

# **Streamlined Employee Detail Management**

## **Project Description:**

Streamlined Employee Detail Management using CRM is a comprehensive and efficient system designed to effectively manage and organize employee information within an organization.

This system leverages Customer Relationship Management (CRM) principles and tools to centralize and streamline employee data, providing a robust platform for HR professionals and managers to handle various aspects of employee details.

**Streamlined Employee Detail Management:** This phrase underscores the core objective of the system, which is to simplify and make more efficient the process of managing employee information. It suggests that the traditional, often cumbersome methods of maintaining employee records are being replaced by a more efficient and streamlined approach.

**Using CRM:** The use of Customer Relationship Management principles and tools indicates that the system takes inspiration from CRM, a well-established approach in managing and nurturing relationships with customers. In this context, CRM principles are adapted to managing relationships within the organization, specifically between the company and its employees.

**Comprehensive and Efficient System:** This phrase emphasizes that the system is not only thorough in its approach but also highly effective. It implies that it covers all aspects of employee data management while doing so with maximum efficiency.

**Manage and Organize Employee Information:** The system's primary functions are to manage and organize employee data. Managing implies tasks like updating, editing, and maintaining records, while organizing suggests arranging this information in a structured and accessible manner.

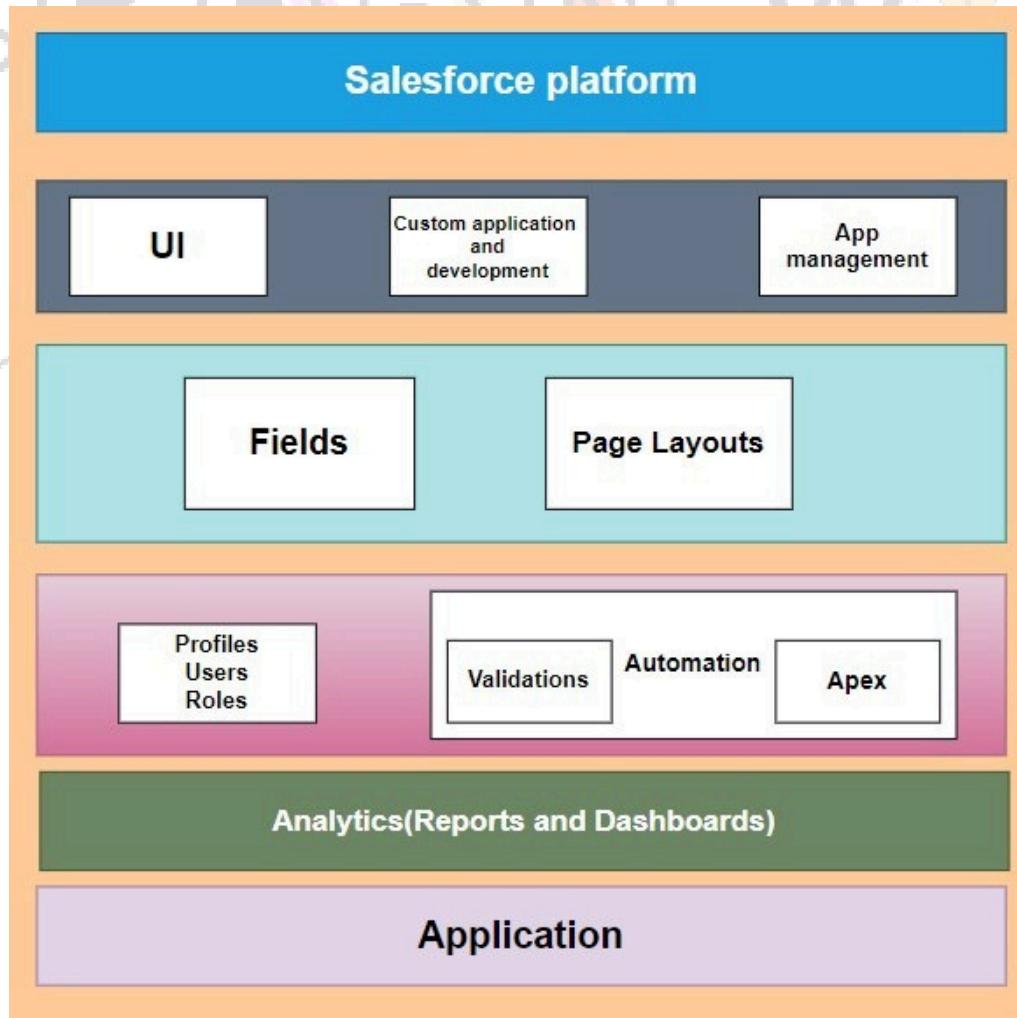
**Centralize and Streamline Employee Data:** The use of "centralize" suggests that employee data is gathered and stored in one central repository, making it easily accessible. "Streamline" means that the system simplifies and optimizes processes related to employee data, reducing redundancy and inefficiency.

**Robust Platform:** This indicates that the system is not just a simple software tool but a powerful and capable platform. It can likely handle a wide range of functions and features related to employee data management.

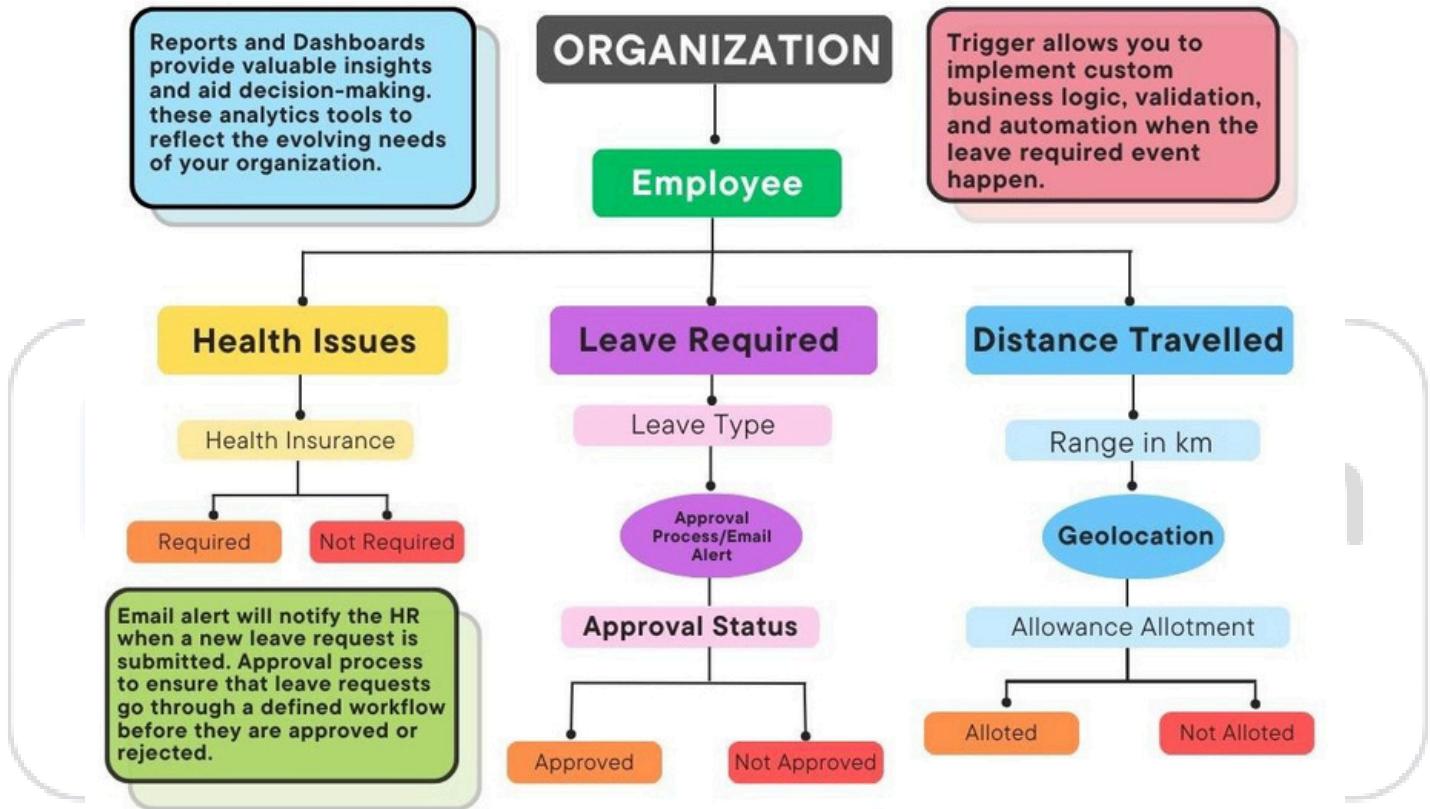
**HR Professionals and Managers:** The intended users of this system are HR professionals and managers, highlighting that it's designed to meet their specific needs in managing and overseeing employee information.

**Various Aspects of Employee Details:** The system isn't limited to a single aspect of employee data but covers multiple dimensions of this information. This could include personal details, employment history, performance records, training and development, and more.

#### Technical Architecture:



## Project Flow:



## What you'll learn

1. RealTimeSalesforceProject
2. Object&RelationshipinSalesforce
3. FormulafieldsandValidationrules.
4. ApprovalProcess.
5. Reportsanddashboards
6. Flows.
7. Emailalertsandemailtemplates.
8. ApexClass
9. ApexTriggers

## **Milestone 1-Salesforce :**

### **Introduction:**

Are you new to Salesforce? Not sure exactly what it is, or how to use it? Don't know where you should start on your learning journey? If you've answered yes to any of these questions, then you're in the right place. This module is for you. Welcome to Salesforce! Salesforce is game-changing technology, with a host of productivity-boosting features, that will help you sell smarter and faster. As you work toward your badge for this module, we'll take you through these features and answer the question, "What is Salesforce, anyway?".

### **What Is Salesforce?**

Salesforce is your customer success platform, designed to help you sell, service, market, analyze, and connect with your customers.

Salesforce has everything you need to run your business from anywhere. Using standard products and features, you can manage relationships with prospects and customers, collaborate and engage with employees and partners, and store your data securely in the cloud.

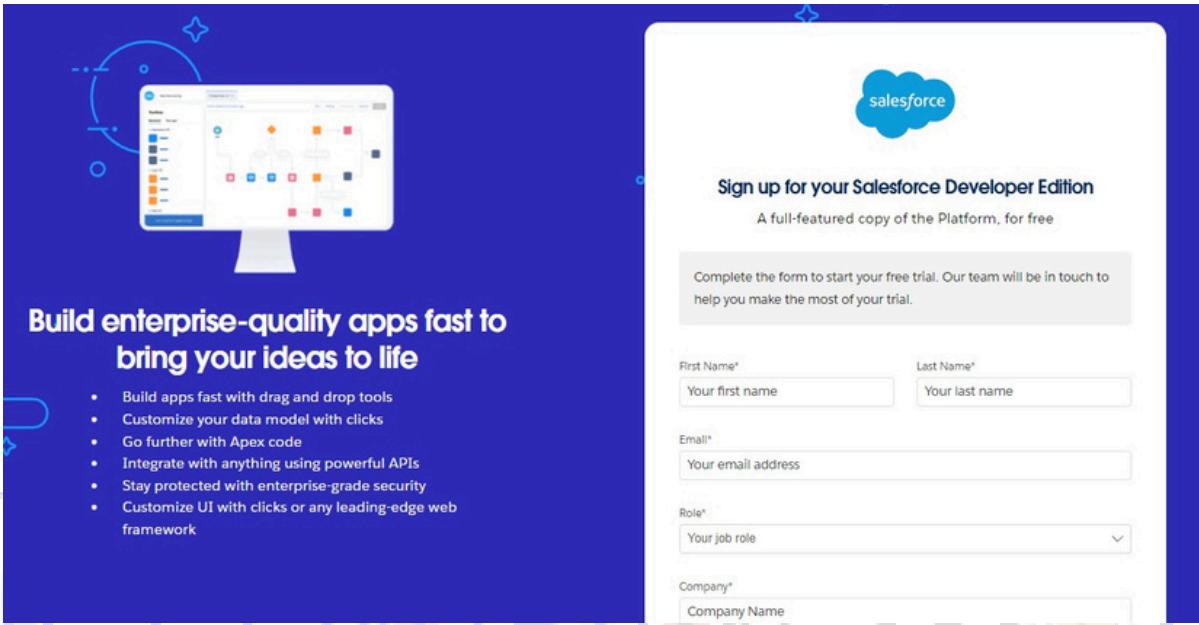
So what does that really mean? Well, before Salesforce, your contacts, emails, follow-up tasks, and prospective deals might have been organized something like this:

<https://youtu.be/r9EX3IGde5k>

### **Activity 1: Creating Developer Account:**

Creating a developer org in salesforce.

1. Goto<https://developer.salesforce.com/signup>
2. Onthesignupform,enterthefollowingdetails:



**Sign up for your Salesforce Developer Edition**  
A full-featured copy of the Platform, for free

Complete the form to start your free trial. Our team will be in touch to help you make the most of your trial.

First Name\*  Last Name\*

Email\*

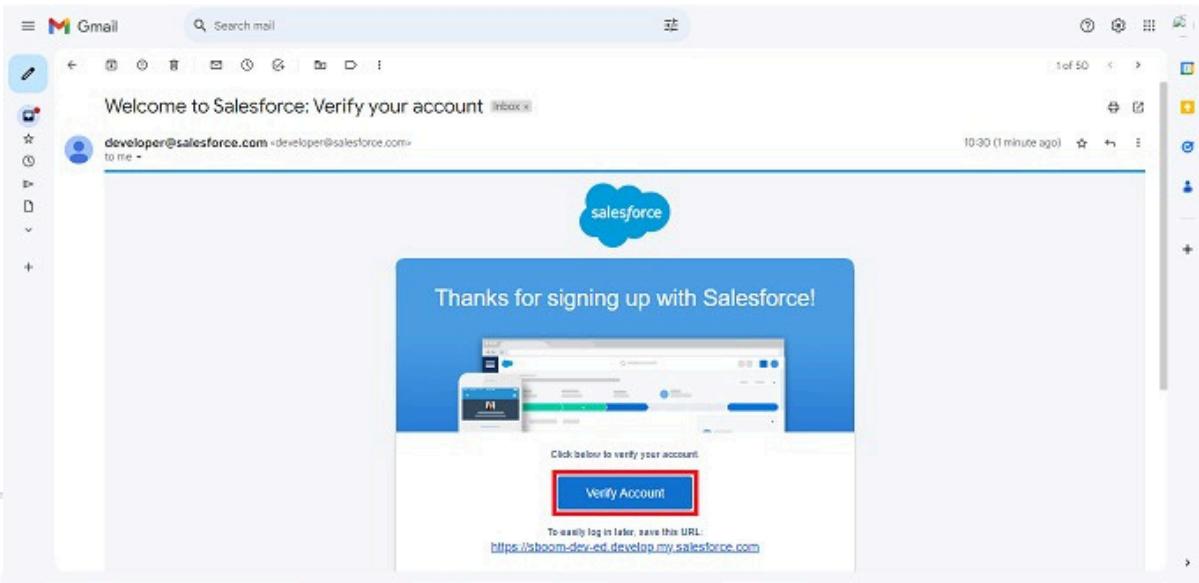
Role\*

Company\*

3. Firstname&Lastname
4. Email
5. Role:Developer
6. Company:CollegeName
7. County:India
8. PostalCode:pincode
9. username:shouldbeacombinationofyournameandcompany
10. This need not be an actual email id, you can give anything in the format  
[username@organization.com](mailto:username@organization.com)
11. Click on sign me up after filling these.

## Activity 2: Account Activation:

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



2. Click on Verify Account

3. Give a password and answer a security question and click on change password.

### Change Your Password

Enter a new password for lead@sboom.com.  
Make sure to include at least:

- 8 characters
- 1 letter
- 1 number

\* New Password  
..... Good

\* Confirm New Password  
..... Match

Security Question  
In what city were you born?

\* Answer  
asdfghjk

Change Password

Then you will redirect to your salesforce setup page.

The screenshot shows the Salesforce Setup Home page. At the top, there's a navigation bar with icons for Home, Object Manager, and a search bar labeled "Search Setup". Below the navigation is a sidebar with links like Setup Home, Service Setup Assistant, Multi-Factor Authentication Assistant, Release Updates, Lightning Experience Transition Assistant, Salesforce Mobile App, Lightning Usage, Optimizer, and Administration (with a "Users" link). The main content area is titled "SETUP Home" and features three cards: "Get Started with Einstein Bots", "Mobile Publisher", and "Real-time Collaborative Docs". Each card has a small icon, a title, a brief description, and a "Get Started" or "Learn More" button. The background of the main content area has a decorative nature-themed pattern.

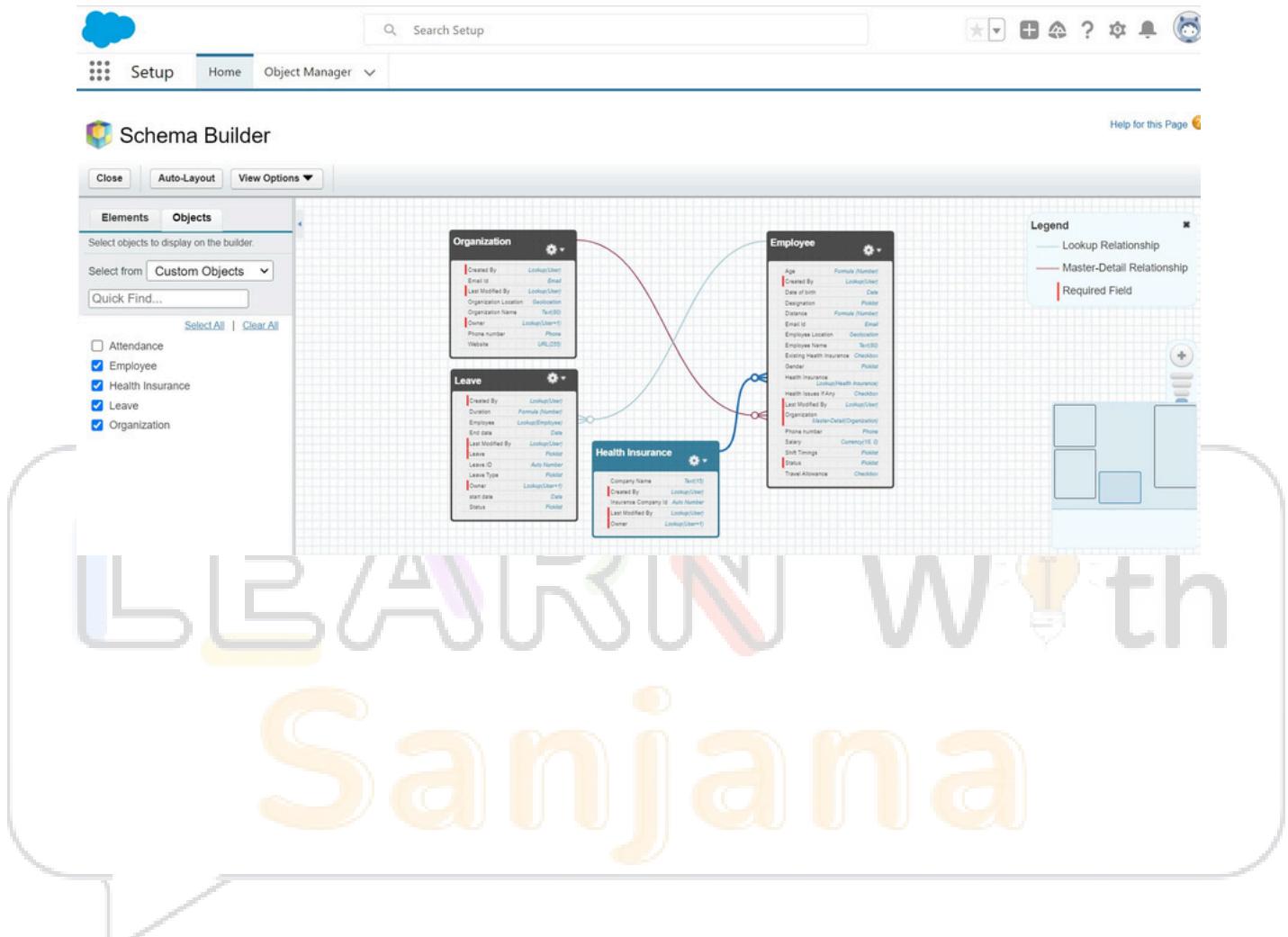
## Milestone 2- Object

### 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

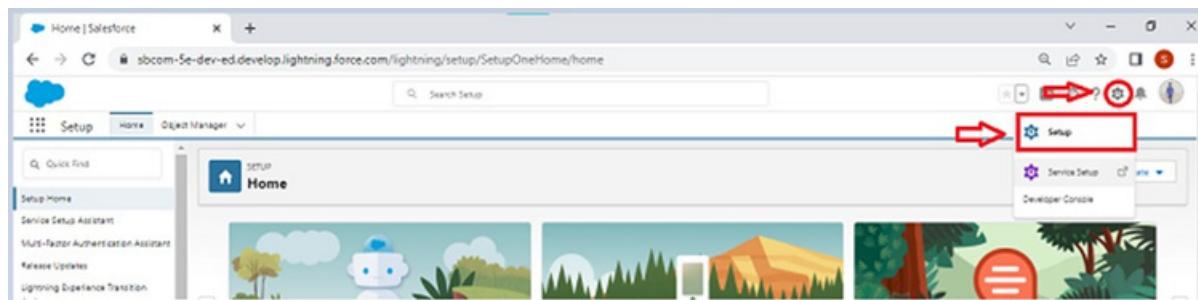
**Salesforce objects are of two types:**

1. **Standard Objects:** Standard objects are the kind of objects that are provided by salesforce.com such as users, contracts, reports, dashboards, etc.
2. **Custom Objects:** Custom objects are those objects that are created by users. They supply information that is unique and essential to their organization. They are the heart of any application and provide a structure for sharing data.



## To Navigate to Setup page:

Click on gear icon → click setup.



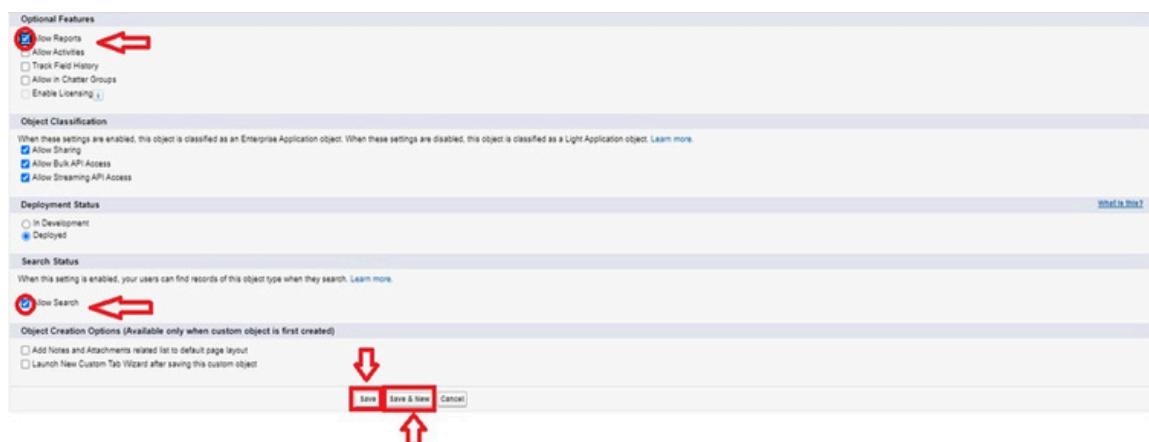
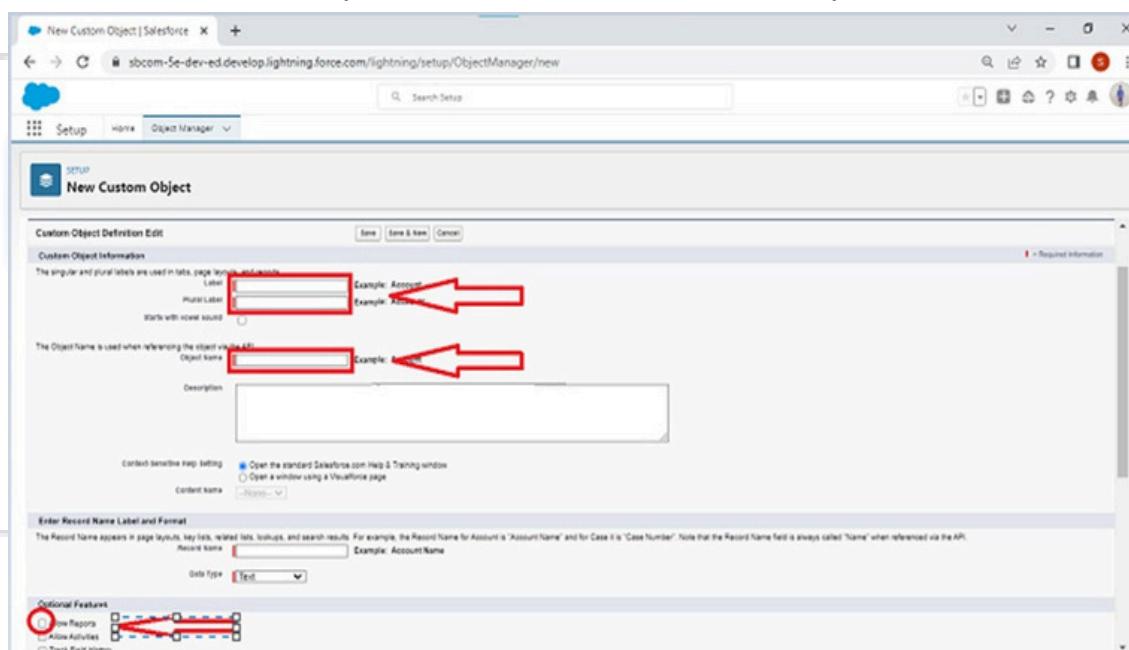
## To create an object:

1. From the setup page → Click on Object Manager → Click on Create → Click on Custom Object.



2. On Custom object defining page:

3. Enter the label name, plural label name, click on Allow reports, Allow search.



4. Click on Save.

### **Activity 1: Create Employee 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 → Employee
3. Plural label name → Employees
4. Enter Record Name Label and Format
  - RecordName → Employee Name
  - DataType → Text
5. Click on Allow reports and Track Field History and Allow Activities.
6. Allow search → **Save.**

### **Activity 2: Create Organization Object:**

1. From the setup page → Click on Object Manager → Click on Create → Click on Custom Object.
2. Enter the label name → Organization
3. Plural label name → Organizations
4. Enter Record Name Label and Format
  - RecordName → Organization
  - DataType → Text
5. Click on Allow reports and Track Field History and Allow Activities.
6. Allow search → **Save.**

### **Activity 3: Create Health Insurance 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 → Health Insurance
4. Plural label name → Health Insurances
3. Enter Record Name Label and Format
  - RecordName → InsuranceCompanyId
  - DataType → AutoNumber
  - DisplayFormat → {000}
  - Startingnumber → 1
4. Click on Allow reports and Track Field History and Allow Activities.
5. Allow search → **Save.**

#### **Activity 4: Create Leave 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 → Leave

3. Plural label name → Leaves

4. Data Type → Auto Number

Display Format → -{000}

Starting number → 1

5. Click on Allow reports and Track Field History and Allow Activities.

6. Allow search → **Save.**

#### **Milestone3-Tabs**

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

Types of Tabs:

##### **1. CustomTabs**

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

##### **2. WebTabs**

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

##### **3. VisualforceTabs**

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

##### **4. LightningComponentTabs**

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

##### **5. LightningPageTabs**

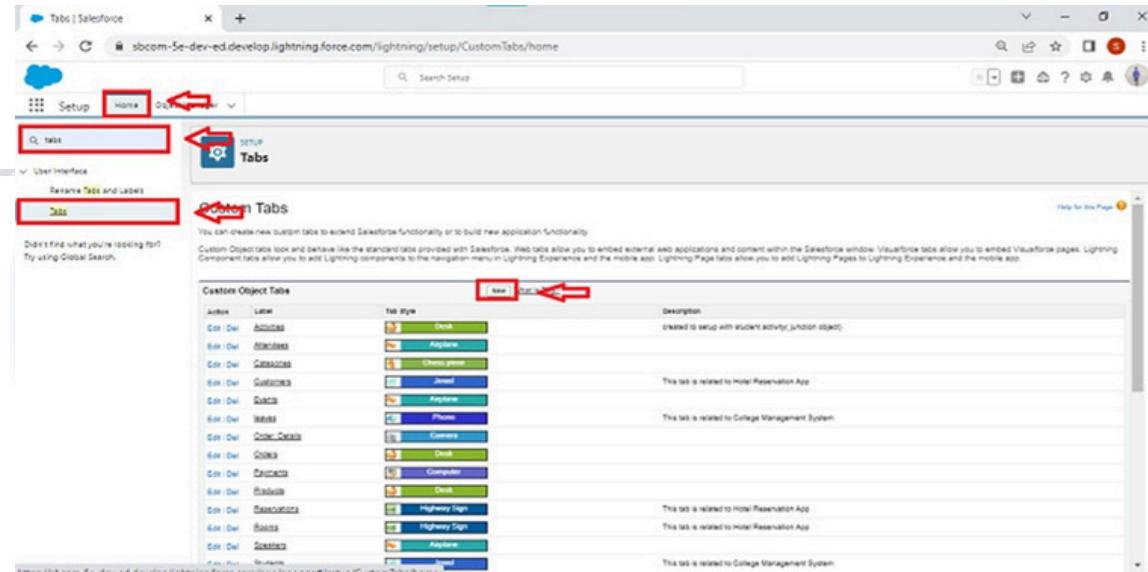
Lightning Page Tabs let you add Lightning Pages to the mobile app navigation menu. Lightning Page tabs don't work like other custom tabs. Once created, they don't show up on the All Tabs page when you click the Plus icon that appears to the right of your

current tabs. Lightning Page tabs also don't show up in the Available Tabs list when you customize the tabs for your apps.

## Activity 1: Creating a Custom Tab

### To create a Tab:(Employee)

1. Go to setup page → type Tabs in Quick Find bar → click on tabs → New (under custom object tab)



2. Select Object(Employee) → Select the tab style → Next (Add to profiles page)  
keep it as default → Next (Add to Custom App) uncheck the include tab .
3. Make sure that the Append tab to users' existing personal customizations is checked.
4. Click save.

The screenshot shows the Salesforce Setup interface with the 'Tabs' page selected. The left sidebar has sections for 'User Interface' and 'Tabs'. The main content area is titled 'Custom Tabs' and contains a table for 'Custom Object Tabs'. The table has columns for Action, Label, Tab Style, and Description. It lists three rows: 'Employees' (People style), 'Health Insurances' (Pencil style), and 'Organizations' (Building style).

Action	Label	Tab Style	Description
Edit   Del	Employees	People	
Edit   Del	Health Insurances	Pencil	
Edit   Del	Organizations	Building	

## Activity 2: Creating Remaining Tabs

1. Now create the Tabs for the remaining Objects, they are " Employee, Organization, Health Insurances, Leave".
2. Follow the same steps as mentioned in Activity -1 .

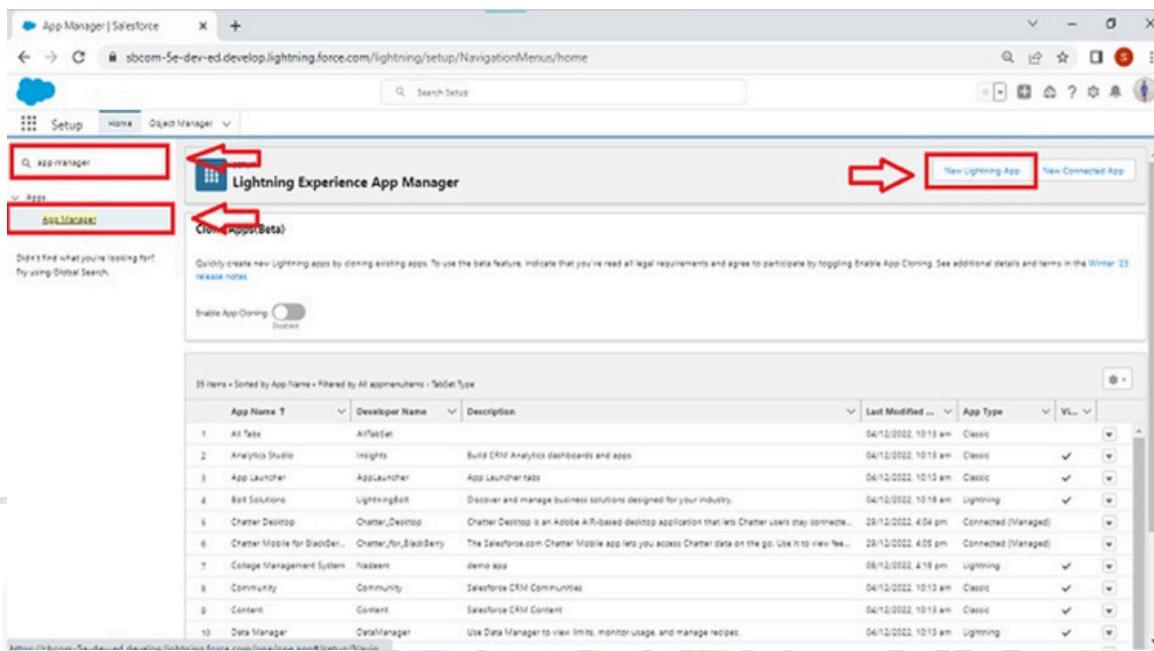
## Milestone 4- The Lightning App:

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 color 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.

### Activity 1: Create a Lightning App

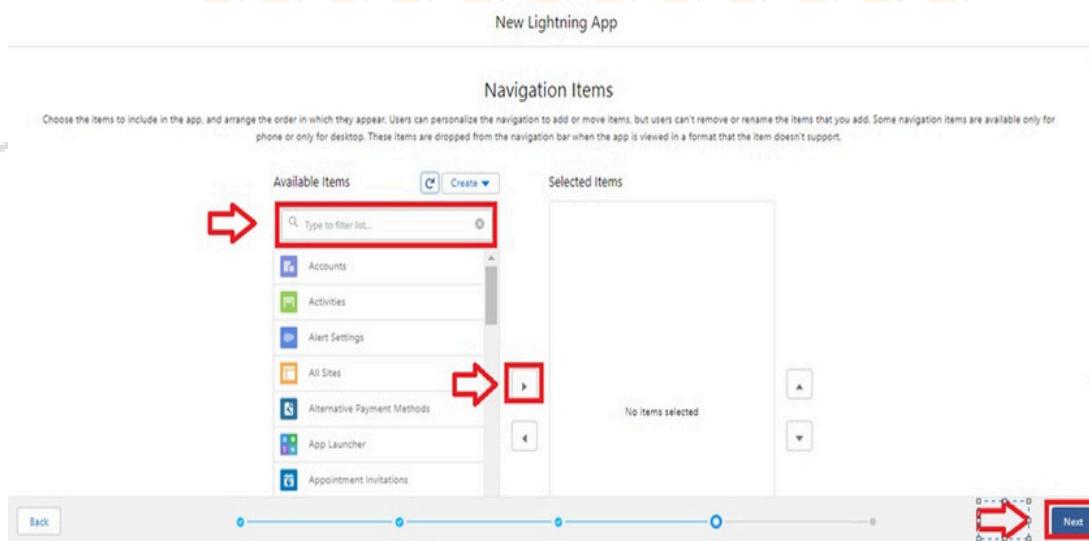
#### To create a lightning app page:

1. Goto setup page → search “appmanager” in quickfind → select “appmanager”  
→ click on New lightning App.



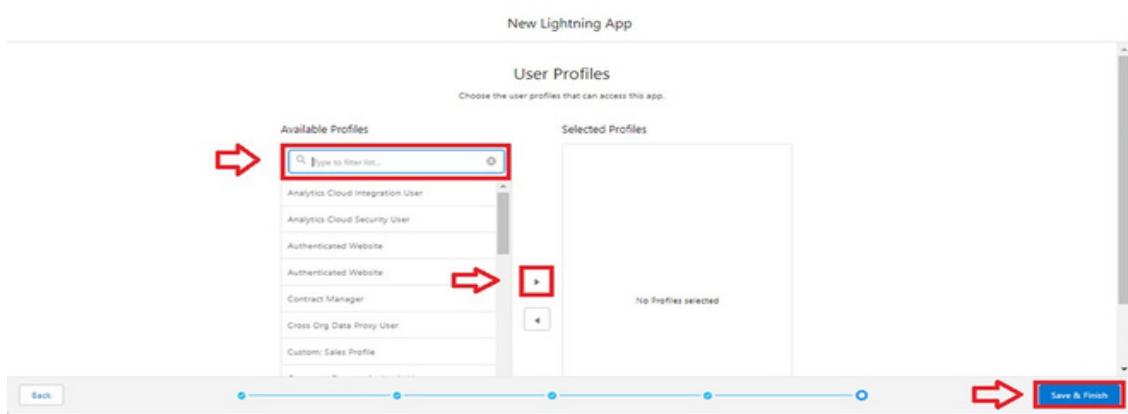
2. Fill the app name in app details as Employee Mapp → Next → (App option page) keep it as default → Next → (Utility Items) keep it as default → Next.

3. ToAddNavigationItems:



Select the items (Employee, Organization, Health Insurances, Leave ) from the search bar and move it using the arrow button → Next.

4. To Add User Profiles:



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

## Milestone 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

#### **Standard Fields:**

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

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

#### **Custom Fields:**

On the other side of the coin, Custom Fields are highly flexible, and users can change them according to requirements. Moreover, each organizer or company can use them if necessary. It means you need not always include them in the records, unlike Standard fields. Hence, the final decision depends on the user, and he can add/remove Custom Fields of any given form.

## **Activity 1 : Creating Junction Object :**

A Junction object is a custom object that serves as a bridge between two related objects in a many-to-many relationship. It allows you to create a relationship between records of two different objects by creating a many-to-many relationship model.

### **Creating junction object as Employee details with Organization & Health Insurance**

To create junction object

## **Activity 2 : Creating a Master-Detail Relationship**

Master-detail relationship is a type of relationship between two objects where the master object controls certain behaviors and settings of the detail object. Here are a few use cases that demonstrate the use of master-detail relationships

1. Go to the setup page → click on object manager → From drop down click edit for Employee object.

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

- Setup Bar:** Includes icons for Home, Object Manager, and other setup options.
- Search Bar:** "Search Setup".
- Object Manager:** "Employee" object selected.
- Left Sidebar:** Options like Details, Fields & Relationships, Page Layouts, Lightning Record Pages, Buttons, Links, and Actions, Compact Layouts, Field Sets, Object Limits, Record Types, and Related Lookup Filters.
- Fields & Relationships:** 15 items, Sorted by Field Label. The table includes columns: FIELD LABEL, FIELD NAME, DATA TYPE, CONTROLLING FIELD, and INDEXED.

FIELD LABEL	FIELD NAME	DATA TYPE	CONTROLLING FIELD	INDEXED
Age	Age_c	Formula (Number)		
Created By	CreatedBy	Lookup(User)		
Date of birth	Date_of_birth_c	Date		
Designation	Designation_c	Picklist		
Email Id	Email_Id_c	Email		
Employee Location	Employee_Location_c	Geolocation		

2. Click on fields & relationship → click on New.

SETUP > OBJECT MANAGER  
Employee

Details

**Fields & Relationships**

Page Layouts  
Lightning Record Pages  
Buttons, Links, and Actions  
Compact Layouts  
Field Sets  
Object Limits  
Record Types  
Related Lookup Filters

**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.
- When a user deletes the master record, 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.

Next Cancel

3. Select “Master-Detail relationship” as data type and click Next.

4. Select the related object “Organization” 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  
 External Lookup 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.
- When a user deletes the master record, 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.

Next Cancel

5. Next → Next → Save & New.

### Activity 3 : Creating Lookup Relationship

A Lookup relationship is a type of relationship in Salesforce that connects two objects together based on a field known as the Lookup field. It establishes a relationship between a child object and a parent object, allowing the child object to reference the parent object.

1. Go to the setup page → click on object manager → Click the Employee object.

2. Click on fields & relationship → click on New.

3. Click Lookup Relationship then next.

The screenshot shows the Salesforce Setup interface for creating a new custom field. The left sidebar is titled 'Fields & Relationships' under 'Employee'. The main panel is titled 'Step 1. Choose the field type' with a sub-section 'Data Type'. A radio button for 'Lookup Relationship' is selected. Other options shown include 'None Selected', 'Auto Number', 'Formula', 'Roll-Up Summary', and 'Master-Detail Relationship'. The right side of the screen shows standard setup navigation buttons: Next, Cancel, and Step 1.

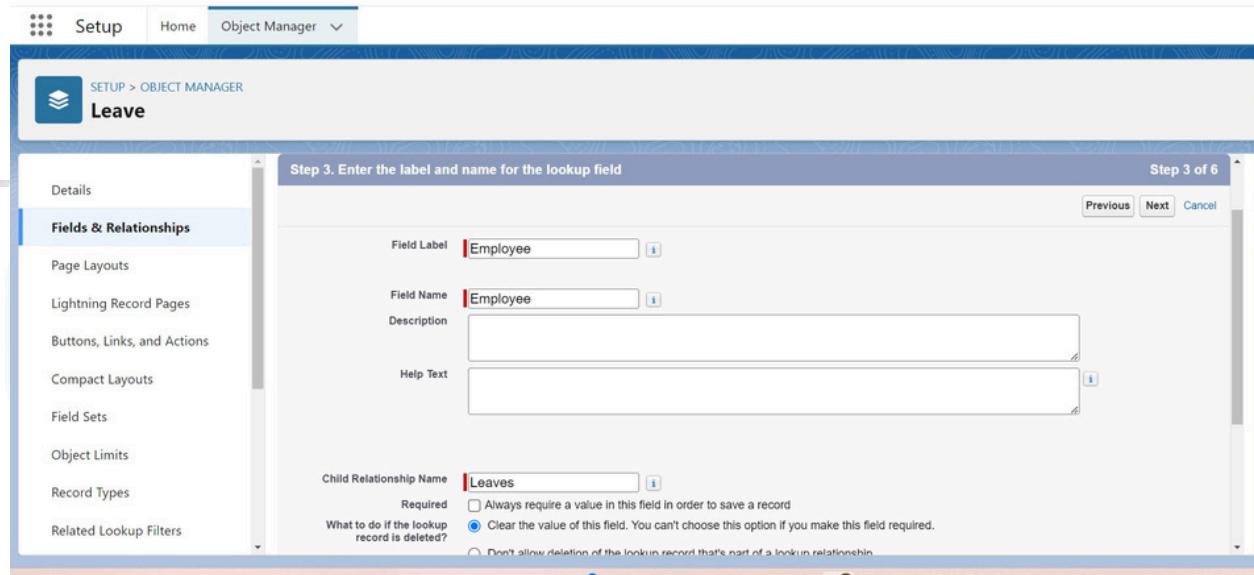
4. Related to Health Insurance.

The screenshot shows the Salesforce Setup interface for creating a new relationship. The left sidebar is titled 'Fields & Relationships' under 'Employee'. The main panel is titled 'Employee New Relationship' and 'Step 2. Choose the related object'. A dropdown menu titled 'Select the other object to which this relationship applies' lists various objects, with 'Health Insurance' highlighted. The right side of the screen shows standard setup navigation buttons: Previous, Next, and Cancel.

5. Give Field Label as "Health Insurance Name" and click Next.

Next → Next → Save.

6. Go to the setup page → click on object manager → Click the “Leave” object.
7. Click on fields & relationship → click on New.
8. Click Lookup Relationship then next.
9. Related to Employee.
10. Related to Leaves.
11. Give Field Label as “Health Insurance Name” and click Next.
12. Next → Next → Save



## Activity 4 : Creating Text Field

### Employee

To create fields in an object:

1. Goto setup → click on Object Manager → type object name( Employee ) in quick find bar → click on the object.

SETUP > OBJECT MANAGER

## Employee

**Fields & Relationships**

- Page Layouts
- Lightning Record Pages
- Buttons, Links, and Actions
- Compact Layouts
- Field Sets
- Object Limits
- Record Types
- Related Lookup Filters

Field Type	Description
Number	Allows users to enter any number. Leading zeros are removed.
Percent	Allows users to enter a percentage number, for example, '10' and automatically adds the percent sign to the number.
Phone	Allows users to enter any phone number. Automatically formats it as a phone number.
Picklist	Allows users to select a value from a list you define.
Picklist (Multi-Select)	Allows users to select multiple values from a list you define.
<b>Text</b>	Allows users to enter any combination of letters and numbers.
Text Area	Allows users to enter up to 255 characters on separate lines.
Text Area (Long)	Allows users to enter up to 131,072 characters on separate lines.
Text Area (Rich)	Allows users to enter formatted text, add images and links. Up to 131,072 characters on separate lines.
Text (Encrypted) <small>[i]</small>	Allows users to enter any combination of letters and numbers and store them in encrypted form.
Time	Allows users to enter a local time. For example, "2:40 PM", "14:40", "14:40:00", and "14:40:50:600" are all valid times for this field.
URL	Allows users to enter any valid website address. When users click on the field, the URL will open in a separate browser window.

**Next** **Cancel**

2. Now click on "Fields & Relationships" → New  
 3. Select Data type as "Text".  
 4. Click on Next  
 5. Fill the above as following:  
 ● Field Label: Name  
 ● Length: 80  
 ● Field Name: gets autogenerated  
 ● Click on Next → Next → Save and new.

SETUP > OBJECT MANAGER

## Employee

**Fields & Relationships**

- Page Layouts
- Lightning Record Pages
- Buttons, Links, and Actions
- Compact Layouts
- Field Sets
- Object Limits
- Record Types
- Related Lookup Filters

**Employee Field**  
**Employee Name**  
[Back to Employee](#) [Help for this Page](#) (?)

**Field Information**

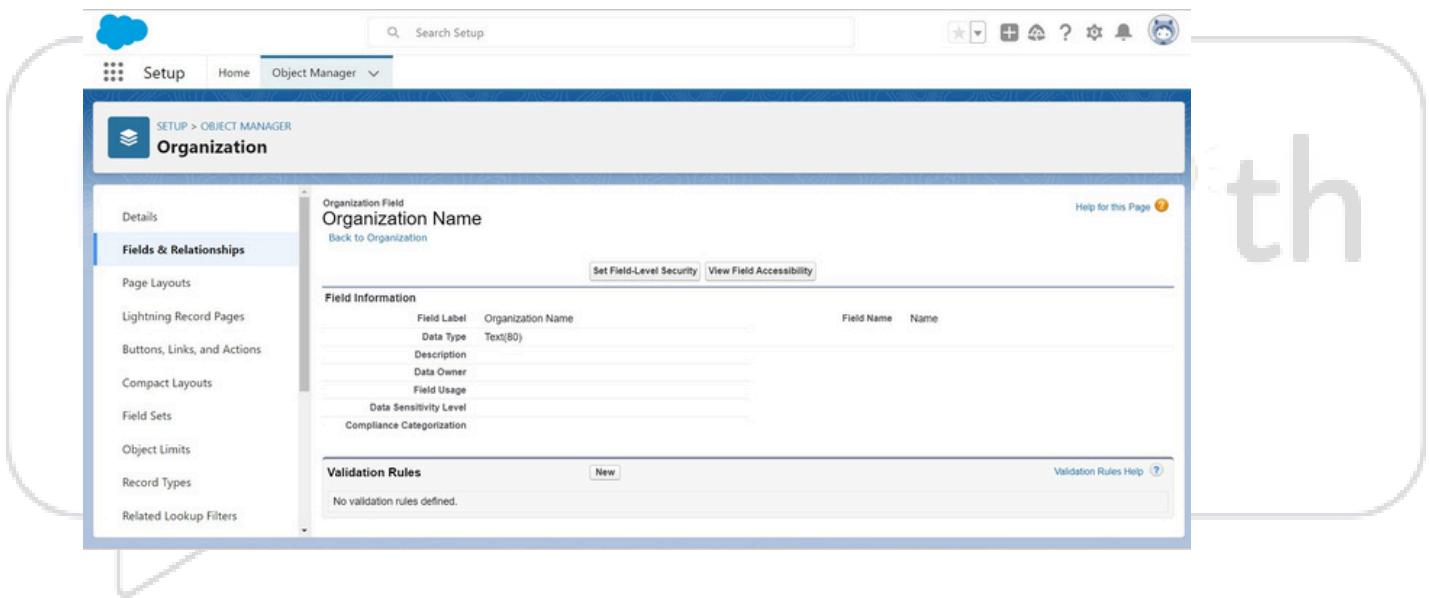
Field Label	Employee Name	Field Name	Name
Data Type	Text(80)		
Description			
Data Owner			
Field Usage			
Data Sensitivity Level			
Compliance Categorization			

**Validation Rules** [New](#) [Validation Rules Help](#) (?)

No validation rules defined.

## Organization

1. Go to setup → click on Object Manager → type object name( Organization ) in quick find bar→ click on the object.
2. Nowclickon“Fields&Relationships”→New
3. SelectDatatypeas“Text”.
4. ClickonNext
5. Filltheaboveasfollowing:
  - FieldLabel:CompanyName
  - Length:80
  - FieldName:getsautogenerated
  - ClickonNext→Next→Saveandnew.



## Health Insurance

1. Gotosetup→clickonObjectManager→typeobjectname(HealthInsurance) in quick find bar→ click on the object.
2. Nowclickon“Fields&Relationships”→New
3. SelectDatatypeas“Text”.
4. ClickonNext
5. Filltheaboveasfollowing:
  - FieldLabel:Name
  - Length:20
  - FieldName:getsautogenerated
  - ClickonNext→Next→Saveandnew.

## Activity 5 : Creating the Phone field

### Employee

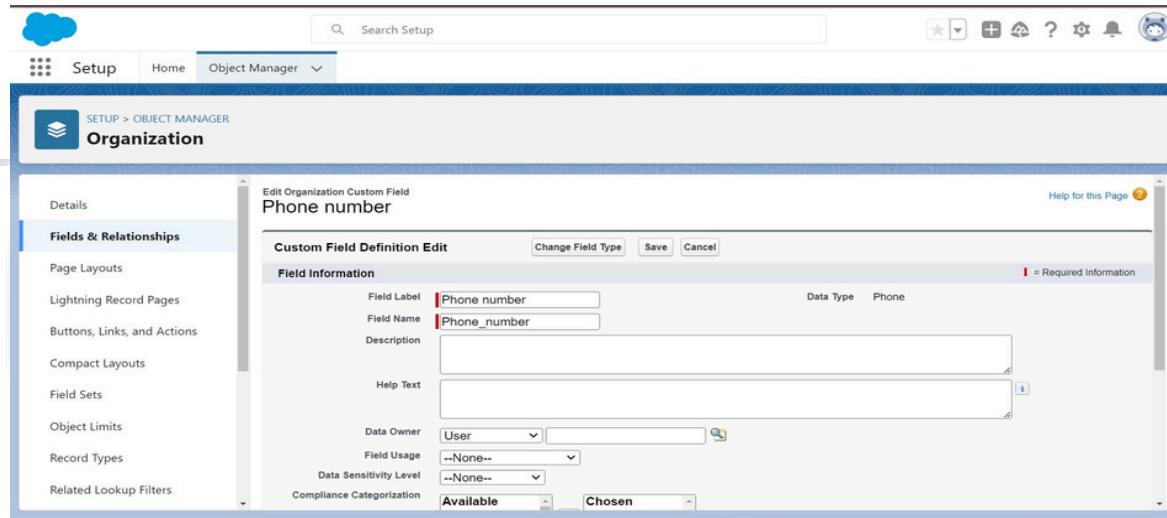
To create fields in an object:

1. Go to setup → click on Object Manager → type object name(Employee ) in quick find bar→ click on the object.
2. Now click on “Fields & Relationships” → New
3. Select Data type as “Phone” and click Next.
4. Given the Field Label as “ Phone Number”.
5. Field Name will be auto populated, and click on Next→ Next → Save & new.

## Organization

To create fields in an object:

1. Go to setup → click on Object Manager → type object name( Organization ) in quick find bar→ click on the object.
2. Now click on “Fields&Relationships”→New
3. Select Datatype as “Phone” and click Next.
4. Given the Field Label as “PhoneNumber”.
5. Field Name will be auto populated, and click on Next→ Next → Save & new.



## Activity 6 : Creating the Email field

### Employee

To create fields in an object:

1. Go to setup → click on Object Manager → type object name( Employee ) in quick find bar→ click on the object.
2. Now click on “Fields & Relationships” → New
3. Select Data type as “Email” and click Next.
4. Given the Field Label as “ Email Id”.
5. Field Name will be auto populated, and click on Next→ Next → Save.

The screenshot shows the Salesforce Setup interface. The top navigation bar includes 'Setup', 'Home', and 'Object Manager'. The main title is 'SETUP > OBJECT MANAGER Employee'. On the left, a sidebar lists options like 'Details', 'Fields & Relationships', 'Page Layouts', etc. The central panel displays the 'Edit Employee Custom Field Email Id' screen. It shows a 'Custom Field Definition Edit' form with fields for 'Field Label' (Email Id), 'Field Name' (Email\_Id), 'Data Type' (Email), 'Description', 'Help Text', 'Data Owner' (User), 'Field Usage' (None), 'Data Sensitivity Level' (None), and 'Compliance Categorization' (Available, Chosen). A note indicates that the field name is required.

To create fields in an object:

## Organization

6. Go to setup → click on Object Manager → type object name( Organization ) in quick find bar→ click on the object.
7. Now click on “Fields & Relationships” → New
8. Select Data type as “Email” and click Next.
9. Given the Field Label as “ Email Id”.
10. Field Name will be auto populated, and click on Next→ Next → Save.

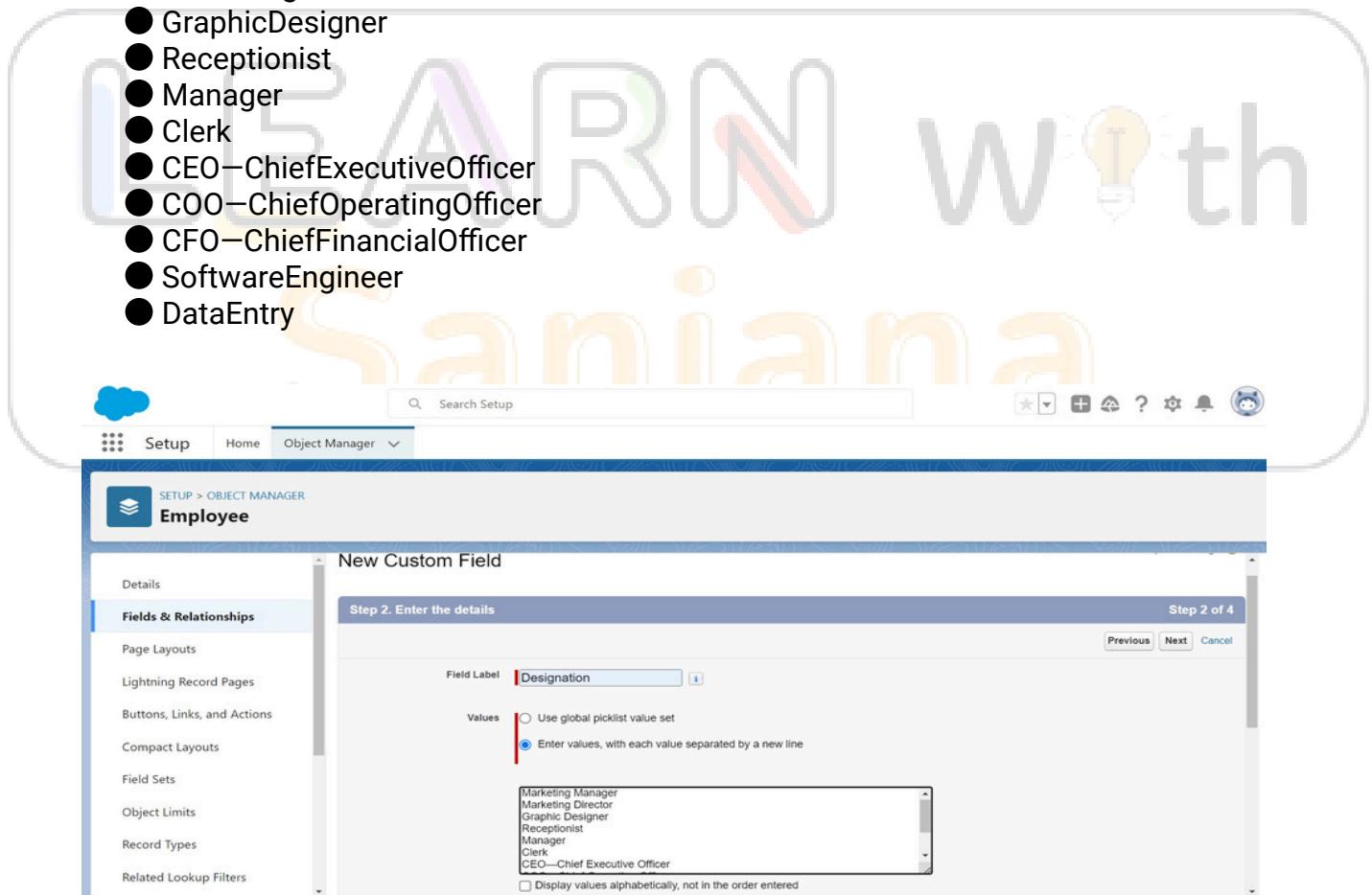
The screenshot shows the Salesforce Setup interface. The top navigation bar includes 'Setup', 'Home', and 'Object Manager'. The main title is 'SETUP > OBJECT MANAGER Organization'. On the left, a sidebar lists options like 'Details', 'Fields & Relationships', 'Page Layouts', etc. The central panel displays the 'Edit Organization Custom Field Email Id' screen. It shows a 'Custom Field Definition Edit' form with fields for 'Field Label' (Email Id), 'Field Name' (Email\_Id), 'Data Type' (Email), 'Description', 'Help Text', 'Data Owner' (User), 'Field Usage' (None), 'Data Sensitivity Level' (None), and 'Compliance Categorization' (Available, Chosen). A note indicates that the field name is required.

## Activity 7 : Creating Picklist Field in Employee

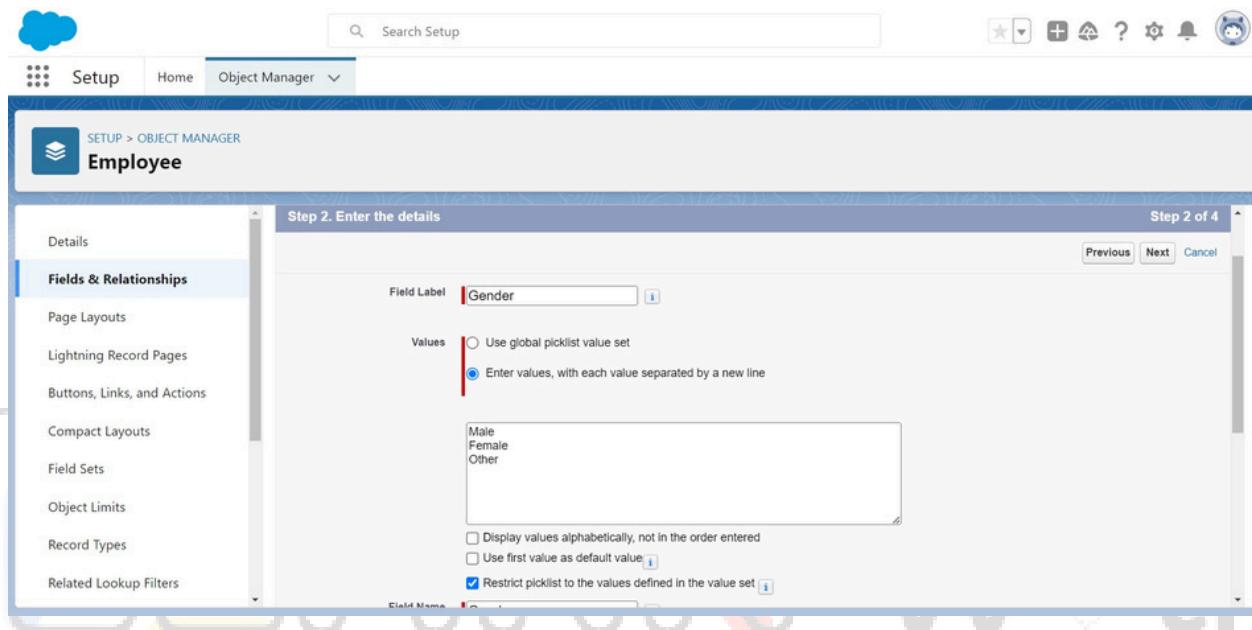
To create fields in an object:

1. Go to setup → click on Object Manager → type object name( Employee ) in quick find bar→ click on the object.
2. Now click on “Fields & Relationships” → New
3. Select Data type as “Picklist” and click Next.
4. Enter Field Label as “Designation”, under values select “Enter values, with each value separated by a new line” and enter values as shown below.

- MarketingManager
- MarketingDirector
- GraphicDesigner
- Receptionist
- Manager
- Clerk
- CEO—ChiefExecutiveOfficer
- COO—ChiefOperatingOfficer
- CFO—ChiefFinancialOfficer
- SoftwareEngineer
- DataEntry



5. Click Next→ Next → Next → Save .
6. Go to setup → click on Object Manager → type object name( Employee ) in quick find bar→ click on the object.
7. Now click on “Fields & Relationships” → New
8. Select Data type as “Picklist” and click Next.
9. Enter Field Label as “Gender”, under values select “Enter values, with each value separated by a new line” and enter values as shown below.



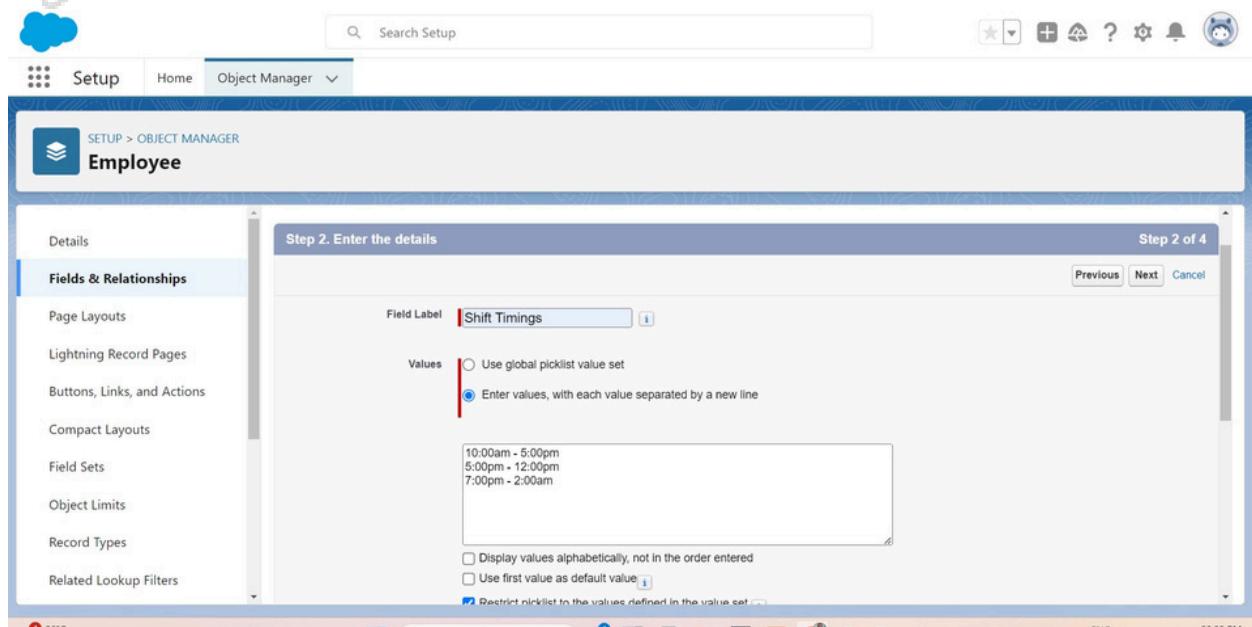
10. Click Next → Next → Next → Save .

11. Goto setup → click on Object Manager → type object name (Employee) in quick find bar → click on the object.

12. Now click on “Fields & Relationships” → New.

13. Select Data type as “Picklist” and click Next.

14. Enter Field Label as “Shift Timings”, under Values select “Enter values, with each value separated by a new line” and enter values as shown below.



15. Click Next → Next → Next → Save .

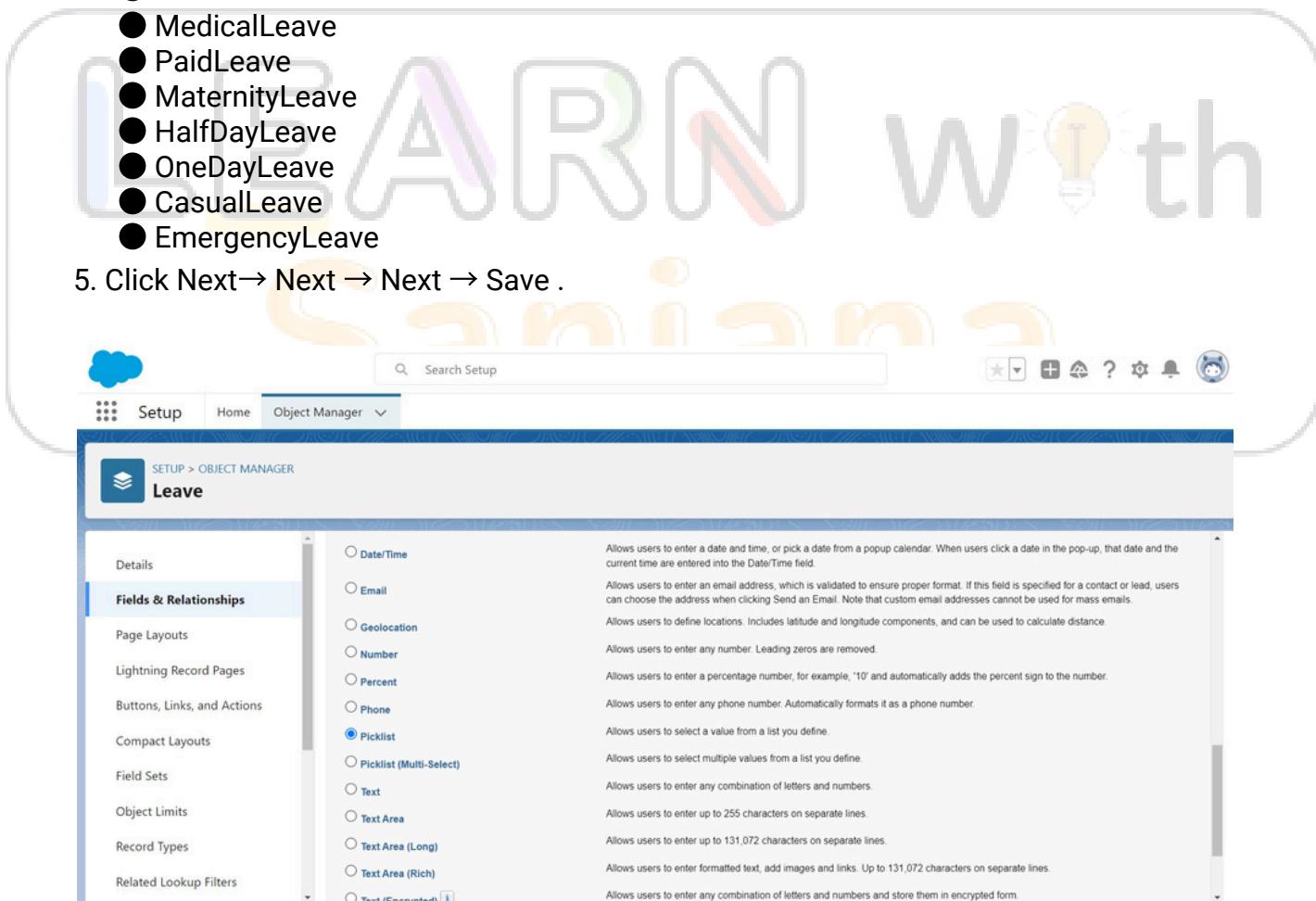
## Leave

To create fields in an object:

1. Go to setup → click on Object Manager → type object name( Leave ) in quick find bar→ click on the object.
2. Now click on “Fields & Relationships” → New
3. Select Data type as “Picklist” and click Next.
4. Enter Field Label as “Leave Type”, under values select “Enter values, with each value separated by a new line” and enter values as shown below.

- Bereavementleave
- MedicalLeave
- PaidLeave
- MaternityLeave
- HalfDayLeave
- OneDayLeave
- CasualLeave
- EmergencyLeave

5. Click Next→ Next → Next → Save .



Setup > OBJECT MANAGER  
Leave

Details

Fields & Relationships

Page Layouts

Lightning Record Pages

Buttons, Links, and Actions

Compact Layouts

Field Sets

Object Limits

Record Types

Related Lookup Filters

Leave

New Custom Field

Step 2. Enter the details

Field Label: Leave Type

Values:

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

Bereavement leave  
Medical Leave  
Paid Leave  
Maternity Leave  
Half Day Leave  
One Day Leave  
Casual Leave

Help for this Page ?

Step 2 of 4

Previous Next Cancel

## Leave

To create fields in an object:

1. Go to setup → click on Object Manager → type object name( Leave ) in quick find bar→ click on the object.
2. Now click on “Fields & Relationships” → New
3. Select Data type as “Picklist” and click Next.
4. Enter Field Label as “Leave Status”, under values select “Enter values, with each value separated by a new line” and enter values as shown below.

Not on leave

On Leave

5. Click Next→ Next → Next → Save .

Setup > OBJECT MANAGER  
Leave

Details

Fields & Relationships

Page Layouts

Lightning Record Pages

Buttons, Links, and Actions

Compact Layouts

Field Sets

Object Limits

Record Types

Related Lookup Filters

Leave

New Custom Field

Step 2. Enter the details

Field Label: Leave Status

Values:

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

On leave  
Not on Leave

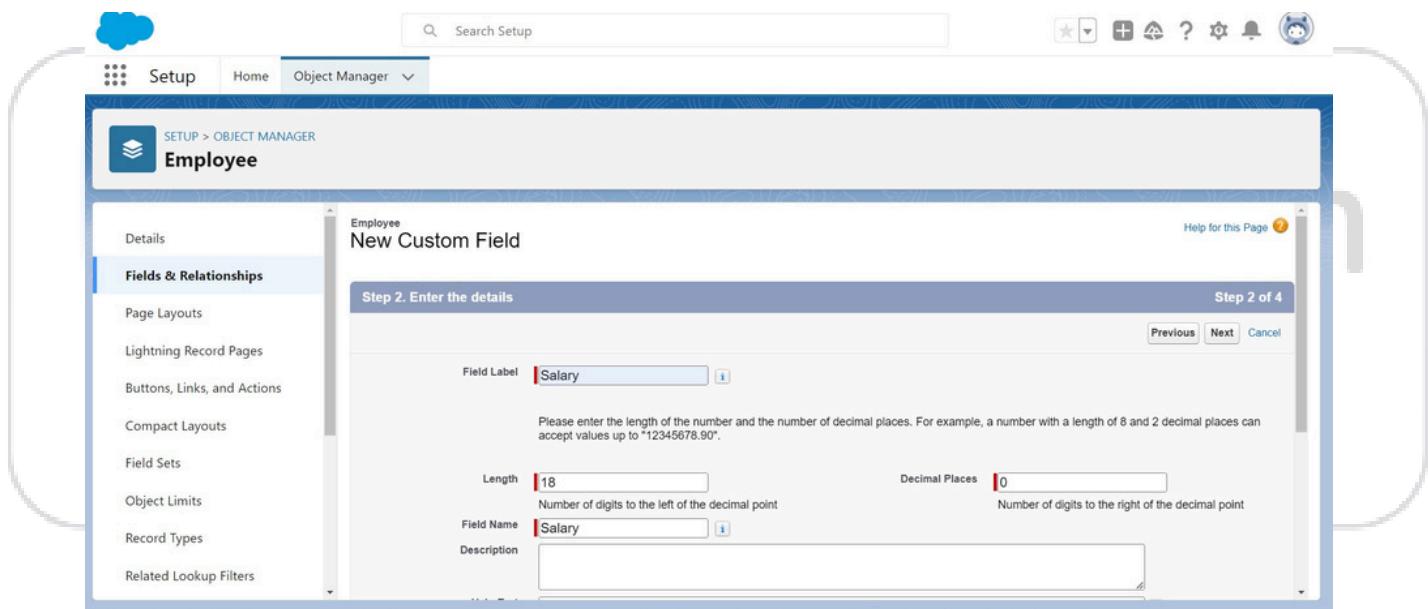
Help for this Page ?

Step 2 of 4

Previous Next Cancel

## **Activity 8 : Creating Currency Field Employee**

- To create fields in an object:
1. Go to setup → click on Object Manager → type object name( Employee ) in quick find bar→ click on the object.
  2. Now click on “Fields & Relationships” → New.
  3. Select Data type as “Currency” and click Next.
  4. Enter Field Label as “Salary ” and length as “ 18 ” and decimal 0.Field name will be auto generated.
  5. Click Next→ Next → Next → Save .



## **Activity 9 : Creating Date Field**

### **Employee**

To create fields in an object:

1. Go to setup → click on Object Manager → type object name( Employee ) in quick find bar→ click on the object.
2. Now click on “Fields & Relationships” → New.
3. Select Data type as “Date ” and click Next.
4. Enter Field Label as “Dateofbirth”. Field name will be auto generated.
5. Click Next→ Next → Next → Save .

The top screenshot shows the 'Fields & Relationships' section of the Employee object setup. It lists various relationship types: Lookup Relationship, Master-Detail Relationship, External Lookup Relationship, Checkbox, Currency, Date (selected), Date/Time, and Email. The bottom screenshot shows the 'New Custom Field' wizard, Step 2: Enter the details. The field is labeled 'Date of birth' and named 'Date\_of\_birth'. The 'Required' checkbox is unchecked, and the 'Auto add to custom report' checkbox is checked.

## Leave

To create fields in an object:

1. Go to setup → click on Object Manager → type object name( Leave ) in quick find bar→ click on the object.
2. Now click on "Fields & Relationships" → New.
3. Select Date type as "Date" and click Next.
4. Enter Field Label as "StartDate". Field name will be auto-generated.
5. Click Next → Next → Next → Save.

The screenshot shows the Salesforce Setup interface with the Object Manager selected. A search bar at the top contains "Leave". The main area displays "Step 2. Enter the details" for creating a new field named "start\_date". The field label is "start date", and the field name is "start\_date". There is a description and help text section, both of which are currently empty. Under the "Required" section, there is an unchecked checkbox for "Always require a value in this field in order to save a record" and a checked checkbox for "Add this field to existing custom report types that contain this entity". The sidebar on the left lists various setup categories, with "Fields & Relationships" selected.

1. Go to setup → click on Object Manager → type object name( Leave ) in quick find bar→ click on the object.
2. Now click on “Fields&Relationships” → New.
3. Select Data type as “Date” and click Next.
4. Enter Field Label as “ End Date”. Field name will be auto generated.
5. Click Next → Next → Next → Save.

The screenshot shows the continuation of the field creation process for the "Leave" object. It is "Step 2 of 4" of "Step 2. Enter the details". The field label is now "End date" and the field name is "End\_date". The "Description" and "Help Text" fields are empty. The "Required" section shows an unchecked checkbox for "Always require a value in this field in order to save a record" and a checked checkbox for "Add this field to existing custom report types that contain this entity". The sidebar on the left shows "Fields & Relationships" selected.

## Activity 10 : Creating URL Field

### Organization

To create fields in an object:

1. Go to setup → click on Object Manager → type object name( Organization ) in quick find bar→ click on the object.
2. Now click on “Fields & Relationships” → New.
3. Select Data type as “ URL ” and click Next.
4. Enter Field Label as “ Website ” .Field name will be auto generated.
5. Click Next→ Next → Next → Save .

The image consists of two screenshots of the Salesforce Setup interface, illustrating the steps to create a custom URL field for the Organization object.

**Screenshot 1: Fields & Relationships Selection**

This screenshot shows the "Fields & Relationships" section of the Object Manager for the "Organization" object. On the left, a sidebar lists various setup options like Page Layouts, Lightning Record Pages, and Field Sets. The main area displays a list of field types with their descriptions. The "URL" type is selected, indicated by a blue border around its radio button.

Field Type	Description
Number	Allows users to enter any number. Leading zeros are removed.
Percent	Allows users to enter a percentage number, for example, '10' and automatically adds the percent sign to the number.
Phone	Allows users to enter any phone number. Automatically formats it as a phone number.
Picklist	Allows users to select a value from a list you define.
Picklist (Multi-Select)	Allows users to select multiple values from a list you define.
Text	Allows users to enter any combination of letters and numbers.
Text Area	Allows users to enter up to 255 characters on separate lines.
Text Area (Long)	Allows users to enter up to 131,072 characters on separate lines.
Text Area (Rich)	Allows users to enter formatted text, add images and links. Up to 131,072 characters on separate lines.
Text (Encrypted)	Allows users to enter any combination of letters and numbers and store them in encrypted form.
Time	Allows users to enter a local time. For example, "2:40 PM", "14:40", "14:40:00", and "14:40:50:600" are all valid times for this field.
<b>URL</b>	Allows users to enter any valid website address. When users click on the field, the URL will open in a separate browser window.

**Screenshot 2: Step 2 of 4 - Enter Details**

This screenshot shows the "Step 2. Enter the details" page of the custom field creation wizard. The "Field Label" is set to "Website". The "Field Name" is also "Website". There are fields for "Description" and "Help Text", both of which are currently empty. At the bottom, there are checkboxes for "Required" and "Always require a value in this field in order to save a record" and "Auto add to custom report" and "Add this field to existing custom report types that contain this entity".

## Activity 11 : Creating Checkbox Field

### Employee

To create fields in an object:

1. Go to setup → click on Object Manager → type object name( Employee ) in quick find bar→ click on the object.
2. Now click on “Fields & Relationships” → New.
3. Select Data type as “Checkbox ” and click Next.
4. Enter Field Label as “ Health Issues If Any” . Field name will be auto generated.
5. Click Next→ Next → Next → Save .

The image consists of two screenshots of the Salesforce Setup interface, illustrating the process of creating a new custom field for the Employee object.

**Screenshot 1: Fields & Relationships**

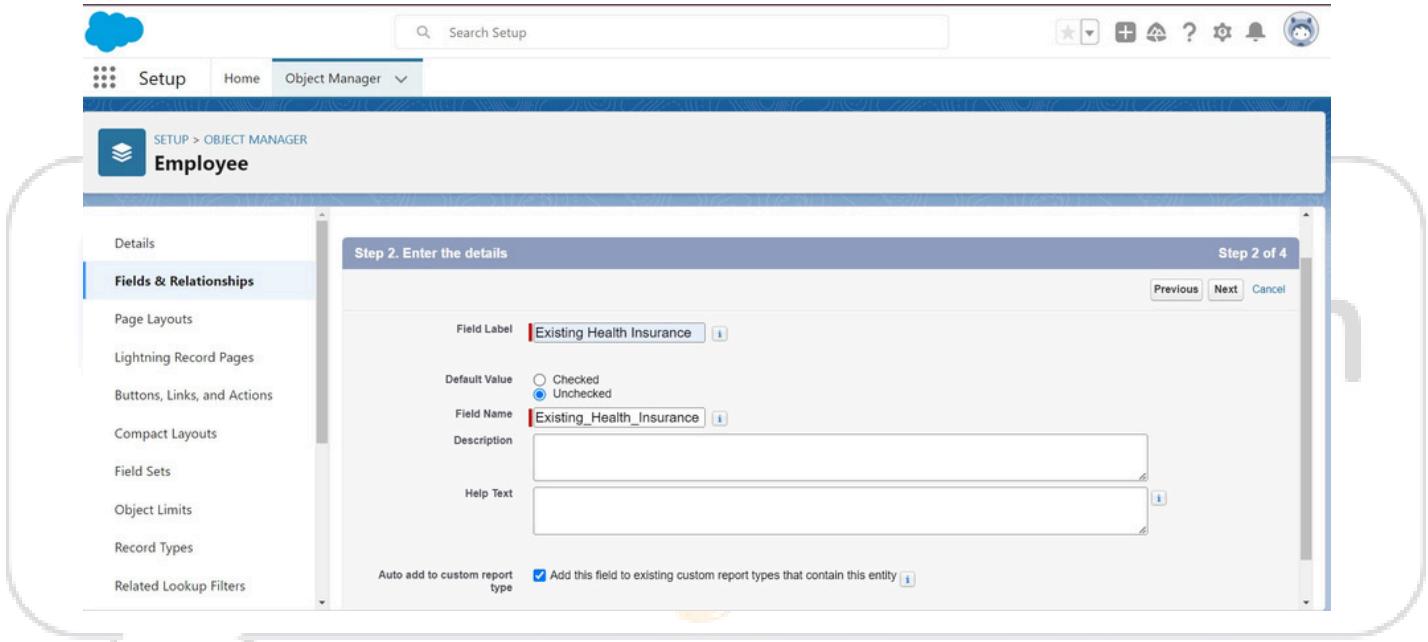
This screenshot shows the "Fields & Relationships" section of the Object Manager for the Employee object. On the left, a sidebar lists various configuration options like Details, Page Layouts, and Lightning Record Pages. The main pane displays a list of field types with their descriptions:

- External Lookup Relationship**: Creates a relationship that links this object to an external object whose data is stored outside the Salesforce org.
- Checkbox**: Allows users to select a True (checked) or False (unchecked) value.
- Currency**: Allows users to enter a dollar or other currency amount and automatically formats the field as a currency amount. This can be useful if you export data to Excel or another spreadsheet.
- Date**: Allows users to enter a date or pick a date from a popup calendar.
- Date/Time**: Allows users to enter a date and time, or pick a date from a popup calendar. When users click a date in the pop-up, that date and the current time are entered into the Date/Time field.
- Email**: Allows users to enter an email address, which is validated to ensure proper format. If this field is specified for a contact or lead, users can choose the address when clicking Send an Email. Note that custom email addresses cannot be used for mass emails.
- Geolocation**: Allows users to define locations. Includes latitude and longitude components, and can be used to calculate distance.
- Number**: Allows users to enter any number. Leading zeros are removed.
- Percent**: Allows users to enter a percentage number, for example, '10' and automatically adds the percent sign to the number.
- Phone**: Allows users to enter any phone number. Automatically formats it as a phone number.
- Picklist**: Allows users to select a value from a list you define.
- Picklist (Multi-Select)**: Allows users to select multiple values from a list you define.

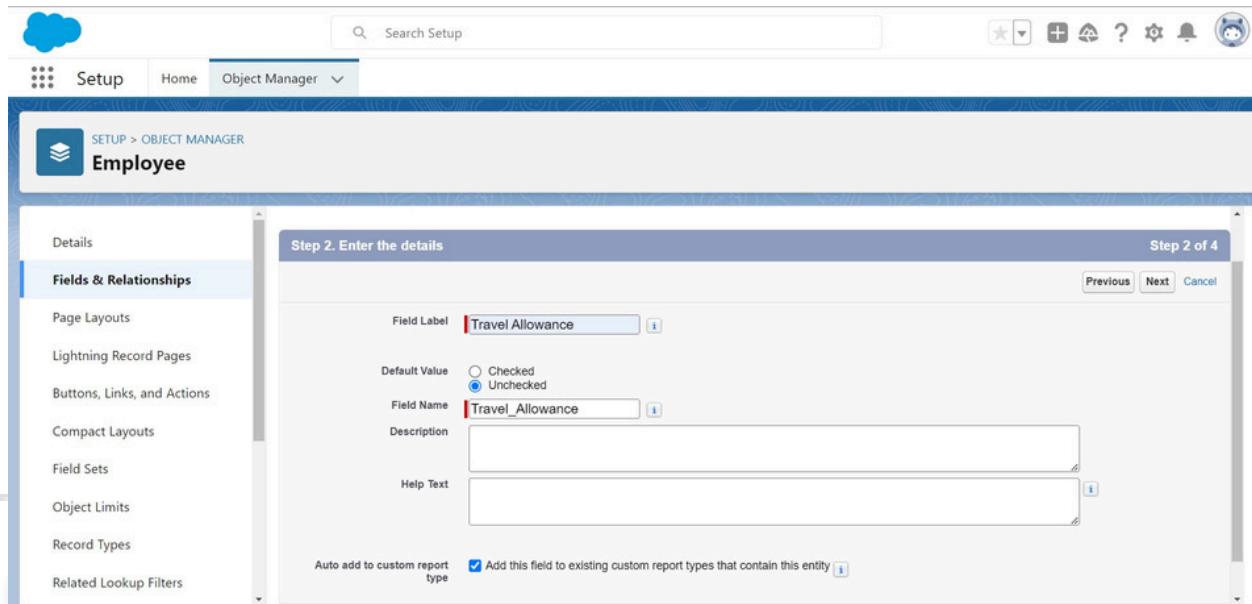
**Screenshot 2: New Custom Field**

This screenshot shows the "New Custom Field" wizard, Step 2 of 4. The "Field Label" is set to "Health Issues If Any". The "Default Value" is set to "Unchecked". The "Field Name" is empty. The "Description" and "Help Text" fields are also empty. At the bottom, there are checkboxes for "Auto add to custom report type" and "Add this field to existing custom report types that contain this entity".

1. Goto setup → click on Object Manager → type object name (Employee) in quick find bar → click on the object.
2. Now click on “Fields & Relationships” → New.
3. Select Data type as “Checkbox ” and click Next.
4. Enter Field Label as “Existing Health Insurance” . Field name will be auto generated.
5. Click Next → Next → Next → Save .



1. Goto setup → click on Object Manager → type object name (Employee) in quick find bar → click on the object.
2. Now click on “Fields & Relationships” → New.
3. Select Data type as “Checkbox ” and click Next.
4. Enter Field Label as “Travel Allowance”. Field name will be auto generated.
5. Click Next → Next → Next → Save.



## Activity 12 : Creating Geolocation Field

### Employee

To create fields in an object:

1. Go to setup → click on Object Manager → type object name( Employee ) in quick find bar→ click on the object.
2. Now click on “Fields & Relationships” → New.
3. Select Data type as “Geolocation ” and click Next.
4. Enter Field Label as “ Employee Location” . Field name will be auto generated.
5. Check the decimal checkbox, In the decimal place enter 15.
6. Click Next→ Next → Next → Save .

The top screenshot shows the 'Fields & Relationships' section of the Employee object setup. It lists various field types: Geolocation (selected), Number, Percent, Phone, Picklist, Picklist (Multi-Select), Text, Text Area, Text Area (Long), Text Area (Rich), Text (Encrypted) (with a question mark icon), Time, and URL. Descriptions for each type are provided.

The bottom screenshot shows the configuration of a specific Geolocation field. The 'Field Label' is set to 'Employee Location'. A note states: 'Enter the name of the location, such as Main Office. Be descriptive and specific, and remember that one record may have multiple locations, such as West Coast Sales Office and East Coast Sales Office.' The 'Latitude and Longitude Display Notation' is set to 'Decimal'. The 'Decimal Places' input field contains '15'. The 'Field Name' is 'Employee\_Location'. There are also 'Description' and 'Help Text' fields.

## Organization

To create fields in an object:

1. Go to setup → click on Object Manager → type object name( Organization ) in quick find bar→ click on the object.
2. Now click on “Fields & Relationships” → New.
3. Select Data type as “Geolocation ” and click Next.
4. Enter the Field Label as “ Organization Location ” . Field name will be auto generated.
5. Check the decimal checkbox, In the decimal place enter 15.
6. Click Next→ Next → Next → Save .

The image consists of two vertically stacked screenshots of the Salesforce Setup interface.

**Screenshot 1: Fields & Relationships**

- Left Panel:** Shows the sidebar with options like Details, Fields & Relationships (selected), Page Layouts, Lightning Record Pages, Buttons, Links, and Actions, Compact Layouts, Field Sets, Object Limits, Record Types, and Related Lookup Filters.
- Right Panel:** Displays a list of field types under the heading "Fields & Relationships". The "Geolocation" type is selected. A detailed description for each field type is provided to the right, such as "Allows users to define locations. Includes latitude and longitude components, and can be used to calculate distance." and "Allows users to enter any number. Leading zeros are removed."

**Screenshot 2: Step 2. Enter the details**

- Left Panel:** Same sidebar as the first screenshot.
- Right Panel:** A step-by-step wizard for creating a new field. Step 2 of 4 is shown. The field is being created for the "Organization" object.
- Field Details:**
  - Field Label:** "Organization Location"
  - Latitude and Longitude Display Notation:** "Decimal" (radio button selected)
  - Decimal Places:** "15"
  - Field Name:** "Organization\_Location"
  - Description:** (Empty text area)
  - Help Text:** (Empty text area)
- Buttons:** "Previous", "Next", and "Cancel" are visible at the top right of the wizard.

### Activity 13 : Creating Formula Field Employee To create fields in an object:

1. Go to setup → click on Object Manager → type object name( Employee ) in quick find bar→ click on the object.
2. Now click on “Fields & Relationships” → New. 3. Select Data type as “Formula ” and click Next.
4. Select “Number” as Formula Return type. Enter “Age” as a Field label. Field name will be auto generated.

5. Click Next, In the Advanced Formula space enter the formula.

(TODAY() - Date\_of\_birth\_\_c)/365,Checkthesyntax.

6. Click Next → Next → Next → Save .

The image consists of two vertically stacked screenshots of the Salesforce Setup interface, specifically the Object Manager for the Employee object.

**Screenshot 1 (Top):** This screenshot shows the initial configuration step for creating a new field. The left sidebar is titled "Fields & Relationships". The right pane is titled "Data Type" and displays five options: "None Selected" (selected), "Auto Number", "Formula" (selected), "Roll-Up Summary", "Lookup Relationship", and "Master-Detail Relationship". A detailed description for "Formula" is provided, stating it is a read-only field derived from a formula expression. It also notes that the formula is updated when source fields change.

**Screenshot 2 (Bottom):** This screenshot shows the continuation of the field creation process. The left sidebar remains the same. The right pane is titled "Formula Return Type" and lists six options: "None Selected" (selected), "Checkbox", "Currency", "Date", "Date/Time", and "Number" (selected). A detailed description for "Number" is provided, stating it calculates a numeric value based on a formula like `Fahrenheit = 1.8 * Celsius + 32`.

Formula Options

Formula Return Type: Number  
Decimal Places: 0

Example: Fahrenheit = 1.8 \* Celsius\_c + 32 | More Examples...

Simple Formula Advanced Formula

Age (Number) = (TODAY() - Date\_of\_birth\_c) / 365

Insert Field Insert Operator

Functions

- All Function Categories --
- ABS
- ACOS
- ADDMONTHS
- AND
- ASCII
- ASIN

Insert Selected Function

7. Go to setup → click on Object Manager → type object name( Employee ) in quick find bar→ click on the object.
8. Now click on “Fields & Relationships” → New.
9. Select Data type as “Formula ” and click Next.
10. Select “Number” as Formula Return type. Enter “Distance” as Field label. Field name will be auto generated.
11. Click Next, In the Advanced Formula space enter the formula.  
DISTANCE( Organization\_\_r.Organization\_Location\_\_c , Employee\_Location\_\_c , 'km'), Check the syntax.
12. Click Next→ Next → Next → Save .

Formula Options

Formula Return Type: Number  
Decimal Places: 2

Example: Fahrenheit = 1.8 \* Celsius\_c + 32 | More Examples...

Simple Formula Advanced Formula

Distance (Number) = DISTANCE( Organization\_\_r.Organization\_Location\_\_c , Employee\_Location\_\_c , 'km')

Insert Field Insert Operator

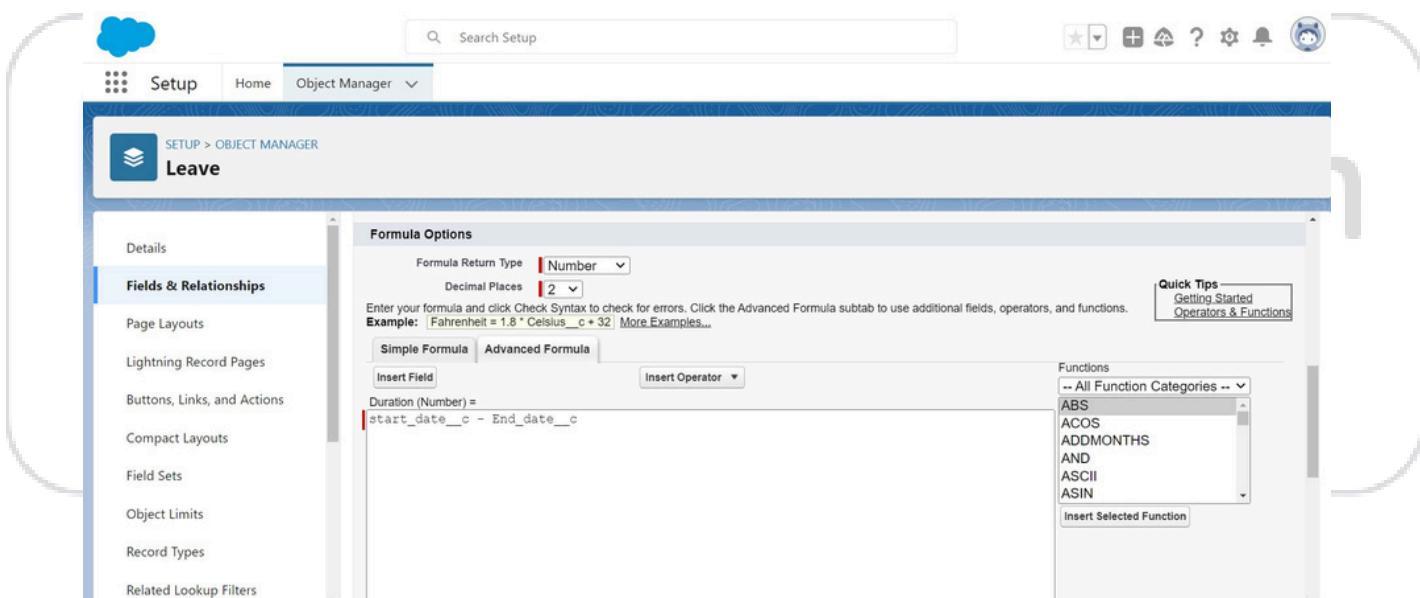
Functions

- All Function Categories --
- ABS
- ACOS
- ADDMONTHS
- AND
- ASCII
- ASIN

Insert Selected Function

**Leave** To create fields in an object:

1. Go to setup → click on Object Manager → type object name( Leave ) in quick find bar→ click on the object.
2. Now click on “Fields & Relationships” → New.
3. Select Data type as “Formula ” and click Next.
4. Select “Number” as Formula Return type. Enter “Duration” as Field label. Field name will be auto generated.
5. Click Next, In the Advanced Formula space enter the formula.  
start\_date\_c - End\_date\_c , Check the syntax.
6. Click Next→ Next → Next → Save .



## Activity 14 : Creating Validation Rule

### Employee

To create fields in an object:

1. Go to setup → click on Object Manager → type object name( Employee ) in quick find bar→ click on the object.
2. Now click on “Validation Rules” → New.
3. Rule Name is “TravelAllowanceOnlyForGreaterDistance”
4. Click the active checkbox.
5. Insert Field , Insert the formula as  
IF( Distance\_c <15, Travel\_Allowance\_c ==true, Travel\_Allowance\_c ==false),  
Check the syntax.
6. In the Error message box,  
Distance is greater than 15 you should select travel allowance required.

7. Error location should be displayed on field. Field should be "Travel Allowance".

8. Click save.

The screenshot shows the 'Employee Validation Rule' setup screen. The 'Validation Rule Edit' tab is selected. The 'Rule Name' field contains 'TravelAllowanceOnlyForGreaterDistance'. The 'Active' checkbox is checked. The 'Error Condition Formula' section contains the formula: `IF( Distance__c <15, Travel_Allowance__c ==true, Travel_Allowance__c ==false)`. A tooltip for 'ABS(number)' is visible on the right, explaining it returns the absolute value of a number. The 'Save' button is at the top right.

This screenshot shows the same validation rule setup screen, but the formula has been expanded to show its components: `IF( Distance__c <15, Travel_Allowance__c ==true, Travel_Allowance__c ==false)`. The 'Functions' dropdown on the right lists various mathematical functions like ABS, ACOS, ADDMONTHS, AND, ASCII, ASIN, etc. The 'Insert Selected Function' option is highlighted.

The screenshot shows the validation rule setup screen with the 'Error Message' section. The 'Example' field contains 'Discount percent cannot exceed 30%'. The 'Error Message' field contains 'Distance is greater than 15 you should select travel allowance required'. The 'Error Location' dropdown is set to 'Field: Travel Allowance'. The 'Save' button is at the bottom right.

## Milestone 6 : Email Templates

We use email templates to increase productivity and ensure consistent messaging. Email templates with merge fields let you quickly send emails that include field data from Salesforce records like contacts, leads, or opportunities. You can use email templates when emailing groups of people—with list email or mass email—or just one person. Salesforce email templates are the easiest way to get your emails done. They help you

create and send quick emails that include merge fields from Salesforce records like Contacts, Leads, Opportunities, or Custom Objects.

When you have a large number of contacts or leads in Salesforce, it can be difficult to keep track of who needs to be notified about new information. Salesforce email templates allow you to combine all these contacts or leads into one email and then send it out simultaneously.

### Activity 1 : Create Email Template For Emergency Leave Approval

To create Email Template: 1. Go to App launcher → click on Email Template. 2. Click on "Email Templates" → New Email Template. 3. Email Template Name is "Emergency

- Leave Approved"
4. Related Entity Type → Employee
5. Description "Your emergency leave was approved".
6. Folder "Public Email Templates".
7. Subject "Your Emergency leave was approved"
8. In the HTML text enter the given information and click save.

Dear {{Employee\_\_c.Name}}

I hope this email finds you well. We wanted to inform you that your emergency leave request has been approved.

Please ensure that all pending tasks are delegated, and you have completed any necessary handovers before proceeding on your leave.

During your absence, if any urgent matters arise or if there is a need for any further assistance, please contact the Manager.

The screenshot shows the Salesforce Home page with the Sales tab selected. A search bar at the top contains the text "Search...". The main navigation bar includes Home, Opportunities, Leads, Tasks, Files, Accounts, Contacts, Campaigns, Dashboards, Reports, More, and a gear icon.

The left sidebar displays the "Employee Mapp" app under Apps. It lists "Contract Line Items", "Credit Memos", "Email Templates", "Employees", and "Engagement Channel Types". A "View More" link is also present. Below this is a chart showing activity from July to September, with a legend indicating "Closed" (orange), "Goal" (green), and "Closed + Open (> 70%)" (blue).

The main content area features a large, blank white space with a small "C" icon in the top right corner. To the right, there is an "Assistant" section with a cartoon illustration of a landscape and the text "Nothing needs your attention right now. Check back later." Below it is a modal titled "Stay ahead of incidents" with the subtext "Help your teams proactively respond to large-scale disruptions with the free Customer Service Incident Management solution from Service Cloud." It includes "Dismiss" and "Get Started" buttons.

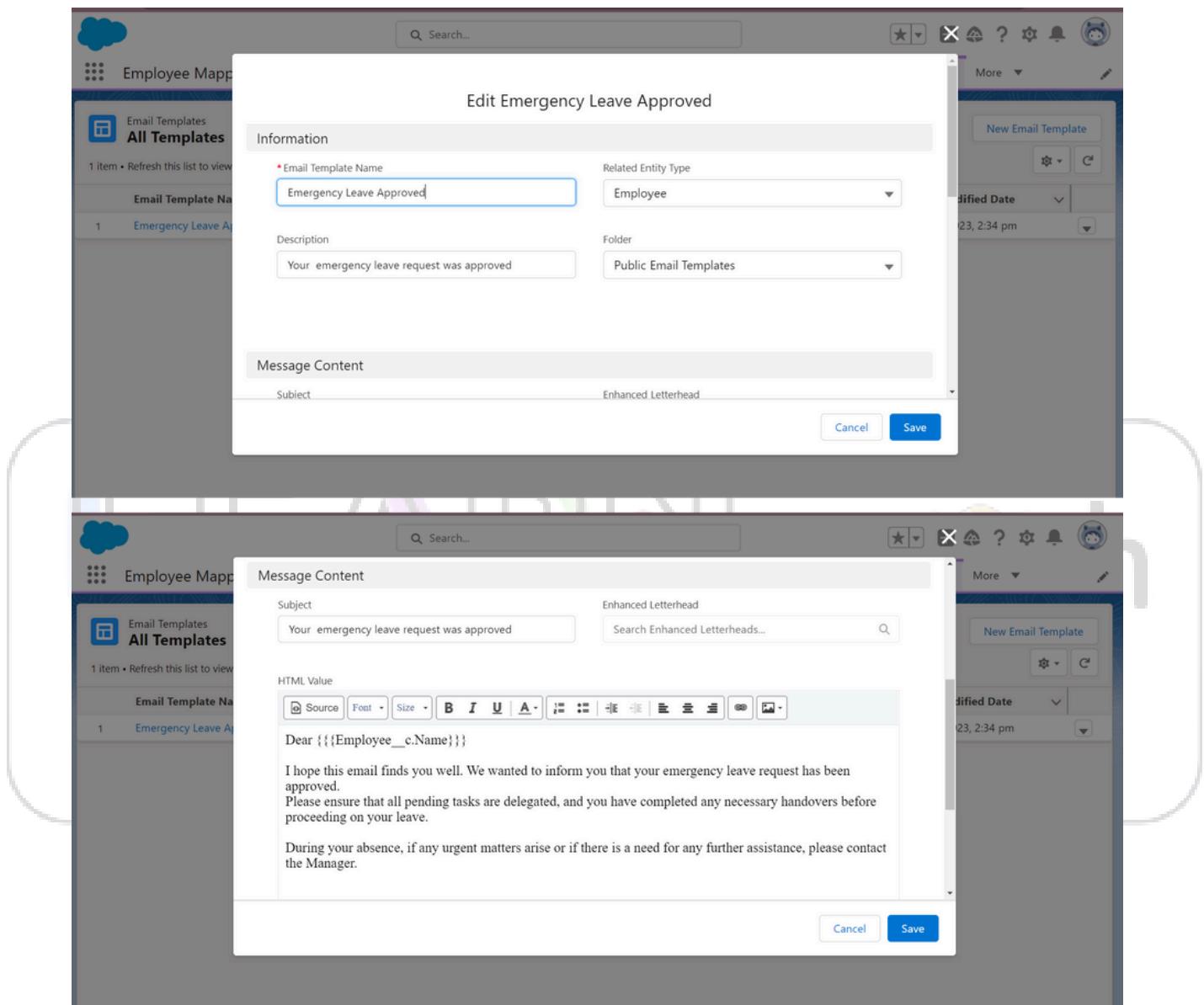
  

The screenshot shows the "Employee Mapp" app's Email Templates list view. The top navigation bar includes Employees, Organizations, Health Insurances, Accounts, Reports, Dashboards, Email Templates, and More. A search bar at the top contains the text "Search...".

The left sidebar shows the "Email Templates" section with a "List Emails" button and a "View All" link. The main content area displays a list of three items:

		Name
4	<input type="checkbox"/>	Sanavi
5	<input type="checkbox"/>	Rekha
6	<input type="checkbox"/>	Nisha

A URL at the bottom of the screen is: <https://smartintern284-dev.develop.lightning.force.com/lightning/o/EmailTemplate/home>



## Milestone 7 : 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. Each user account contains at least the following:

- Username
- EmailAddress
- User'sFirstName(optional)
- User'sLastName
- Alias
- Nickname
- License
- Profile
- Role(optional)

## Activity 1:

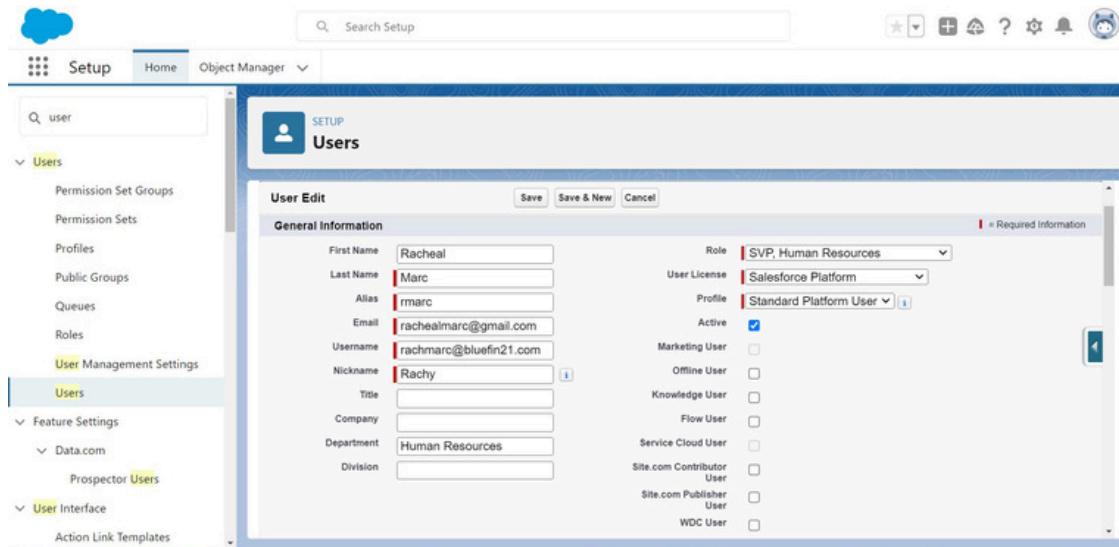
### Create User 1:

Go to setup → type users in quick find box → select users → click New user.

Fill in the fields

1. First Name: Racheal
2. Last Name: Marc
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: SVP, Human Resources
8. User license: Salesforce Platform
9. Profiles: Standard Platform User

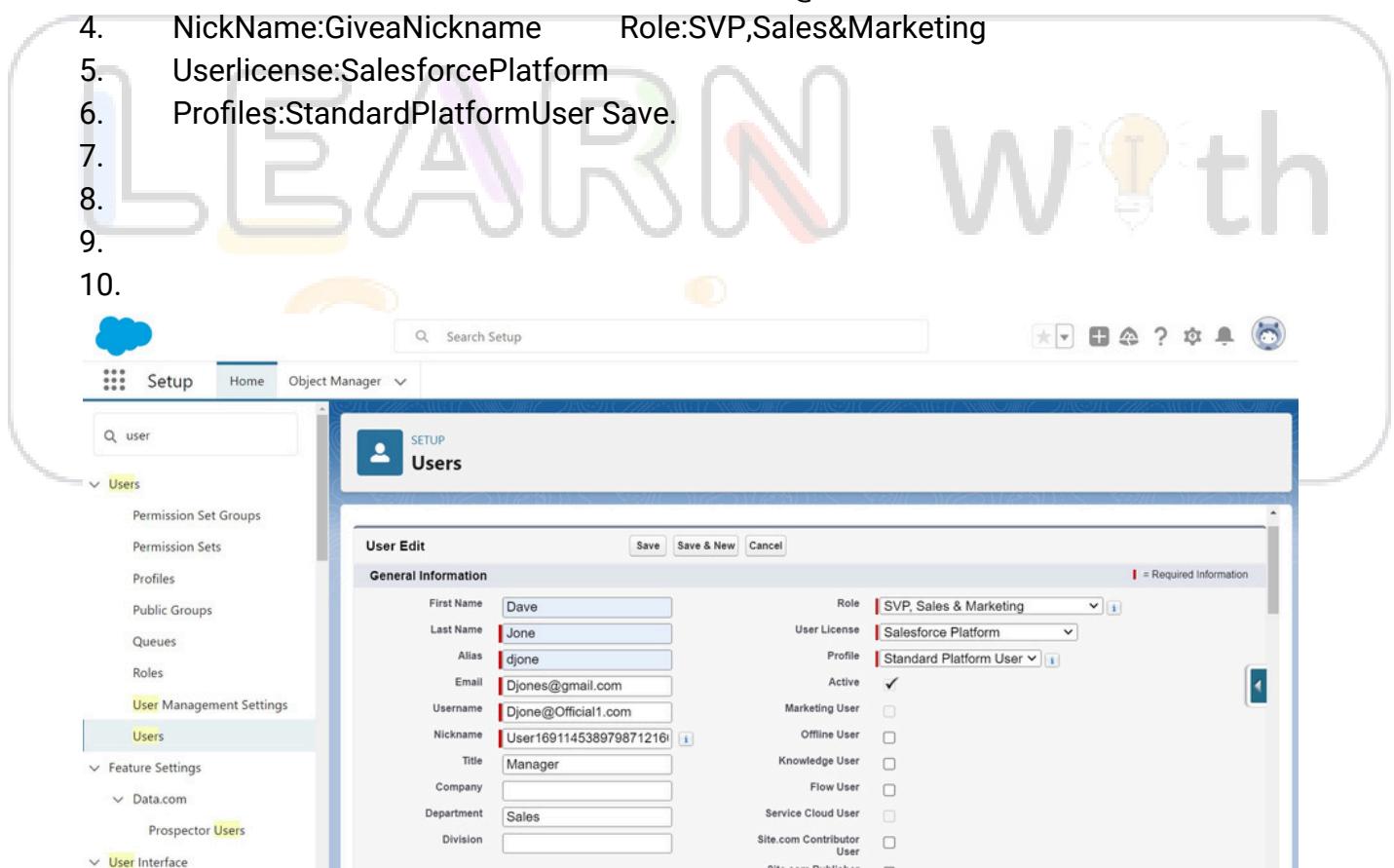
10. Save.



## Create User 2:

Go to setup → type users in quick find box → select users → click New user.  
Fill in the fields

1. FirstName:Dave LastName:Jone Alias:GiveaAliasName
2. Emailid:GiveyourPersonalEmailid
3. Username:Usernameshouldbeinthisform:text@text.text
4. NickName:GiveaNickname Role:SVP,Sales&Marketing
5. Userlicense:SalesforcePlatform
6. Profiles:StandardPlatformUser Save.
- 7.
- 8.
- 9.
- 10.



## Milestone 8 : Approval Process

### What Is Approval Process In Salesforce?

The Approval Process is an automated process that an org uses to approve records in Salesforce. For example, When In the organization, someone is not able to decide a particular thing then he can ask someone else for approval. So, for such frequent cases or situations, one can define the approval process. So, Users can take benefit of such an approval process whenever needed.

Records submitted for approval are approved by the user(s) in the organization. These users are called Approvers. A single Approval process is bound to a single object because when a rule is defined, this object influences the fields that will be available to set the criteria. An approval process consists of finalizing the basic properties of the approval process (as shown in the below image), approval steps, and actions to be executed.

### Actions In Salesforce Approval Process

There are 4 actions present except the approval steps which complete an approval process, following are:

#### 1. Initial Submission Actions

Initial submission actions are the actions that occur when a user first submits a record for approval. By default, an action to lock the record runs automatically on initial submission. Initial submission actions can include any approval actions such as email alerts, field updates, tasks, or outbound messages.

#### 2. Final Approval Actions

Final Approval actions are the actions that occur when a record is approved from all the approval steps. It also locks or unlocks the record, as specified. It can include any approval actions such as email alerts, field updates, tasks, or outbound messages.

#### 3. Final Rejection Actions

Final Rejection actions are the actions that occur when a record is rejected from any of the approval steps. It also locks or unlocks the record, as specified. It can include any approval actions such as email alerts, field updates, tasks, or outbound messages.

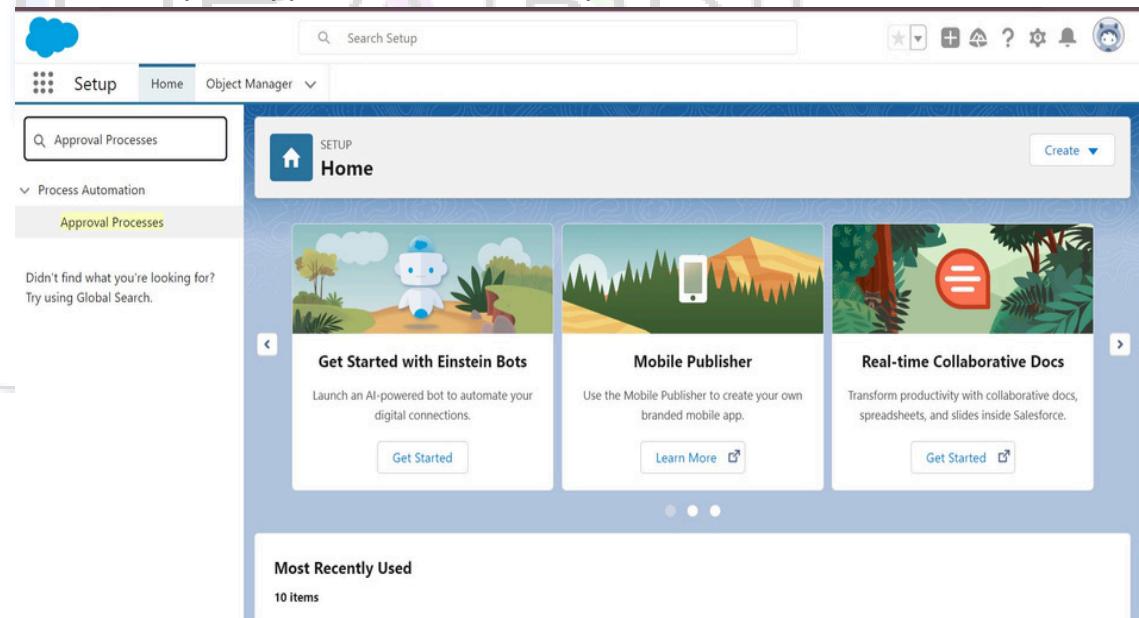
#### 4. Recall Actions

Recall actions are the actions that occur when a record is recalled after submission for approval. It can include any approval actions such as email alerts, field updates, tasks, or outbound messages.

### Activity 1 : Create Approval Process For Emergency Leave

To create fields in an object:

1. Go to setup → Approval Processes in quick find bar → click on it.



2. Manage Approval Process For → "Leave" from the drop down.

The screenshot shows the Salesforce Setup interface. The left sidebar has a search bar and navigation links: Home, Object Manager, and Approval Processes (which is selected). The main content area is titled "Approval Processes" and includes a help section with steps 1-7. A dropdown menu "Manage Approval Processes For: Leave" is open. Below it, sections for "Active Approval Processes" and "Inactive Approval Processes" show no results.

3. Click "Create New Approval Process" → Use standard setup wizard.

4. Process Name "Emergency Leave Approval" → Click Next.

This screenshot is identical to the one above, but the "Create New Approval Process" dropdown is expanded, showing two options: "Use Jump Start Wizard" and "Use Standard Setup Wizard".

Search Setup

Home Object Manager

Setup

Approval Processes

Emergency Leave Approval

Step 1 of 6

Process Name: Emergency Leave Approval

Unique Name: Emergency\_Leave\_Approval

Description:

5. Field “Leave:Leave Type” → Operator : equals, Value → Click on the lookup filter icon and select “Emergency Leave”.
6. Click insert field,then click Next.

Field	Operator	Value	Logic Operator
Leave: Leave Type	equals	Emergency Leave	AND
--None--	--None--		AND
--None--	--None--		AND
--None--	--None--		

Search Setup

Home Object Manager

Setup

Q approva

Data

Mass Transfer Approval Requests

Process Automation

Approval Processes

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

**SETUP** Approval Processes

Emergency Leave Approval

Step 2. Specify Entry Criteria Step 2 of 6

If only certain types of records should enter this approval process, enter that criteria below. For example, only expense reports from employees at headquarters should use this approval process.

Specify Entry Criteria

Use this approval process if the following criteria are met:

Field	Operator	Value	AND
Leave: Leave Type	equals	Emergency Leave	AND
--None--	--None--		AND
--None--	--None--		AND
--None--	--None--		

7. Field “Leave:Leave Type” → Operator : equals, Value → Click on the lookup filter icon and select “Emergency Leave”.
8. Next Automated Approver determined by “Manager” from the drop down. Use approver field of leave owner should be marked as check.
9. Select the “Administrators ONLY can edit records during the approval process”. Then Next.
10. Under the Approval Assignment Email Template click in the lookup icon→Lightning →Public Email Templates “Emergency Leave Approved”.Then Next.

Search Setup

Home Object Manager

Setup

Q approva

Data

Mass Transfer Approval Requests

Process Automation

Approval Processes

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

**SETUP** Approval Processes

Emergency Leave Approval

Step 3. Specify Approver Field and Record Editability Properties Step 3 of 6

When you define approval steps, you can assign approval requests to different users. One of your options is to use a user field to automatically route these requests. If you want to use this option for any of your approval steps, select a field from the picklist below. Also, when a record is in the approval process, it will always be locked—only an administrator will be able to edit it. However, you may choose to also allow the currently assigned approver to edit the record.

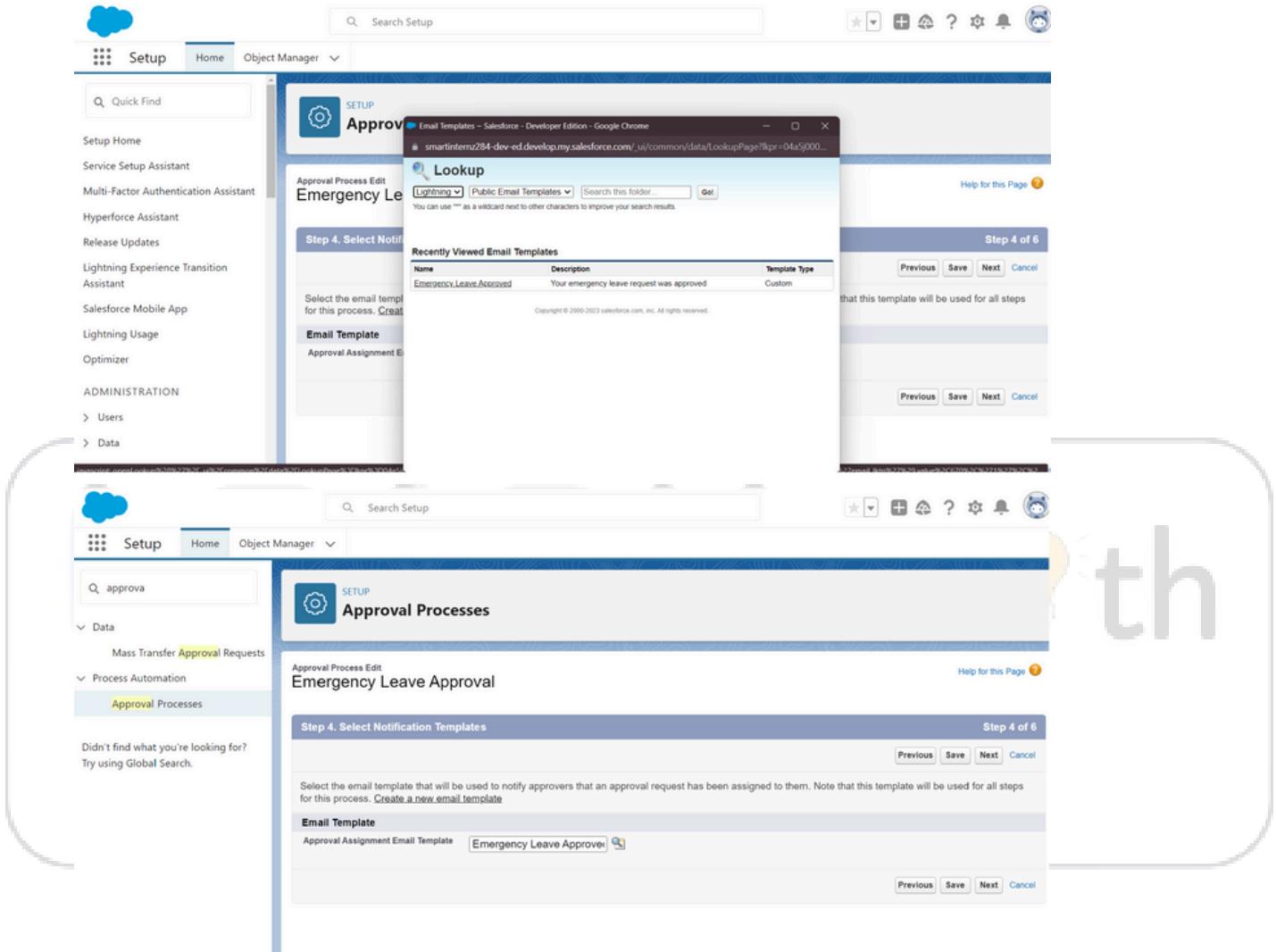
Select Field Used for Automated Approval Routing

Next Automated Approver Determined By Manager

Use Approver Field of Leave Owner

Record Editability Properties

Administrators ONLY can edit records during the approval process.  
 Administrators OR the currently assigned approver can edit records during the approval process.



11. From the available fields select →LeaveID, and then add →Add it to the selected Fields. Similarly add the Owner, LeaveType, Status. Then Next.

- MakesureDisplayapproverhistoryischecked.
- Andundersecuritysettingscheckthe“Allowapproverstoaccesstheapproval page only from within the Salesforce application. (Recommended)” option.

12. Submitter type Search →Owner, Allowed Submitters →Leave Owner. Then Next.

- MakesureAllowsubmitterstorecallapprovalrequestsischecked.
- Then click save.

The screenshots illustrate the configuration of an Approval Process in Salesforce Setup:

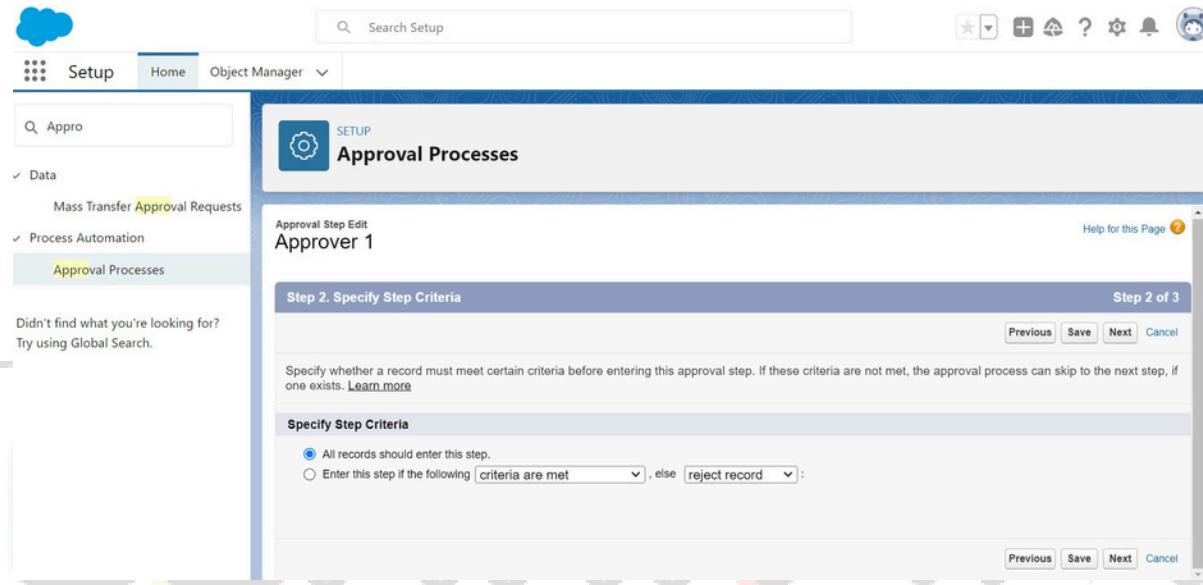
- Step 5: Select Fields to Display on Approval Page Layout**
  - Available Fields:** Created By, Duration, Employee, End date, Last Modified By, Leave start date.
  - Selected Fields:** Leave ID, Owner, Leave Type, Status.
  - Buttons:** Add, Remove, Up, Down.
  - Preview:** A screenshot of the approval page layout showing the selected fields.
  - Text:** "The approval page is where an approver will actually approve or reject a request. Using the options below, choose the fields to display on this page."
  - Buttons:** Previous, Save, Next, Cancel.
- Step 6: Specify Initial Submitters**
  - Initial Submitters:** Submitter Type: Search: Owner, for: [empty field], Find.
  - Available Submitters:** --None--.
  - Allowed Submitters:** Leave Owner.
  - Buttons:** Add, Remove.
  - Text:** "Using the options below, specify which users are allowed to submit the initial request for approval. For example, expense reports should normally be submitted for approval only by their owners."
  - Buttons:** Previous, Save, Cancel.

13. Once you have saved your approval process, while on the same page click the **Run Approval Process** button to run the approval process.

#### 14. At the approval steps, Click on “New Approval Step”.

15. Enter the name as "Approver1" the unique name will automatically be updated.Then Next.

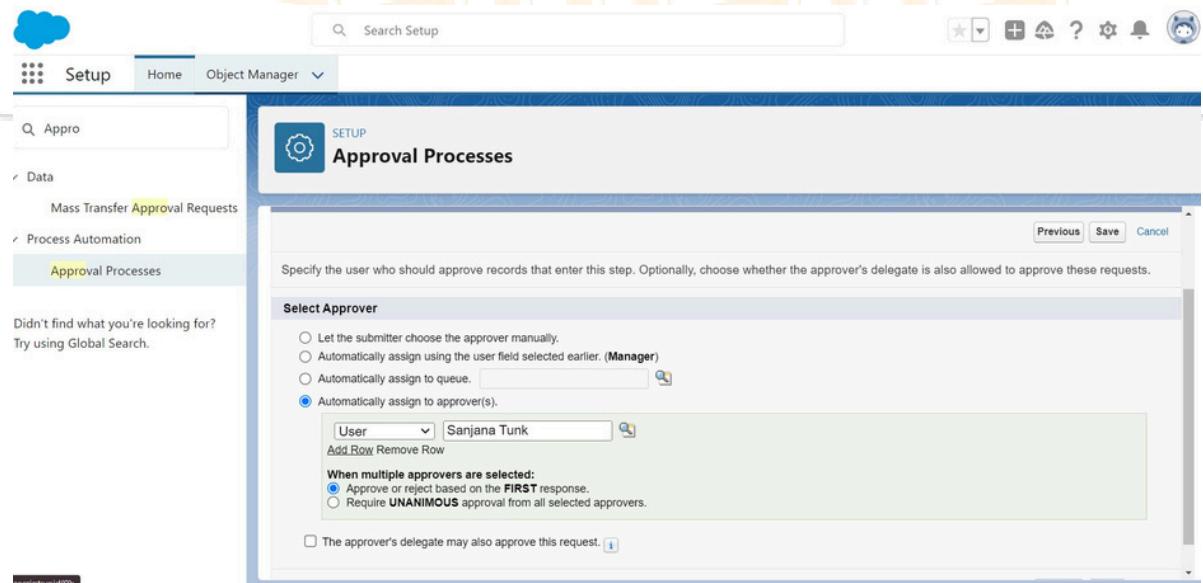
16. All records should enter this step.Then Next.



The screenshot shows the 'Approval Processes' setup page. A specific approval step is being edited, titled 'Approver 1'. The current step is 'Step 2. Specify Step Criteria'. The instructions say to specify criteria for entering the step. There are two options: 'All records should enter this step' (selected) and 'Enter this step if the following criteria are met, else reject record'. Below these options, there is a note about skipping the step if criteria are not met. At the bottom of the screen, there are 'Previous', 'Save', 'Next', and 'Cancel' buttons.

17. Automatically assign to approvers is to be selected. User: from the lookup give the user.

18. "Approve or reject based on the FIRST response" is to be selected. Then click save.



The screenshot shows the 'Approval Processes' setup page. It's on the 'Select Approver' step. The instructions ask to specify the user who should approve records. There are four options: 'Let the submitter choose the approver manually', 'Automatically assign using the user field selected earlier. (Manager)', 'Automatically assign to queue.', and 'Automatically assign to approver(s)' (selected). Below this, a user lookup field shows 'Sanjana Tunk'. Under 'When multiple approvers are selected:', the 'Approve or reject based on the FIRST response' option is selected. At the bottom, there is a checkbox for 'The approver's delegate may also approve this request.' and a note about UNANIMOUS approval.

19.While on the same Approval Process page .Under the "Final Approval Action" click Add New from the drop down select "Email Alert".

The screenshot shows the Salesforce Setup interface with the 'Approval Processes' page selected. The left sidebar includes links for Data, Mass Transfer Approval Requests, Process Automation, and Approval Processes. The main area displays the 'Approval Steps' section with one step named 'Approver 1' assigned to 'User:Sanjana Tunk'. Below it is the 'Final Approval Actions' section, which is currently expanded to show three actions: 'Record Lock' (Description: Lock the record), 'Email Alert' (Description: Your emergency leave request was approved), and 'Field Update' (Description: Outbound Message). A dropdown menu for 'Add New' is open, showing options like 'Task', 'Email Alert' (which is highlighted), 'Field Update', and 'Outbound Message'.

20. Description: Your emergency leave request was approved. Unique name is auto populated.

21. Email Template, click the lookup option and select Emergency Leave Approved.

The screenshot shows the Salesforce Email Templates - Lookup page. It displays a list of recently viewed email templates, with one entry named 'Emergency\_Leave\_Approved' selected. This template has a description of 'Your emergency leave request was approved' and is categorized as 'Custom'. The page also includes a search bar at the top and a note about modifications applying to all instances of the template.

22. Recipient Type : User, Selected Recipient : Leave Owner. Then click save.

## Milestone 9 : Flows

What is a flow ?

In Salesforce, a flow is a tool that automates complex business processes. Simply put, it collects data and then does something with that data. Flow Builder is the declarative interface used to build individual flows.

Flows fall into five categories:

**Screen Flows:** These are flows that have a UI element and require input from users. These types of flows are either launched as an action or embedded as an element on a Lightning page.

**Schedule-Triggered Flows:** These auto-launched flows launch at a specified time and frequency for each record in a batch, and they run in the background.

**Auto-launched Flows:** Run automated tasks with this flow type. Auto-launched flows can be invoked from other flows (subflow), process builder, from within an Apex class, from a set schedule, from record changes, or from platform events.

**Record-Triggered Flows:** These autolaunched flows run in the background either before a record save or after the record is saved when a record is created, updated, or deleted.

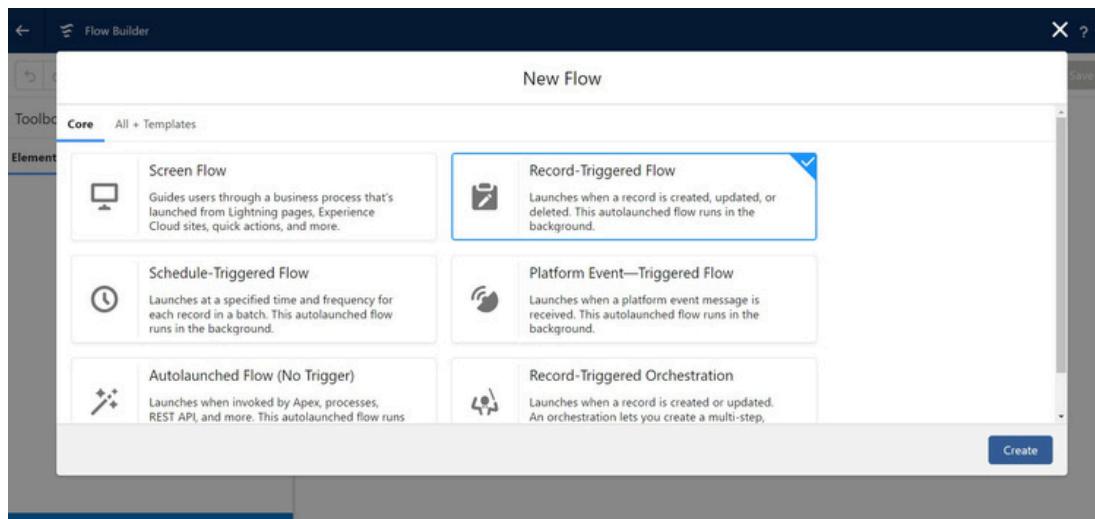
**Platform Event-Triggered Flows:** When a platform event message is received, these autolaunched flows run in the background.

### When and why should we use a flow?

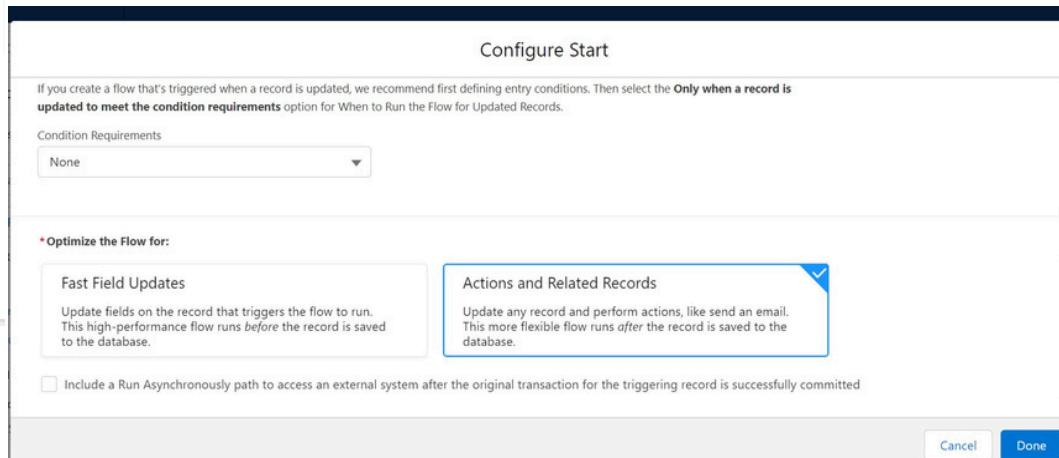
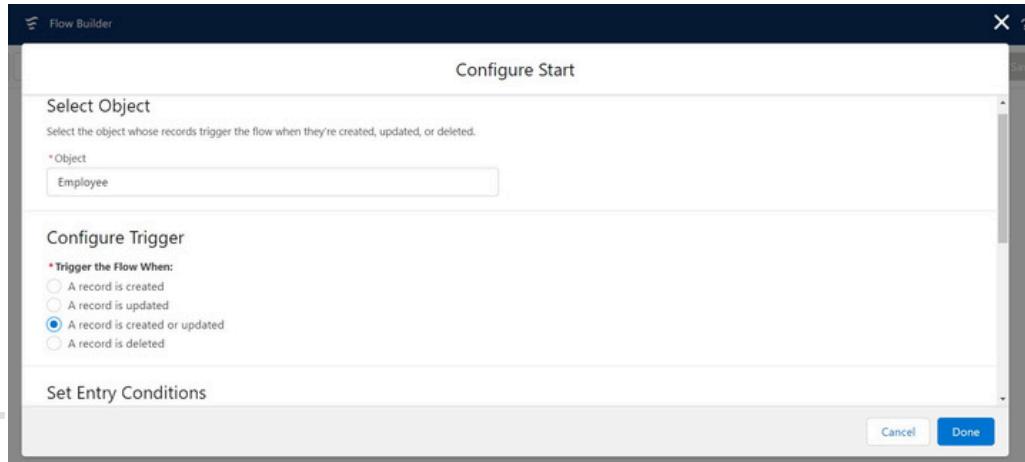
If you need to generate a new automated business process, or user guided experience that does not reach the complexity threshold for Apex Code, then flow is your go-to tool. If you are modifying an existing process that was built with Process Builder or workflow, then you should consider a number of factors when deciding whether to modify the existing process or migrate it to Flow. Flows are able to create, edit, and delete records in Salesforce, send emails, show relevant data and gather input from users, and generate outbound messages.

### Activity 1 : Create Flow for Shift to start

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.Click on create.

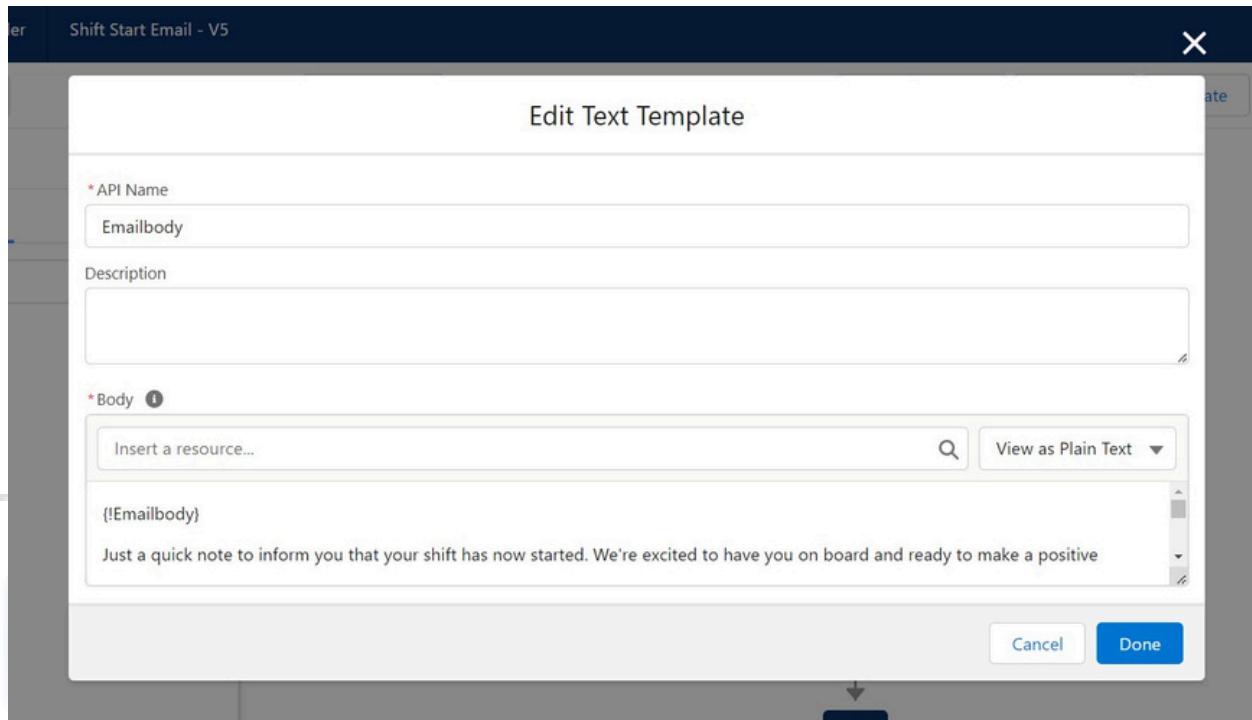


3. Under Object select "Employee". Click on A record is created or updated.Actions and Related Records, Done.

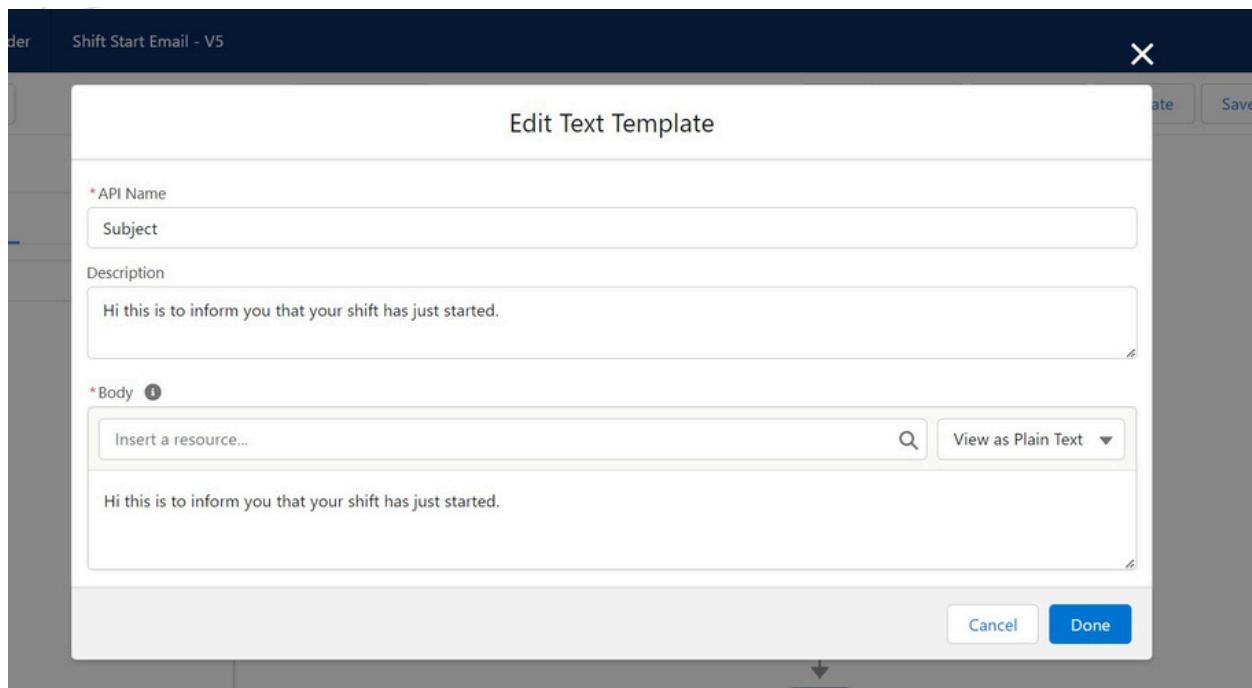


4. Select Free Form Layout for the flow and then Click on the Manager option, You will find "New Resource"
5. Select "TextTemplate"
6. Then API name should be filled as "EmailBody", And enter the given details in it

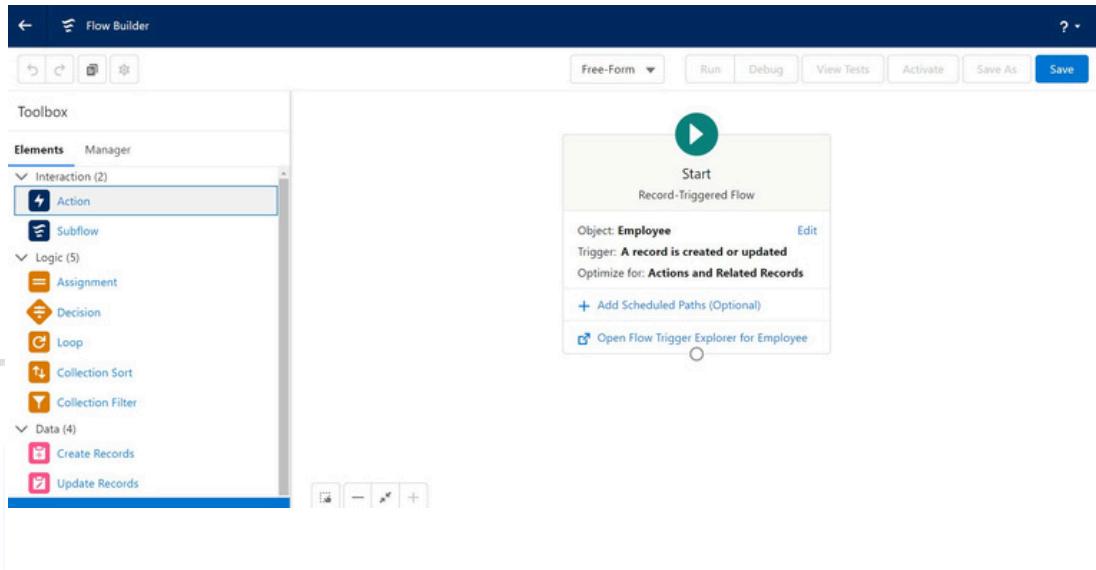
{!Emailbody} Just a quick note to inform you that your shift has now started. We're excited to have you on board and ready to make a positive impact today! Should you need any support or have any questions during your shift, don't hesitate to reach out to your team members or supervisor. Health Issues If Any: {!\$Record.Health\_Issues\_If\_Any\_\_c} Existing Insurance: {!\$Record.Existing\_Health\_Insurance\_\_c} Travel Allowance: {!\$Record.Travel\_Allowance\_\_c}



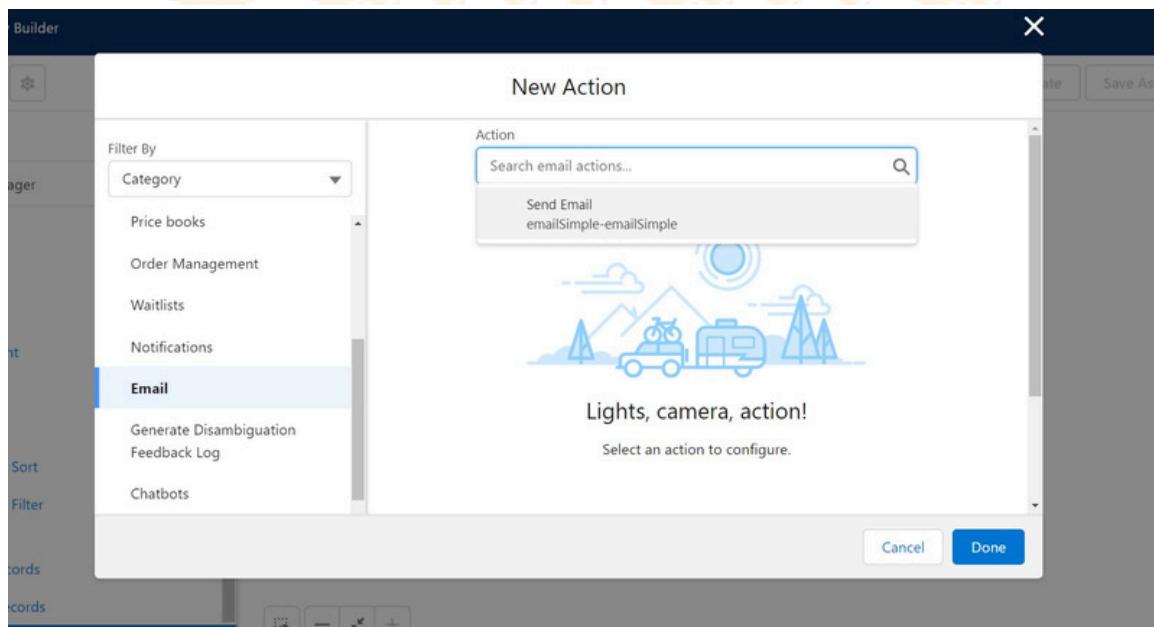
7. Click “New Resource” under manager.
8. Select “Text Template”
9. Then API name should be filled as “Subject”.And enter the given details in it (Hi this is to inform you that your shift has just started.)Make sure it is “view as plain text”.
10. Click Done.



11. Drag the “Action” element from the toolbox onto the screen.



12. Under Category dropdown select Email, Then in the action bar select “Send Email”action.



13. Give API name as “Shift Started”.

14. Change the toggle to “Include the Body” Select {!Emailbody} from the dropdown.

15. Change the toggle to “Include the Subject” Select{!Subject} from the dropdown.
16. Change the toggle for recipient address list to include. From the dropdown select “{!\$Record.Email\_Id\_c}”
17. And then click save, and click on activate.

### Edit Action

Set Input Values for the Selected Action

A <sub>a</sub> Body ⓘ	{!Emailbody}	<input checked="" type="checkbox"/> Include
A <sub>a</sub> Email Template ID		<input type="checkbox"/>

Cancel Done

### Edit Action

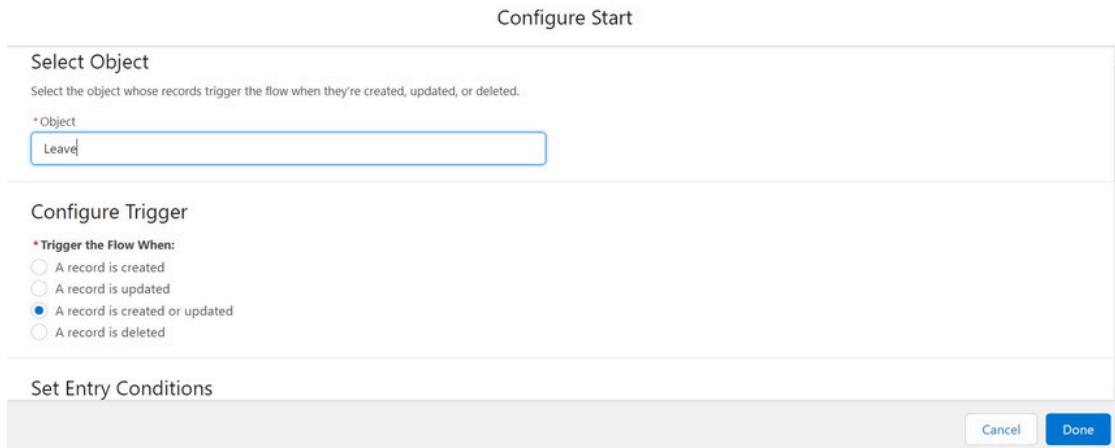
A <sub>a</sub> Body ⓘ	{!Emailbody}	<input checked="" type="checkbox"/> Include
A <sub>a</sub> Email Template ID		<input type="checkbox"/> Don't Include
⌚ Log Email on Send		<input type="checkbox"/> Don't Include
A <sub>a</sub> Recipient Address Collection		<input type="checkbox"/> Don't Include
A <sub>a</sub> Recipient Address List ⓘ	{!\$Record.Email_Id_c}	<input checked="" type="checkbox"/> Include

Cancel Done

The screenshot shows the Salesforce Flow Builder interface. At the top, it says "Shift Start Email - V5" and "Version 5: Inactive—Last modified a day ago". Below the toolbar, there's a "Toolbox" sidebar with sections for "Elements" (selected) and "Manager". Under "ELEMENTS", there are "Text Templates" (Emailbody, Subject) and "Actions" (Shift\_Start). The main workspace shows a flow diagram starting with a "Start" step (Record-Triggered Flow) for the "Employee" object, triggered by "A record is created or updated". This leads to an "Action" step labeled "Shift Started". A modal window titled "Edit Action" is open, listing several fields with their respective toggle switches: "Related Record ID" (Don't Include), "Rich-Text-Formatted Body" (Don't Include), "Sender Email Address" (Don't Include), "Sender Type" (Don't Include), and "Subject" (Include, with the value "{!Subject}"). At the bottom of the modal are "Cancel" and "Done" buttons.

## Activity 2 : Create Flow for Email Alert

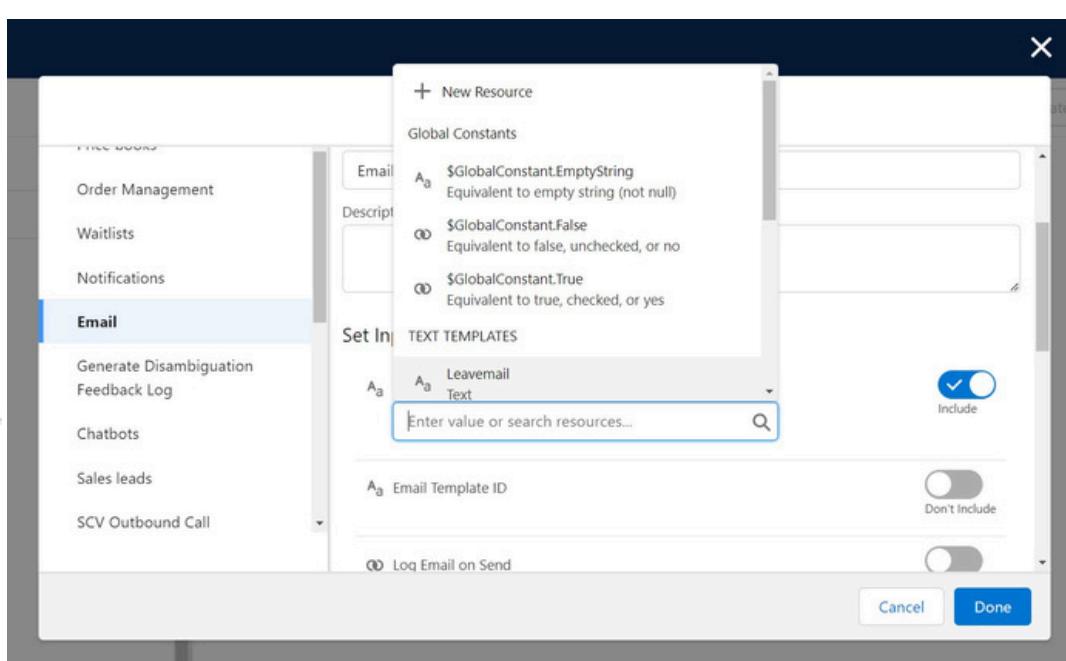
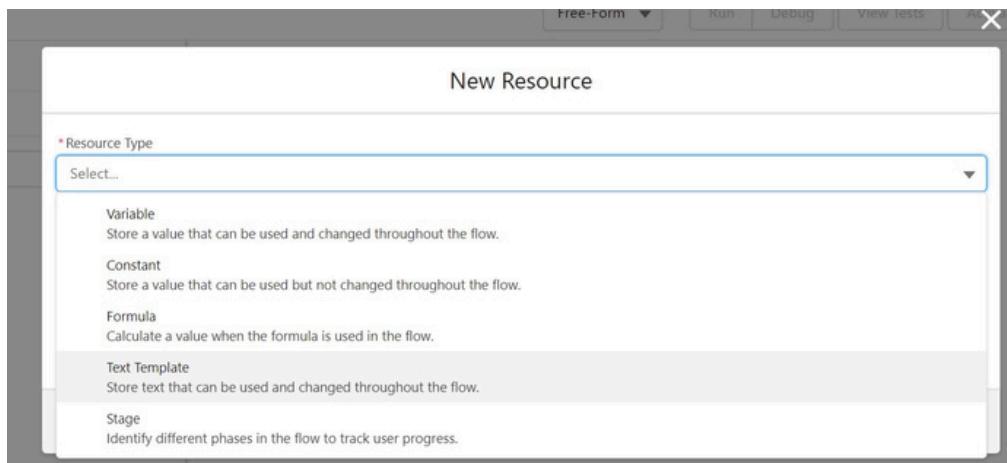
1. Go to setup → type Flow in quick find box → Click on the Flow and Select the New Flow.
2. Select the record Triggered flow.Click on create.
3. Under Object select "Leave". Click on A record is created or updated.Actions and Related Records, Done.



4. Select Free Form Layout for the flow and then Click on the Manager option, You will find “New Resource”
5. Select “TextTemplate”
6. Label it as “LeaveMail”. And mention the given details  
Dear {!\$Record.Employee\_\_r.Name} This is to inform you that your application to leave has been granted. For further queries you may contact your manager.  
Click Done.
7. Drag the “Action”element from the tool box on to the screen.
8. Under Category dropdown select Email, Then in the action bar select “Send Email”action.
9. Give API name as “EmailAlert”.
10. Change the toggle to “Include the Body” and select “leave mail” from dropdown.

The screenshot shows the Flow Builder interface with the following details:

- Flow Name:** LeaveMail
- Start Step:** Start (Record-Triggered Flow)
- Object:** Leave
- Trigger:** A record is created or updated
- Toolbox:** Manager tab is selected. Other tabs include Elements, New Resource, and a search bar.
- Action Bar:** Buttons for Free-Form, Run, Debug, and View Tests.



Edit Text Template

\* API Name  
leavemail

Description

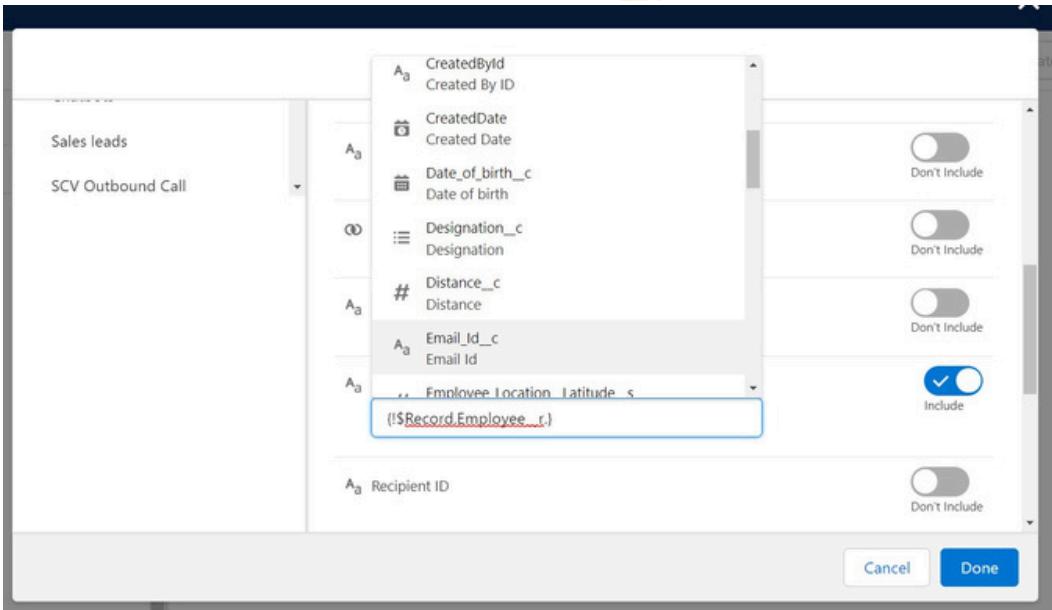
\* Body ?

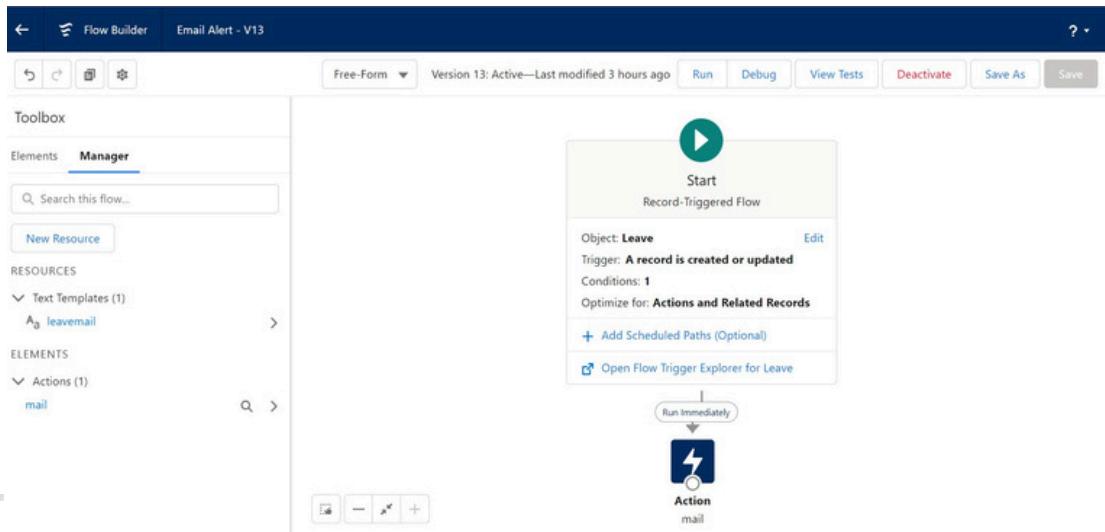
Insert a resource...  View as Plain Text ▼

Dear {!\$Record.Employee\_\_r.Name}  
This is to inform you that, your application to leave is been granted. For further quires you may contact your manager.

Cancel Done

11. Change the toggle to “Include Recipient Address List”. From the dropdown select “{!\$Record.Employee\_\_r.Email\_Id\_\_c}”
12. Change the toggle to “Subject”. In the enter text type “Leave info” and then click done.
13. Make sure it is view as plain text.
14. And then click save, and click on activate.





## Milestone 10 : User Adoption

### Activity 1 : Create Records for the Employee object

1. GotoAppLauncher → click on Employee Mapp.
2. Click on the employee Tab .Click on New.

Employee Mapp

Employees Organizations Health Insurances Accounts Reports Dashboards Customers Leaves

Recently Viewed ▾

New Import

Employee Name

3. Fill in the employee details.

**New Employee**

\* = Required Information

**Information**

\* Employee Name  
[ ]

Phone number  
[ ]

Email Id  
[ ]

Date of birth  
[ ]

Gender  
--None--

Cancel Save & New Save

4. Give the employee name, email, date of birth, gender, salary all the fields are to be filled including shift timings.
5. Make sure you fill the location in terms of latitude and longitude as shown below.
6. Then click save and new.(Similarly create more records in the employee object)

Health Issues If Any

Existing Health Insurance  
 Health Insurance  
I-005

Employee Location

Latitude  
17.460029984050855

Longitude  
78.5070676011174

\* Organization  
HSBC

Travel Allowance

Shift Timings  
10:00am - 5:00pm

Cancel Save & New Save

## Activity 2 : Create Records for the Organization object.

The screenshot shows a Salesforce interface for creating a new organization record. The form fields are as follows:

- \*Organization Name: IBM
- Email Id: HR@IBM.com
- Phone number: 9996578721
- Website: <https://www.ibm.com/in>
- Organization Location:
  - Latitude: 17.42385553150533
  - Longitude: 78.37782676307994

At the bottom, there are buttons for "Cancel", "Save & New", and "Save". The "Save" button is highlighted in blue. A status message at the bottom indicates the record was created by Sanjana Tunk on 18/07/2023 at 4:57 pm.

1. Click on the organization Tab. Click on New.
2. Give the Organization name, email, phone all the fields are to be filled including organization location.
3. Make sure you fill the location in terms of latitude and longitude as shown below. Then click save and new.(Similarly create more records in the organization object)

## Activity 3 : Create Records for the Health Insurance object

1. Click on the health insurance Tab. Click on New.

New Health Insurance

Information

Insurance Company Id	Owner
	Sanjana Tunk
Company Name	
<input type="text"/>	

Cancel  Save & New  Save

2. Give the Insurance Company Name. Click save and New . Similarly create few more records.

### Activity 3 : Create Records for the Leave object.

1. Click on the Leave Tab .Click on New.
2. Fill The leave details.
3. Click save and New. Similarly create a few more records.

The screenshot shows a Salesforce interface for creating a leave request. The form fields are as follows:

- Employee: Karishma
- \*Leave: Required
- Leave Type: Medical Leave
- start date: 05/09/2023
- End date: 06/09/2023
- Status: On leave

At the bottom of the form are three buttons: Cancel, Save & New, and Save.

## Milestone 11 : 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. JoinedReports

Note: (Make sure to create records in Employee, Organization, Health Insurances, Leaves)

Let's create a Report.

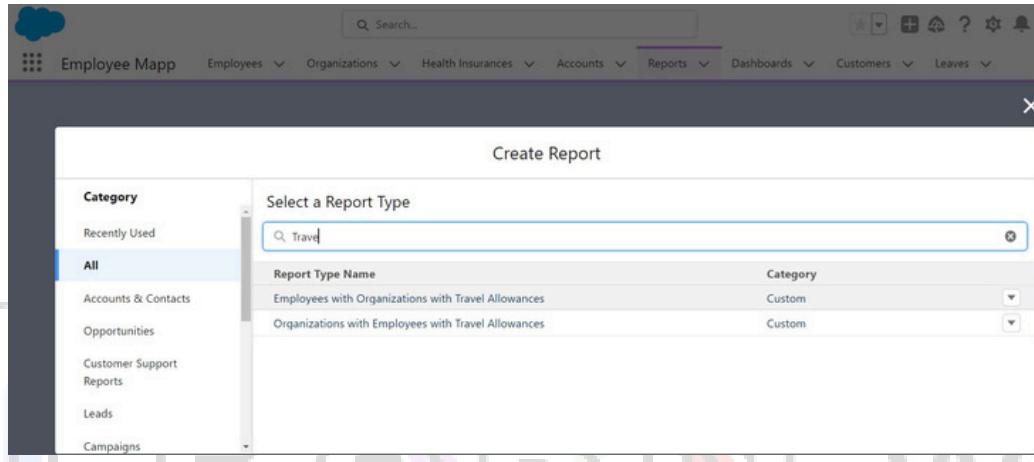
### Activity 1:

#### Create Report

1. Go to the app → click on the reports tab
2. Click New Report.
3. Select report type from category or from report type panel or from search panel → click on start report.
4. Select report → Employees with Organizations with Travel Allowances , Then click on start report.
5. Once you click on start report you will see that the records you have created would be

displayed.

6. Group the columns according to your preference from the dropdown as shown.
7. Save your report as Travel Allowance Report. And run it.



The screenshot shows the report preview interface. At the top, it says 'REPORT' and 'New Report / Employees with Organizations with Travel Allowances'. Below that are buttons for 'Add Chart', 'Save & Run', 'Save', 'Close', and 'Run'. On the left, there's an 'Outline' section with 'Groups' (containing 'GROUP ROWS' and 'Add group...') and 'Columns' (containing 'Employee Name' and 'Add column...'). In the main area, a table titled 'Employee Name' shows a list of names: Nisha, Rekha, Reshma, Kareena, Sanjana, Sanavi, and Rani. A note says 'Previewing a limited number of records. Run the report to see everything.' and there's a toggle for 'Update Preview Automatically'. The background features a faint watermark of a lightbulb and the word 'with'.

The screenshot shows the Employee Mapp application interface. At the top, there's a navigation bar with links for Employees, Organizations, Health Insurances, Accounts, Reports, Dashboards, Customers, Leaves, and a search bar. Below the navigation is a toolbar with icons for Add Chart, Save & Run, Save, Close, and Run.

The main area is titled "REPORT" and "Travel Allowances Report". It displays a preview of a report titled "Employees with Organizations with Travel Allowances". The preview table has columns: Employee Name, Travel Allowance, Distance, and Shift Timings. The data rows are:

	Employee Name	Travel Allowance	Distance	Shift Timings
1	Nisha	<input type="checkbox"/>	14.22	-
2	Rekha	<input type="checkbox"/>	14.96	-
3	Reshma	<input type="checkbox"/>	14.42	10:00am - 5:00pm
4	Kareena	<input checked="" type="checkbox"/>	2,239.95	10:00am - 5:00pm
5	Sanjana	<input type="checkbox"/>	14.02	10:00am - 5:00pm
6	Sanavi	<input type="checkbox"/>	14.29	10:00am - 5:00pm
7	Rani	<input type="checkbox"/>	14.76	10:00am - 5:00pm
8		1	2,326.62	

On the left, there's a sidebar titled "Fields" with sections for Groups (Group Rows, Add group...), Columns (Add column..., Employee Name, # Travel Allowance, # Distance, Shift Timings), and a note about previewing a limited number of records. There's also a toggle for "Update Preview Automatically".

This screenshot shows the generated report titled "Report: Employees with Organizations with Travel Allowances" and "Travel Allowances Report".

The report summary at the top shows:

- Total Records: 7
- Total Travel Allowance: 1
- Total Distance: 2,326.62

The report table has columns: Employee Name, Travel Allowance, Distance, and Shift Timings. The data rows are identical to the preview:

	Employee Name	Travel Allowance	Distance	Shift Timings
1	Sanjana	<input type="checkbox"/>	14.02	10:00am - 5:00pm
2	Rekha	<input type="checkbox"/>	14.96	-
3	Sanavi	<input type="checkbox"/>	14.29	10:00am - 5:00pm
4	Rani	<input type="checkbox"/>	14.76	10:00am - 5:00pm
5	Nisha	<input type="checkbox"/>	14.22	-
6	Reshma	<input type="checkbox"/>	14.42	10:00am - 5:00pm
7	Kareena	<input checked="" type="checkbox"/>	2,239.95	10:00am - 5:00pm
8		1	2,326.62	

At the top of the report view, there are buttons for Enable Field Editing, Search, Add Chart, and Edit.

8. Similarly create a report for Organizations with Employees and Health Insurances and save it as "Employee and health insurances".

The screenshot shows the Employee Mapp application interface. At the top, there's a navigation bar with links for Employees, Organizations, Health Insurances, Accounts, Reports, Dashboards, Customers, Leaves, and a search bar. Below the navigation is a toolbar with icons for saving, running, and closing the report.

The main area is titled 'REPORT' and 'Employees and Health Insurances'. It displays a table with the following columns: Organization: Organization Name, Employee: Employee Name, Health Insurance: Insurance Company Id, and Age. The data in the table is as follows:

	Organization: Organization Name	Employee: Employee Name	Health Insurance: Insurance Company Id	Age
1	HSBC	Rani	I-003	23
2	IBM	Sanjana	I-005	22
3	Accenture	Kareena	I-006	25
4	Accenture	Reshma	I-008	21
5				91

The left sidebar contains sections for 'Outline' (selected), 'Groups' (with 'GROUP ROWS' and 'Add group...'), and 'Columns' (with 'Add column...', 'Organization: Organization Name', 'Employee: Employee Name', 'Health Insurance: Insurance Company Id', and '# Age'). A note at the top says 'Previewing a limited number of records. Run the report to see everything.' and there's a toggle for 'Update Preview Automatically'.

9. Similarly create a report for Leave with employee and save it as "Employee leave details".

The screenshot shows the Employee Mapp application interface, similar to the previous one but with a different report title.

The main area is titled 'REPORT' and 'Employee leave details'. It displays a table with the following columns: Duration, Employee: Employee Name, Employee: Phone number, and Leave Type. The data in the table is as follows:

	Duration	Employee: Employee Name	Employee: Phone number	Leave Type
-5.00 (2)	Kareena Sanjana	9949686541 7702816383	Casual Leave Emergency Leave	
Subtotal				
-1.00 (3)	Kareena Sanavi Rani	9949686541 7702816383 1234567890	Medical Leave Emergency Leave Emergency Leave	
Subtotal				
0.00 (1)	Reshma	9989767521	Half-day Leave	
Subtotal				
Total (6)				

The left sidebar contains sections for 'Fields' (selected), 'Groups' (with 'GROUP ROWS' and 'Add group...'), and 'Columns' (with 'Add column...', 'Employee: Employee Name' and 'Employee: Phone number'). A note at the top says 'Previewing a limited number of records. Run the report to see everything.' and there's a toggle for 'Update Preview Automatically'.

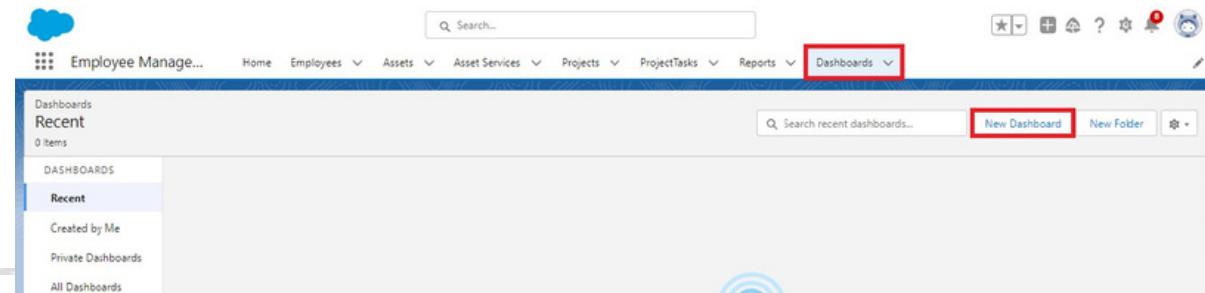
## Milestone 12 : Dashboards

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

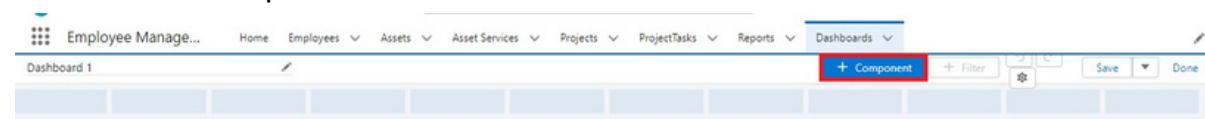
1. Go to the app → click on the Dashboards tabs.



2. Give a Name and click on Create.

A screenshot of a 'New Dashboard' dialog box. It has a title 'New Dashboard'. The form fields are: 'Name' (Employee Details), 'Description' (Employee data in dashboard), and 'Folder' (Private Dashboards). There is a 'Select Folder' button next to the folder input field. At the bottom are 'Cancel' and 'Create' buttons. The entire dialog box is highlighted with a red box.

3. Select add component.



4. Select a Report and click on select.
5. Add the component on the dashboard.
6. Click save then done.

Employee Map

Employee Details

Search... Component Filter Save Done

Select Report

**Reports**

**Recent**

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

**Folders**

Select Report Search Reports and Folders... Reports and Folders ▾

- Employee with leaves  
Sanjana Tunk - 01-Aug-2023, 3:52 pm - Private Reports
- Employees and Health Insurances  
Sanjana Tunk - 01-Aug-2023, 3:45 pm - Private Reports
- Travel Allowances Report  
Sanjana Tunk - 01-Aug-2023, 3:23 pm - Private Reports

Cancel Select

This screenshot shows the 'Select Report' dialog box. It has a sidebar on the left with sections for 'Reports' (Recent, Created by Me, Private Reports, Public Reports, All Reports) and 'Folders'. The main area is titled 'Select Report' with a search bar and a dropdown for 'Reports and Folders'. Below the search bar is a list of recent reports, each with a timestamp and a link to 'View Report'. At the bottom right are 'Cancel' and 'Select' buttons.

Add Component

Report: Employee with leaves X

Use chart settings from report ?

Display As:

- Table
- Bar Chart
- Line Chart
- Map
- Card
- Gauge
- Donut Chart
- 123
- Treemap
- Waterfall
- Grid

Preview

Employee with leaves

Record Count

Duration

Duration	Record Count
-5.00	2
-1.00	3
0.00	1

[View Report \(Employee with leaves\)](#)

Cancel Add

This screenshot shows the 'Add Component' dialog for the 'Employee with leaves' report. It includes fields for 'Report' (Employee with leaves), a checkbox for 'Use chart settings from report', and a 'Display As' section with various chart icons. The 'Preview' section shows a bar chart with three bars representing different duration ranges. At the bottom are 'Cancel' and 'Add' buttons.

Add Component

Report: Employees and Health Insurances X

Use chart settings from report ?

Display As:

- Table
- Bar Chart
- Line Chart
- Map
- Card
- Gauge
- Donut Chart
- 123
- Treemap
- Waterfall
- Grid

Preview

Employees and Health Insurances

Sum of Age

Organization: Organization Name

Organization	Sum of Age
Accenture	46
HSBC	23
IBM	22

[View Report \(Employees and Health Insurances\)](#)

Cancel Add

This screenshot shows the 'Add Component' dialog for the 'Employees and Health Insurances' report. It includes fields for 'Report' (Employees and Health Insurances), a checkbox for 'Use chart settings from report', and a 'Display As' section with various chart icons. The 'Preview' section shows a line chart with three data points for Accenture, HSBC, and IBM. At the bottom are 'Cancel' and 'Add' buttons.

### Edit Component

Report  
Travel Allowances Report (X)

Use chart settings from report (i)

Display As

Y-Axis

Preview

#### Travel Allowances Report

Sum of Travel Allowance

Organization Name	Sum of Travel Allowance
Accenture	~0.95
HSBC	~0.15
IBM	~0.05

View Report (Travel Allowances Report)

Cancel Update

# LEARNING WITH

Employee Mapp

Employees ▼ Organizations ▼ Health Insurances ▼ Accounts ▼ Reports ▼ Dashboards ▼ \* Sanjana Tunk ▼ X More ▼

Employee Details

+ Component + Filter ↶ ↷ ⚙️ Save Done

#### Employee with leaves

Duration	Record Count
-5.00	2
-1.00	3
0.00	1

View Report (Employee with leaves)

#### Employees and Health Insurances

Organization Name	Sum of Age
Accenture	46
HSBC	23
IBM	22

View Report (Employees and Health Insurances)

#### Travel Allowances Report

Sum of Travel Allowance

Organization Name	Sum of Travel Allowance
Accenture	~0.95
HSBC	~0.15
IBM	~0.05

View Report (Travel Allowances Report)

## Milestone 13: APEX

**Apex Overview** Apex is a strongly typed, object-oriented programming language that allows developers to execute flow and transaction control statements on the Lightning platform server in conjunction with calls to the Lightning Platform API. Using syntax that looks like Java and acts like database stored procedures, Apex enables developers to add business logic to most system events, including button clicks, related record updates, and Visualforce pages. Apex code can be initiated by Web service requests and from triggers on objects. It is as similar as Java i.e., it also supports OOP (Object oriented programming) like Classes, objects, methods.

**Creating Classes :** Apex classes are modeled on their counterparts in Java. You'll define, instantiate, and extend classes, and you'll work with interfaces, Apex class versions, properties, and other related class concepts.

### ● Class:

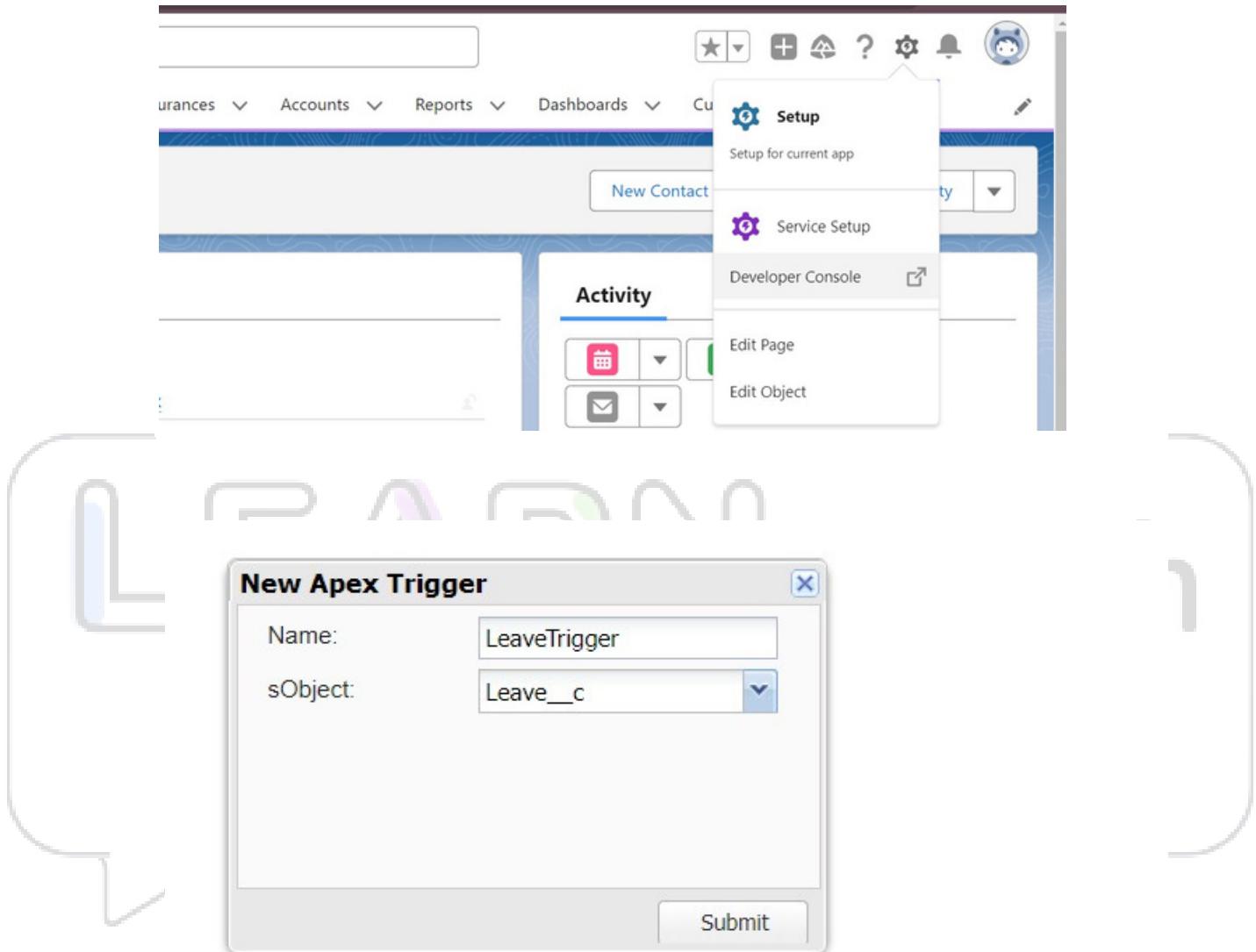
As in Java, you can create classes in Apex. A class is a template or blueprint from which objects are created. An object is an instance of a class.

### ● Object:

Object is an instance of a class, where it can access all the properties that are present in a class i.e., variables and methods.

### Steps to create a trigger in APEX:

1. Login to the trailhead account and navigate to the gear account in the top right corner.
2. Then we can see the Developer console. Click on the developer console and you will navigate to a new console window.
3. Then you can see many tools in the Toolbar of the new console window. Click on File, New and Apex Trigger.
4. Enter the name "LeaveTrigger" select the sObject from the list "leave\_\_c".



5. Enter the given code in the console, check for errors and save.

```
trigger LeaveTrigger on Leave__c (before insert) {  
    if(trigger.isBefore){  
        if(trigger.isInsert){  
            LeaveTriggerHandler.ifMaleEmployee(trigger.new);  
        }  
    }  
}
```

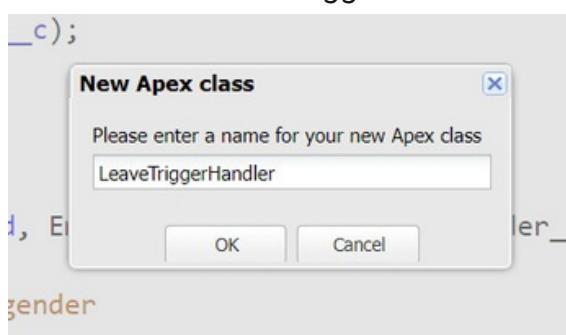
The screenshot shows the Salesforce Developer Console interface. At the top, there's a toolbar with options like File, Edit, Debug, Test, Workspace, Help, and a code editor tab for 'LeaveTriggerHandler.apxc'. Below the toolbar, the code editor displays the following Apex trigger:

```
1 trigger LeaveTrigger on Leave__c (before insert) {
2
3     if(trigger.isBefore){
4         if(trigger.isInsert){
5             LeaveTriggerHandler.ifMaleEmployee(trigger.new);
6         }
7     }
8 }
```

The line number 5 is highlighted with a red dot, indicating it's the current line of interest. At the bottom of the code editor, there's a navigation bar with tabs: Logs, Tests, Checkpoints, Query Editor, View State, Progress, and Problems. The 'Problems' tab is currently selected. The main body of the console is empty, showing a light gray background.

### Steps to create a Class in APEX:

1. Then you can see many tools in the Toolbar of the new console window. Click on File, New and Apex Class.
2. Enter the name "LeaveTriggerHandler" click ok.



3. Enter the given code in the console.

```
public class LeaveTriggerHandler {

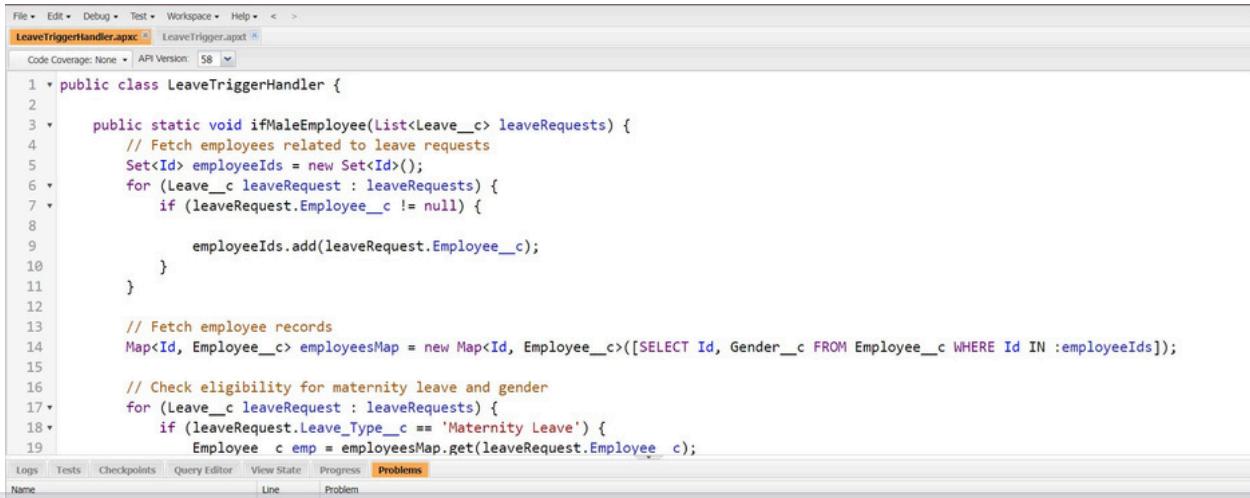
    public static void ifMaleEmployee(List<Leave__c> leaveRequests) {
        // Fetch employees related to leave requests
        Set<Id> employeeIds = new Set<Id>();
        for (Leave__c leaveRequest : leaveRequests) {
            if (leaveRequest.Employee__c != null) {

                employeeIds.add(leaveRequest.Employee__c);
            }
        }

        // Fetch employee records
        Map<Id, Employee__c> employeesMap = new Map<Id, Employee__c>([SELECT Id,
Gender__c FROM Employee__c WHERE Id IN :employeeIds]);

        // Check eligibility for maternity leave and gender
        for (Leave__c leaveRequest : leaveRequests) {
            if (leaveRequest.Leave_Type__c == 'Maternity Leave') {
                Employee__c emp = employeesMap.get(leaveRequest.Employee__c);
                if (emp != null && emp.Gender__c != null && emp.Gender__c == 'Male') {
                    leaveRequestaddError('Male employees are not eligible for Maternity
Leave');
                }
            }
        }
    }
}
```

4. Checkforerrorsandsaveit.



```
1 * public class LeaveTriggerHandler {  
2  
3     public static void ifMaleEmployee(List<Leave__c> leaveRequests) {  
4         // Fetch employees related to leave requests  
5         Set<Id> employeeIds = new Set<Id>();  
6         for (Leave__c leaveRequest : leaveRequests) {  
7             if (leaveRequest.Employee__c != null) {  
8  
9                 employeeIds.add(leaveRequest.Employee__c);  
10            }  
11        }  
12  
13        // Fetch employee records  
14        Map<Id, Employee__c> employeesMap = new Map<Id, Employee__c>([SELECT Id, Gender__c FROM Employee__c WHERE Id IN :employeeIds]);  
15  
16        // Check eligibility for maternity leave and gender  
17        for (Leave__c leaveRequest : leaveRequests) {  
18            if (leaveRequest.Leave_Type__c == 'Maternity Leave') {  
19                Employee__c emp = employeesMap.get(leaveRequest.Employee__c);  
20            }  
21        }  
22    }  
23}
```

LEARN with  
Sanjana