and present your Salesforce data in various formats. They help you uncover insights and share them effectively with your team.

Types of Reports in Salesforce:

1. **Tabular Reports:** Simple listings of data in rows and columns.
2. **Summary Reports:** Data grouped by specific criteria with subtotals.
3. **Matrix Reports:** Data summarized in both rows and columns.
4. **Joined Reports:** Multiple report types displayed in blocks for comparison.

Creating a Report Folder

1. Click on the **App Launcher** and search for **Reports**.
2. Go to the **Reports Tab** and click on **New Folder**.
3. Enter the **Folder Label**: Garage Management Folder (unique name auto-populated).
4. Click **Save**.

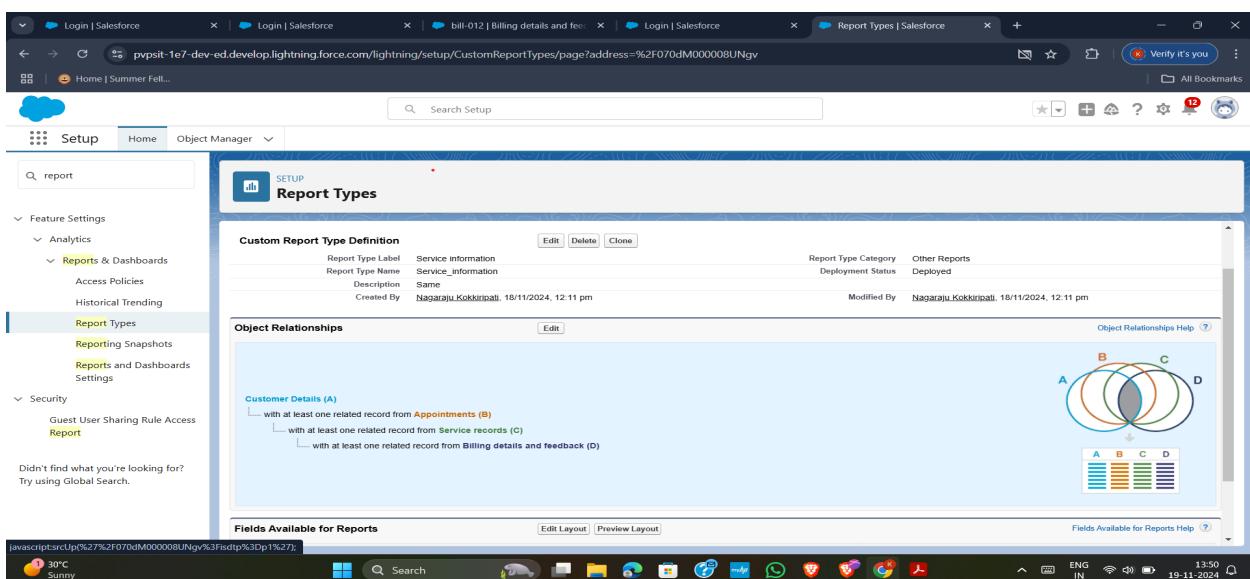


Sharing a Report Folder

1. Navigate to the **Reports Tab** and go to **All Folders**.
2. Click the dropdown arrow for the **Garage Management Folder** and select **Share**.
3. Choose **Share With:** Roles.
4. In the **Name Field**, search for **Manager** and set **Access Level** to **View**.
5. Click **Share** and then **Done**.

Creating a Custom Report Type

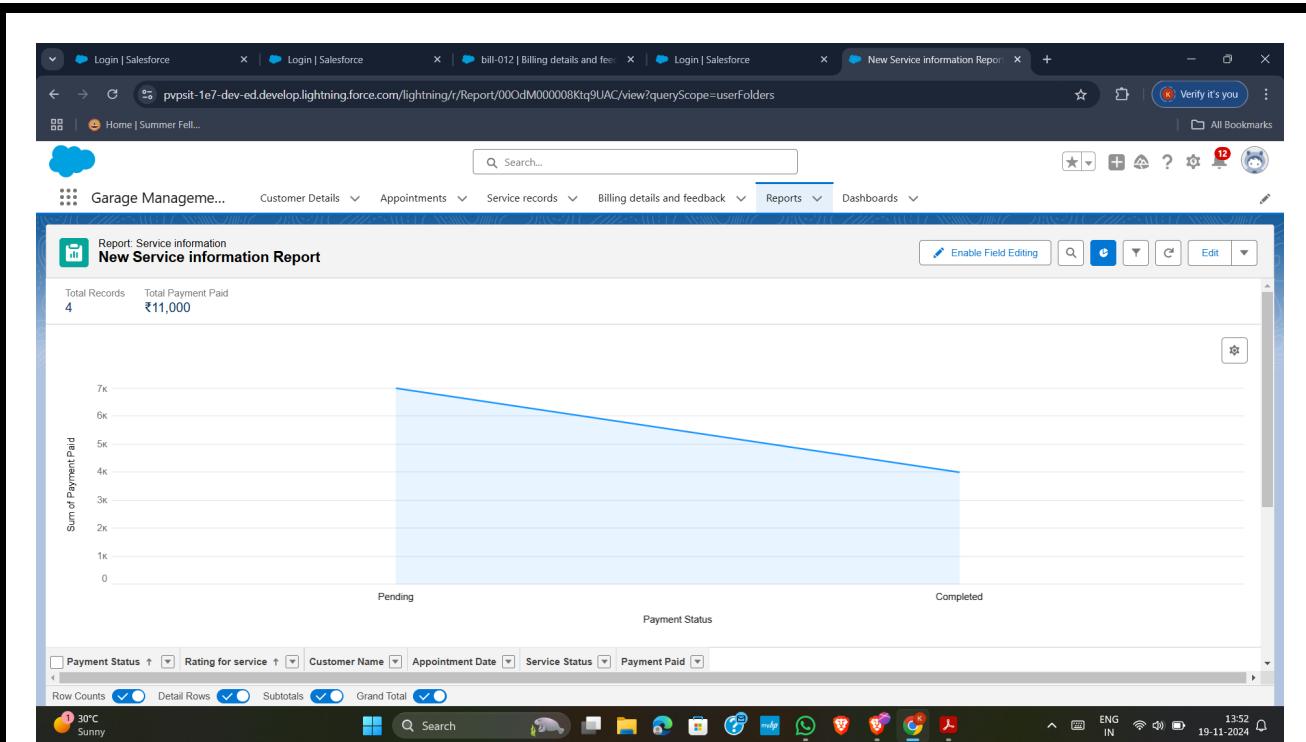
1. Go to **Setup > Report Types** and click **Continue**.
2. Select **New Custom Report Type**.
3. Set the **Primary Object** to **Customer Details**.
4. Enter:
 - **Report Type Label:** Service Information
 - **Report Type Name:** Auto-populated
 - **Description:** Keep as is
 - **Category:** Other Reports
 - **Deployment Status:** Deployed
5. Click **Next**.
6. In **Related Objects**, add:
 - **Appointment**
 - **Service Records**
 - **Billing Details and Feedback**.
7. Click **Save**.



Creating a Report

Note: Before creating the report, add 10 records to each object with all fields filled for a better experience.

1. Navigate to the **Reports Tab** and click **New Report**.
2. Select **Category**: Other Reports.
3. Search for **Service Information** and click **Start Report**.
4. In the **Outline Pane**, add these fields in the **Columns Section**:
 - Customer Name
 - Appointment Date
 - Service Status
 - Payment Paid
5. Remove unnecessary fields.
6. Add fields to **Group Rows Section**:
 - Rating for Service
 - Payment Status
7. Click **Add Chart** and select **Line Chart**.
8. Click **Save** and provide:
 - **Report Name**: New Service Information Report
 - **Unique Name**: Auto-populated
 - **Folder**: Garage Management Folder
9. Click **Save**.



Dashboards

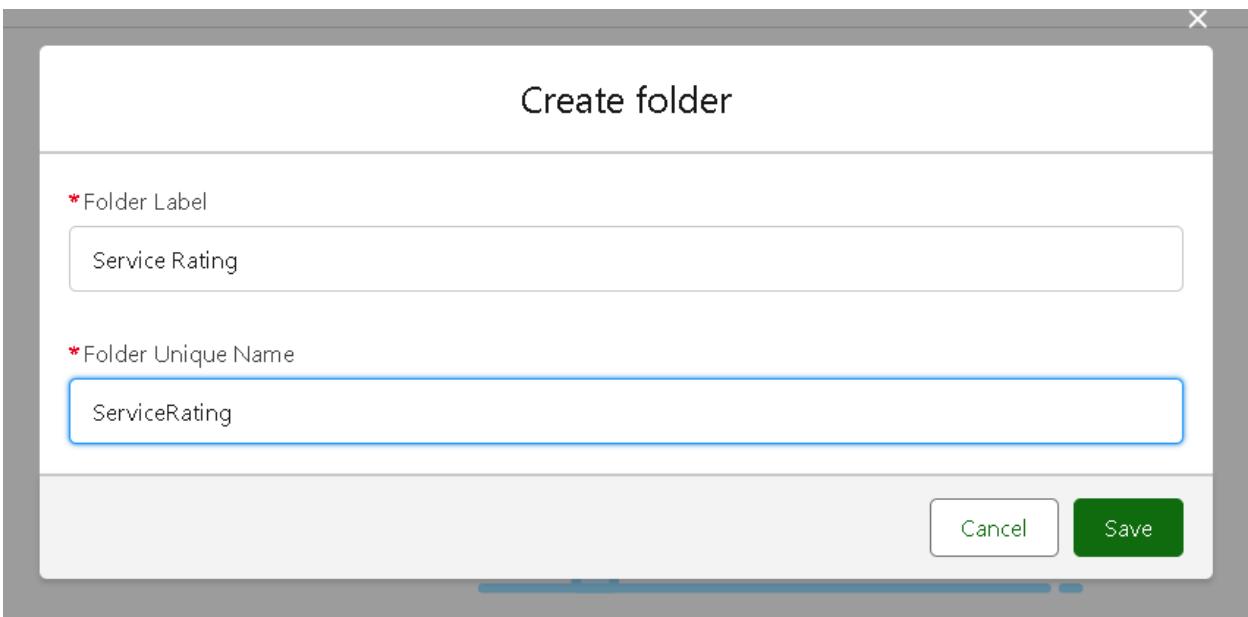
Dashboards provide visual representations of report data, enabling quick decision-making based on real-time insights.

Creating a Dashboard Folder

1. Search for **Dashboards** in the **App Launcher** and go to the **Dashboards Tab**.
2. Click **New Folder** and set:
 - **Folder Label:** Service Rating Dashboard
 - **Unique Name:** Auto-populated
3. Click **Save**.

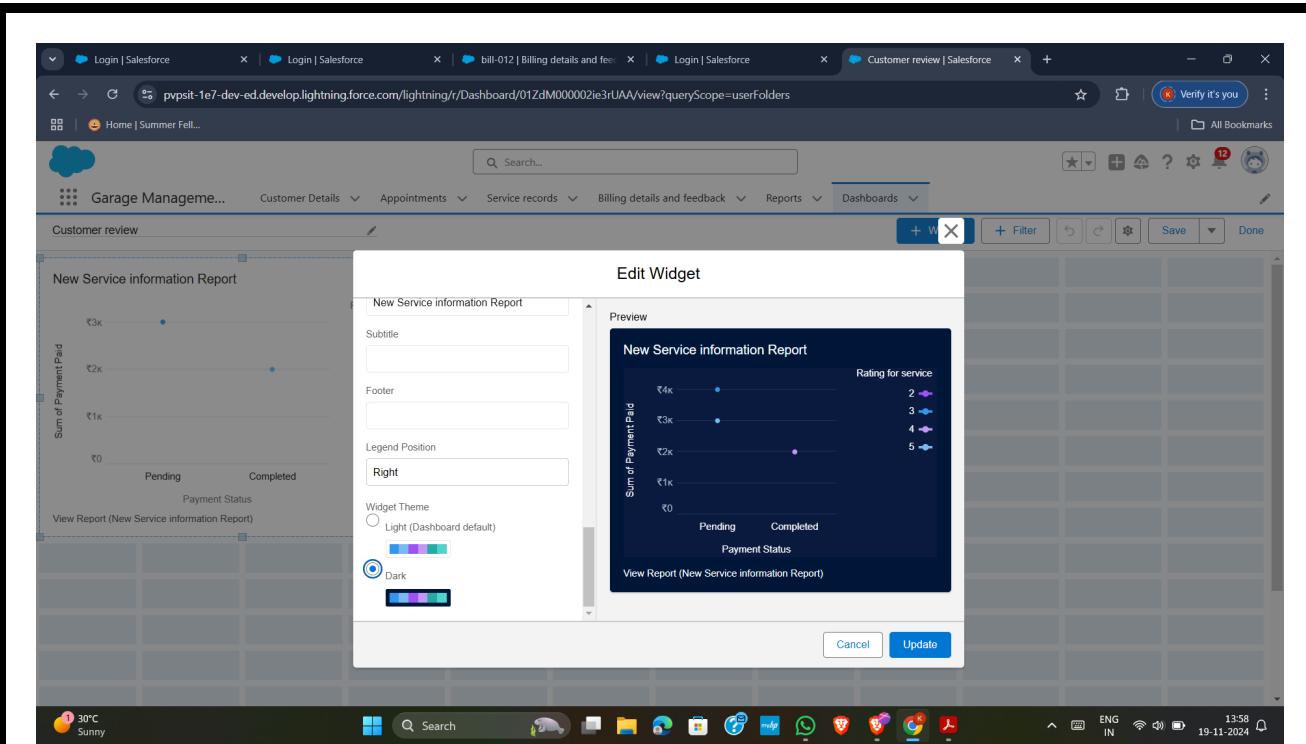
Sharing the Dashboard Folder

Follow the same steps used for sharing the report folder to set sharing permissions.



Creating a Dashboard

1. Go to the **Dashboards Tab** and click **Create New Dashboard**.
2. Provide:
 - **Name:** Custom name
 - **Folder:** Service Rating Dashboard
3. Click **Create**.
4. Add a component:
 - Select a report.
 - Choose **Line Chart** and adjust the theme as needed.
5. Click **Add**, then **Save**, and finally **Done**.



Subscribing to a Dashboard

1. Click **Subscribe** in the top right of the dashboard.
2. Set:

■ Frequency: Weekly

■ Day: Monday

3. Click Save.

