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WORKFORCE ADMINISTRATION SOLUTION (DEV)

1. Project Overview

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.

2. Objectives

Business Goals

Improve Workforce Efficiency

Streamline and automate workforce management processes to reduce manual tasks and improve operational efficiency.

Enhance Data Accuracy

Achieve a 95% accuracy rate in employee data, ensuring that all records, including employment details, benefits, and time-off tracking, are error-free.

Improve Compliance Management

Ensure that the system complies with all local, state, and federal regulations by integrating a compliance management tool, reducing the risk of non-compliance by 25%.

Specific Outcomes

Centralized Employee Records

Consolidate all employee data into a single, centralized system for easy access and real-time updates, eliminating information across multiple systems.

Time-Off and Leave Management

Introduce an automated leave management system within Salesforce, allowing employees to request time off, track accruals, and manage approvals directly, resulting in a 20% reduction in HR workload for leave-related inquiries.

Enhanced Reporting and Analytics

Deliver custom dashboards and reports to track workforce performance, turnover, and compliance, with the ability to generate real-time reports at the click of a button, improving decision-making speed

3. Salesforce Key Features and Concepts Utilized

- Object
- Tabs
- The Lightning App:
- Fields & Relationships
- Setting OWD
- User Adoption
- Import Data
- Profiles
- Role
- Users
- Page layouts
- Chatter Group
- Record Types
- Permission sets
- Reports
- Dashboards
- Approval Process

- Apex Trigger

4. Detailed Steps to Solution Design

Object

What Is an Object?

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

Salesforce objects are of two types:

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

To create an object:

1. From the setup page --> Click on Object Manager --> Click on Create --> Click on Custom Object.
2. Enter the label name: Employee
3. Plural label name: Employees
4. Enter Record Name Label and Format

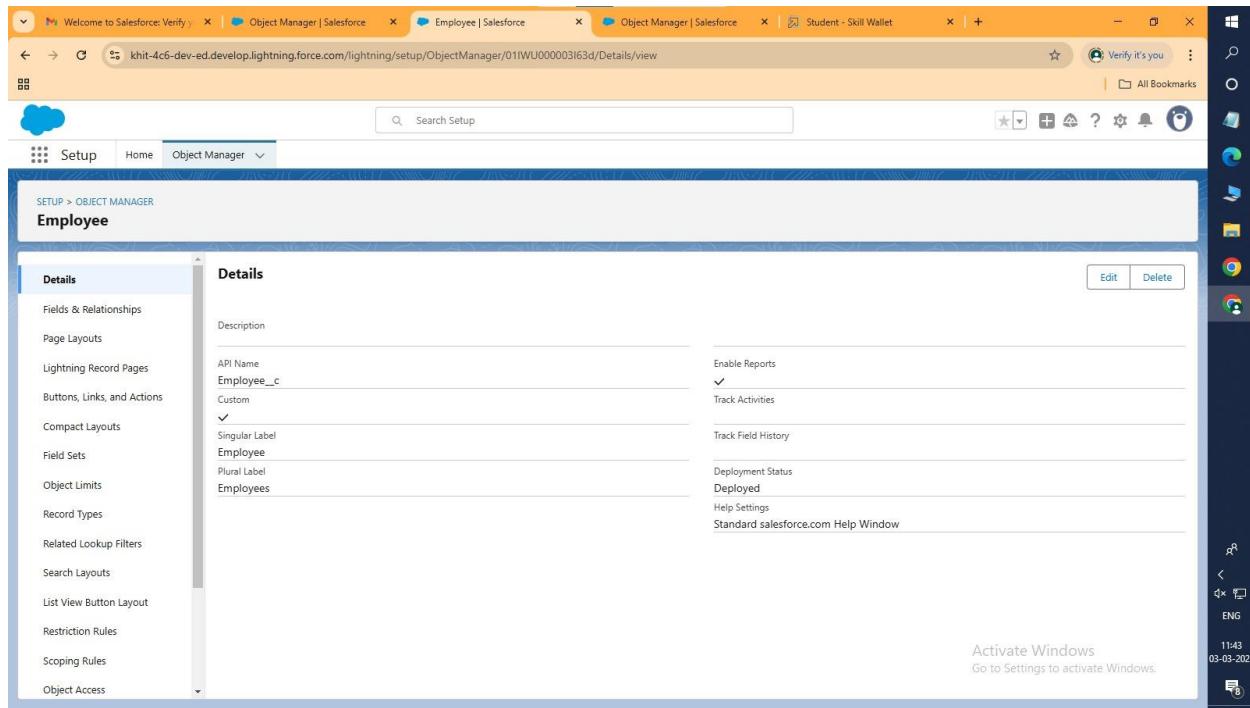
Record Name : Employee ID

Data Type : Auto Number

Display Format : EMS-{0000}

Starting Number : 1

5. Click on Allow reports, Allow search --> Save.



In the similar way Create the objects with the Project, ProjectTask, Asset, Asset Services.

Create Project Object

The screenshot shows the Salesforce Object Manager interface. The top navigation bar includes tabs for 'Welcome to Salesforce: Verify', 'Object Manager | Salesforce', 'Employee | Salesforce', 'Project | Salesforce', and 'Student - Skill Wallet'. The main title is 'SETUP > OBJECT MANAGER' followed by 'Project'. On the left, a sidebar lists various object configuration options like 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, Scoping Rules, and Object Access. The central 'Details' section shows the API Name 'Project__c', which is custom (checked). Singular Label is 'Project' and Plural Label is 'Projects'. Under 'Enable Reports', 'Track Activities' is checked. Deployment Status is 'Deployed' and Help Settings point to the standard salesforce.com help window. A status bar at the bottom right indicates 'Activate Windows'.

Create ProjectTask Object

This screenshot shows the creation of a new object named 'ProjectTask'. The setup is identical to the 'Project' object, with the API Name set to 'ProjectTask__c', indicating it is a custom object. The singular label is 'ProjectTask' and the plural label is 'ProjectTasks'. The 'Enable Reports' and 'Track Activities' checkboxes are checked. The deployment status is 'Deployed' and help settings point to the standard salesforce.com help window. The status bar at the bottom right indicates 'Activate Windows'.

Create Asset Object

The screenshot shows the Salesforce Setup interface for creating a new object named 'Asset'. The left sidebar lists various configuration options like Fields & Relationships, Page Layouts, and Lightning Record Pages. The main 'Details' tab shows the following configuration:

Description	API Name	Asset__c
Custom	Enable Reports	✓
✓	Track Activities	
Singular Label	Track Field History	
Asset	Deployment Status	Deployed
Plural Label	Help Settings	Standard salesforce.com Help Window
Assets		

At the bottom right, there is a message: "Activate Windows" and "Go to Settings to activate Windows."

Create Asset Service Object

The screenshot shows the Salesforce Setup interface for creating a new object named 'Asset Service'. The left sidebar lists various configuration options. The main 'Details' tab shows the following configuration:

Description	API Name	Asset_Service__c
Custom	Enable Reports	✓
✓	Track Activities	
Singular Label	Track Field History	
Asset Service	Deployment Status	Deployed
Plural Label	Help Settings	Standard salesforce.com Help Window
Asset Services		

At the bottom right, there is a message: "Activate Windows" and "Go to Settings to activate Windows."

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 Object

To create a Tab

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

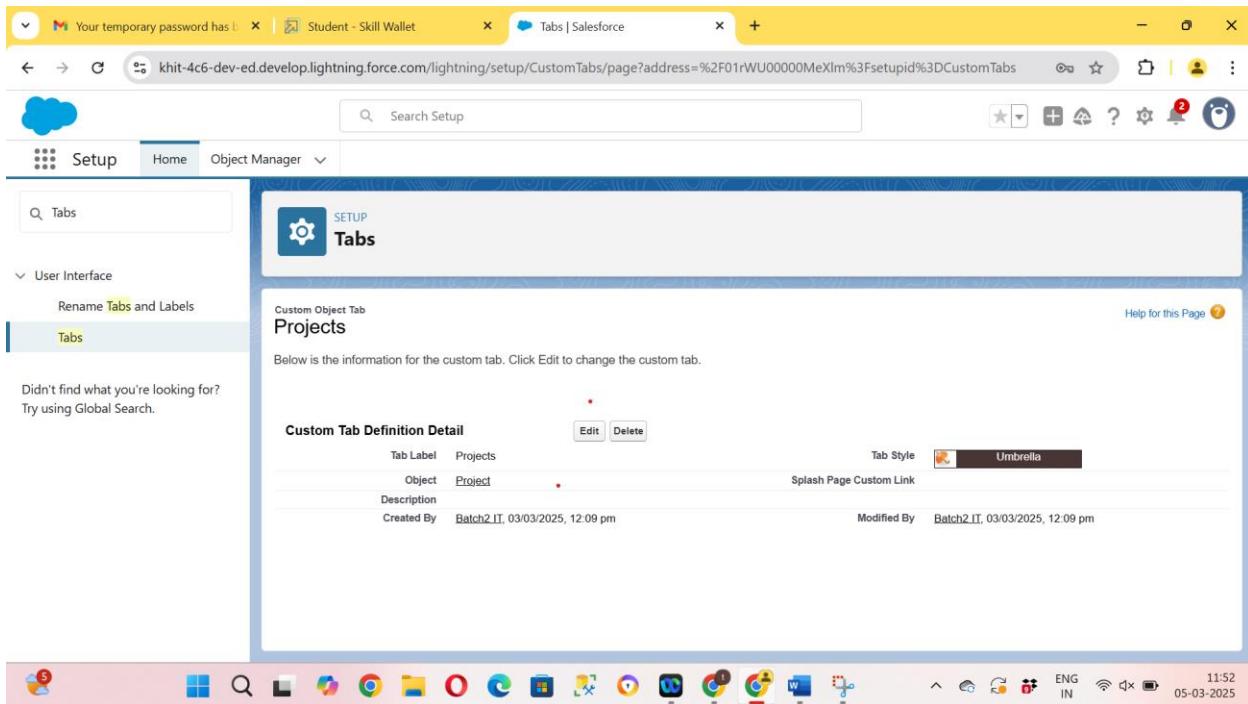
Creating a Custom Tab (Employee)

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

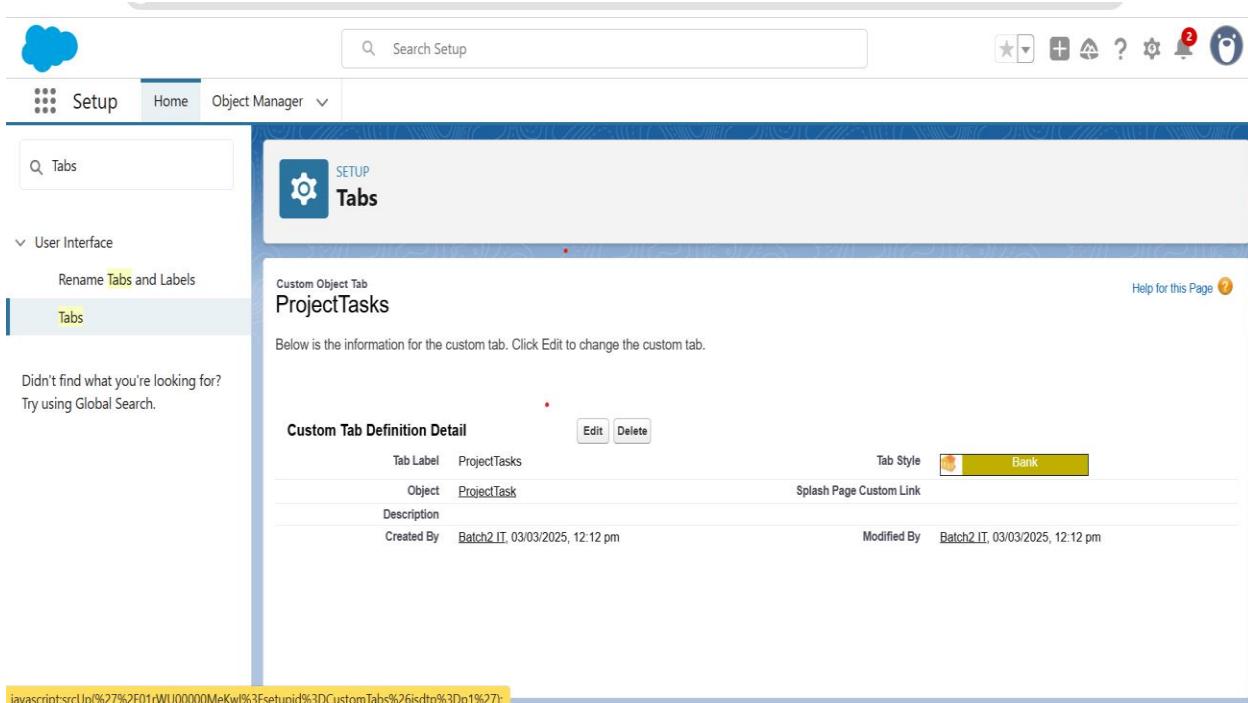
- Page Header:** Your temporary password has..., Student - Skill Wallet, Tabs | Salesforce
- Search Bar:** Search Setup
- Left Navigation:** Setup, Home, Object Manager
- Left Sidebar:** User Interface, Rename Tabs and Labels, Tabs
- Current Page:** SETUP Tabs
- Section:** Custom Object Tab Employees
- Description:** Below is the information for the custom tab. Click Edit to change the custom tab.
- Custom Tab Definition Detail:**

Tab Label	Employees	Tab Style	Star
Object	Employee	Splash Page Custom Link	
Description			
Created By	Batch2 IT, 03/03/2025, 12:07 pm	Modified By	Batch2 IT, 03/03/2025, 12:07 pm
- Bottom Taskbar:** Weather (27°C Haze), Windows Start button, Task View, File Explorer, Edge, Taskbar icons, ENG IN, 11:48, 05-03-2025

Creating a Custom Tab (Project)



Creating a Custom Tab (ProjectTasks)



Creating a Custom Tab (Assets)

The screenshot shows the Salesforce Setup interface. The top navigation bar includes a cloud icon, 'Search Setup', and various global buttons. The main menu on the left is under 'User Interface' and 'Rename Tabs and Labels'. The 'Tabs' section is selected. The central content area is titled 'SETUP Tabs' and shows a 'Custom Object Tab Assets'. A message below says, 'Below is the information for the custom tab. Click Edit to change the custom tab.' The 'Custom Tab Definition Detail' table contains the following data:

Tab Label	Assets	Tab Style	
Object	Asset	Splash Page Custom Link	
Description			
Created By	Batch2_IT [03/03/2025, 12:11 pm]	Modified By	Batch2_IT [03/03/2025, 12:11 pm]

A help link 'Help for this Page' is located in the top right corner.

Creating a Custom Tab (Asset Services)

The screenshot shows the Salesforce Setup interface, identical to the previous one but with a different custom tab name. The 'Custom Object Tab Asset Services' is defined with the following details:

Tab Label	Asset Services	Tab Style	
Object	Asset Service	Splash Page Custom Link	
Description			
Created By	Batch2_IT [03/03/2025, 12:12 pm]	Modified By	Batch2_IT [03/03/2025, 12:12 pm]

A help link 'Help for this Page' is located in the top right corner.

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.

To create a lightning app page

1. Go to setup page --> search “app manager” in quick find --> select “app manager” --> click on New lightning App.
2. Fill the app name in app details 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

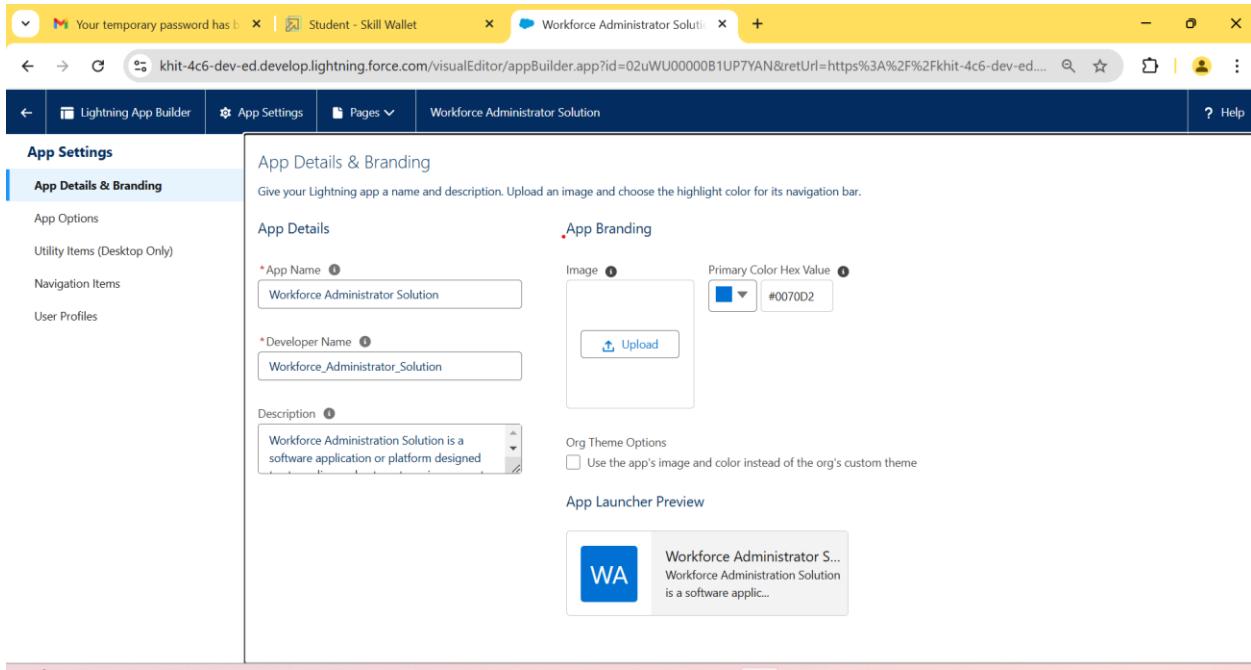
3. Then click Next --> (App option page) keep it as default --> Next --> (Utility Items) keep it as default --> Next.

4. To Add Navigation Items:

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.

5. To Add User Profiles:

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



Fields & Relationships

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

Activity 1: Creating Text Field in Employee 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.

The screenshot shows the Salesforce Setup interface. The top navigation bar includes a cloud icon, 'Search Setup', and various global buttons. The main header reads 'SETUP > OBJECT MANAGER Employee'. On the left, a sidebar lists options like Details, Fields & Relationships (which is selected), Page Layouts, Lightning Record Pages, Buttons, Links, and Actions, Compact Layouts, Field Sets, Object Limits, Record Types, Related Lookup Filters, Search Layouts, and List View Button Layout. The main content area displays the 'Employee Custom Field Employee Name' configuration. It shows the 'Custom Field Definition Detail' section with tabs for 'Edit', 'Set Field-Level Security', 'View Field Accessibility', and 'Where is this used?'. Under 'Field Information', details include: Field Label: Employee Name, Field Name: Employee_Name, API Name: Employee_Name_c, Description: Help Text, Data Owner: System, Field Usage: Standard, Data Sensitivity Level: Low, Compliance Categorization: None, Created By: Batch2_IT 03/03/2025, 12:33 pm, Modified By: Batch2_IT 03/03/2025, 12:33 pm. To the right, it shows Object Name: Employee and Data Type: Text. At the bottom, under 'General Options', there are checkboxes for Required and Unique.

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.
3. Click on Next.
4. Fill the above as following:

Field Label: Date of Birth.

Field Name: gets auto generated.

Click on Next --> Next --> Save and new.

Employee Custom Field Date of Birth

Custom Field Definition Detail

Field Information	Object Name	Employee	
Field Label	Date of Birth	Data Type	Date
Field Name	Date_of_Birth		
API Name	Date_of_Birth__c		
Description			
Help Text			
Data Owner			
Field Usage			
Data Sensitivity Level			
Compliance Categorization			
Created By	Batch2_IT, 03/03/2025, 12:37 pm	Modified By	Batch2_IT, 03/03/2025, 12:37 pm
General Options			
Required	<input checked="" type="checkbox"/>		
Default Value			

Activity 3: Creating Formula Field in Employee Object

1. Repeat step 1 and 2 mentioned in activity 1
2. Select Data type as “Formula” and click Next.
3. Give Field Label and Field Name as “Age” and select formula return type as “Number” and click next.
4. Under Advanced Formula write down the formula and click “Check Syntax” and Next --> Next --> Save & New.

Employee Custom Field Age

Custom Field Definition Detail

Field Information	Object Name	Employee	
Field Label	Age	Data Type	Formula
Field Name	Age		
API Name	Age__c		
Description			
Help Text			
Data Owner			
Field Usage			
Data Sensitivity Level			
Compliance Categorization			
Created By	Batch2_IT, 03/03/2025, 12:43 pm	Modified By	Batch2_IT, 03/03/2025, 12:43 pm
Formula Options			
Data Type	Formula		
Decimal Places	2		
YEAR(TODAY()) - YEAR(DATE_OF_BIRTH__C)			

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.
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.
4. Click Next --> Next --> Next --> Save & New.

The screenshot shows the Salesforce Setup interface. The top navigation bar includes a cloud icon, a search bar labeled "Search Setup", and various global buttons. Below the bar, the "Setup" tab is selected, followed by "Home" and "Object Manager". The main content area is titled "Employee" under "SETUP > OBJECT MANAGER". A sidebar on the left lists options like "Fields & Relationships", "Page Layouts", "Lightning Record Pages", etc. The main panel displays the "Custom Field Definition Detail" for a field named "Gender". The "Field Information" section shows the following details:

Field Label	Gender	Object Name	Employee
Field Name	Gender	Data Type	Picklist
API Name	Gender_c		
Description			
Help Text			
Data Owner			
Field Usage			
Data Sensitivity Level			
Compliance Categorization			

Below this, the "General Options" section includes "Required" (unchecked) and "Default Value" (empty). At the bottom of the page, there are buttons for "Edit", "Set Field-Level Security", "View Field Accessibility", and "Where is this used?". A "Help for this Page" link is also present.

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.
3. Select Employee from the drop down related to the field and click Next.
4. Give Field Label as “Reports to” and click Next.
5. Next --> Next --> Save & New.

SETUP > OBJECT MANAGER

Employee

Reports to

Back to Employee

Validation Rules [0]

Custom Field Definition Detail

Field Label: Reports to
Field Name: Reports_to
API Name: Reports_to_c
Object Name: Employee
Data Type: Lookup

Description
Help Text
Data Owner
Field Usage
Data Sensitivity Level
Compliance Categorization

Created By: Batch2_IT, 03/03/2025, 12:49 pm
Modified By: Batch2_IT, 03/03/2025, 12:49 pm

Activity 6: Creating Master-Detail Relationship between Employee & Asset 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. Give Field Label as “Employee Name” and click Next.
7. Next --> Next --> Save & New.

SETUP > OBJECT MANAGER

ProjectTask

Employee Name

Back to ProjectTask

Validation Rules [0]

Custom Field Definition Detail

Field Label: Employee Name
Field Name: Employee_Name
API Name: Employee_Name_c
Object Name: ProjectTask
Data Type: Master-Detail

Description
Help Text
Data Owner
Field Usage
Data Sensitivity Level
Compliance Categorization

Created By: Batch2_IT, 03/03/2025, 12:52 pm
Modified By: Batch2_IT, 03/03/2025, 12:52 pm

Activity 7: Creating Remaining Fields in Employee Object

Now create the remaining fields using the data types mentioned below.

1. Qualification (Text)
2. Address (Text Area)
3. Experience (Text Area)
4. Phone no (Phone)
5. Email (Email)
6. Joining date (Date)
7. Mode of Work Picklist (Values: Onsite, Remote)
8. Cab Allowances (Check box)
9. Food Allowances (Check box)
10. Wifi Allowances (Check box)
11. Cab Allowance Amount (Currency)
12. Food Allowance Amount (Currency)
13. Wifi Allowance Amount (Currency)
14. Login Time (Time)
15. Logout Time (Time)
16. LinkedIn Profile (url)

The screenshot shows the Salesforce Object Manager interface for the 'Employee' object. The left sidebar has 'Fields & Relationships' selected under the 'Employee' tab. The main area displays a table of fields:

FIELD LABEL	FIELD NAME	DATA TYPE	CONTROLLING FIELD	INDEXED
Address	Address__c	Text Area(255)		
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(10)		

SETUP > OBJECT MANAGER
Employee

Fields & Relationships
26 Items. Sorted by Field Label

Page Layouts	Experience	Experience__c	Text Area(255)
Lightning Record Pages	Food Allowance Amount	Food_Allowance_Amount__c	Currency(18, 0)
Buttons, Links, and Actions	Food Allowances	Food_Allowances__c	Checkbox
Compact Layouts	Gender	Gender__c	Picklist
Field Sets	Joining date	Joining_date__c	Date
Object Limits	Last Modified By	LastModifiedById	Lookup(User)
Record Types	LinkedIn Profile	LinkedIn_Profile__c	URL(255)
Related Lookup Filters	Login Time	Login_Time__c	Time
Search Layouts	Logout Time	Logout_Time__c	Time
List View Button Layout			
Restriction Rules			

SETUP > OBJECT MANAGER
Employee

Fields & Relationships
26 Items. Sorted by Field Label

Page Layouts	Logout Time	Logout_Time__c	Time
Lightning Record Pages	Mode of Work	Mode_of_Work__c	Picklist
Buttons, Links, and Actions	Owner	OwnerId	Lookup(User,Group)
Compact Layouts	Phone no	Phone_no__c	Phone
Field Sets	Qualification	Qualification__c	Text(18)
Object Limits	Record Type	RecordTypeid	Record Type
Record Types	Reports to	Reports_to__c	Lookup(Employee)
Related Lookup Filters	Wifi Allowance Amount	Wifi_Allowance_Amount__c	Currency(18, 0)
Search Layouts	Wifi Allowances	Wifi_Allowances__c	Checkbox
List View Button Layout			
Restriction Rules			

Now create the remaining fields in Project using the data types mentioned below.

1. Project Name (Text)
2. Project Lead (Text)
3. Start Date (Date)
4. End Date (Date)
5. Project Status (Picklist: Value - Completed, On Going, Not Yet Started)

The screenshot shows the Salesforce Object Manager interface for the 'Project' object. The top navigation bar includes 'Setup', 'Home', and 'Object Manager'. The main area displays the 'Fields & Relationships' section, which lists nine items sorted by Field Label. The table has columns for FIELD LABEL, FIELD NAME, DATA TYPE, CONTROLLING FIELD, and INDEXED. The listed fields are:

FIELD LABEL	FIELD NAME	DATA TYPE	CONTROLLING FIELD	INDEXED
Created By	CreatedById	Lookup(User)		
End Date	End_Date__c	Date		
Last Modified By	LastModifiedById	Lookup(User)		
Owner	OwnerId	Lookup(User,Group)		✓
Project ID	Name	Auto Number		✓
Project Lead	Project_Lead__c	Text(30)		
Project Name	Project_Name__c	Text(20)		
Project Status	ProjectStatus__c	Picklist		
Start Date	Start_Date__c	Date		

Now create the remaining fields in ProjectTask using the data types mentioned below.

1. Project Task (MDR)
2. Finishes in (Formula return type: Number)
3. Working Hours (Numbers)
4. Employee Name (MDR with Employee Object)

SETUP > OBJECT MANAGER

ProjectTask

Fields & Relationships
7 Items, Sorted by Field Label

FIELD LABEL	FIELD NAME	DATA TYPE	CONTROLLING FIELD	INDEXED
Created By	CreatedById	Lookup(User)		
Employee Name	Employee_Name__c	Master-Detail(Employee)		✓
Finishes in	Finishes_in__c	Formula (Number)		
Last Modified By	LastModifiedById	Lookup(User)		
Project	Project__c	Master-Detail(Project)		✓
Project Task Name	Name	Text(80)		✓
Working Hours	Working_Hours__c	Number(18, 0)		

Now create the remaining fields in Asset Service using the data types mentioned below.

1. Asset Id (Lookup relationship with Asset object)
2. Type (Picklist: Values - Technical Issue, Non-Technical Issue)
3. Technician (Text)
4. Subject (Text Area)
5. Description (Text Long)

SETUP > OBJECT MANAGER

Asset Service

Fields & Relationships
9 Items, Sorted by Field Label

FIELD LABEL	FIELD NAME	DATA TYPE	CONTROLLING FIELD	INDEXED
Asset Id	Asset_Id__c	Lookup(Asset)		✓
Created By	CreatedById	Lookup(User)		
Description	Description__c	Long Text Area(32768)		
Last Modified By	LastModifiedById	Lookup(User)		
Owner	OwnerId	Lookup(User,Group)		✓
Project Task Name	Name	Text(80)		✓
Subject	Subject__c	Text Area(255)		
Technician	Technician__c	Text(18)		
Type	Type__c	Picklist		

Now create the remaining fields in Asset using the data types mentioned below.

1. Asset Type (Picklist: Values – Laptop, Charger, Mouse, Monitor, CPU)
2. Model Name (Text)
3. Employee Name (Lookup relationship with Employee Object)
4. Date Of Issue (Formula (Joining date), Formula Return type: date)

The screenshot shows the Salesforce Object Manager interface. The top navigation bar includes 'Setup', 'Home', and 'Object Manager'. Below this, the 'Asset' object is selected. On the left, a sidebar lists various configuration options under 'Fields & Relationships'. The main content area is titled 'Fields & Relationships' and displays a table of fields. The table columns are 'FIELD LABEL', 'FIELD NAME', 'DATA TYPE', 'CONTROLLING FIELD', and 'INDEXED'. The fields listed are:

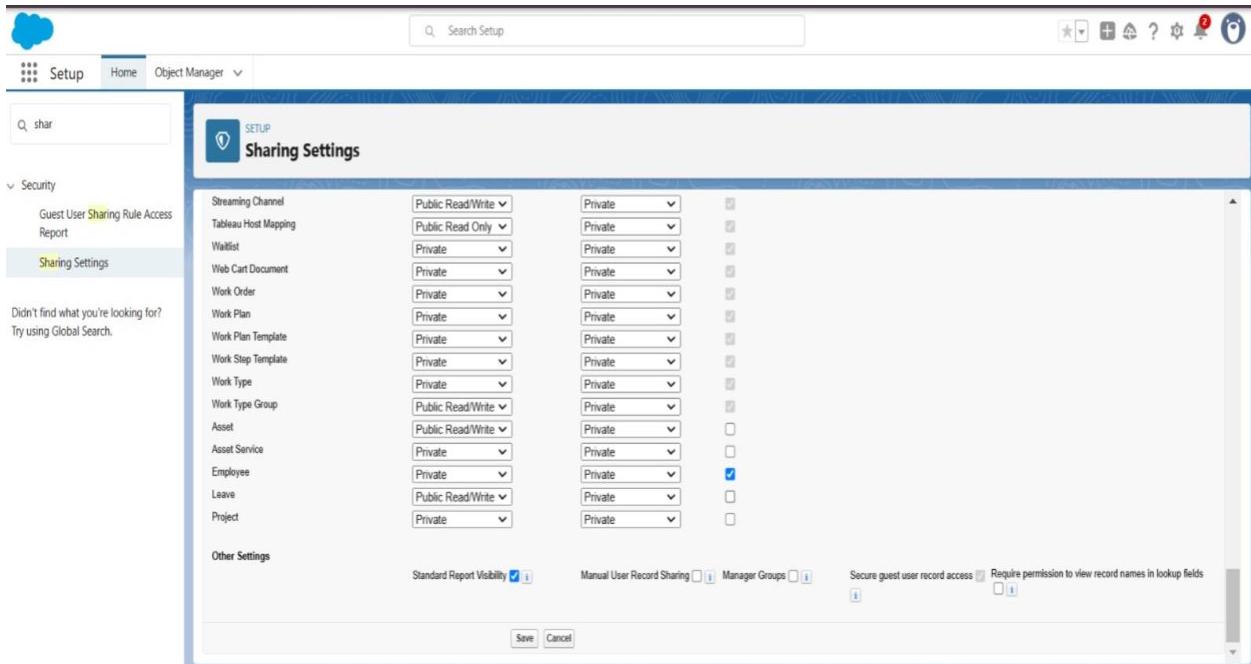
FIELD LABEL	FIELD NAME	DATA TYPE	CONTROLLING FIELD	INDEXED
Asset Type	Asset_Type__c	Picklist		
Created By	CreatedById	Lookup(User)		
Date Of Issue	Date_Of_Issue__c	Formula (Date)		
Employee Name	Employee_Name__c	Lookup(Employee)		✓
Last Modified By	LastModifiedById	Lookup(User)		
Model Name	Model_Name__c	Text(18)		
Owner	OwnerId	Lookup(User,Group)		✓
Project Task Name	Name	Text(80)		✓

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.

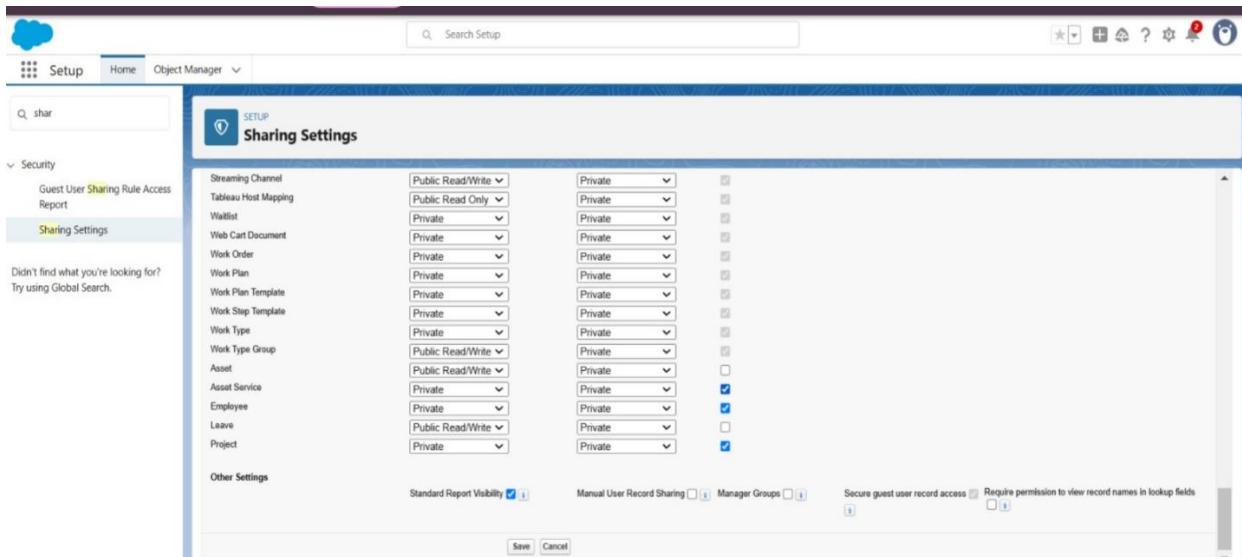
Create OWD Setting

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



The screenshot shows the 'Sharing Settings' page in the Salesforce Setup interface. The left sidebar has a 'Sharing' section selected. The main area displays a table of sharing settings for various objects. In the 'Project' row, the 'Sharing Rule Access' dropdown is set to 'Public Read/Write' and the 'Share Type' dropdown is set to 'Private'. Other objects like 'Work Order', 'Work Plan', and 'Leave' also have their sharing rules and types set to 'Private'. At the bottom, there are 'Other Settings' and several checkboxes for 'Standard Report Visibility', 'Manual User Record Sharing', 'Manager Groups', 'Secure guest user record access', and 'Require permission to view record names in lookup fields'. There are 'Save' and 'Cancel' buttons at the bottom right.

Set OWD as Private for Project and Asset Service objects.



This screenshot is identical to the one above, showing the 'Sharing Settings' page in the Salesforce Setup interface. The 'Sharing' section is selected in the sidebar. The main table shows sharing settings for various objects. The 'Project' object's 'Sharing Rule Access' is now set to 'Public Read/Write' and its 'Share Type' is set to 'Private'. The 'Asset Service' object's 'Sharing Rule Access' is also set to 'Public Read/Write' and its 'Share Type' is set to 'Private'. The other objects ('Work Order', 'Work Plan', 'Leave') remain with their original settings. The 'Other Settings' section and the bottom checkboxes are the same as in the first screenshot.

User Adoption

Create a Record (Employee)

1. Click on App Launcher on the left side of the screen.
2. Search Workforce Administration Solution & click on it.
3. Click on the Employee tab.

4. Click New.
5. Fill the Details and click on Save.

The screenshot shows the Salesforce interface for the Workforce Administration Solution. The top navigation bar includes links for Employees, Projects, ProjectTasks, Assets, Asset Services, Reports, Dashboards, and Leaves. A search bar and various icons are also present. Below the navigation, a sidebar titled 'Employees' shows a list of 'Recently Viewed' employees. The list contains 6 items, all labeled 'Employee ID' and numbered 1 through 6. Each item has a checkbox and a dropdown arrow. To the right of the list are buttons for 'New', 'Import', 'Change Owner', and 'Assign Label'. Below the list is a search bar and a set of filter and sort icons.

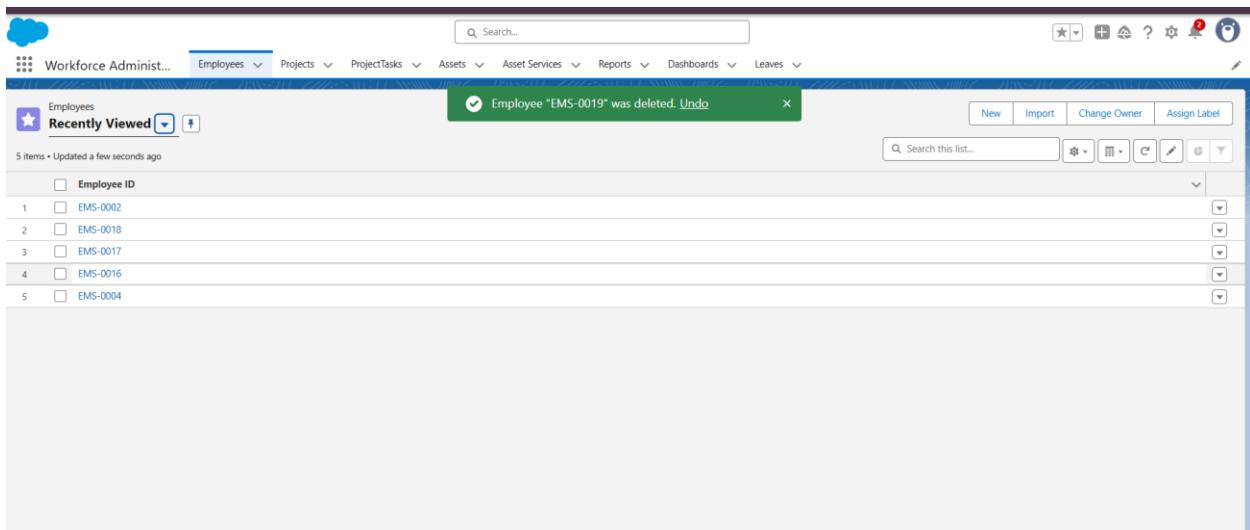
View a Record (Employee)

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

The screenshot shows the detailed view of an employee record in Salesforce. The top navigation bar and sidebar are identical to the previous screenshot. The main area displays the 'Details' tab for an employee named 'EMS-0019'. The 'Employee ID' field shows 'EMS-0019'. The 'Owner' field is listed as 'Batch2 IT'. Other fields visible include 'Employee Name' (Malleeswari), 'Date of Birth' (16/12/2003), 'Age' (22.00), 'Gender', 'Reports to', 'Qualification', 'Address', and 'Experience'. Action buttons at the top right of the detail view include 'New Contact', 'Edit', and 'New Opportunity'.

Delete a Record (Employee)

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



Import Data

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

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

Importing data using Data Wizard

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!
4. Click the Custom Objects tab and select the Employee object.
5. Select Add new records.
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.
8. The next screen gives you a summary of your data import. Click Start Import.
9. Click OK on the popup.
10. Scroll down the page and verify that your data has been imported under batches.
11. Make sure you have 0 records under the records failed column.

Profiles

A profile is a group/collection of settings and permissions that define what a user can do in salesforce

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.
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.
4. Scroll down and Click on Save.

Role Detail			
		Role Name	HR
This role reports to	CEO	Role Name as displayed on reports	HR
Modified By	Batch2.II, 04/03/2025, 10:38 am	Sharing Groups	Role, Role and Internal Subordinates
Opportunity Access	Users in this role can edit all opportunities associated with accounts that they own, regardless of who owns the opportunities		
Case Access	Users in this role can edit all cases associated with accounts that they own, regardless of who owns the cases		

Manager Profile

The screenshot shows the Salesforce Setup interface with the 'Profiles' tab selected. The 'Manager' profile is displayed, which includes the following details:

- Name:** Manager
- User License:** Salesforce Platform
- Description:** (empty)
- Created By:** Batch2 IT, 04/03/2025, 10:27 am
- Modified By:** Batch2 IT, 04/03/2025, 1:15 pm

Page Layouts

Standard Object Layouts	Global	Fulfillment Order Product
Email Application	Not Assigned [View Assignment]	Group [View Assignment]
Home Page Layout	Home Page Default [View Assignment]	Idea Varies by Record Type [View Assignment]
Account	Account Layout [View Assignment]	Individual Individual Layout [View Assignment]
Alternative Payment Method	Alternative Payment Method Layout	Invoice Invoice Layout

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.

The screenshot shows the Salesforce Setup interface with the 'Profiles' tab selected. The 'On Site Employee' profile is displayed, which includes the following details:

- Name:** On Site Employee
- User License:** Salesforce Platform
- Description:** (empty)
- Created By:** Batch2 IT, 04/03/2025, 10:33 am
- Modified By:** Batch2 IT, 04/03/2025, 1:15 pm

Page Layouts

Standard Object Layouts	Global	Fulfillment Order Product
Email Application	Not Assigned [View Assignment]	Group [View Assignment]
Home Page Layout	Home Page Default [View Assignment]	Idea Varies by Record Type [View Assignment]
Account	Account Layout [View Assignment]	Individual Individual Layout [View Assignment]
Alternative Payment Method	Alternative Payment Method Layout	Invoice Invoice Layout

Role

Creating HR Role

1. Go to quick find --> Search for Roles --> click on set up roles.
2. Click on Expand All and click on add role under whom this role works.
3. Give Label as “HR” and Role name gets auto populated. Check to whom this role (HR) reports. Then click on Save.
4. Refer the below diagram to understand which role reports to which role.

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

Users

A user is anyone who logs in to Salesforce. Users are employees at your company.

Create User

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

First Name : Niklaus

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 : HR

User license : Salesforce

Profile : HR

3. Save.

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

Field	Value
Name	Niklaus Mikaelson
Alias	nnika
Email	218x1a1214@khlguntur.ac.in [Verify]
Username	tanuja@yaram.com
Nickname	Nik
Title	
Company	
Department	
Division	
Address	
Time Zone	(GMT+05:30) India Standard Time (Asia/Kolkata)
Locale	English (India)
Language	English
Delegated Approver	
Manager	
Receive Approval Request Emails	Only if I am an approver
Enrollment ID	

On the right side of the screen, there are several checkboxes for user profile settings, with 'Active' checked. Other options like 'Marketing User', 'Offline User', 'Knowledge User', 'Flow User', 'Service Cloud User', 'Site.com Contributor User', 'Site.com Publisher User', 'WDC User', 'Mobile Push Registrations', 'Data.com User Type', 'Accessibility Mode (Classic Only)', and 'Debug Mode' are also listed.

Creating another user

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

The screenshot shows the Salesforce Setup interface under the 'Users' section. A new user record is being created for 'Kol Mikaelson'. The 'User Detail' tab is selected, displaying the following information:

Field	Value
Name	Kol Mikaelson
Alias	kmika
Email	218x1a1214@khitguntur.ac.in [Verify]
Username	srikanth@kalam.com
Nickname	kallam
Title	
Company	
Department	
Division	
Address	
Time Zone	(GMT+05:30) India Standard Time (Asia/Kolkata)
Locale	English (India)
Language	English
Delegated Approver	
Manager	
Receive Approval Request Emails	Only if I am an approver
Expiration ID	

On the right side of the screen, there is a sidebar with various user management settings like 'Permission Set Groups', 'Profiles', 'Public Groups', 'Queues', 'Roles', and 'User Management Settings'. The 'User Management Settings' section is currently active. The bottom of the page shows a footer with an email link: mailto:218x1a1214@khitguntur.ac.in.

Create two more users as we created in activity 2.

The screenshot shows the Salesforce Setup interface. The left sidebar is titled 'SETUP' and contains sections like 'User Management Settings' (which is currently selected), 'Users', 'Feature Settings', 'Service', and 'User Interface'. The main content area is titled 'User Malleswari Kamatham' and shows 'User Detail' information. The user's name is 'Malleswari Kamatham', alias 'mkama', email '218x1214@khalguntur.ac.in [Verify]', and nickname 'kanth'. The 'Role' is set to 'Remote Employee'. Under 'User License', 'Salesforce Platform' and 'Remote Employee' are checked. The 'Active' checkbox is checked. Other roles listed include Marketing User, Offline User, Knowledge User, Flow User, Service Cloud User, Site.com Contributor User, Site.com Publisher User, WDC User, Mobile Push Registrations, Data.com User Type, Accessibility Mode (Classic Only), and Debug Mode. The 'Receive Approval Request Emails' checkbox is checked with the note 'Only if I am an approver'. A note at the bottom says 'With Contact Details on Photo'.

Page layouts

Creating a Page Layout for Employee object

To Create a Page layout:

1. Go to Setup --> Click on Object Manager --> Search for the object (Employee) --> From drop down click on Edit.
2. Click on Page layout --> Click on New. Give Page layout Name as “On Site Employee Layout” and click on Save.
3. Drag and drop the Section from the highlight panel below the Information and name it as “Personal Information” and click Ok.
4. Drag Date of Birth, Address and Age fields from Employee Information to Personal Information section.
5. Similarly perform the above step to create “Allowances” and add allowances fields in it as shown below.
6. Click Save.
7. Make sure your page layout looks like the picture above.

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.

Chatter Group

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.

- Fill in the new group information with these details:

Group Name (Group Name)

Description (understanding Description on your own)

Access Type (Private)

Allow Customers (Checked)

- Click Save & Next. Skip the Upload Picture section and click Next.
- On the Manage Members screen, click Add next to users you created in the previous activity
- Click Done.
- This is how your group interface looks like.
- 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.

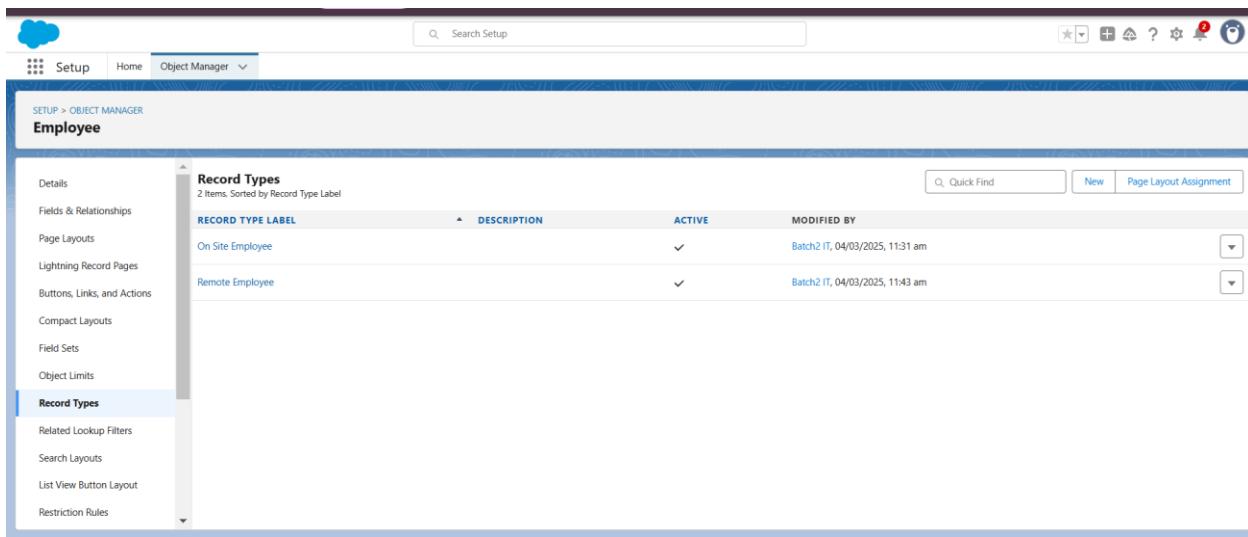
10. Click Share

The screenshot shows the Salesforce Chatter interface for the 'Internal Discussion' group. At the top, there's a navigation bar with links for Workforce Administ..., Employees, Projects, ProjectTasks, Assets, Asset Services, Reports, Dashboards, Leaves, and the current group, 'Internal Discussion'. Below the navigation is a header with the group name 'Internal Discussion' and a note that it's 'Private with Customers'. The main area is divided into sections: 'Chatter' (with tabs for Post, Poll, and Question) and 'Engagement' (with a text input field 'Share an update...' and a 'Share' button). On the right, there are two panels: 'Group Details' (which includes a description stating 'Salesforce Chatter Groups are collaborative spaces') and 'Manage Members' (with search fields for 'Search People...', 'Member Name', and 'Member Role'). A sidebar on the left shows a user profile for 'Batch2 IT' and a message: 'Welcome to the Internal Discussion Group, here you can post anything which is related to ongoing projects.' There are also buttons for 'Like' and 'Comment'.

Record Types

Record Types are a way of grouping many records of one type for that object.

Creating On Site Employee and Remote Employee Record Type



RECORD TYPE LABEL	DESCRIPTION	ACTIVE	MODIFIED BY
On Site Employee		✓	Batch2 IT, 04/03/2025, 11:31 am
Remote Employee		✓	Batch2 IT, 04/03/2025, 11:43 am

Permission sets

A permission set is a collection of settings and permissions that give users access to various tools and functions

Creating a permission set

1. Go to setup --> type “permission sets” in quick search --> select permission sets --> New.
2. Enter the label name as “Per to Emp” --> Save.
3. Under Apps Select object settings.
4. Click on Employee object --> click on Edit --> under object permission check for read and create.
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.

The screenshot shows the Salesforce Setup interface. The left sidebar is collapsed, and the main content area is the 'Permission Sets' page. A permission set named 'Per to Emp' is selected. The 'Permission Set Overview' section shows the API Name 'Per_to_Emp', Namespace Prefix 'Batch2_IT', and creation and modification details by 'Batch2_IT'. The 'Apps' section lists various app settings: Assigned Apps, Assigned Connected Apps, Object Settings, App Permissions, Apex Class Access, and Visualforce Page Access.

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

Create Report

1. Go to the app --> click on the reports tab
2. Click New Report
3. Select report type from category or from report type panel or from search panel --> click on start report.
4. Customize your report --> Add fields from left pane as shown below
5. Save or run it.

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

Create a report with report type: “Employees with Assets”.

The screenshot shows the 'Reports' section of the Workforce Administ... app. On the left, there's a sidebar with categories like 'Recent', 'Reports', 'Folders', and 'Favorites'. The main area displays a table of reports with columns: Report Name, Description, Folder, Created By, Created On, and Subscribed. Three reports are listed:

Report Name	Description	Folder	Created By	Created On	Subscribed
New Assets with Employee Name Report	employee with project and project task	Private Reports	Batch2 IT	4/3/2025, 12:57 pm	
New Employees Report		Private Reports	Batch2 IT	4/3/2025, 12:26 pm	
		Private Reports	Batch2 IT	4/3/2025, 12:05 pm	

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.

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.
5. Select a Report and click on select.

The screenshot shows a dashboard titled 'Dashboard 1'. It includes a message about last refresh time and viewing information. Below is a report component titled 'New Employees Report' with a table of employee data:

Employee Name	Employee ID	Reports to	Login Time	Logout Time
Alexander	a00WJ00000dudx8	-	9:00 am	5:00 pm
Amelia	a00WJ00000dudxF	-	9:00 am	5:00 pm
Benjamin	a00WJ00000dudx7	-	-	-
Chloe	a00WJ00000dudxI	-	9:00 am	5:00 pm
Elizabeth	a00WJ00000dudxG	-	-	-
Emma	a00WJ00000dudx8	-	-	-
Ethan	a00WJ00000dudxA	-	9:00 am	5:00 pm

Approval Process

Create the leave object and Tab

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
 - Name (Leave Approval Request)
 - Approval Assignment Email Template (Leave blank)
5. Click Save.
6. Click View Approval Process Detail Page.

Initial Submission Action

Final Approval Action

Final Rejection Action

The screenshot shows the Salesforce Approval Processes page. The left sidebar has sections for Data (Mass Transfer Approval Requests, Feature Settings, Approval Settings), Process Automation (Process Definition, Approval Processes), and a search bar. The main content area is titled 'Approval Processes' and shows the details for the 'Leave: Leave Approval Request' process. The 'Process Definition Detail' section includes fields like Process Name (Leave Approval Request), Unique Name (Leave_Approval_Request), Description, Entry Criteria (Administrator ONLY), Record Editability (Administrator ONLY), Approval Assignment Email Template, Initial Submitters (Leave Owner), Created By (Batch2), and Modified By (Batch2). Action buttons include Edit, Clone, Delete, and Activate. Below this is the 'Initial Submission Actions' section, which lists an action (Edit | Remove) with Type (Record Lock) and Description (Lock the record from being edited). Other actions listed are Field Update for Approval Status to Submitted, Approval Status to Approved, and Approval Status to Rejected.

5. Testing and Validation

Apex Trigger

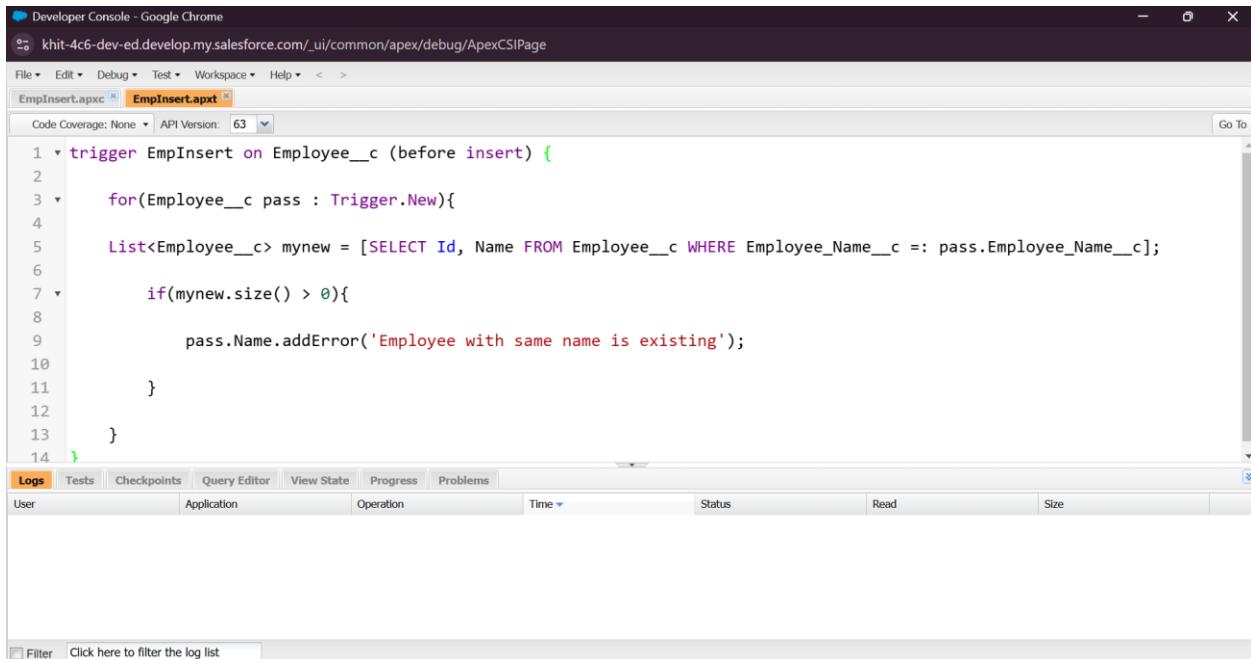
Create an Apex Trigger

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

Code Snippet:

```
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');
        }
    }
}
```

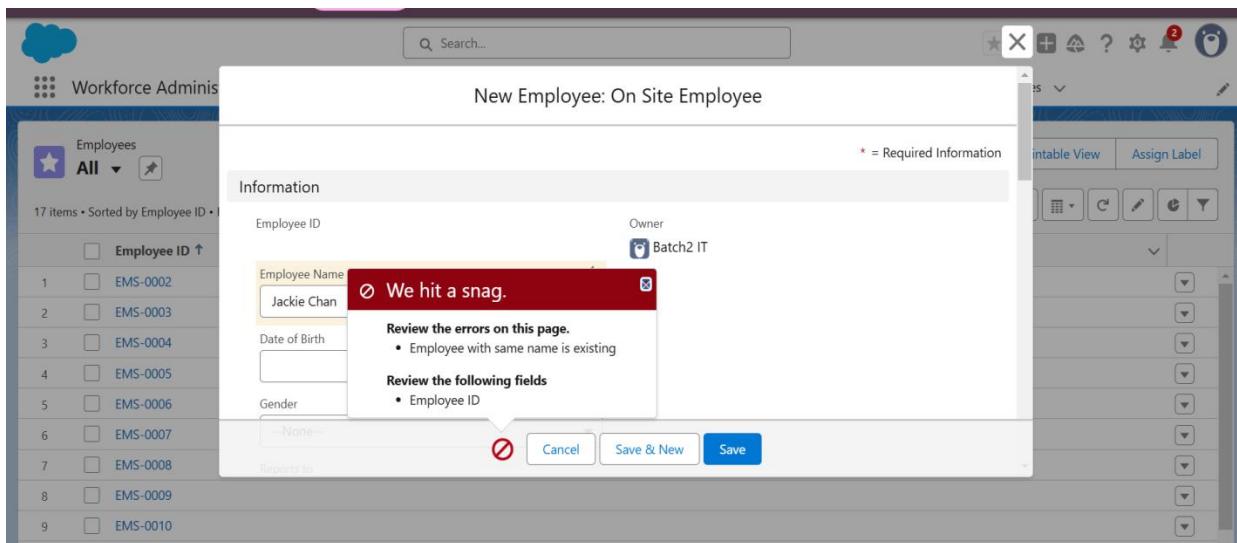
5. Save the code.(click on file --> Save)



The screenshot shows the Salesforce Developer Console interface. The title bar reads "Developer Console - Google Chrome" and the URL is "khit-4c6-dev-ed.develop.my.salesforce.com/_ui/common/apex/debug/ApexCSIPage". The main area displays the Apex trigger code for "EmpInsert.apxc". The code checks if an employee with the same name already exists before inserting a new record. The API version is set to 63. Below the code editor, there are tabs for Logs, Tests, Checkpoints, Query Editor, View State, Progress, and Problems. The Logs tab is selected. At the bottom, there is a filter bar with the placeholder "Click here to filter the log list".

Testing the Trigger

Follow the steps which are mentioned in User Adoption, 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 ”.



6.Key Scenarios Addressed by Salesforce in the Implementation Project

Here are some key scenarios addressed by Salesforce in the implementation project for Workforce Administration Solution development:

Scenario 1: Employee Data Management

Challenge: Managing employee data, including personal, job, and benefits information.

Solution: Salesforce implements Employee Data Management using custom objects, fields, and page layouts to store and manage employee data.

Scenario 2: Time-Off Management

Challenge: Managing employee time-off requests, approvals, and tracking.

Solution: Salesforce implements Time-Off Management using custom objects, workflows, and approval processes to manage time-off requests.

7. Conclusion

The development of a Workforce Administration solution within Salesforce provides organizations with a powerful, scalable, and integrated approach to manage and optimize their workforce processes. By leveraging Salesforce's cloud-based platform, businesses can automate key workforce tasks such as employee onboarding, time and attendance tracking, performance management, and scheduling.

Through the integration of various Salesforce tools like Salesforce Service Cloud, Salesforce Lightning, and Salesforce AppExchange, a custom Workforce Administration solution can be tailored to meet the unique needs of any business, ensuring data security, scalability, and flexibility. Additionally, with the use of automation features, reporting tools, and analytics, organizations can improve decision-making and ensure that they are making the most of their human capital.

Moreover, the adoption of such a solution promotes a streamlined and cohesive user experience by providing a single platform for both HR and workforce management functions. This leads to greater collaboration, improved operational efficiency, and enhanced employee satisfaction.

Ultimately, a Workforce Administration solution developed on Salesforce can not only enhance day-to-day operations but also support strategic growth and long-term sustainability by enabling organizations to respond quickly and effectively to workforce challenges.

