

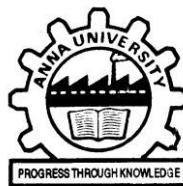
# **PROJECT REPORT**

**Naan Mudhalvan – Salesforce Developer**

**Project Title: Workforce Administration Solution**

## **Team Members:**

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**ANNA UNIVERSITY  
REGIONAL CAMPUS COIMBATORE**

# Workforce Administration Solution

## **Project Description:**

Workforce Administration Solution is a software application or platform designed to streamline and automate various aspects of employee's working on projects and Asset Assignment processes within an organization. It serves as a centralized system for managing employee data, number of projects an employee is working on, tracking employee performance, and keeping record for the assets which they are assigned to.

## **Short Description:**

Workforce Administration Solution automates employee project work and asset assignments, centralizing data management, project tracking, and performance monitoring within organizations.

## **Introduction:**

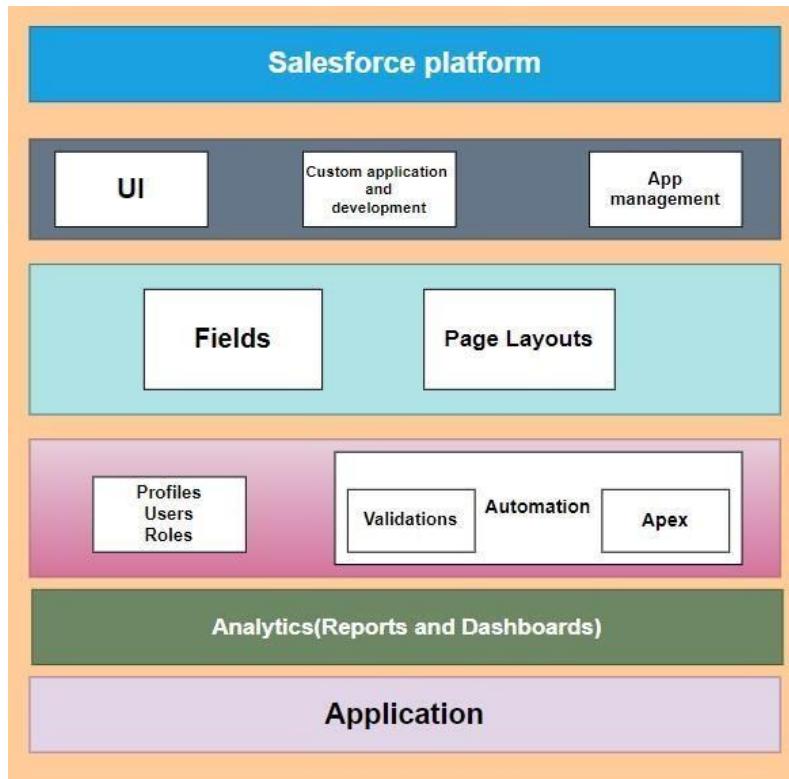
**Workforce Administration Solution** is created in companies to streamline and automate various aspects of employee management, project tracking, and asset assignments. Key purposes include:

1. **Centralized Data Management:** Consolidates all employee, project, and asset data into a single platform, making it easier to manage and access essential information.
2. **Project Tracking:** Monitors employee involvement in projects, tracks project progress, and organizes task assignments, enabling efficient management and productivity insights.
3. **Asset Management:** Keeps records of assets assigned to employees, ensuring accountability and facilitating better asset utilization and tracking.
4. **Enhanced Security and Compliance:** Ensures sensitive data security with access restrictions, secure storage, and compliance with data protection policies, especially using Salesforce's cloud capabilities.
5. **Performance Monitoring:** Allows companies to assess employee performance, providing insights for workforce planning and optimizing resource allocation.

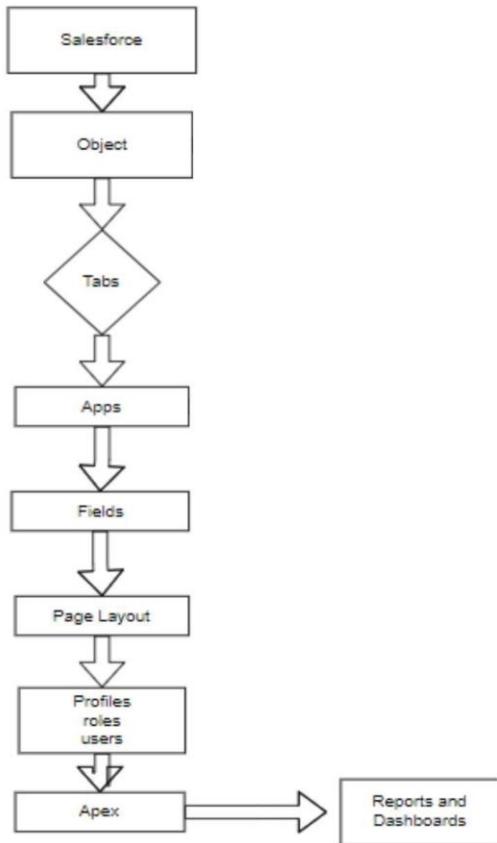
**6. Automated Administrative Processes:** Reduces manual tasks for HR and admin departments, such as employee onboarding, project assignments, and leave approvals, boosting efficiency and reducing errors.

By implementing a Workforce Administration Solution, companies can improve operational efficiency, strengthen data security, and support strategic decision-making based on reliable and organized information.

### Technical Architecture:



## **Project Flow:**



## **System Requirements:**

Windows 11

Install with two web browser

Bandwidth of 30mbps

## **What we learnt**

1. Real Time Salesforce Project
2. Data Modelling
3. Creating an Application
4. User Interface Customization
5. Importing bulk amounts of data
6. Security in Salesforce
7. Group Collaboration
8. Reports & Dashboards

### **Use Case:**

In an effort to enhance data security and performance while simplifying system administration, TheSmartBridge company is transitioning to Salesforce, a new cloud technology. By leveraging this advanced platform, the company can ensure the safe storage of sensitive data through robust encryption and proactive backup mechanisms. The cloud's automated data replication capabilities provide added protection and efficient disaster recovery solutions. With access to scalable resources, TheSmartBridge can optimize performance, ensuring fast and reliable access to data. This shift to the new cloud technology streamlines administrative tasks, reducing complexity and allowing system administrators to focus on higher-value activities, ultimately increasing productivity and enhancing overall operational efficiency.



Workforce Administration Solution  
(Dev)

## **Milestone 1-Salesforce**

### **Introduction:**

Salesforce is a leading cloud-based platform that provides customer relationship management (CRM) solutions, helping businesses streamline and automate interactions with customers, sales, and support. Founded in 1999, Salesforce enables companies to store customer data, manage sales, and create personalized marketing campaigns. It includes various tools for sales automation, customer service, marketing, and analytics, all accessible through a single, customizable interface.

One of Salesforce's standout features is its flexibility; it offers options to build custom applications, integrate with external systems, and extend functionality with third-party apps from its AppExchange marketplace. With robust security, scalability, and AI-driven insights (such as through Salesforce Einstein), the platform empowers organizations of all sizes to improve productivity, make data-driven decisions, and enhance customer satisfaction.

### **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/r9EX3lGde5k>

### **Use Case:**

Creating a Salesforce Developer Edition org allows developers to experiment, innovate, and build customized solutions within a controlled environment. With access to Salesforce's powerful development tools and features, developers can prototype, test, and refine their applications, empowering them to deliver robust and tailored solutions to meet unique business requirements. As a Salesforce Administrator for TheSmartBridge you must have a Salesforce developer edition org in order to do all the required works which the CEO desires for TheSmartBridge.

Before creating our developer account, we must know what are the types of Editions Salesforce offers.

### **Types of Salesforce Editions:**

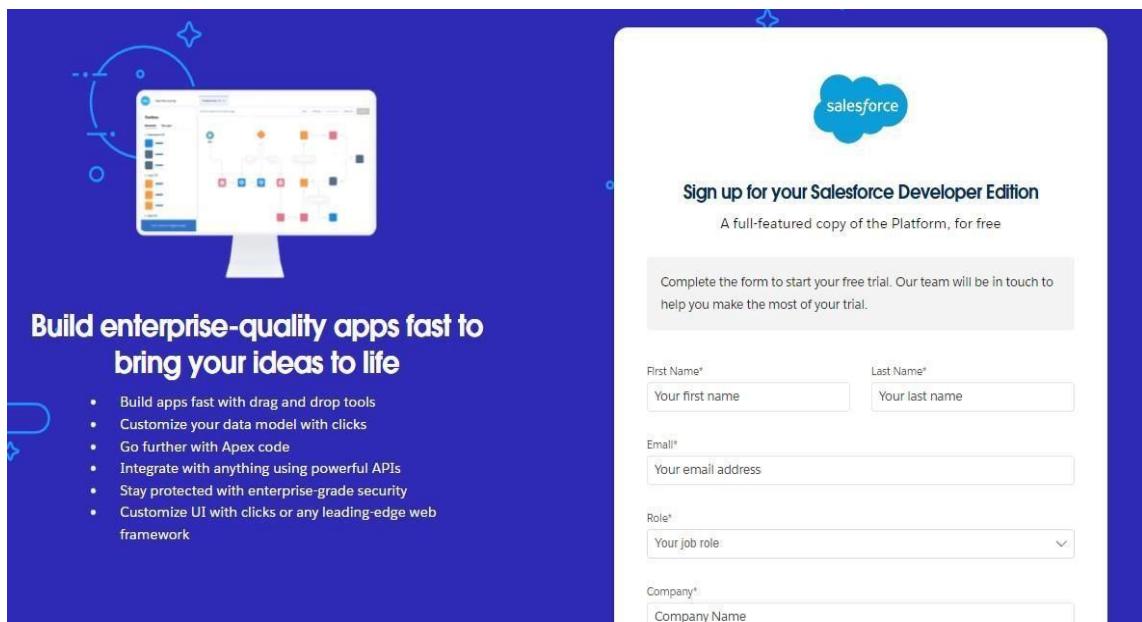
1	Essentials	Designed for small businesses getting started with CRM to boost sales or service productivity. It includes a setup assistant and administration tools to customize your deployment as you grow.
2	Professional	Designed for businesses requiring full-featured CRM functionality. It includes straightforward and easy-to-use customization, integration, and administration tools to facilitate any small to midsize deployment.
3	Enterprise	Meets the needs of large and complex businesses. It gives you advanced customization and administration tools, in addition to all the functionality available in Professional Edition, that can support large-scale deployments. Enterprise Edition also includes access to Salesforce APIs, so you can easily integrate with back-office systems.
4	Unlimited	Maximizes your success and extends it across the entire enterprise through the Lightning Platform. It gives you new levels of platform flexibility for managing and sharing all your information on demand. Includes all Enterprise Edition functionality, Premier Support, full mobile access, unlimited custom apps, increased storage limits, and other features.
5	Developer	Provides access to the Lightning Platform and APIs. It lets developers extend Salesforce, integrate with other applications, and develop new tools and applications. Developer Edition also provides access to many of the features available in Enterprise Edition

Let's begin with creating our Salesforce Developer Account.

### Activity 1: Creating Developer Account

Creating a developer org in salesforce.

1. Go to <https://developer.salesforce.com/signup>
2. On the sign up form, enter the following details :



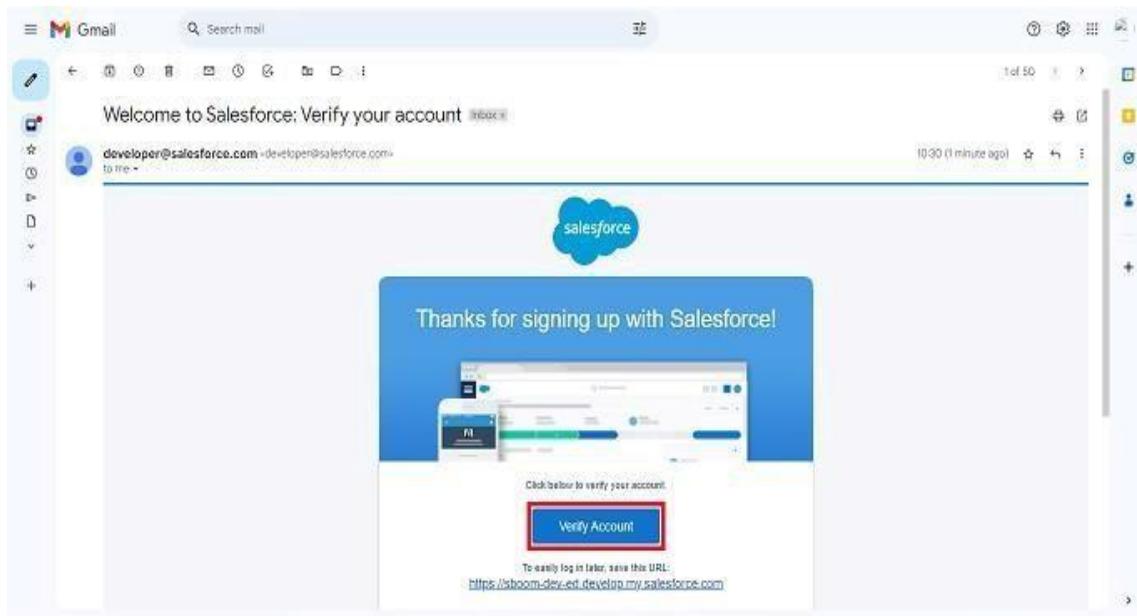
- 1) First name & Last name: DIJRISKTA Team
- 2) Email : \*\*\*\*@gmail.com
- 3) Role : Developer
- 4) Company : Anna University Regional Campus Coimbatore
- 5) County : India
- 6) Postal Code : 641 046
- 7) Username : should be a combination of your name and company

This need not be an actual email id, you can give anything in the format :  
[username@organization.com](mailto:username@organization.com)

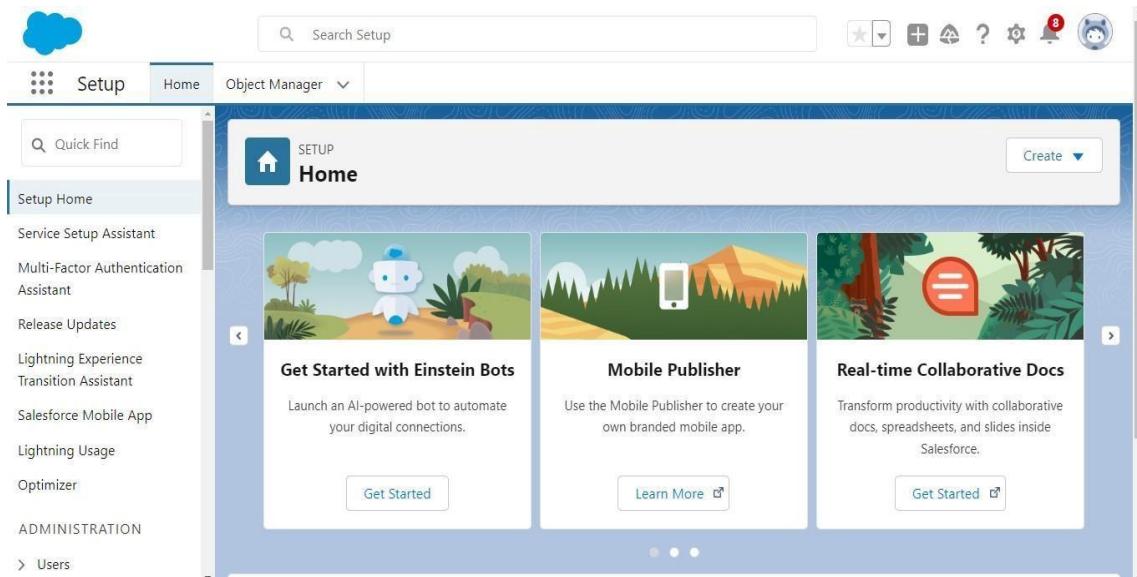
Click on sign me up after filling these.

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



## **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:**

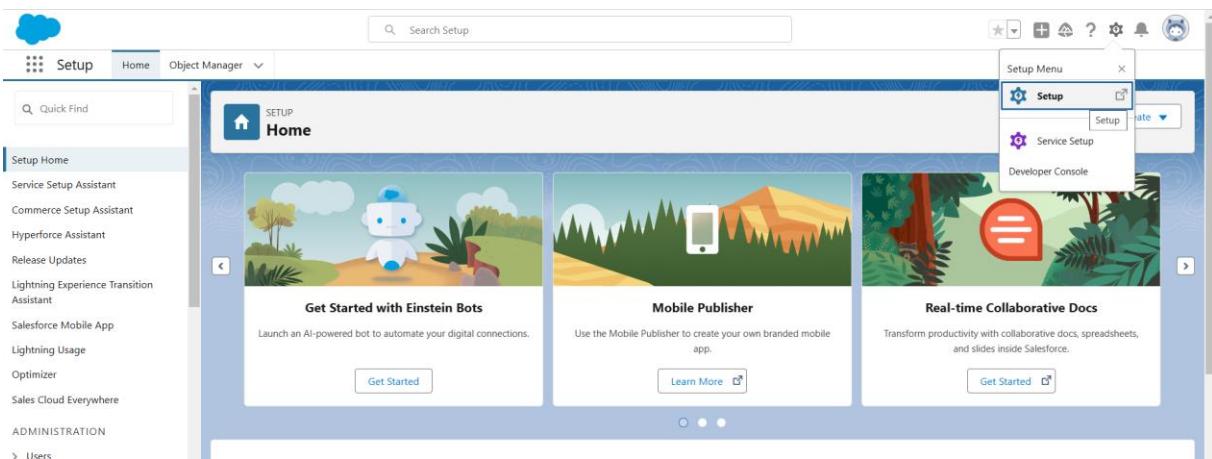
1. **Standard Objects:** Standard objects are the kind of objects that are provided by salesforce.com such as users, contracts, reports, dashboards, etc.
2. **Custom Objects:** Custom objects are those objects that are created by users. They supply information that is unique and essential to their organization.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

### **Use Case:**

Creating an object in Salesforce organization is essential for efficient data management and process automation. By defining custom objects, businesses can structure and store data specific to their needs, enabling streamlined workflows, personalized reporting, and enhanced user experiences. Objects serve as the foundation for organizing and leveraging critical information within Salesforce. As an Admin for TheSmartBridge, It's your responsibility to store the data as per the organization needs.

### **To Navigate to Setup page:**

Click on gear icon → click setup.



## Activity 1: Create Employee Object

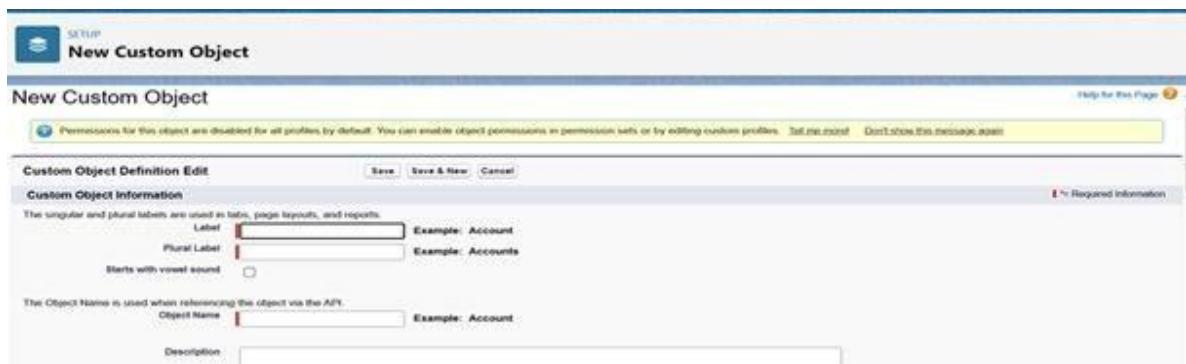
The purpose of creating an Employee custom object is to keep track of the employee's activities and their individual and as well as team progress.

To create an object:

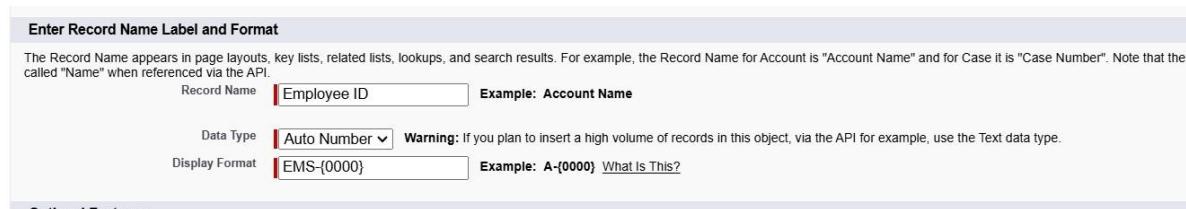
1. From the setup page → Click on Object Manager → Click on Create → Click on Custom Object.



- 1) Enter the label name → Employee
- 2) Plural label name → Employees



- 3) Enter Record Name Label and Format
  - Record Name → Employee ID
  - Data Type → Auto Number
  - Display Format → EMS-{0000} • Starting Number → 1



2. Click on Allow reports,
3. Allow search → Save.

<b>Optional Features</b>
<input checked="" type="checkbox"/> Allow Reports <input type="checkbox"/> Allow Activities <input type="checkbox"/> Track Field History <input type="checkbox"/> Allow in Chatter Groups <input type="checkbox"/> Enable Licensing <a href="#">i</a>
<b>Object Classification</b>
When these settings are enabled, this object is classified as an Enterprise Application object. When these settings are disabled, this object is classified as a Light Application object. <a href="#">Learn more.</a>
<input checked="" type="checkbox"/> Allow Sharing <input checked="" type="checkbox"/> Allow Bulk API Access <input checked="" type="checkbox"/> Allow Streaming API Access
<b>Deployment Status</b>
<input type="radio"/> In Development <input checked="" type="radio"/> Deployed
<b>Search Status</b>
When this setting is enabled, your users can find records of this object type when they search. <a href="#">Learn more.</a>
<input checked="" type="checkbox"/> Allow Search
<input type="button" value="Save"/> <input type="button" value="Save &amp; New"/> <input type="button" value="Cancel"/>

## Activity 2: Create Project Object

The purpose of creating a project object is to have detailed information about the on-going and completed projects in the organization.

To create an object:

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

  - 1) Enter the label name → Project
  - 2) Plural label name → Projects
  - 3) Enter Record Name Label and Format
    - Record Name → Project ID
    - Data Type → Auto Number
    - Display Format → Proj-{0000}
    - Starting Number → 1

2. Click on Allow reports,
3. Allow search → Save

## Activity 3: Create 3 more objects with label names as ProjectTask, and , Asset Service.

**Note:** use “Text” as a data type and label Record Name as “Project Task Name”.

Appointment Topic Time Slot	AppointmentTopicTimeSlot	Standard Object		
Asset	Asset_c	Custom Object	07/11/2024	✓
Asset	Asset	Standard Object		
Product Category Product	ProductCategoryProduct	Standard Object		
Product Consumption Schedule	ProductConsumptionSchedule	Standard Object		
Project	Project_c	Custom Object	06/11/2024	✓
ProjectTask	ProjectTask_c	Custom Object	07/11/2024	✓
Promotion	Promotion	Standard Object		
Promotion Market Segment	PromotionMarketSegment	Standard Object		
Promotion Qualifier	PromotionQualifier	Standard Object		
Promotion Segment	PromotionSegment	Standard Object		
Promotion Segment Buyer Group	PromotionSegmentBuyerGroup	Standard Object		

## **Milestone 3 - Tabs**

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

### **Types of Tabs:**

#### **1. Custom Tabs**

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

#### **2. Web Tabs**

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

#### **3. Visualforce Tabs**

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

#### **4. Lightning Component Tabs**

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

#### **5. Lightning Page Tabs**

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

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

### **Use Case:**

Creating Objects and storing TheSmartBridge organization's data is the very first step in the requirements they want. Now to access the stored data by an employee from the organization Admin needs to create Tabs. By designing a dedicated Tab, businesses can improve user experience, simplify navigation, and provide quick access to critical information, enhancing productivity and ensuring efficient utilization of Salesforce's capabilities.

## 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)

## Custom Tabs

You can create new custom tabs to extend Salesforce functionality or to build new application functionality.

Custom Object tabs look and behave like the standard tabs provided with Salesforce. Web tabs allow you to embed external pages. Lightning Component tabs allow you to add Lightning components to the navigation bar. You can also add Lightning Pages to Lightning Experience and the mobile app.

The screenshot shows two sections of the Salesforce Setup interface:

- Custom Object Tabs:** A section titled "Custom Object Tabs" with a "New" button highlighted by a red box. It displays the message "No Custom Object Tabs have been defined".
- Web Tabs:** A section titled "Web Tabs" with a "New" button highlighted by a red box. It displays the message "No Web Tabs have been defined".

2. Select Object(Employee) → Select any tab style → Next (Add to profiles page) keep it as default → Next (Add to Custom App) keep it as default → Save.

The screenshot shows the "Create New Custom Tab" configuration page:

- Header: Choose the custom object for this new custom tab. Fill in other details.
- Object dropdown: "None" (highlighted by a red box). Sub-options include "None", "Asset", "Asset Service", and "Employee" (highlighted by a blue box).
- Tab Style dropdown: "None" (highlighted by a red box). Sub-options include "None", "Asset", "Asset Service", and "Employee" (highlighted by a blue box).
- Optional fields:
  - (Optional) Choose a Home Page Custom Link: Project (highlighted by a red box), ProjectTask (highlighted by a blue box).
  - Splash Page Custom Link: ProjectTask (highlighted by a blue box).
- Description field: Enter a short description.
- Buttons at the bottom: "Next" (highlighted by a red box) and "Cancel".

## Activity 2:

### To create a Tab:(Project)

1. Go to setup page → type Tabs in Quick Find bar → click on tabs → New (under custom object tab)
2. Select Object(Project) → Select the tab style → Next (Add to profiles page) keep it as default → Next (Add to Custom App) keep it as default → Save.

## Activity 3:

Now create tabs for Project Task, Asset, Asset Services objects.

The screenshot shows the 'Custom Tabs' section of the Salesforce Setup. At the top, there's a 'Help for this Page' link. Below it, a note says: 'You can create new custom tabs to extend Salesforce functionality or to build new application functionality. Custom Object tabs look and behave like the standard tabs provided with Salesforce. Web tabs allow you to embed external web applications and content within the Salesforce window. Visualforce tabs allow you to embed Visualforce pages. Lightning Component tabs allow you to add Lightning components to the navigation menu in Lightning Experience and the mobile app. Lightning Page tabs allow you to add Lightning Pages to Lightning Experience and the mobile app.' The main table lists six custom object tabs:

Action	Label	Tab Style	Description
Edit   Del	Assets	Red Cross	
Edit   Del	Asset Services	Jewel	
Edit   Del	Employees	Dice	
Edit   Del	Leads	Phone	
Edit   Del	Prospects	Trophy	
Edit   Del	ProjectTasks	Star	

## **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 gives 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.

### **Use Case:**

Well done you have reached close to your organizational requirement by creating the objects to store the organization's data. Making a database for an organization is just not enough to reach out the requirements, the task is how the users at the organization can access the objects you have created for them. As an Admin for the TheSmartBridge organization it's your duty to make sure every user of the organization is able to access the data modeling structure.

### **Activity 1: Create a Lightning App To create a lightning app page:**

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

The screenshot shows the 'Lightning Experience App Manager' page. The left sidebar has 'Setup' selected, followed by 'Home' and 'Object Manager'. Under 'App', 'App Manager' is selected, with 'External Client Apps' and 'External Client App Manager' listed under it. A note says 'Didn't find what you're looking for? Try using Global Search.' The main area title is 'Lightning Experience App Manager' with a subtitle '24 items • Sorted by App Name • Filtered by All appmemberships - Tabset Type, App Type'. It lists various apps with columns for 'App Name', 'Developer Name', 'Description', 'Last Modified', 'App Type', and 'Visible'. The apps listed are: All Tabs, Insights, Analytics Studio, AppLauncher, App Launcher tabs, Automation, FlowsApp, LightningBolt, Bob Solutions, Discover and manage business solutions design..., Business Rules Engine, ExpressionGetConsole, and Community.

2. Fill the app name in app details and branding as follow

App Name : Workforce Administrator Solution

Developer Name : this will auto populated

Description : Give a meaningful description

Image : optional (if you want to give any image you can otherwise not mandatory) Primary color hex value : keep this default

3. Then click Next → (App option page) keep it as default → Next → (Utility Items) keep it as default → Next.

New Lightning App

---

**App Details**

\* App Name

\* Developer Name

Description

**App Branding**

Image

Primary Color Hex  
Value  #0070D2

Org Theme Options  Use the app's image and color instead of the org's custom theme

4. To Add Navigation Items:

New Lightning App

---

**Available Items**

- Asset State Periods
- Assets
- Async Operation Logs
- Authorization Form
- Authorization Form Consent
- Authorization Form Data Use

**Selected Items**

Assets

Search the items in the search bar(Employees, Projects, ProjectTask, Assets, Asset Services, Reports, Dashboard) from the search bar and move it using the arrow button → Next.**Note:** select asset the custom object which we have created in the previous activity.

5. To Add User Profiles:

New Lightning App

---

Choose the user profiles that can access this app.

**Available Profiles**

Salesforce API Only System Integrations

**Selected Profiles**

System Administrator

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 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.

#### **Use Case:**

Now it's time for you to think out of the box for your organization. You have successfully created the database objects for the organization but now all eyes turn on you as you have to define what sort of information the objects store which you have created. As a life saver of your organization you come up with the idea of creating fields to store different types of data.

#### **Activity 1 : Creating Text Field in Employee Object**

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 “Text”.

4. Click on Next

5. Fill the above as following:

- Field Label : Employee Name
- Length : 18
- Field Name : gets auto generated
- Click on Next → Next → Save and new.

## Activity 2 : Creating Date of Birth Field in Employee Object

1. Repeat step 1 and 2 mentioned in activity 1
2. Select Data type as “Date” and click Next.

<input type="radio"/> Checkbox	Allows users to select a True (checked) or False (unchecked) value.
<input type="radio"/> Currency	Allows users to enter a dollar or other currency amount and automatically formats the field as a currency amount. This can be used for financial fields.
<input checked="" type="radio"/> Date	Allows users to enter a date or pick a date from a popup calendar.
<input type="radio"/> 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 becomes the default for the time.
<input type="radio"/> 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, it's used for sending mass emails.

3. Click on Next.
4. Fill the above as following:
  - a. Field Label: Date of Birth.
  - b. Field Name : gets auto generated.
  - c. Click on Next → Next → Save and new.

## Activity 3 : Creating Formula Field in Employee Object

5. Repeat step 1 and 2 mentioned in activity 1
6. Select Data type as “Formula” and click Next.

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

7. Give Field Label and Field Name as “Age” and select formula return type as “Number” and click next.

Employee  
New Custom Field

Help for this Page

Step 2 of 5

Step 2. Choose output type

Field Label: Age

Field Name: Age

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

Formula Return Type

None Selected

Select one of the data types below.

Checkbox

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

Currency

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

Date

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

Date/Time

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

Number

Calculate a numeric value  
Example: `[Fahrenheit = 1.8 * Celsius_c + 32]`

Percent

Calculate a percent and automatically add the percent sign to the number.  
Example: `[Discount = /Amount - Discounted_Amount_c / Amount]`

8. Under Advanced Formula write down the formula and click “Check Syntax” and Next→ Next→ Save & New.

**Step 3. Enter formula**

Step 3 of 5

Enter your formula and click Check Syntax to check for errors. Click the Advanced Formula subtab to use additional fields, operators, and functions.

Example: Fahrenheit = 1.8 \* Celsius + 32 | [More Examples](#)

[Simple Formula](#) [Advanced Formula](#)

[Insert Field](#) [Insert Operator](#)

**Functions**

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

[Insert Selected Function](#)

## Activity 4 : Creating Picklist Field in Employee Object

1. Repeat step 1 and 2 mentioned in activity 1
2. Select Data type as “Picklist” and click Next.

<input type="radio"/> Phone	Allows users to enter any phone number. Automatically formats it as a phone number.
<input checked="" type="radio"/> Picklist	Allows users to select a value from a list you define.
<input type="radio"/> Picklist (Multi-Select)	Allows users to select multiple values from a list you define.
<input type="radio"/> Text	Allows users to enter any combination of letters and numbers.

3. Enter Field Label as “Gender”, under values select “Enter values, with each value separated by a new line” and enter values as shown below.

**Step 2. Enter the details**

Step 2 of 4

Field Label:  [i](#)

Values:

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

[i](#)

Display values alphabetically, not in the order entered

Use first value as default value [i](#)

Restrict picklist to the values defined in the value set [i](#)

Field Name:  [i](#)

Description:

4. Click Next→ Next → Next → Save & New.

## Activity 5 : Creating Self-Relationship Field in Employee Object

1. Repeat step 1 and 2 mentioned in activity 1
2. Select Data type as “Lookup Relationship” and click Next.

<input type="radio"/> Roll-Up Summary	A read-only field that displays the sum, minimum, or maximum value of a field in a related list or the record count of all records listed in a related list.
<input checked="" type="radio"/> Lookup Relationship	Creates a relationship that links this object to another object. The relationship field allows users to click on a lookup icon to select a value from a popup list. The other object is the source of the values in the list.
<input type="radio"/> Master-Detail Relationship	Creates a special type of parent-child relationship between this object (the child, or “detail”) and another object (the parent, or “master”) where: <ul style="list-style-type: none"> <li>The relationship field is required on all detail records.</li> <li>The ownership and sharing of a detail record are determined by the master record.</li> <li>When a user deletes the master record, all detail records are deleted.</li> </ul>

3. Select Employee from the drop down related to the field and click Next.

Step 2. Choose the related object

Select the other object to which this object is related.

Related To

Step 2  
Previous Next Cancel

4. Give Field Label as “Reports to” and click Next.

5. Next → Next → Save & New.

Field Label	API Name	Type
Age	Age_c	Formula (Number)
Cab Allowance	Cab_Allowance_c	Checkbox
Cab Allowance Amount	Cab_Allowance_Amount_c	Currency(18, 0)
Created By	CreatedById	Lookup(User)
Date of Birth	Date_of_Birth_c	Date
Email	Email_c	Email
Employee ID	Name	Auto Number
Employee Name	Employee_Name_c	Text(18)
Experience	Experience_c	Text Area(255)

## Activity 6 : Master-Detail Relationship

**Creating Master-Detail Relationship between Employee & ProjectTask Object To**

Create a Master-Detail relationship

1. Go to the setup page → click on object manager → type object name(ProjectTask) in the quick find bar→ click on the object.
2. Click on fields & relationship → click on New.
3. Select “Master-Detail relationship” as data type and click Next.
4. For field label related to: select “Employee” object and click Next.
5. Give Field Label as “Employee Name” and click Next.
6. Next → Next → Save & New.

## Activity 7 : Creating Remaining Fields in Employee Object

Now create the remaining fields using the data types mentioned in the table.

Sl No	Object Name	Field																																			
1	Employee	<table border="1"> <thead> <tr> <th>Field Name</th><th>Data type</th></tr> </thead> <tbody> <tr> <td>• Qualification</td><td>Text</td></tr> <tr> <td>• Address</td><td>Text Area</td></tr> <tr> <td>• Experience</td><td>Text Area</td></tr> <tr> <td>• Phone no</td><td>Phone</td></tr> <tr> <td>• Email</td><td>Email</td></tr> <tr> <td>• Joining date</td><td>Date</td></tr> <tr> <td>• Mode of Work</td><td>Picklist: Values  On Site Remote</td></tr> <tr> <td>• Cab Allowance</td><td>Check box</td></tr> <tr> <td>• Food Allowances</td><td>Check box</td></tr> <tr> <td>• Wifi Allowances</td><td>Check box</td></tr> <tr> <td>• Cab Allowance Amount</td><td>Currency</td></tr> <tr> <td>• Food Allowance Amount</td><td>Currency</td></tr> <tr> <td>• Wifi Allowance Amount</td><td>Currency</td></tr> <tr> <td>• Login Time</td><td>Time</td></tr> <tr> <td>• Logout Time</td><td>Time</td></tr> <tr> <td>• LinkedIn Profile</td><td>url</td></tr> </tbody> </table>	Field Name	Data type	• Qualification	Text	• Address	Text Area	• Experience	Text Area	• Phone no	Phone	• Email	Email	• Joining date	Date	• Mode of Work	Picklist: Values  On Site Remote	• Cab Allowance	Check box	• Food Allowances	Check box	• Wifi Allowances	Check box	• Cab Allowance Amount	Currency	• Food Allowance Amount	Currency	• Wifi Allowance Amount	Currency	• Login Time	Time	• Logout Time	Time	• LinkedIn Profile	url	
Field Name	Data type																																				
• Qualification	Text																																				
• Address	Text Area																																				
• Experience	Text Area																																				
• Phone no	Phone																																				
• Email	Email																																				
• Joining date	Date																																				
• Mode of Work	Picklist: Values  On Site Remote																																				
• Cab Allowance	Check box																																				
• Food Allowances	Check box																																				
• Wifi Allowances	Check box																																				
• Cab Allowance Amount	Currency																																				
• Food Allowance Amount	Currency																																				
• Wifi Allowance Amount	Currency																																				
• Login Time	Time																																				
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		<table border="1"> <thead> <tr> <th>Field Name</th><th>Data type</th></tr> </thead> <tbody> <tr> <td> <ul style="list-style-type: none"> <li>• Project Name</li> <li>• Project Lead</li> <li>• Start Date</li> <li>• End Date</li> <li>• Project Status</li> </ul> </td><td> Text  Text  Date  Date  Picklist: Values  <div style="border: 1px solid black; padding: 5px; margin-top: 5px;"> Completed  On Going  Not Yet Started </div> </td></tr> </tbody> </table>	Field Name	Data type	<ul style="list-style-type: none"> <li>• Project Name</li> <li>• Project Lead</li> <li>• Start Date</li> <li>• End Date</li> <li>• Project Status</li> </ul>	Text Text Date Date Picklist: Values <div style="border: 1px solid black; padding: 5px; margin-top: 5px;"> Completed  On Going  Not Yet Started </div>
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<ul style="list-style-type: none"> <li>• Project Name</li> <li>• Project Lead</li> <li>• Start Date</li> <li>• End Date</li> <li>• Project Status</li> </ul>	Text Text Date Date Picklist: Values <div style="border: 1px solid black; padding: 5px; margin-top: 5px;"> Completed  On Going  Not Yet Started </div>					
2	Project	<table border="1"> <thead> <tr> <th>Field Name</th><th>Data type</th></tr> </thead> <tbody> <tr> <td> <ul style="list-style-type: none"> <li>• Project Task</li> <li>• Finishes in</li> <li>• Working Hours</li> <li>• Employee Name</li> <li>• Asset Id</li> </ul> </td><td> MDR with project object <b>Formula :</b>  (Project_Task__r.Start_D ate__c -  Project_Task__r.End_D ate__c )  <b>Formula return type:</b>  Number  Numbers  Master Detail relationship with  Employee object  Lookup relationship with Asset object </td></tr> </tbody> </table>	Field Name	Data type	<ul style="list-style-type: none"> <li>• Project Task</li> <li>• Finishes in</li> <li>• Working Hours</li> <li>• Employee Name</li> <li>• Asset Id</li> </ul>	MDR with project object <b>Formula :</b> (Project_Task__r.Start_D ate__c - Project_Task__r.End_D ate__c ) <b>Formula return type:</b> Number Numbers Master Detail relationship with Employee object Lookup relationship with Asset object
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3	Project Task	<p><b>Note:</b> here in Finishes in field, Start Date and End Date belong to Employee Object.</p>				

		<table border="1"> <thead> <tr> <th>Field Name</th><th>Data type</th></tr> </thead> <tbody> <tr> <td>• Asset Id</td><td>Lookup relationship with Asset object</td></tr> </tbody> </table>	Field Name	Data type	• Asset Id	Lookup relationship with Asset object						
Field Name	Data type											
• Asset Id	Lookup relationship with Asset object											
4	Asset Service	<table border="1"> <tbody> <tr> <td>• Type</td><td>Picklist: Values Technical Issue Non Technical Issue</td></tr> <tr> <td>• Technician</td><td>Text</td></tr> <tr> <td>• Subject</td><td>Text Area</td></tr> <tr> <td>• Description</td><td>Text Long</td></tr> </tbody> </table>	• Type	Picklist: Values Technical Issue Non Technical Issue	• Technician	Text	• Subject	Text Area	• Description	Text Long		
• Type	Picklist: Values Technical Issue Non Technical Issue											
• Technician	Text											
• Subject	Text Area											
• Description	Text Long											
5	Asset	<table border="1"> <thead> <tr> <th>Field Name</th><th>Data type</th></tr> </thead> <tbody> <tr> <td>• Asset Type</td><td>Picklist: Values Laptop Charger Mouse Monito CPU</td></tr> <tr> <td>• Model Name</td><td>Text</td></tr> <tr> <td>• Employee Name</td><td>Lookup relationship with Employee Object</td></tr> <tr> <td>• Date of Issue</td><td>Formula(Joining date) Formula Return type: date</td></tr> </tbody> </table>	Field Name	Data type	• Asset Type	Picklist: Values Laptop Charger Mouse Monito CPU	• Model Name	Text	• Employee Name	Lookup relationship with Employee Object	• Date of Issue	Formula(Joining date) Formula Return type: date
Field Name	Data type											
• Asset Type	Picklist: Values Laptop Charger Mouse Monito CPU											
• Model Name	Text											
• Employee Name	Lookup relationship with Employee Object											
• Date of Issue	Formula(Joining date) Formula Return type: date											

## **Milestone 6 - Setting OWD**

Organization-Wide Defaults, or OWDs, are the pattern security rules that you can follow for your Salesforce instance. Organization Wide Defaults are utilized to confine who can access what information in your CRM. You can award access through different methods that we will discuss later (sharing principles, Role Hierarchy, Sales Teams, and Account groups, manual sharing, and so forth).

Primarily, there are four levels of access that can be set in Salesforce OWD and they are-

- Public Read/Write/Transfer
- Public Read/Write
- Public Read/Only
- Private

### **Use Case:**

Data is the most precious thing of any organization and keeping it safe is the first most priority of any Admin in the organization. As an Admin, to ensure data privacy and compliance with regulations, you need to restrict access to sensitive customer information using OWD.

### **Activity 1:**

#### Create OWD Setting

1. Go to Set Up → in the Quick Find box type Sharing Settings → click on it.
2. Click Edit in the Organization-Wide Defaults area.

The screenshot shows the 'Sharing Settings' page in the Salesforce Setup. The left sidebar has 'Sharing' selected under 'Security'. The main content area is titled 'Sharing Settings' and contains a table for 'Default Sharing Settings'. The table has columns for 'Object', 'Default Internal Access', 'Default External Access', and 'Grant Access Using Hierarchies'. The table lists various objects like Lead, Account, Contact, etc., with their respective sharing settings. A note at the bottom right of the table says 'Organization-Wide Defaults Help'.

Object	Default Internal Access	Default External Access	Grant Access Using Hierarchies
Lead	Public Read/Write/Transfer	Private	✓
Account and Contract	Public Read/Write	Private	✓
Contact	Controlled by Parent	Controlled by Parent	✓
Order	Controlled by Parent	Controlled by Parent	✓
Asset	Controlled by Parent	Controlled by Parent	✓
Opportunity	Public Read/Write	Private	✓
Case	Public Read/Write/Transfer	Private	✓
Campaign	Public Full Access	Private	✓
Campaign Member	Controlled by Campaign	Controlled by Campaign	✓
User	Public Read Only	Private	✓

3. Search for the Employee object.
4. Under default internal access and default external access change the options to “Private” and under grant access using hierarchies select the check box.
5. Click on save.

Asset	Public Read/Write	Private	<input checked="" type="checkbox"/>
Asset Service	Private	Private	<input checked="" type="checkbox"/>
Employee	Private	Private	<input checked="" type="checkbox"/>
Leave	Public Read/Write	Private	<input checked="" type="checkbox"/>
Project	Private	Private	<input checked="" type="checkbox"/>

**Other Settings**

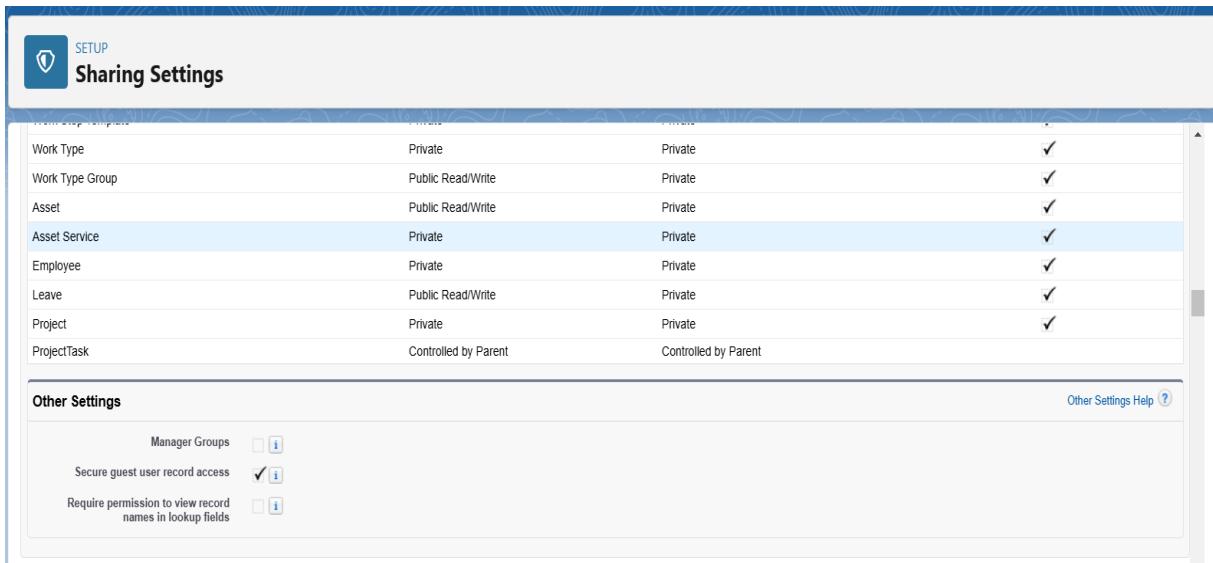
Standard Report Visibility  

Manual User Record Sharing   Manager Groups  

6. This Setting is for all the Users Which have been Created.

### Activity 2:

Set OWD as Private for Project and Asset Service objects.



The screenshot shows the "Sharing Settings" page in the Salesforce Setup. The page title is "Sharing Settings" and it includes a "SETUP" button in the top left corner.

The main table lists sharing settings for various objects:

Object	Default Internal Access	Default External Access	Grant Access Using Hierarchies
Work Type	Private	Private	<input checked="" type="checkbox"/>
Work Type Group	Public Read/Write	Private	<input checked="" type="checkbox"/>
Asset	Public Read/Write	Private	<input checked="" type="checkbox"/>
Asset Service	Private	Private	<input checked="" type="checkbox"/>
Employee	Private	Private	<input checked="" type="checkbox"/>
Leave	Public Read/Write	Private	<input checked="" type="checkbox"/>
Project	Private	Private	<input checked="" type="checkbox"/>
ProjectTask	Controlled by Parent	Controlled by Parent	<input checked="" type="checkbox"/>

**Other Settings**

- Manager Groups:  
- Secure guest user record access:  
- Require permission to view record names in lookup fields:  

## **Milestone 7 - User Adoption**

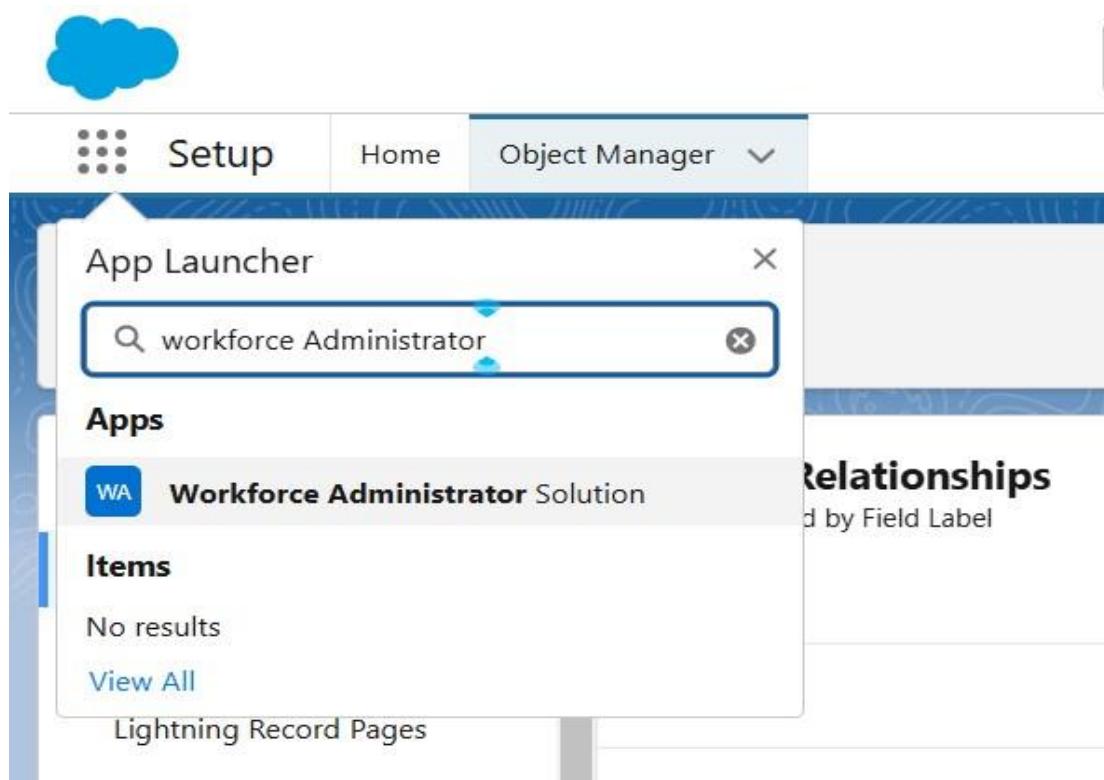
### **Use Case:**

As a new Administrator, you perform user management tasks like creating and editing users, resetting passwords, granting permissions, configuring data access, and much more. In this unit, you will learn about users and how you add users to your Salesforce org.

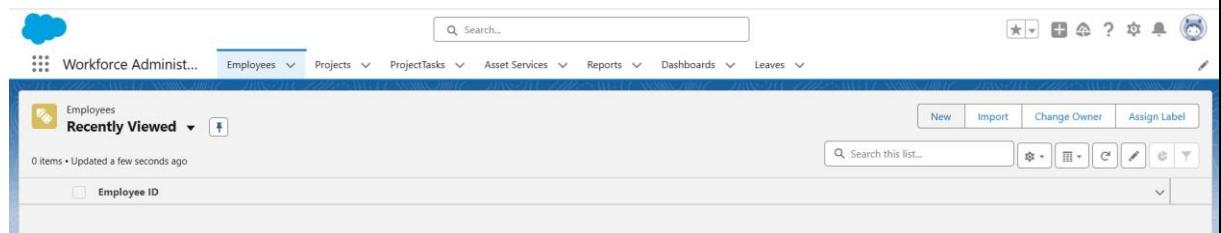
### **Activity 1:**

Create a Record (Employee)

1. Click on App Launcher on the left side of the screen.
2. Search Employee Management System & click on it.



3. Click on the Employee tab.
4. Click New.



5. Fill the Details and click on Save.

## **Activity 2:**

View a Record(Employee)

1. Click on App Launcher on the left side of the screen.
2. Search Employee Management System & click on it.
3. Click on the Employee Tab.
4. Click on any record name. you can see the details of the Employee

## **Activity 3:**

Delete a Record(Employee)

1. Click on App Launcher on the left side of the screen.
2. Search Employee Management System & click on it.
3. Click on the Employee Tab.
4. Click on Arrow at right hand side on that Particular record.
5. Click delete.

## **Activity 4:**

Create at least 10 records for each of the objects: Asset, Project, Project Task, Asset Service.

The screenshot shows a list of employees in a software application. The top navigation bar includes 'Employees', 'All' (selected), and a search/filter icon. On the right, there are buttons for 'New', 'Import', 'Change Owner', 'Printable View', and 'Assign Label'. Below the navigation is a search bar with placeholder 'Search this list...' and various filter icons. The main area displays a table with 14 rows, each representing an employee. The columns include a checkbox header, 'Employee ID', and a list of 14 entries from EMS-0002 to EMS-0015. Each row has a small downward arrow icon at the end.

	Employee ID
1	EMS-0002
2	EMS-0003
3	EMS-0004
4	EMS-0005
5	EMS-0006
6	EMS-0007
7	EMS-0008
8	EMS-0009
9	EMS-0010
10	EMS-0011
11	EMS-0012
12	EMS-0013
13	EMS-0014
14	EMS-0015

## **Milestone 8 - Import Data**

NOTE- Before creating the application download this file from the URL given below and save the file in CSV.

<https://tinyurl.com/SF-Employee-Data>

Data Import lets you upload data from external sources and combine it with data you collect via Analytics. You can then use Analytics to organize and analyze all of your data in ways that better reflect your business.

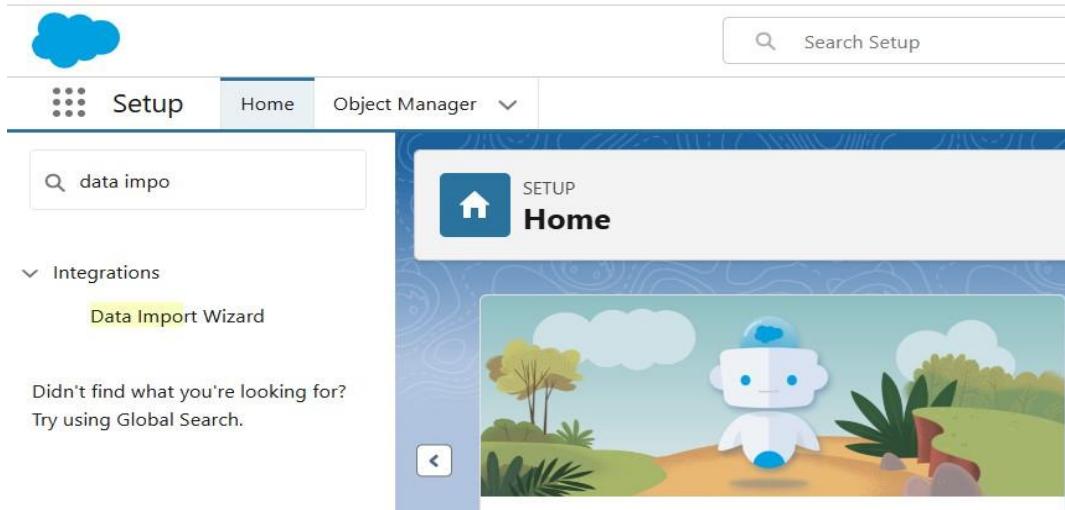
The Data Import Wizard is a Tool makes it easy to import data for many standard Salesforce objects, including accounts, contacts, leads, solutions, campaign members, and person accounts. You can also import data for custom objects.

In order to complete this milestone, you need to create CSV files and give them data given in the picture below. After that from these CSV files we will import data for the Employee object.

### **Use Case:**

Congrats you have successfully made an app with all the default settings for the organization. Now here comes the real admin work, to import the old data of TheSmartBridge organization which was in CSV format into the salesforce org without failing any of the record. Note in real time you might also facing some additional task such as data cleaning, elimination of duplicate values or records, etc., **Activity-1:**

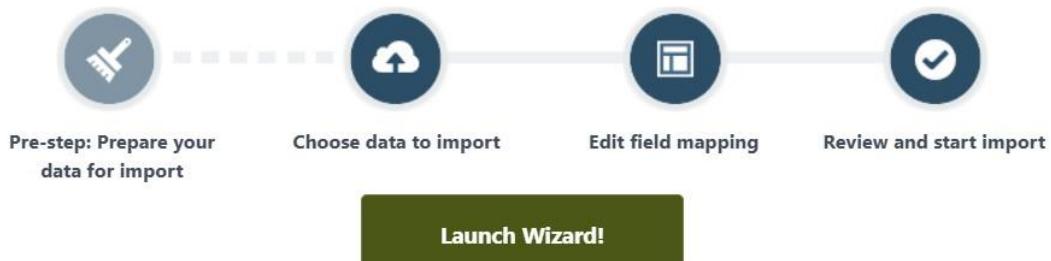
1. From Setup, click the Home tab.
2. In the Quick Find box, enter Data Import and select Data Import Wizard.



3. Click Launch Wizard!

## Import your data in 3 easy steps!

Launch the Data Import Wizard to import your data.



4. Click the Custom Objects tab and select the Employee object.

The screenshot shows the "Choose data" step of the Data Import Wizard. On the left, there are two tabs: "Standard objects" and "Custom objects". Under "Standard objects", there are four items: Asset Services, Assets, Employees, and Leaves. Each item has a right-pointing arrow. On the right, there is a large empty rectangular area labeled "Edit mapping". At the top, there is a blue button labeled "Let's do this".

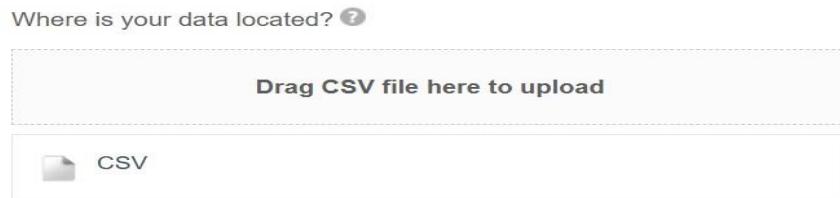
5. Select Add new records.

The screenshot shows the "Add new records" step of the Data Import Wizard. On the left, there is a list of objects: Standard objects (Asset Services, Assets, Employees, Leaves, ProjectTasks) and Custom objects (Employee). The "Employees" object is selected, indicated by a green checkmark. On the right, there are several configuration options:

- "Match by:" dropdown set to "--None--".
- "Which User field in your file designates record owners?" dropdown set to "--None--".
- "Which Employee field in your file do you want to match against to set the Reports to lookup field?" dropdown set to "--None--".
- "Trigger workflow rules and processes?" checkbox (unchecked).

At the top, there is a progress bar with a blue dot at the beginning, a grey dot in the middle, and a grey dot at the end. The text "Getting closer..." is displayed above the progress bar. Below the progress bar, there is a message: "Import your Data into Salesforce" and "You can import up to 50,000 records at a time." There are also "What kind of data are you importing?" and "What do you want to do?" sections.

6. Click CSV and choose file Employee\_CSV which we made earlier. Click Next.

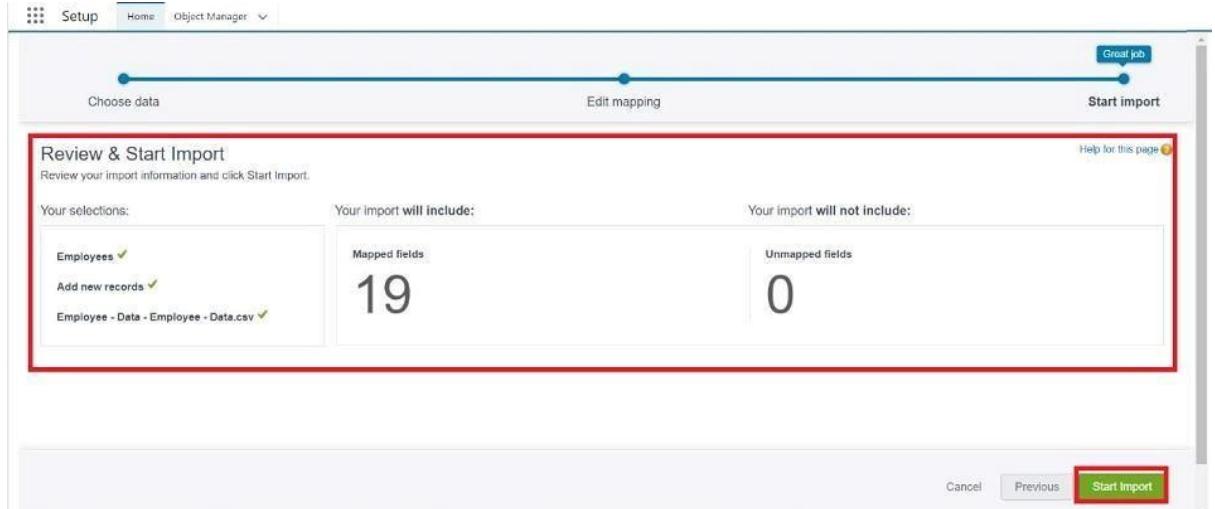


7. Since the field names in the CSV file (CSV Header) are the same as the field names in your object (Mapped Salesforce Object), the fields are automatically mapped. Click Next.

Edit	Mapped Salesforce Object	CSV Header	Example	Example	Example
Change	Employee Name	Employee Name	Jackie Chan	James	Benjamin
Change	Date of Birth	Date of Birth	01/01/1993	27/02/1998	16/03/1999
Change	Gender	Gender	Male	Male	Male
Change	Qualification	Qualification	B.Tech	B.Tech	B.Com
Change	Address	Address			
Change	Experience	Experience	9	6	5
Change	Phone no	Phone no	7995434750	7995434751	7995434752

**Note:** no need to map “Reports to” field. The Data Import Wizard is designed to handle basic data import tasks and does not support mapping relationships between records.

8. The next screen gives you a summary of your data import. Click Start Import.



9. Click OK on the popup.

**Congratulations**, your import has started!  
Click OK to view your import status on the Bulk Data Load Job page.

OK

10. Scroll down the page and verify that your data has been imported under batches.

Batches										
View Request	View Result	Batch ID	Start Time	End Time	Total Processing Time (ms)	API Active Processing Time (ms)	Apex Processing Time (ms)	Records Processed	Records Failed	Memory Count
<a href="#">View Request</a>	<a href="#">View Result</a>	7515 00000JeYH4	14/06/2023, 11:54 am	14/06/2023, 11:54 am	103	60	0	14	0	0

11. Make sure you have 0 records under the records failed column.

## **Milestone 9 - Profiles**

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

### **Types of profiles in salesforce**

#### **1. Standard profiles:**

By default salesforce provides below standard profiles.

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

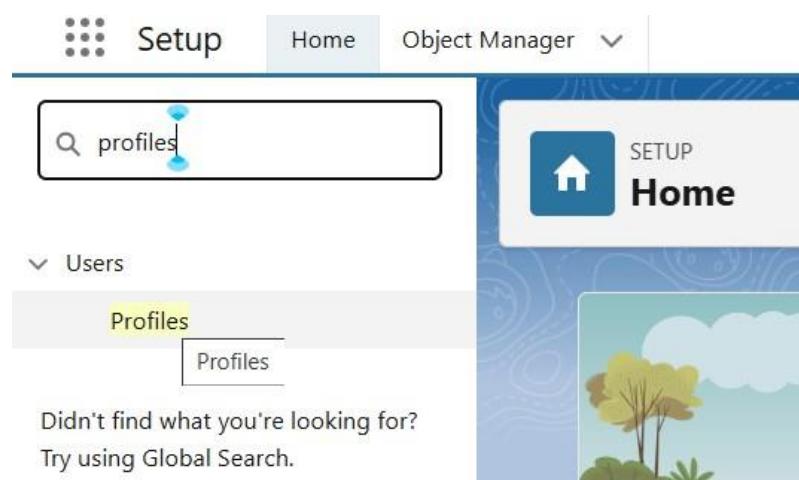
We cannot deleted standard ones

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

#### **2. Custom Profiles:**

Custom ones defined by us.

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



## Use Case:

Great work Admin, you have done so good till now. TheSmartBridge CEO wants you to differentiate the users based on their functionalities, position and based on this those users need to have the minimum access to the database object in the organization. Now it's time to use your Admin skills to focus on the users, their functionality and position in the organization in order to achieve the CEO requirements.

### Activity 1: HR Profile

#### To create a new profile:

1. Go to setup → type profiles in quick find box → click on profiles → clone the desired profile (Standard user) → enter profile name (HR) → Save.

### Clone Profile

Enter the name of the new profile.

You must select an existing profile to clone from.

Existing Profile	Standard User
User License	Salesforce
Profile Name	HR

Save Cancel

Save

2. While still on the profile page, then click Edit.
3. Scroll down to Custom Object Permissions and Give access permissions for Assets and Asset Services objects.

Custom Object Permissions						
	Basic Access					Data Administration
	Read	Create	Edit	Delete	View All	Modify All
Assets	<input checked="" type="checkbox"/>					
Asset Services	<input checked="" type="checkbox"/>					
Employees	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

4. Scroll down and Click on Save.

### Activity 2: Manager Profile

1. Go to setup → type profiles in quick find box → click on profiles → clone the desired profile (Salesforce Platform User) → enter profile name (Manager) → Save.
2. While still on the profile page, then click Edit.

3. Scroll down to Custom Object Permissions and Give access permissions for Employee, Project and Project Task objects.

### Clone Profile

Enter the name of the new profile.

**You must select an existing profile to clone from.**

Existing Profile

User License

Profile Name

4. Scroll down and Click on Save.

### Activity 3: Create Employee Profile

Create Employee Profiles for “On Site Employee”, “Remote Employee” as in Activity 2, but in step 3 only allow permission access for Project and Project Task objects only.

### Clone Profile

Enter the name of the new profile.

**You must select an existing profile to clone from.**

Existing Profile

User License

Profile Name

## **Milestone 10 - Role**

A role in Salesforce defines a user's visibility access at the record level. Roles may be used to specify the types of access that people in your Salesforce organization can have to data.

Simply put, it describes what a user could see within the Salesforce organization.

### **Use Case:**

You have successfully fulfilled the 1st requirement i.e., differentiating the users based on the functionality. Now comes the 2nd task of differentiating the users based on their position, using your excellent admin skills and expanding the custom roles for the organization and assigning it to the users.

### **Activity 1:**

Creating HR Role:

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

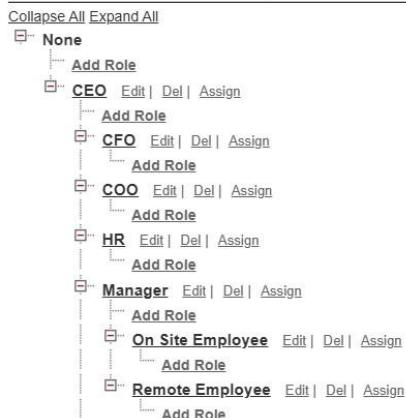
The screenshot shows the Salesforce Setup interface under the 'Users' category. The 'Roles' section is selected. A detailed 'Understanding Roles' section is displayed, featuring a 'Sample Role Hierarchy' diagram. The hierarchy starts with 'Executive Staff' (CEO, President, CFO, VP, Sales) at the top, followed by 'Western Sales Director' (W. Sales), 'Eastern Sales Director' (E. Sales), and 'International Sales Director' (Int'l Sales) in the middle, and finally 'Western Sales Rep' (CA Sales Rep, OR Sales Rep), 'Eastern Sales Rep' (NY Sales Rep, MA Sales Rep), and 'International Sales Rep' (Asian Sales Rep, European Sales Rep) at the bottom. Arrows indicate the reporting structure. A legend on the right explains various permission levels based on the hierarchy level. At the bottom right of the main content area, there are 'Set Up Roles' and 'Don't show this page again' buttons.

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

### **Creating the Role Hierarchy**

You can build on the existing role hierarchy shown on this page. To insert a new role, click **Add Role**.

#### **Your Organization's Role Hierarchy**



3. Give Label as “HR” and Role name gets auto populated. Check to whom this role (HR) reports. Then click on Save.

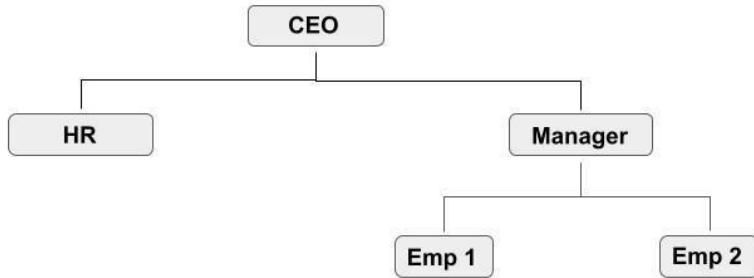
Role Edit  
**New Role**

**Role Edit**

Label	<input type="text" value="HR"/>
Role Name	<input type="text" value="HR"/> <a href="#">i</a>
This role reports to	<input type="text" value="CEO"/> <a href="#">e</a> <a href="#">g</a>
Role Name as displayed on reports	<input type="text"/>

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

4. Refer the below diagram to understand which role reports to which role.



Role Hierarchy: The above diagram represents which role reports to which one.

**Activity 2:**

Create three more roles for Manager, On Site Employee, Remote Employee.

**Note:** On Site Employee and Remote Employee reports to Manager.

## Role Edit

Label

Role Name  

This role reports to  

Role Name as displayed on reports

Role Edit

## New Role

### Role Edit

Label

Role Name  

This role reports to  

Role Name as displayed on reports

## **Milestone 11 - 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.

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
- Email Address
- User's First Name (optional)
- User's Last Name
- Alias
- Nickname
- License
- Profile
- Role (optional)

### **Use Case:**

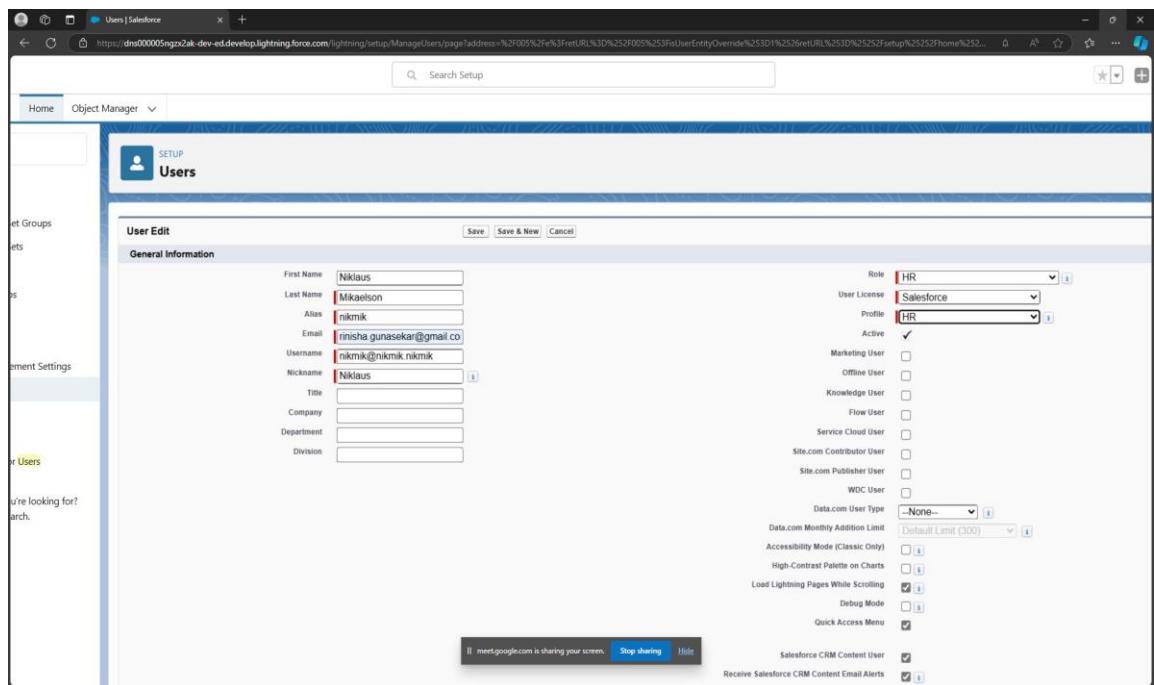
TheSmartBridge is all set to move with the Salesforce platform. As this platform is very new to the employees in the organization it's up to you to enlight every employee in it.

### **Activity 1:**

#### **Create User**

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

1. First Name : Niklaus
2. Last Name : Mikaelson
3. Alias : Give a Alias Name
4. Email id : Give your Personal Email id
5. Username : Username should be in this form: [text@text.text](#)
6. Nickname : Give a Nickname
7. Role : HR
8. User license : Salesforce
9. Profiles : HR



3. Save.

### Activity 2:

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

- First Name : Kol
- Last Name : Mikaelson
- Alias : Give a Alias Name
- Email id : Give your Personal Email id
- Username : Username should be in this form: text@text.text
- Nick Name : Give a Nickname
- Role : Manager
- User license : Salesforce Platform
- Profiles : Manager

3. Save.

### Activity 3:

Create two more users as mentioned in activity 2

Action	Full Name	Alias	Username	Role	Active	Profile
<input type="checkbox"/>	Bahadur Lal	lalbah	lalbah@lalbah.lalbah	On-Site Employee	<input checked="" type="checkbox"/>	On-Site Employee
<input type="checkbox"/>	Chatter Expert	chatter	chatty_000ms000000ngzx2ak_gdddj8pg6znb@chatter.salesforce.com		<input checked="" type="checkbox"/>	Chatter Free User
<input type="checkbox"/>	Devaraya, Krishna	krid	krid@krid.krid	Remote Employee	<input checked="" type="checkbox"/>	Remote Employee
<input type="checkbox"/>	Mikaelson, Kol	komika	komika@komika.komika	Manager	<input checked="" type="checkbox"/>	Manager
<input type="checkbox"/>	Mikaelson, Niklaus	nikmik	nikmik@nikmik.nikmik	HR	<input checked="" type="checkbox"/>	HR
<input type="checkbox"/>	Team_DJRISKTA	DJRST	peakyblinder@gmail.com		<input checked="" type="checkbox"/>	System Administrator
<input type="checkbox"/>	User_Integration	integ	integration@0odns000005ogzx2ak.com		<input checked="" type="checkbox"/>	Analytics Cloud Integration User
<input type="checkbox"/>	User_Security	sec	insightssecurity@00dms000000ngzx2ak.com		<input checked="" type="checkbox"/>	Analytics Cloud Security User

## **Milestone 12 - Page layouts**

Page Layout in Salesforce allows us to customize the design and organize detail and edit pages of records in Salesforce. Page layouts can be used to control the appearance of fields, related lists, and custom links on standard and custom objects' detail and edit pages.

### **Use Case:**

Hurray!! you have completed the data model structure for your organization but while looking at the detailed and edit pages it seems to be so clumsy, so decide to organize the page in a pleasant way for the sake of good and pleasant appearance and assembling all different kinds of information in different sections.

### **Activity 1 :**

#### **To Create a Page layout:**

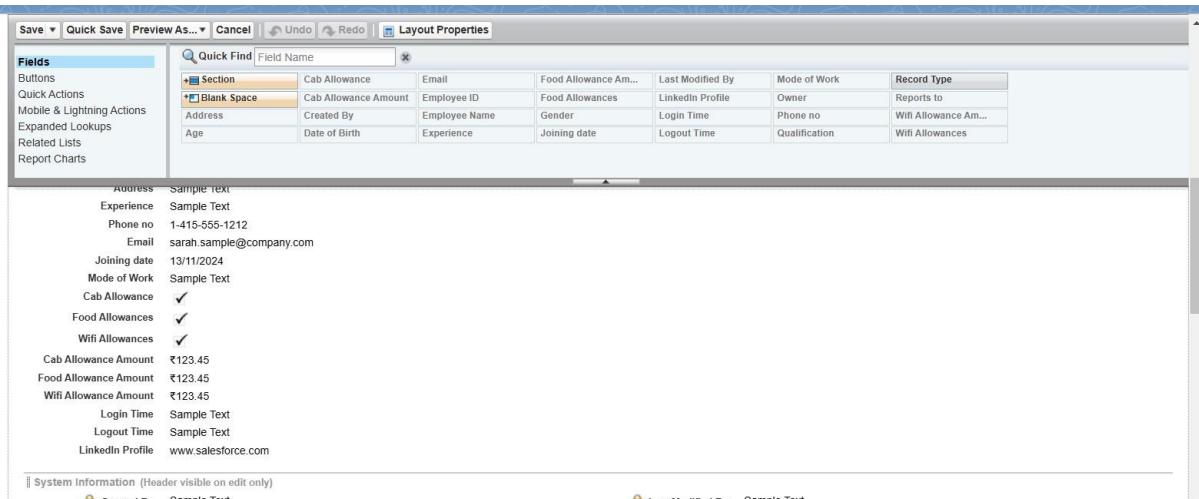
1. Go to Setup → Click on Object Manager → Search for the object (Employee) → From drop down click on Edit.

The screenshot shows the Salesforce Object Manager interface. At the top, there's a search bar with 'employ' typed in and a 'Schema Builder' button. Below the search bar, there's a 'Create' button with a dropdown arrow. The main area displays a table with one row for the 'Employee' object. The columns are labeled: LABEL, API NAME, TYPE, DESCRIPTION, LAST MODIFIED, and DEPLOYED. The 'Employee' entry has 'Employee\_\_c' in the API Name column, 'Custom Object' in the Type column, and '06/11/2024' in the Last Modified column. There are 'Edit', 'Delete', and 'Edit' buttons in the Deployed column. A tooltip '1 Items. Sorted by Label' is visible above the table.

2. Click on Page layout → Click on New.

The screenshot shows the 'Create New Page Layout' dialog for the 'Employee' object. On the left, there's a sidebar with options: Details, Fields & Relationships, Page Layouts (which is selected), Lightning Record Pages, Buttons, Links, and Actions, and Compact Layouts. The main area has a title 'Create New Page Layout' and a note: 'As an option, you may select an existing layout to clone. If you create a page layout without cloning, your page layout will not include the standard sections whose names are translated for your international users.' It includes fields for 'Existing Page Layout' (a dropdown menu with 'None' selected) and 'Page Layout Name' (an input field containing 'On Site Employee Layout'). At the bottom are 'Save' and 'Cancel' buttons.

3. Give Page layout Name as “On Site Employee Layout” and click on Save.
4. Drag and drop the Section from the highlight panel below the Information and name it as “Personal Information” and click Ok.
5. Drag Date of Birth, Address and Age fields from Employee Information to Personal Information section.
6. Similarly perform the above step to create “Allowances” and add allowances fields in it as shown below.



7. Click Save.

8. Make sure your page layout looks like the picture above.

### Activity 2 :

Create another page layout and name it as “Remote Employee Layout”, and in the allowances section use only Wifi Allowance and Wifi Allowances Amount fields.

The screenshot shows the Salesforce Object Manager for the Employee object. The left sidebar has sections for Details, Fields & Relationships, Page Layouts (which is selected), Lightning Record Pages, Buttons, Links, and Actions, Compact Layouts, and Field Sets. The main area is titled 'Page Layouts' and shows a list of 3 items, sorted by Page Layout Name. The columns are PAGE LAYOUT NAME, CREATED BY, and MODIFIED BY. The 'Employee Layout' was created by DURISKTA Team on 06/11/2024, 11:57 pm. The 'On Site Employee Layout' was created by DURISKTA Team on 11/11/2024, 7:16 pm. The 'Remote Employee Layout' was created by DURISKTA Team on 11/11/2024, 7:29 pm. There are 'Quick Find', 'New', and 'Page Layout Assignment' buttons at the top right of the list.

## **Milestone 13 - Chatter Group**

Salesforce Chatter Groups are collaborative spaces within the Salesforce platform that enable teams to communicate, share information, and collaborate on projects. They provide a centralized hub for discussions, file sharing, and updates, allowing users to stay connected, streamline workflows, and enhance productivity.

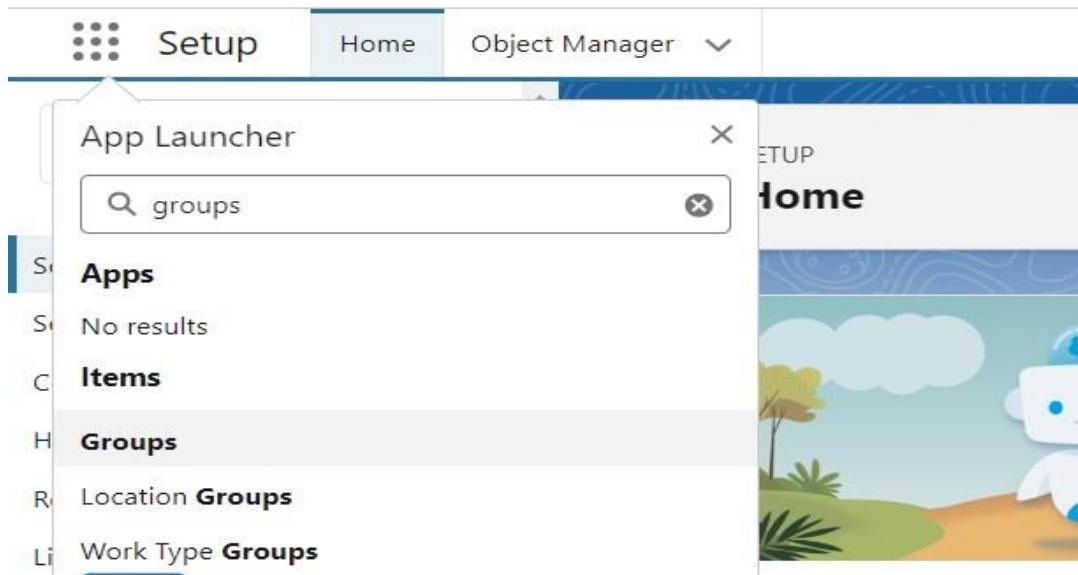
### **Use Case:**

Congratulations Admin you have made the job done for the organization, Amar The Founder of the organization and Jai Prakash The COO are very impressed with your work. But still there are some updates which your COO wants in your organization. So he comes to you with the idea that all the employees should have a common group for work discussion inside the salesforce. You know how to get this done with your admin skills.

### **Activity 1 :**

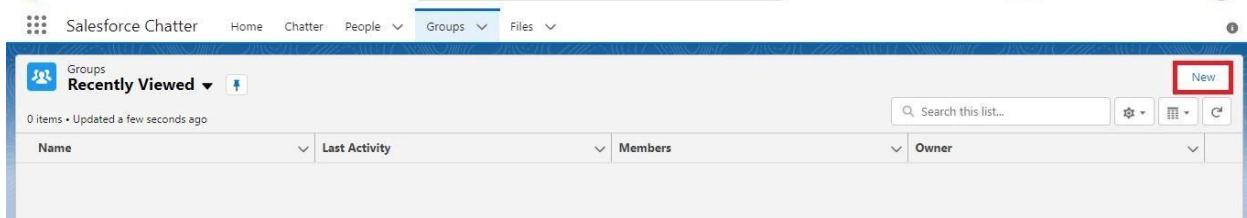
Creating a chatter group for your organization.

1. Click the App Launcher .
2. Enter Groups in the Search apps and items... box and select Groups.



3. Click New.

Field	Value
Group Name	Internal Discussion
Description	Give a understanding Description on your own
Access Type	Private
Allow Customers	Checked



4. Fill in the new group information with these details:

Name
\* = Required Information

**\* Name**

Description

This is created on the request of COO of the organization, for teams and users to have an internal discussion among them and have a clear idea about the on going activities.

Information

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Group Email

Cancel
Save

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Search...

X

Group Email  
0F9NS00000DLY50AO@post.ns-5ngzx2ak.ind56.chatter.salesforce.com

\* Owner

DIJRISKTA Team  X

Disable automatic archiving

\* Access Type

Private  ▾

Allow customers

Broadcast Only

Cancel  Save

5. Click Save & Next. Skip the Upload Picture section and click Next.
6. On the Manage Members screen, click Add next to users you created in the previous activity.

Photo	Name	Title	Group Member Role ↑
1	DURISHTA Team		Admin
2	Lal Bahadur		Standard
3	Krishna Devaraya		Standard
4	Niklaus Mikaelson		Standard
5	Kol Mikaelson		Standard

7. Click Done.

Sharing with customers

Share an update...

To Internal Discussion

Share

8. This is how your group interface looks like.
9. Where it says Share an update, post this message to the group: Welcome to the Internal Discussion Group, here you can post anything which is related to ongoing projects.
10. Click Share.

Note: You can like or comment on this post.

**Note:** there is a default chatter group in the org with all the active users in it, this activity is to show you how to create a chatter group and add users into it.

## **Milestone 14 - Record Types**

Record Types are a way of grouping many records of one type for that object. These can be applied to any standard or custom object, and allow you to have a different page layout, fields, required fields, and picklist values. Record types allow administrators to create a different page layout with custom picklist fields and values for the same business process and various business processes.

### **Use Case:**

All things done for the organization. But some of the organization employees feel it difficult to fill up all the details while creating an employee record, so Jai Prakash (COO) assigned you a task to create different forms for employee records based on their mode of work. As an Admin, you know how to achieve this.

### **Activity 1:**

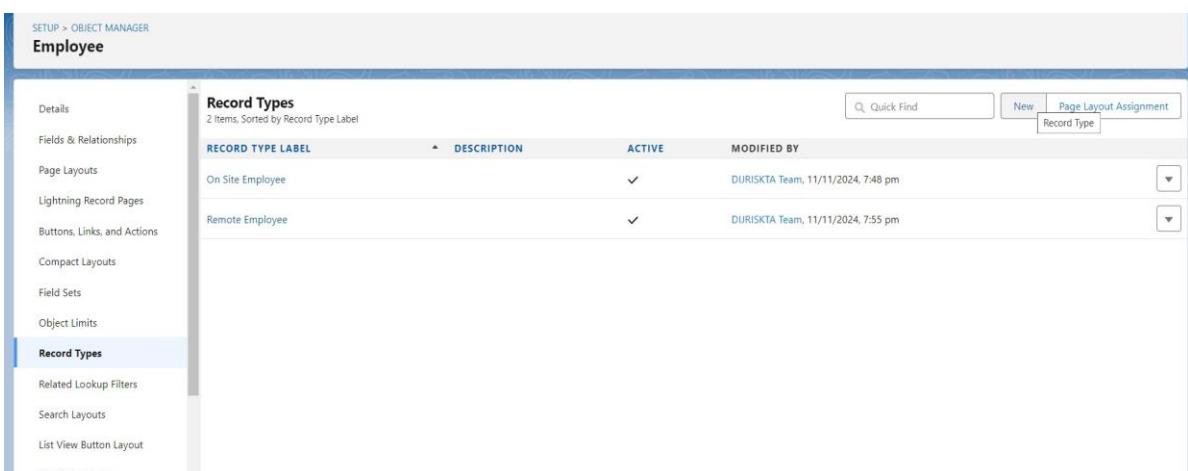
#### **To create a Record Type:**

1. Go to Setup → click on Object Manager → Search for the object (Employee) → from drop down click Edit.



The screenshot shows the Salesforce Object Manager interface. At the top, there's a search bar with 'employ' typed in, a 'Schema Builder' button, and a 'Create' button. Below the header, a table lists objects: 'Employee' with API name 'Employee\_\_c' and type 'Custom Object'. The table has columns for LABEL, API NAME, TYPE, DESCRIPTION, LAST MODIFIED, and DEPLOYED. In the bottom right corner of the table, there are 'Edit', 'Delete', and 'Edit' buttons.

2. From the left panel click Record Types → New.



The screenshot shows the 'Record Types' section of the Salesforce Object Manager for the 'Employee' object. On the left, a sidebar lists various configuration options, with 'Record Types' selected. The main area displays a table titled 'Record Types' with two items: 'On Site Employee' and 'Remote Employee'. The table has columns for RECORD TYPE LABEL, DESCRIPTION, ACTIVE, and MODIFIED BY. Both records are marked as active and were modified by the 'DURISKTA Team' on different dates. There are 'New', 'Page Layout Assignment', and 'Record Type' buttons at the top right of the table.

3. Give Record Type Label as "On Site Employee" and make it active.

**Step 1. Enter the details**

Enter a name and description for the new record type. The new record type will include all the picklist values from the existing record type selected below. After saving the new record type, you will be able to customize the picklist values.

**Record Type**

Existing Record Type	--Master--
Record Type Label	On site Employee
Record Type Name	On_site_Employee
Description	
Active	<input checked="" type="checkbox"/>

**Note:** Select Make Available to give users assigned to this profile the ability to create and clone records of this record type, or assign this record type to existing records. To make the new record type the default for a profile, select Make Default. Users assigned to this record type can still view and edit records associated with record types not available for their profiles.

#### 4. Uncheck for “Make Available”.

Select Make Available to give users assigned to this profile the ability to create and clone records of this record type, or assign this record type to existing records. To make the new record type the default for a profile, select Make Default. Users assigned to this record type can still view and edit records associated with record types not available for their profiles.

Profile Name	Record Types Currently Available	Make Available	Make Default
Analytics Cloud Integration User		<input type="checkbox"/>	<input type="checkbox"/>
Analytics Cloud Security User		<input type="checkbox"/>	<input type="checkbox"/>

#### 5. Scroll down and check for the Manager & System Administrator profile and click on Next.

Identity User		<input type="checkbox"/>	<input type="checkbox"/>
Manager	On Site Employee (Default) , Remote Employee	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Marketing User		<input type="checkbox"/>	<input type="checkbox"/>
Minimum Access - API Only Integrations		<input type="checkbox"/>	<input type="checkbox"/>
Minimum Access - Salesforce		<input type="checkbox"/>	<input type="checkbox"/>
On Site Employee		<input type="checkbox"/>	<input type="checkbox"/>
Partner App Subscription User		<input type="checkbox"/>	<input type="checkbox"/>
Partner Community Login User		<input type="checkbox"/>	<input type="checkbox"/>
Partner Community User		<input type="checkbox"/>	<input type="checkbox"/>
Read Only		<input type="checkbox"/>	<input type="checkbox"/>
Remote Employee		<input type="checkbox"/>	<input type="checkbox"/>
Salesforce API Only System Integrations		<input type="checkbox"/>	<input type="checkbox"/>
Silver Partner User		<input type="checkbox"/>	<input type="checkbox"/>
Solution Manager		<input type="checkbox"/>	<input type="checkbox"/>
Standard Platform User		<input type="checkbox"/>	<input type="checkbox"/>
Standard User		<input type="checkbox"/>	<input type="checkbox"/>
System Administrator	On Site Employee (Default) , Remote Employee	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Work.com Only User		<input type="checkbox"/>	<input type="checkbox"/>

#### 6. Select “Apply a different layout for each profile”, and change page layout to On Site Employee Layout for manager profile and System Administrator.

Record Type  
**On Site Employee**  
[« Back to Custom Object: Employee](#)

Use the Edit button to change the properties of this record type. Use the Edit links in the Picklist Values related list to choose the picklist values available for records with this record type.

		Edit
Record Type Label	On Site Employee	Active <input checked="" type="checkbox"/>
Record Type Name	On_Site_Employee	
Namespace Prefix		
Description		
Created By	DURISKTA Team, 11/11/2024, 7:48 pm	Modified By <a href="#">DURISKTA Team</a> , 13/11/2024, 11:09 pm

**Picklists Available for Editing**

Action	Field	Modified Date
<a href="#">Edit</a>	Gender	11/11/2024, 7:48 pm
<a href="#">Edit</a>	Mode of Work	11/11/2024, 7:48 pm

[Picklists Available for Editing Help](#) 

7. click Save.

## Activity 2:

Create another Record Type with name “Remote Employee” following the step from activity 1.

**Note:** use Remote Employee page layout for Remote Employee record type.

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  
Search Layouts  
List View Button Layout  
Restriction Rules

**Record Types**  
2 Items, Sorted by Record Type Label

RECORD TYPE LABEL	DESCRIPTION	ACTIVE	MODIFIED BY
On Site Employee		✓	DURISKTA Team, 11/11/2024, 7:48 pm
Remote Employee		✓	DURISKTA Team, 11/11/2024, 7:55 pm

Quick Find  New [Page Layout Assignment](#)

## **Milestone 15 - Permission sets**

A permission set is a collection of settings and permissions that give users access to various tools and functions. Permission sets extend users' functional access without changing their profiles. Users can have only one profile but, depending on the Salesforce edition, they can have multiple permission sets.

### **Use Case:**

Every day is a war for Admin with some unique challenges. A new challenge awaits as you enter the office. After you arrive in office you came to know that the manager is on leave and there's a lot work pending at his desk generally there are numbers of employee records that the manager have to enter in the salesforce org and no other person have the permission to create those records except him and your CEO wants it to be done by the end of the day, as it's not possible to create the same profile and assigned it to some other person in the org. So using your admin knowledge you came up with the idea to create a permission set and assign it to someone who doesn't have the access to do that job.

Let's create a permission set.

### **Activity 1:**

1. Go to setup → type “permission sets” in quick search → select permission sets → New.

The screenshot shows the Salesforce Setup interface. The top navigation bar includes a cloud icon, 'Setup', 'Home', and 'Object Manager'. A search bar says 'Search Setup'. On the left, a sidebar has 'Users' expanded, with 'Permission Set Groups' and 'Permission Sets' selected. Under 'Custom Code', there are 'Custom Permissions' and a note about global search. The main content area is titled 'Permission Sets' with the sub-header 'All Permission Sets'. It shows a table with three rows of data:

Action	Permission Set Label	Description
<input type="checkbox"/>	Authenticated Payer	An authenticated external user with the ability to make and manage payments.
<input type="checkbox"/>	Buyer	Allows access to the store. Lets users see products and categories.
<input type="checkbox"/>	Buver Manager	Includes all Buver capabilities, and allows access to manage them.

2. Enter the label name as “Per to Emp” → save.

Permission Set Create

Enter permission set information

Label: per\_to\_rmp

API Name: per\_to\_rmp

Description:

Session Activation Required:

### 3. Under Apps Select object settings.

**Apps**

**Assigned Apps**  
Settings that specify which apps are visible in the app menu

**Assigned Connected Apps**  
Settings that specify which connected apps are visible in the app menu

**Object Settings**  
Permissions to access objects and fields, and settings such as tab availability

**App Permissions**  
Permissions to perform app-specific actions, such as "Manage Call Centers"

**Apex Class Access**  
Permissions to execute Apex classes

**Visualforce Page Access**  
Permissions to execute Visualforce pages

**External Data Source Access**  
Permissions to authenticate against external data sources

**Flow Access**  
Permissions to execute Flows

**Named Credential Access**  
Permissions to authenticate against named credentials

**External Credential Principal Access**  
Permissions to authenticate with external credential principal mappings

**Custom Permissions**  
Permissions to access custom processes and apps

### 4. Click on Employee object → click on Edit → under object permission check for read and create.

Permission Set Overview > Object Settings > Employees

**Employees**

**Tab Settings**

Available	Visible
<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/> <a href="#">i</a>

**Employee: Record Type Assignments**

Record Types	Assigned Record Types
On Site Employee	<input checked="" type="checkbox"/>
Remote Employee	<input type="checkbox"/>

**Object Permissions**

Permission Name	Enabled
Read	<input checked="" type="checkbox"/>
Create	<input checked="" type="checkbox"/>
Edit	<input type="checkbox"/>
Delete	<input type="checkbox"/>

### 5. Click on Save.

### 6. After saving the permission click on the Manage assignment

7. Now click on the Manage Assignment.

8. Click on Add Assignment.

9. Now select the users (any one user with the profile “On Site Employee”) and click on Next.

10. Click on Assign
11. Click on Done.

## **Milestone 16 - Reports**

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

### Types of Reports in Salesforce

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

### **Use Case:**

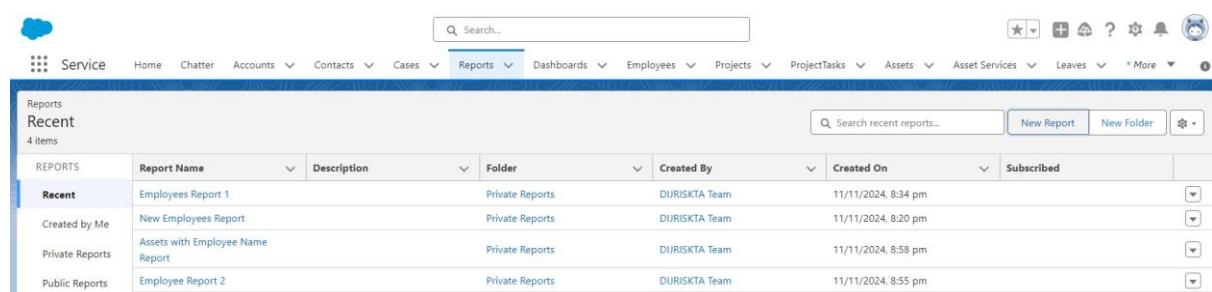
The CEO of an organization wants to have a brief data on employees working, projects in take, project progress, Assets assigned, what are the conditions of the Assets assigned. So he can have a clear picture of his organization and be able to make any decisions required based on this data. So he calls you on this task and wants you to represent the data in an appropriate way.

Let's create a Report.

### **Activity 1:**

#### **Create Report**

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



The screenshot shows the Salesforce Reports page. At the top, there is a search bar and a toolbar with icons for star, plus, question mark, and other report-related functions. Below the toolbar, a navigation bar includes links for Home, Chatter, Accounts, Contacts, Cases, Reports, Dashboards, Employees, Projects, ProjectTasks, Assets, Asset Services, Leaves, and More. The main area is titled "Recent" and shows a list of 4 items. The columns in the list are: REPORTS, Report Name, Description, Folder, Created By, Created On, and Subscribed. The items listed are: "Employees Report 1" (Private Reports, DURISKTA Team, 11/11/2024 8:34 pm), "New Employees Report" (Private Reports, DURISKTA Team, 11/11/2024 8:20 pm), "Assets with Employee Name Report" (Private Reports, DURISKTA Team, 11/11/2024 8:58 pm), and "Employee Report 2" (Private Reports, DURISKTA Team, 11/11/2024 8:55 pm). There are also buttons for "Search recent reports...", "New Report", and "New Folder".

3. Select report type from category or from report type panel or from search panel → click on start report.

#### 4. Customize your report

- Add fields from left pane as shown below

	Employee: Employee ID	Employee: ID	Employee Name	Age	Date of Birth	Gender
1	EMS-0002	a00NS00000LBF8J	Jackie Chan	31.00	01/01/1993	Male
2	EMS-0003	a00NS00000LBF9K	James	26.00	27/02/1998	Male
3	EMS-0004	a00NS00000LBF9L	Benjamin	25.00	16/03/1999	Male
4	EMS-0005	a00NS00000LBF9M	Alexander	23.00	14/07/2001	Male
5	EMS-0006	a00NS00000LBF9N	William	22.00	05/11/2002	Male
6	EMS-0007	a00NS00000LBF9O	Ethan	29.00	11/11/1995	Male
7	EMS-0008	a00NS00000LBF9P	Emma	26.00	29/11/1998	Female
8	EMS-0009	a00NS00000LBF9Q	Olivia	22.00	03/08/2002	Female
9	EMS-0010	a00NS00000LBF9R	Sophia	24.00	27/03/2000	Female
10	EMS-0011	a00NS00000LBF9S	Isabella	28.00	17/06/1996	Female
11	EMS-0012	a00NS00000LBF9T	Amelia	25.00	19/09/1999	Female
12	EMS-0013	a00NS00000LBF9U	Elizabeth	25.00	24/05/1999	Female
13	EMS-0014	a00NS00000LBF9V	Scarlett	26.00	07/03/1998	Female
14	EMS-0015	a00NS00000LBF9W	Chloe	24.00	07/09/2000	Female
15					356.00	

#### 5. Save or run it.

**Note:** Reports may get varied from the above pictures as the data might be different.

#### Activity 2:

1. Create a report with report type: “Employees with ProjectTasks and Projects”.
2. Create a report with report type: “Employees with Assets”.

Report Name	Description	Folder	Created By	Created On	Subscribed
Employees Report 1	Private Reports	DURISKTA Team	11/11/2024, 8:34 pm		
New Employees Report	Private Reports	DURISKTA Team	11/11/2024, 8:20 pm		
Assets with Employee Name Report	Private Reports	DURISKTA Team	11/11/2024, 8:58 pm		
Employee Report 2	Private Reports	DURISKTA Team	11/11/2024, 8:55 pm		

## **Milestone 17 - 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.

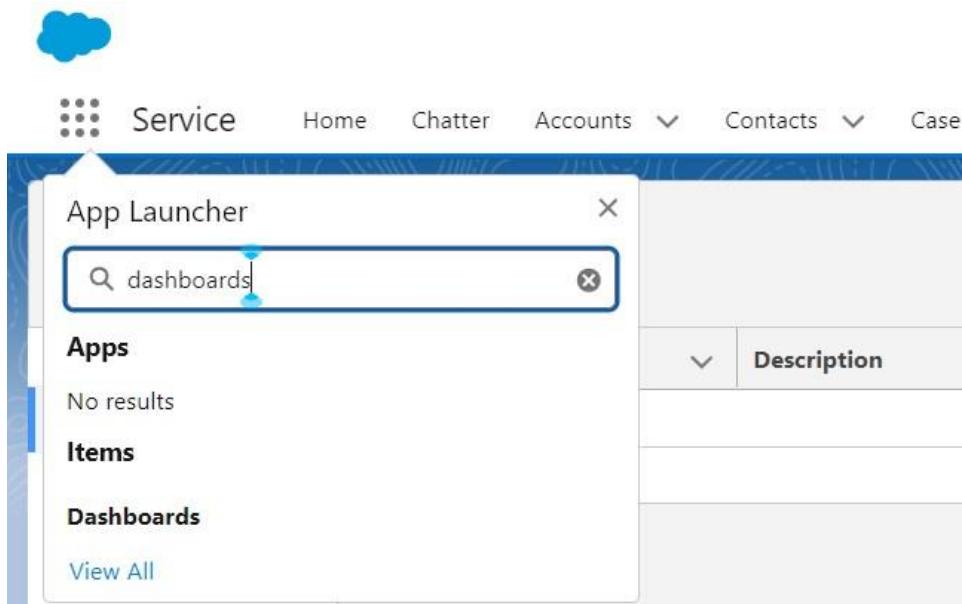
### **Use Case:**

As an Admin for the organization you keep pushing yourself to reach out the business requirements to take the organization to peak heights and all your superiors are very much impressed with your efforts and work dedication. In addition with reports you make an ease for the CEO in viewing the reports with data visualization. So he doesn't have to search for the data he wants during the meetings.

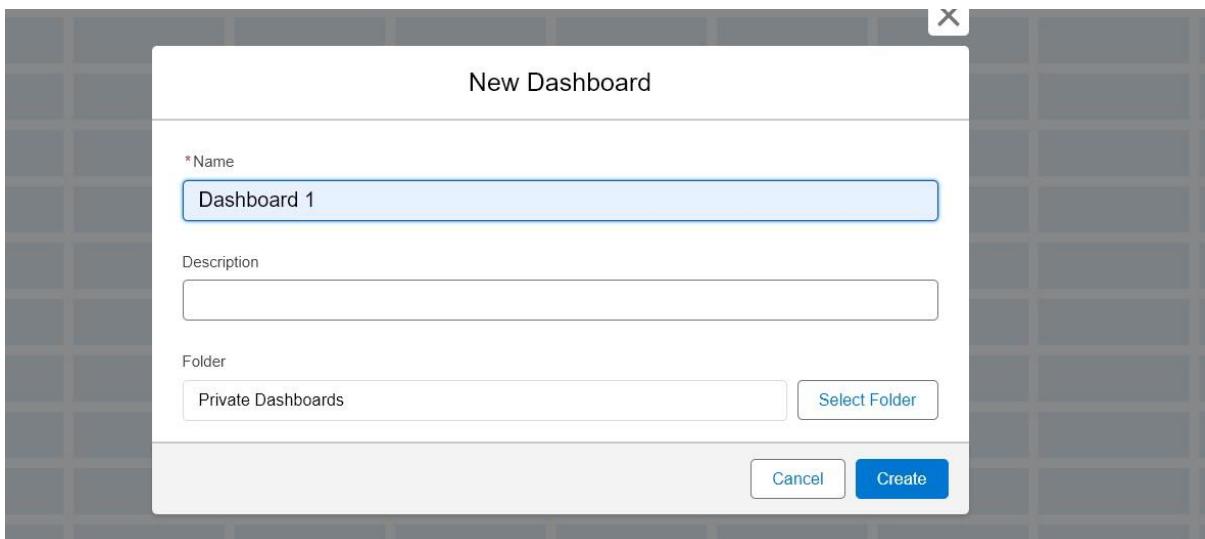
### **Activity 1:**

#### **Create Dashboard**

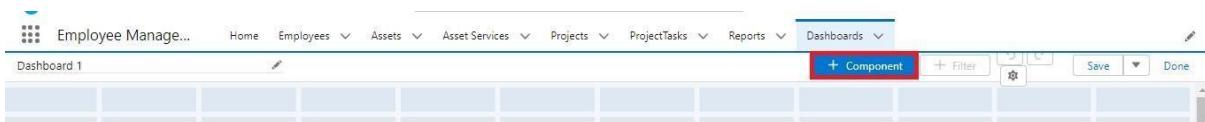
1. Go to the app → click on the Dashboards tabs.



2. Give a Name and click on Create.



### 3. Select add component.



### 4. Select a Report and click on select.

The screenshot shows a report titled 'New Employees Report'. The report header includes a dashboard icon, the title 'Dashboard 1', a note about last refresh (2 days ago), and the date/time (As of 11-Nov-2024, 10:45 pm - Viewing as DIJRISKTA Team). Below the header is a table with columns: Employee Name, Employee ID, Report, Login Time, and Logout Time. The table lists eight employees: Alexander, Amelia, Benjamin, Chloe, Elizabeth, Emma, and Ethan. At the bottom of the report is a link 'View Report (New Employees Report)'.

Employee Name	Employee ID	Report	Login Time	Logout Time
Alexander	EMS-0005	-	9:00 am	5:00 pm
Amelia	EMS-0012	-	9:00 am	5:00 pm
Benjamin	EMS-0004	-	-	-
Chloe	EMS-0015	-	9:00 am	5:00 pm
Elizabeth	EMS-0013	-	-	-
Emma	EMS-0008	-	-	-
Ethan	EMS-0007	-	9:00 am	5:00 pm

### 5. Click Add then click on Save and then click on Done.

## Activity 2:

Create another Dashboard as we discussed in activity 1.

The screenshot shows a Salesforce dashboard titled "Dashboard 2". At the top, there is a search bar and a navigation bar with links for Service, Home, Chatter, Accounts, Contacts, Cases, Reports, Dashboards, and Employee. A message indicates the dashboard was last refreshed 2 days ago and shows data as of 11-Nov-2024, 10:30 pm, viewing as DIJRISKTA Team. Below the header, the title "Employees Report 1" is displayed above a table. The table has columns for Employee Name, Employee ID, Report Type, Login Time, and Logout Time. The data includes eight rows for Alexander, Amelia, Benjamin, Chloe, Elizabeth, Emma, and Ethan. A "View Report (Employees Report 1)" button is located at the bottom left of the report area.

Employee Name	Employee ID	Report Type	Login Time	Logout Time
Alexander	EMS-0005	-	9:00 am	5:00 pm
Amelia	EMS-0012	-	9:00 am	5:00 pm
Benjamin	EMS-0004	-	-	-
Chloe	EMS-0015	-	9:00 am	5:00 pm
Elizabeth	EMS-0013	-	-	-
Emma	EMS-0008	-	-	-
Ethan	EMS-0007	-	9:00 am	5:00 pm

## **Milestone 18 - Approval Process**

### **Use Case:**

The Hiring Manager (HR) at TheSmartBridge wants to track the leave applications for each and every employee of the company. His requirement is the no leave application with more than 5 days of leave should come to him but automatically get submitted to the Employee Manager. If the leave application is more than 5 days then only his approval is needed.

As an Admin to TheSmartBridge you know what to do in order to achieve this requirement.

### **Prerequisites:**

Create the **leave** object with the following fields.

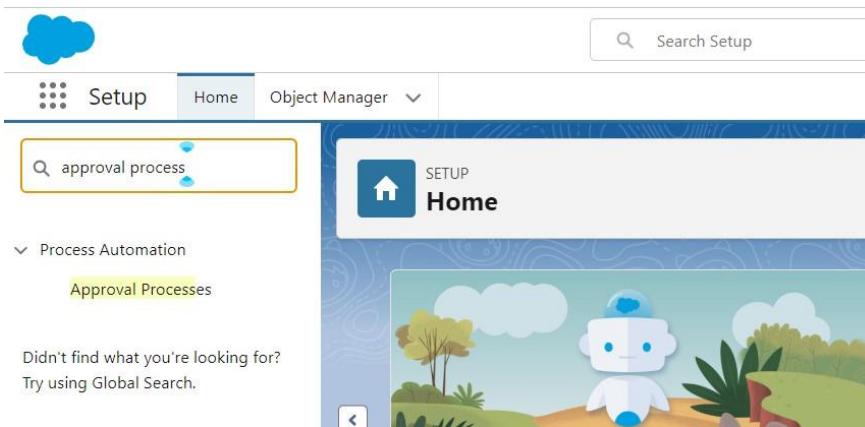
Object	Fields	Datatype
Leave	Employee Name No. of Days Subject Description Status	Lookup with Employee object Number Text Text Area(Rich) Picklist: values as follows
		Submitted Approved Rejected

Create the tab for the **leave** object.

### **Activity 1:**

#### **Create an Approval Process for Leave object.**

1. Go to Setup → type Approval Processes in quick find → click on Approval Processes.



2. In the Manage Approval Processes For list, select Leave.
3. Click Create New Approval Process and select Use Jump Start Wizard.



4. Enter the following parameters

Parameter	Value
Name	Leave Approval Request
Unique Name	Leave_Approval_Request (This automatically gets sent when you tab out of the Name field)
Approval Assignment Email Template	Leave blank
Add the Submit for Approval button and Approval History related list to all Travel Approval page layouts	Leave this selected/checked
Use Approver Field of Leave Owner	Leave unselected/unchecked.
Select Approver	select Automatically assign to approver(s) and for users select the name of the user with the Manager role.

5. Click Save.
6. Click View Approval Process Detail Page.

Edit Custom Object  
Leave

**Custom Object Definition Edit**

**Custom Object Information**

The singular and plural labels are used in tabs, page layouts, and reports.  
**Be careful when changing the name or label as it may affect existing integrations and merge templates.**

Label	Leave	Example: Account
Plural Label	Leaves	Example: Accounts
Starts with vowel sound	<input type="checkbox"/>	

The Object Name is used when referencing the object via the API.

Object Name	Leave	Example: Account
-------------	-------	------------------

Description

Context-Sensitive Help Setting

- Open the standard Salesforce.com Help & Training window
- Open a window using a Visualforce page

Content Name

—None—

## Activity 2:

### Initial Submission Action:

- Under initial submission action click on add new and then select field update.
- Give name as “Approval Status to Submitted”.

**Initial Submission Actions**

Action	Type	Description
Record Lock	Field Update	Lock this record
Edit   Remove	Field Update	Approve
Edit   Remove	Field Update	Approve
Edit   Remove	Field Update	Flow
		Approval Status to Rejected

Add Existing Add New ▾

- Task
- Email Alert
- Field Update
- Outbound Message
- Flow
- Approval Status to Rejected

- Select Status for the field to update.
- Under specify new field value select “A specific value” and select submitted and click Save.

Define the field update, including the object associated with the workflow rule, approval process, or entitlement process, the field to update, and the value to apply. Note the fields are shown only for the type that you select.

**Field Update Edit**

**Identification**

Name	Approval Status to Submitted
Unique Name	Approval_Status_to_Submit
Description	
Object	Leave
Field to Update	Leave: Status
Field Data Type	Picklist
Re-evaluate Workflow Rules after Field Change	<input type="checkbox"/>

**Specify New Field Value**

**Picklist Options**

- The value above the current one
- The value below the current one
- A specific value

Submitted

Save Save & New Cancel

## Activity 3:

### Approval Steps:

1. While you are still on Leave Approval Request detail page, Under approval steps click the new approval step.
2. Give the name as “Approval from HR” and click on next.

The Jump Start wizard creates a one-step approval process for you in just a few minutes.

Enter a name for your process in the box below and then select an email template to notify the approv

Name	Approval from HR
Unique Name	Approval_from_HR
Approval Assignment Email Template	<input type="button" value=""/>

3. Under specify step criteria select “Enter this step if the following (Criteria are met)”,  
Select field : “Leave: No. of Days”,  
Operator : equals Value : 5

Specify Entry Criteria

Use this approval process if the following criteria are met :

Field	Operator	Value	AND
Leave: No. of Days	equals	5	AND
--None--	--None--		

[Add Filter Logic...](#)

4. Click next.
5. Under select approver : select Automatically assign to approver(s) and for users select the name of the user with the HR role.

Approval Steps		New Approval Step	
Action	Step Number	Name	Description
Show Actions   Edit   Del	1	Step 1	
Show Actions   Edit   Del	2	Approval from HR	Leave: No. of Days EQUALS 5

Final Approval Actions	
Action	Type
Add Existing	
Add New	
Edit	Record Lock

6. Click on Save.
7. No, I'll do this later. Take me to the approval process detail page to review what I've just created and click Go.

## Activity 4:

### Final Approval Action:

- Under initial submission action click on add new and then select field update.

The screenshot shows the 'Initial Submission Actions' screen. At the top right, there is an 'Add Existing' button and an 'Add New' button with a dropdown arrow. The dropdown menu is open, showing several options: Task, Email Alert, Field Update, Outbound Message, Flow, and Approval Status to Rejected. The 'Field Update' option is highlighted with a blue selection box.

- Give name as "Approval Status to Approved".

Select Status for the field to update.

Under specify new field value select "A specific value" and select Approved and click Save.

The screenshot shows the 'Field Update Edit' screen. At the top right, there are 'Save', 'Save & New', and 'Cancel' buttons. The main area is divided into two sections: 'Identification' and 'Specify New Field Value'.  
**Identification Section:**  
Name: Approval Status to Approve  
Unique Name: Approval\_Status\_to\_Appro  
Description: (empty)  
Object: Leave  
Field to Update: Leave: Status  
Field Data Type: Picklist  
Re-evaluate Workflow Rules after Field Change: (checkbox checked)  
**Specify New Field Value Section:**  
Picklist Options:  
 The value above the current one  
 The value below the current one  
 A specific value: Approved  
At the bottom right of this section are 'Save', 'Save & New', and 'Cancel' buttons.

## Activity 5:

### Final Rejection Action:

- Under initial submission action click on add new and then select field update.

The screenshot shows the 'Initial Submission Actions' screen. At the top right, there are two buttons: 'Add Existing' and 'Add New'. A dropdown menu is open over the 'Add New' button, listing several options: Task, Email Alert, Field Update, Outbound Message, Flow, and Approval Status to Rejected. The 'Field Update' option is highlighted with a blue selection box.

- Give name as "Approval Status to Rejected".

Select Status for the field to update.

Under specify new field value select "A specific value" and select Rejected and click Save.

The screenshot shows the 'Field Updates' screen under the 'SETUP' tab. The title is 'Field Updates'. Below it, a sub-header says: 'Define the field update, including the object associated with the workflow rule, approval process, or entitlement process, the field to update, and the value to apply. Note that the field to update Fields are shown only for the type that you select.' The main area is titled 'Field Update Edit' with buttons for 'Save', 'Save & New', and 'Cancel'.  
**Identification**  
Name: Approval Status to Rejected  
Unique Name: Approval\_Status\_to\_Reject  
Description:  
Object: Leave  
Field to Update: Leave: Status  
Field Data Type: Picklist  
Re-evaluate Workflow Rules after Field Change:   
**Specify New Field Value**  
**Picklist Options**  
 The value above the current one  
 The value below the current one  
 A specific value: Rejected  
  
At the bottom are 'Save', 'Save & New', and 'Cancel' buttons.

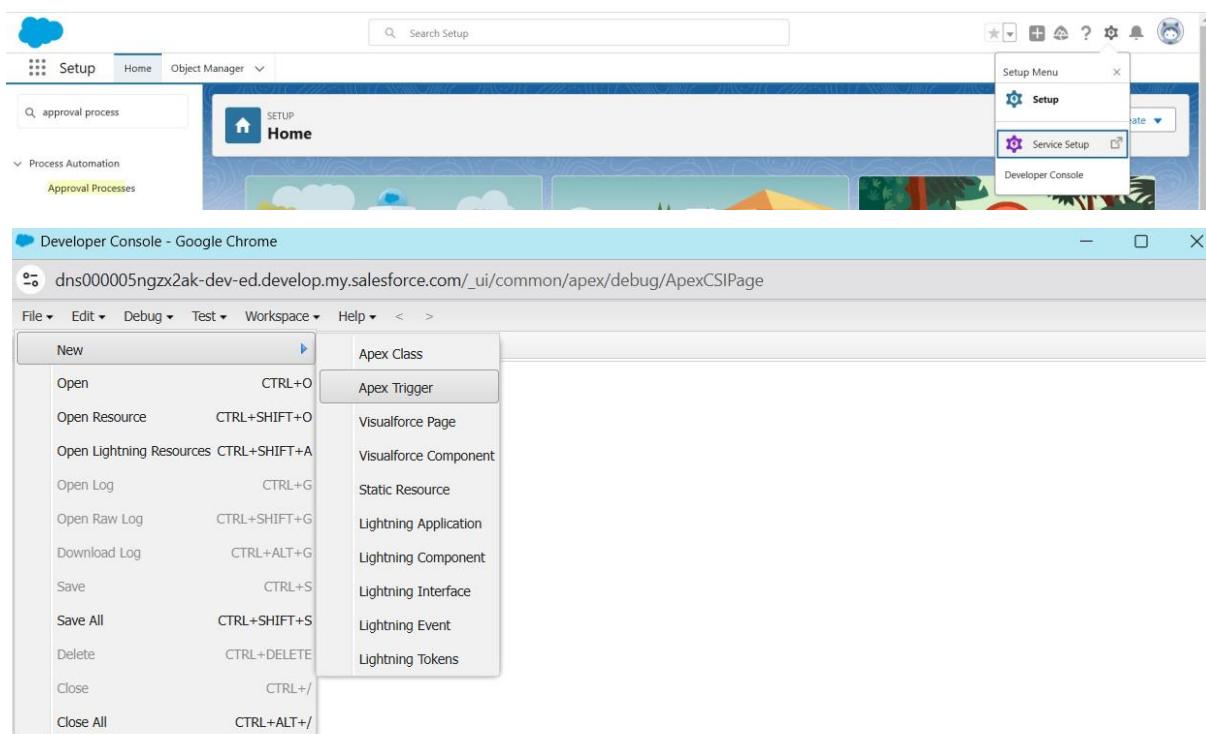
## **Milestone 19 - Apex Trigger**

### **Use Case:**

The Manager at TheSmartBridge wants no duplicate names of employees should enter into the database. So he/she recalls you for the solution. Write a code to achieve this requirement using Salesforce developer skills to fulfill the Managers requirement.

### **Activity 1 : Create an Apex Trigger**

1. To create a new Apex Class follow the below steps: Click on the file → New → Apex Class.



2. Give the Apex Trigger name as “EmpInsert”, and select Employee\_\_c from the dropdown for sObject.



3. Click Submit.
4. Now write the code logic here

The screenshot shows the Salesforce Developer Console interface. The top navigation bar includes File, Edit, Debug, Test, Workspace, Help, and tabs for Logs, Tests, Checkpoints, Query Editor, View State, Progress, and Problems. The main area displays the Apex trigger code:

```

1 * trigger EmpInsert on Employee__c (before insert) {
2     for(Employee__c pass : Trigger.New){
3
4         List<Employee__c> mynew = [SELECT Id, Name FROM Employee__c WHERE Employee_Name__c =: pass.Employee_Name__c];
5
6         if(mynew.size() > 0){
7             pass.Name.addError('Employee with same name is existing');
8
9         }
10    }
11 }
12
13 }

```

Below the code, a table titled "Logs" shows the execution details:

User	Application	Operation	Time	Status	Read	Size
DURISHTA Team	Unknown	ApexTestHandler	11/14/2024, 10:10:14 PM	Success	Unread	22.8 KB

At the bottom, there are "Filter" and "Click here to filter the log list" buttons.

5. Save the code.(click on file → Save)

### Trigger Code:

```

trigger EmpInsert on Employee__c (before insert) {
    for(Employee__c pass : Trigger.New){
        List<Employee__c> mynew = [SELECT Id, Name FROM Employee__c WHERE
            Employee_Name__c =: pass.Employee_Name__c];
        if(mynew.size() > 0){
            pass.Name.addError('Employee with same name is existing');
        }
    }
}

```

The screenshot shows the Salesforce Developer Console interface. The top navigation bar includes File, Edit, Debug, Test, Workspace, Help, and tabs for Logs, Tests, and Problems. The main area displays the Apex test class code:

```

2 * public class EmpInsertTest {
3     @isTest
4     public static void testDuplicateEmployeeName() {
5         Employee__c emp1 = new Employee__c();
6         emp1.Employee_Name__c = 'John Doe';
7         insert emp1;
8         Employee__c emp2 = new Employee__c();
9         emp2.Employee_Name__c = 'John Doe';
10        Test.startTest();
11        try {
12            insert emp2;
13            System.assert(false, 'Expected a duplicate name error, but none was thrown.');
14        } catch (DmlException e) {
15            System.assert(e.getMessage().contains('Employee with same name is existing'), 'Unexpected error message: ' + e.getMessage());
16        }
17        Test.stopTest();
18    }
19    @isTest
20    public static void testUniqueEmployeeName() {
21        Employee__c emp1 = new Employee__c();
22        emp1.Employee_Name__c = 'Jane Doe';
23        insert emp1;
24        Employee__c emp2 = new Employee__c();
25        emp2.Employee_Name__c = 'Mark Smith';
26        Test.startTest();
27        insert emp2;
28        Test.stopTest();
29    }
}

```

**Trigger Tester Code:**

```
@isTest
public class EmpInsertTest {
    @isTest
    public static void testDuplicateEmployeeName() {
        Employee__c emp1 = new Employee__c();
        emp1.Employee__Name__c = 'John Doe';
        insert emp1;

        Employee__c emp2 = new Employee__c();
        emp2.Employee__Name__c = 'John Doe';
        Test.startTest();
        try {
            insert emp2;
            System.assert(false, 'Expected a duplicate name error, but none was thrown.');
        } catch (DmlException e) {
            System.assert(e.getMessage().contains('Employee with same name is existing'),
            'Unexpected error message: ' + e.getMessage());
        }
        Test.stopTest();
    }

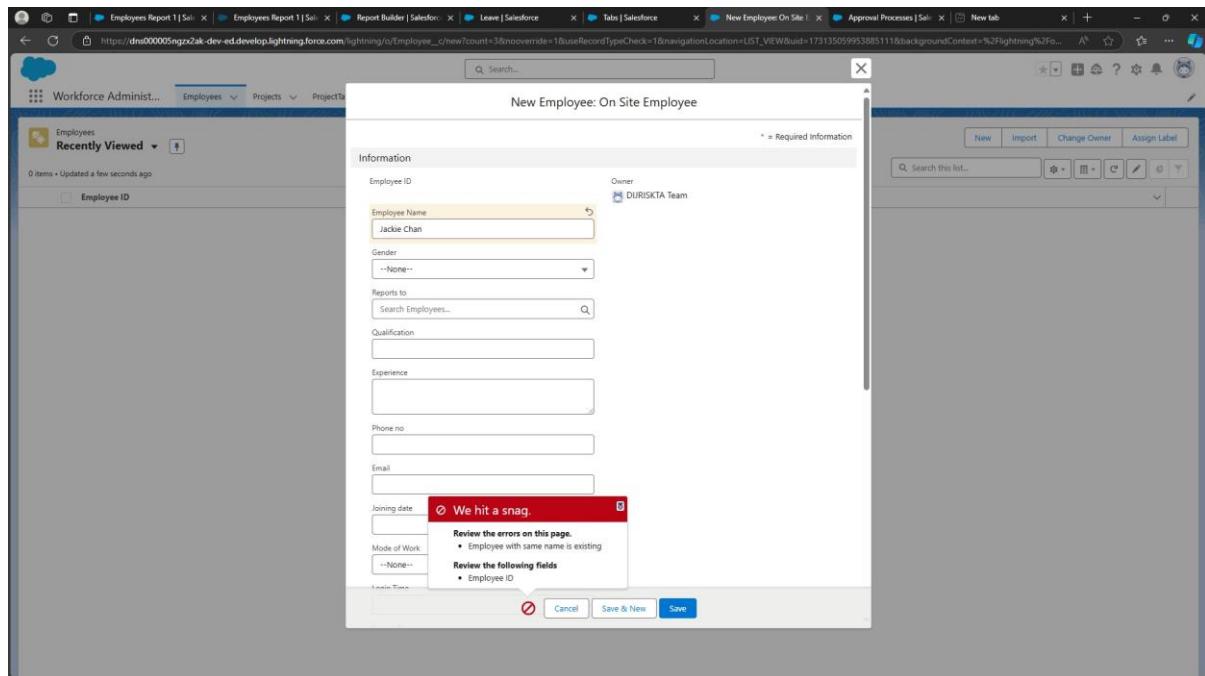
    @isTest
    public static void testUniqueEmployeeName() {
        Employee__c emp1 = new Employee__c();
        emp1.Employee__Name__c = 'Jane Doe';
        insert emp1;

        Employee__c emp2 = new Employee__c();
        emp2.Employee__Name__c = 'Mark Smith';
        Test.startTest();
        insert emp2;
        Test.stopTest();

        List<Employee__c> employees = [SELECT Id, Employee__Name__c FROM
        Employee__c WHERE Employee__Name__c IN ('Jane Doe', 'Mark Smith')];
        System.assertEquals(2, employees.size(), 'Expected 2 employees to be inserted.')}}}
```

## Activity 2 : Testing the Trigger

Follow the steps which are mentioned in **Milestone 7, Activity 1** and try to create a record with the existing Employee Name say “Jackie Chan” you’ll face the error while saving the record saying “Employee with same name is existing”.



## Conclusion:

In summary, the **Workforce Administration Solution** is designed to centralize and streamline employee management, project tracking, and asset assignment processes within companies. By automating administrative tasks and enhancing data security through Salesforce, it improves efficiency, supports better decision-making, and ensures compliance. This solution enables companies to monitor performance, optimize resource allocation, and maintain accurate, accessible records, ultimately driving productivity and operational effectiveness.