



# Workforce Administration Solution (Dev)

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## 1. Project Overview

The Workforce Administration Solution project is a software application focused on enhancing efficiency in managing employees' project assignments and asset allocation within an organization. The solution functions as a centralized platform that automates data management and streamlines tracking for employee projects and asset assignments, resulting in improved resource allocation, project oversight, and asset management. This solution is designed to simplify and automate the process of tracking employees' project involvement, performance, and the assets assigned to them.

## 2. Objectives

**Centralized Employee and Project Data Management:** Maintain a complete, up-to-date repository of employee information and project assignments, accessible by HR, team leads, and project managers.

**Project Tracking and Employee Allocation:** Track the number and status of projects an employee is involved in, monitor individual workloads, and facilitate more effective team and resource allocation.

**Asset Assignment Management:** Streamline asset allocation by tracking which resources (laptops, devices, software licenses, etc.) are assigned to employees, ensuring accountability and ease of asset retrieval.

**Performance Monitoring and Reporting:** Enable project managers to track employee contributions and performance across projects, with the ability to analyze productivity and identify areas for improvement.

**Efficient Resource Utilization:** Improve the allocation of human resources and assets to ensure that employees are not underutilized or overburdened, thus enhancing project outcomes and asset ROI.

## Specific Outcomes:

- **Improved Resource Allocation:** Enhanced visibility into project assignments and asset allocation to reduce over-allocation or underutilization.
- **Asset Accountability:** Better control over assets with an easy-to-manage system to track, assign, and retrieve items, leading to reduced asset loss or mismanagement.
- **Increased Productivity:** By allowing managers to monitor workloads and performance metrics, the system encourages better alignment of employee skills to projects and tasks.
- **Actionable Insights:** Analytics and reporting empower decision-makers with insights to adjust resources and support employee performance improvements.

## 3. Salesforce Key Features and Concepts Utilized

- Object
  - Employee, Project, Asset, Task, and Performance Review: Custom objects created to store essential data about

workforce details, project assignments, assets, tasks, and performance metrics.

- Tabs
  - Tabs Setup: Configured tabs for each custom object to allow easy navigation for users, enabling quick access to Employee, Project, Asset, and Task records within the app.
- The Lightning App
  - Workforce Manager Lightning App: Customized the app for branding and streamlined user access, offering an organized interface for workforce and asset management.
- Fields & Relationships
  - Custom Fields and Relationships: Added relevant fields (e.g., Project Start Date, Asset Condition, Performance Rating) and set up relationships, such as Employee-to-Project and Project-to-Task, to organize and link essential data.
- Setting OWD (Organization-Wide Defaults)
  - OWD Settings: Configured data access at the organization level, setting appropriate access controls (e.g., private or read-only) for objects like Employee and Asset to maintain data security and compliance.
- User Adoption
  - User Training and Support: Provided training materials and conducted sessions to ensure users understood and effectively utilized the app's features for streamlined workforce management.
- Import Data

Data Import: Used Data Import Wizard and Data Loader to upload initial records for Employees, Projects, and Assets, ensuring a seamless transition to the new system.

- Profiles
  - User Profiles: Defined profiles (e.g., HR, Project Manager, Employee) to control access to objects, fields, and features based on user roles and responsibilities.

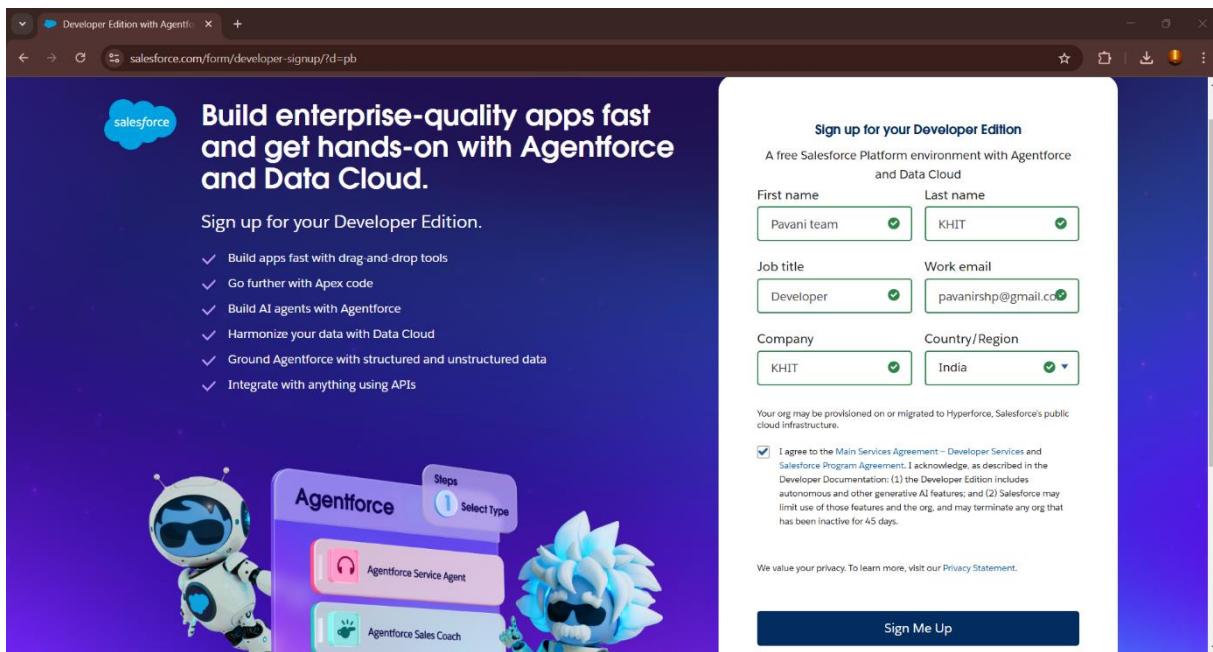
- Role
  - Role Hierarchy: Set up a role hierarchy to define data visibility and reporting structure, ensuring managers can access subordinate data while protecting sensitive information.
- Users
  - User Creation: Added users with designated profiles and roles, providing them access to specific records and functionalities according to their responsibilities.
- Page Layouts
  - Custom Page Layouts: Designed layouts for each object (e.g., Project, Asset) to display relevant fields and actions, enhancing user experience and data entry efficiency.
- Chatter Group
  - Chatter Groups: Created groups (e.g., Project Team, HR Discussions) for real-time collaboration and knowledge sharing, allowing teams to discuss updates and resolve issues efficiently.
- Record Types
  - Record Types for Projects and Assets: Set up different record types to categorize various types of projects (e.g., Internal, Client) and assets (e.g., IT Equipment, Office Supplies) for more specific management and reporting.
- Permission Sets
  - Permission Sets: Assigned additional permissions to users who required special access (e.g., HR needing access to restricted Employee data), without changing their profiles.
- Reports
  - Custom Reports: Built reports to track project progress, employee workload, asset usage, and performance, providing insights for better decision-making.
  - Dashboards
  - Workforce Dashboard: Created a comprehensive dashboard displaying metrics such as resource allocation, project status, and asset distribution for management visibility.

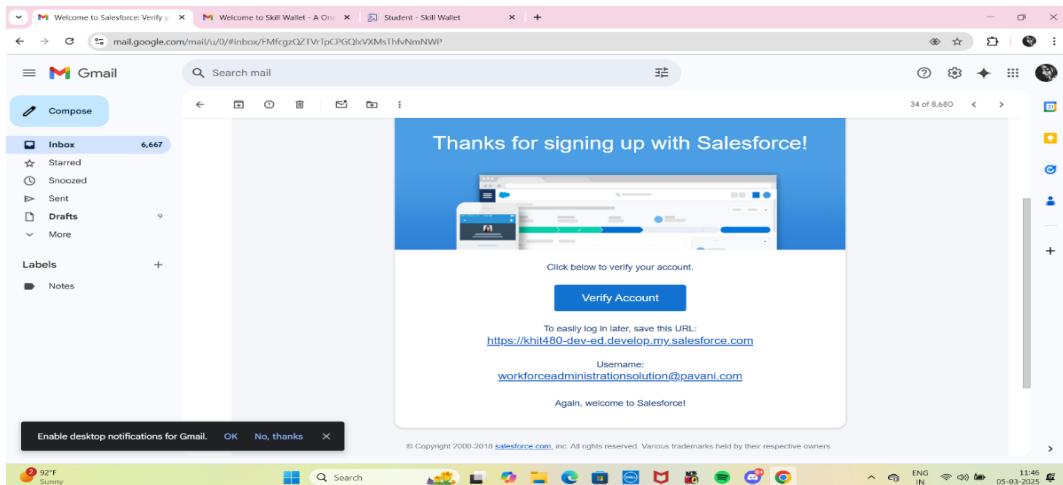
- Approval Process
  - Approval Workflow for Asset Requests: Set up an approval process for employees to request assets, which requires **manager** approval before assets are assigned, ensuring control and accountability.
- Apex Trigger
  - Automated Notifications and Calculations: Developed Apex triggers to automate notifications for project status updates, asset returns, and performance metrics based on project completion and asset utilization.

## 4. Detailed Steps to Solution Design

### 1. Created Salesforce Developer Account

- We began by creating a Salesforce Developer Account to access a development environment where we could build and customize the application. This setup provided the necessary tools to design, test, and deploy the application.





## Defined Objects

- Employee objects and Project objects were created.
  - Create 3 more objects with label names as ProjectTask, Asset, Asset Service.
1. Log in to your Salesforce account
  2. Select Setup
  3. Search for Object Manager
  4. Select Create
  5. Select Custom Object
  6. Enter the following information:
    - **Label**
    - **Plural Label**
    - **Object Name**

8. Select Save.

Student - Skill Wallet

Employer | Salesforce

khit480-dev-ed.develop.lightning.force.com/lightning/setup/ObjectManager/01Qy000003htsL/Details/view

Setup Home Object Manager

SETUP > OBJECT MANAGER Employee

**Details**

Description

API Name Employee\_c  
Custom ✓  
Singular Label Employee  
Plural Label Employees

Enable Reports ✓  
Track Activities

Track Field History

Deployment Status Deployed  
Help Settings Standard salesforce.com Help Window

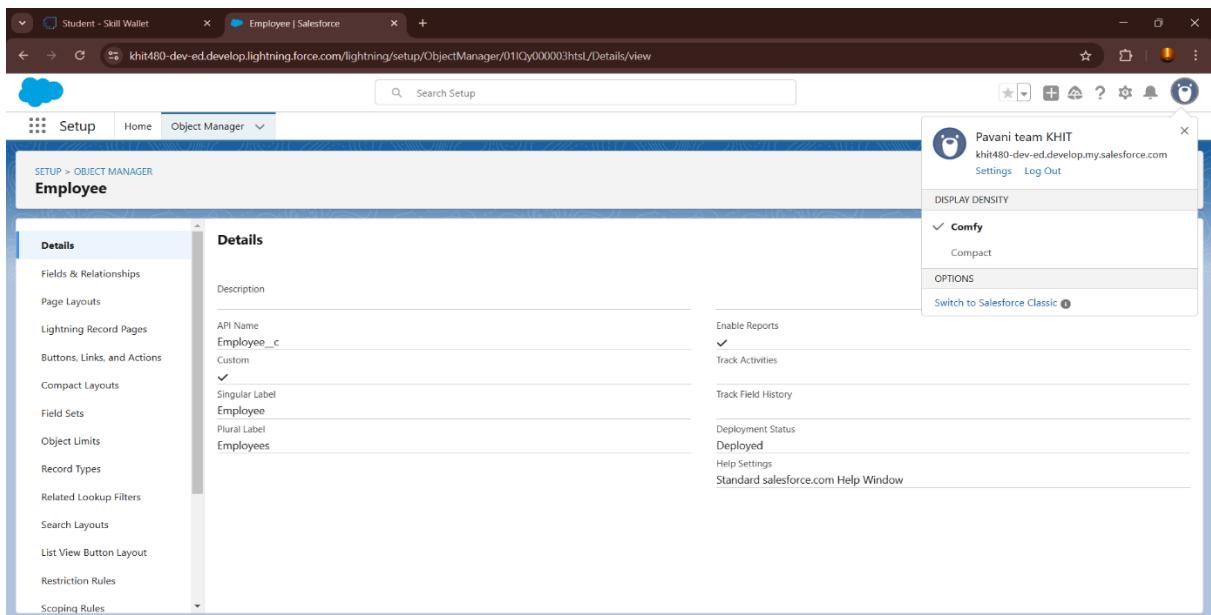
DISPLAY DENSITY

✓ Comfy  
Compact

OPTIONS

Switch to Salesforce Classic

Pavani team K HIT khit480-dev-ed.develop.my.salesforce.com Settings Log Out



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Project | Salesforce

khit480-dev-ed.develop.lightning.force.com/lightning/setup/ObjectManager/01Qy000003huA5/Details/view

Setup Home Object Manager

SETUP > OBJECT MANAGER Project

**Details**

Description

API Name Project\_c  
Custom ✓  
Singular Label Project  
Plural Label Projects

Enable Reports ✓  
Track Activities

Track Field History

Deployment Status Deployed  
Help Settings Standard salesforce.com Help Window

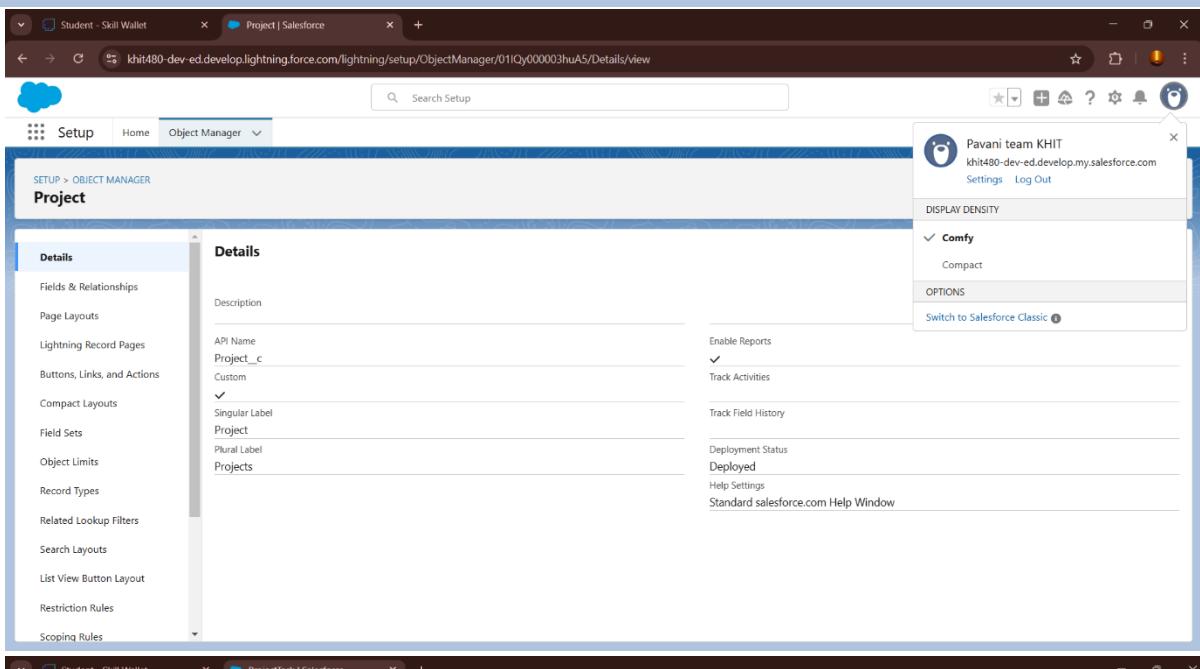
DISPLAY DENSITY

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Compact

OPTIONS

Switch to Salesforce Classic

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ProjectTask | Salesforce

khit480-dev-ed.develop.lightning.force.com/lightning/setup/ObjectManager/01Qy000003hsx4/Details/view

Setup Home Object Manager

SETUP > OBJECT MANAGER ProjectTask

**Details**

Description

API Name ProjectTask\_c  
Custom ✓  
Singular Label ProjectTask  
Plural Label ProjectTasks

Enable Reports ✓  
Track Activities

Track Field History

Deployment Status Deployed  
Help Settings Standard salesforce.com Help Window

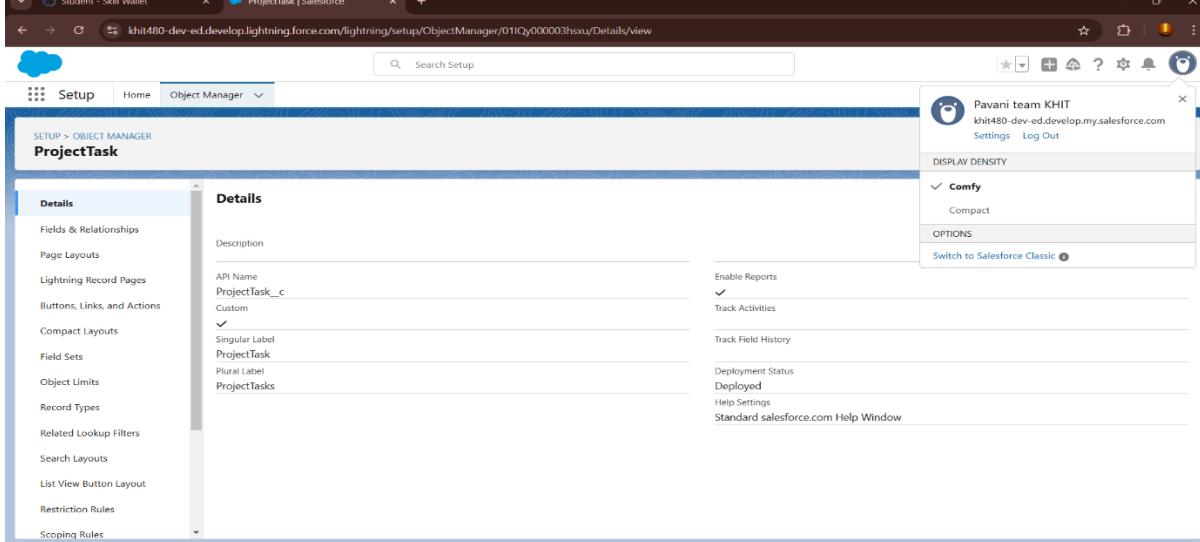
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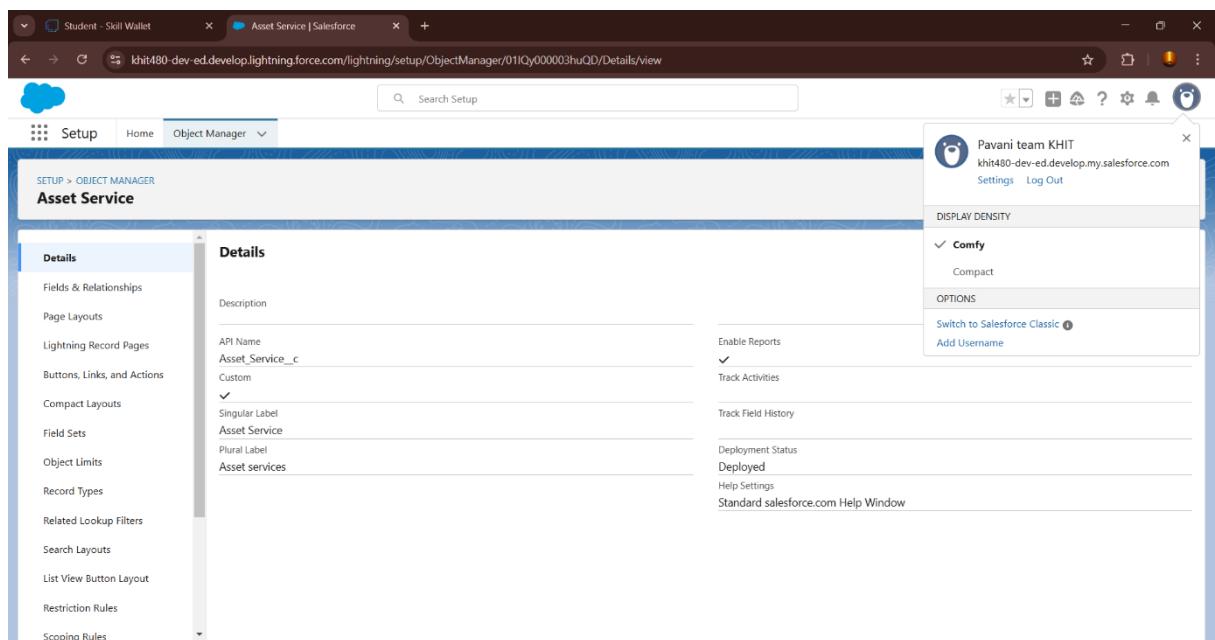
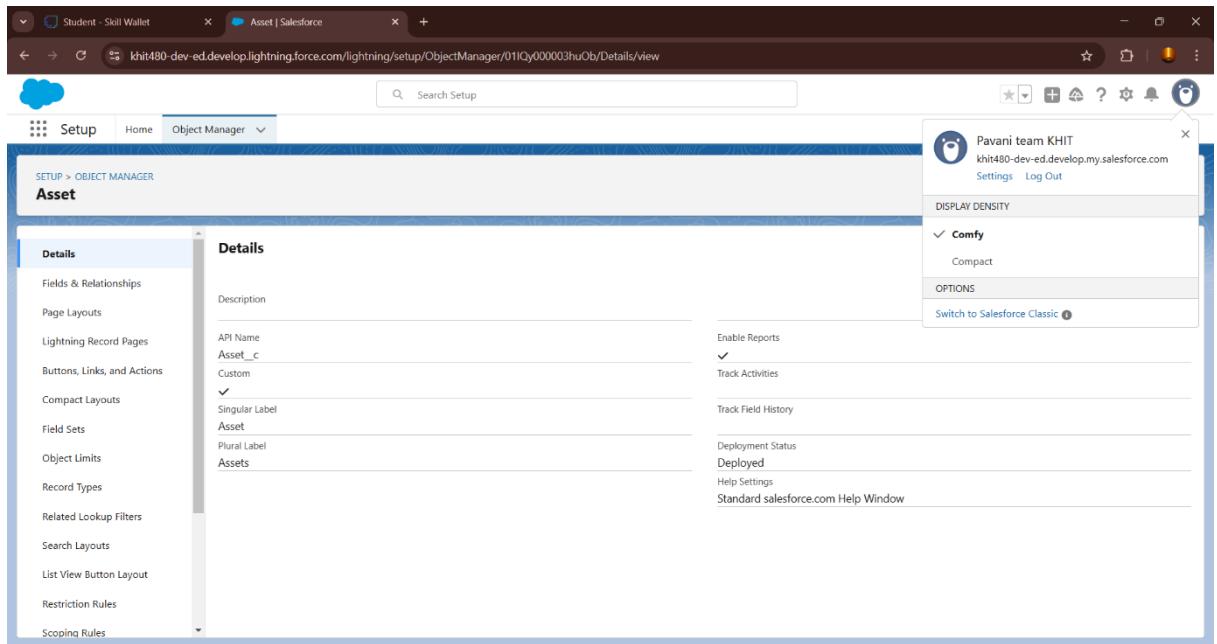
✓ Comfy  
Compact

OPTIONS

Switch to Salesforce Classic

Pavani team K HIT khit480-dev-ed.develop.my.salesforce.com Settings Log Out





## 2. Configured Tabs

- Corresponding tabs were created for each of the main objects to facilitate easy access within Salesforce.
- Tabs for Employee, Project and other objects were set up.
  - Go to Setup Page
  - Search for Tabs in the Quick Find box
  - Select Tabs

- Click New under Custom Object Tabs
- Select the object you want to create the tab for
- Choose a tab style
- Enter any other required details
- Click Save

The image consists of three vertically stacked screenshots of the Salesforce Setup interface, specifically the 'Tabs' section.

**Screenshot 1:** Shows the 'Step 1. Enter the Details' page for creating a 'New Custom Object Tab'. The 'Object' dropdown is set to 'Project' and the 'Tab Style' dropdown is set to 'Lightning'. A note at the bottom says '(Optional) Choose a Home Page Custom Link to show as a splash page the first time your users click on this tab.' Below it is a 'Description' input field.

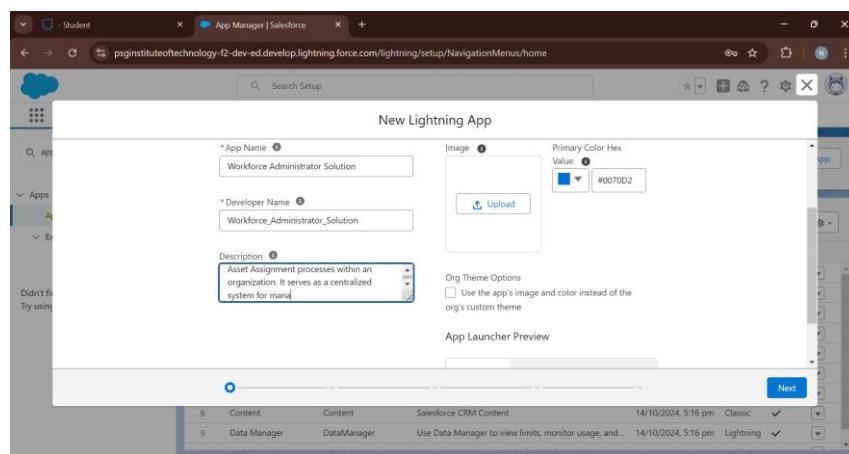
**Screenshot 2:** Shows the same 'Step 1. Enter the Details' page, but with the 'Object' dropdown set to 'Employee' and the 'Tab Style' dropdown set to 'Jewel'. The rest of the page content is identical to the first screenshot.

**Screenshot 3:** Shows the 'Custom Tabs' page. At the top, there's a note: 'You can create new custom tabs to extend Salesforce functionality or to build new application functionality.' Below this is a table titled 'Custom Object Tabs' with columns for 'Action', 'Label', 'Tab Style', and 'Description'. The table contains five rows of data:

Action	Label	Tab Style	Description
Edit   Del	Assets	Leaf	
Edit   Del	Asset Services	Postage	
Edit   Del	Employees	Jewel	
Edit   Del	Projects	Lightning	
Edit   Del	ProjectTasks	Airplane	

# Developed the Lightning App

- We created a custom Lightning App named "**Workforce Administrator Solution**" to consolidate all project functionalities.
- The app was configured with specific branding, navigation items, and user access settings, which made it intuitive and easy to use for project participants.



Lightning apps let you brand your apps with a custom colour and logo. You can even include a utility bar and Lightning page tabs in your Lightning app. Members of your org can work more efficiently by easily switching between apps.

A screenshot of a web browser displaying the Salesforce Setup page. The left sidebar shows a navigation menu with "Data", "Apps", "Connected Apps", "External Client Apps", "Lightning Bolt", and "Lightning Bolt Solutions". The "Apps" section is currently selected. The main content area is titled "Lightning Experience App Manager" and displays a table of 27 items. The table has columns for "App Name", "Developer Name", "Description", "Last Modified", "Type", and "Status". Some rows are partially visible, such as "All Tabs", "Analytics Studio", "App Launcher", "Approvals", "Automation", "Bolt Solutions", "Business Rules Engine", "Community", "Content", "Data Manager", "Digital Experiences", "Employee Management System", "Lightning Usage App", and "Marketing CRM Classic". The "Status" column indicates whether the app is "Classic" or "Lightning".

## Added Fields to Objects

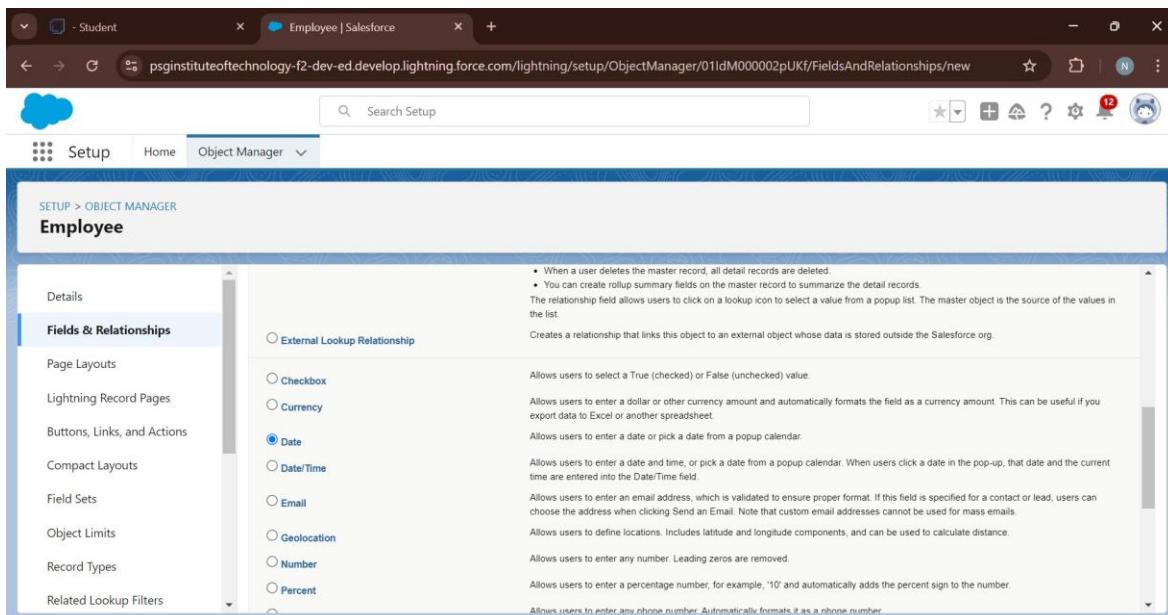
- Creating Text Field in Employee Object

1. Go to setup / click on Object Manager / type object name(Employee) in quick find bar / click on the object.
2. click on “Fields & Relationships” / New
3. Select Data type as “Text”.
4. Field Label: Employee Name

Length : 18

Field Name : gets auto generated

Click on Next / Next / Save and new.



**Follow the above same steps and create the remaining fields with different data types and labels.**

- Creating Date of Birth Field in Employee Object
- Creating Formula Field in Employee Object
- Creating Picklist Field in Employee Object
- Creating Self-Relationship Field in Employee Object
- Creating Master-Detail Relationship between Employee & Asset Object
- Creating Remaining Fields in Employee Object

The screenshots show the Salesforce Object Manager interface for the Employee object. In the top screenshot, the 'Data Type' section is open, showing various options like None Selected, Auto Number, Formula (which is selected), Roll-Up Summary, Lookup Relationship, Master-Detail Relationship, and External Lookup Relationship. In the bottom screenshot, the 'Formula Return Type' section is open, showing options like None Selected, Checkbox, Currency, Date, Date/Time, and Number (which is selected). A field labeled 'Age' is being configured.

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

**Employee**

**Step 2 of 4**

**Field Label:** Gender

**Values:**

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

Male  
Female

Display values alphabetically, not in the order entered

Use first value as default value

Restrict picklist to the values defined in the value set

**Field Name:** Gender

**Employee**

**Fields & Relationships**

- Auto Number
- Formula
- Roll-Up Summary
- Lookup Relationship
- Master-Detail Relationship
- External Lookup Relationship
- Checkbox
- Currency
- 

**ProjectTask**

**Fields & Relationships**

- Auto Number
- Formula
- Roll-Up Summary
- Lookup Relationship
- Master-Detail Relationship
- External Lookup Relationship
- Checkbox
- Currency
-

### 3. Setting OWD

- Create OWD Setting
- Set OWD as Private for Project and Asset Service objects

The image contains two identical screenshots of the Salesforce 'Sharing Settings' page under the 'SETUP' tab. Both screenshots show a grid of sharing rules for various objects. The top row of objects includes Work Plan Template, Work Step Template, Work Type, Work Type Group, Asset, Asset Service, Employee, and Project. The bottom row includes Waitlist, Web Cart Document, Work Order, Work Plan, Work Plan Template, Work Step Template, Work Type, Work Type Group, Asset, Asset Service, Employee, and Project. Each object has a dropdown menu for sharing settings, with most set to 'Private'. To the right of each dropdown is a checkbox. In the first screenshot, all checkboxes are checked. In the second screenshot, checkboxes for Asset, Asset Service, Employee, and Project are checked, while others are unchecked.

Object	Sharing Setting	Checkboxes
Work Plan Template	Private	checked
Work Step Template	Private	checked
Work Type	Private	checked
Work Type Group	Public Read/Write	unchecked
Asset	Public Read/Write	checked
Asset Service	Public Read/Write	checked
Employee	Private	checked
Project	Public Read/Write	checked
Waitlist	Private	unchecked
Web Cart Document	Private	unchecked
Work Order	Private	unchecked
Work Plan	Private	unchecked
Work Plan Template	Private	unchecked
Work Step Template	Private	unchecked
Work Type	Private	unchecked
Work Type Group	Public Read/Write	unchecked
Asset	Public Read/Write	checked
Asset Service	Private	checked
Employee	Private	checked
Project	Private	checked

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).

1. Public Read/Write/Transfer, 2. Public Read/Write, 3. Public Read/Only, 4. Private

## 4. User Adoption

- Create a Record (Employee)
- View a Record (Employee)
- Delete a Record (Employee)

As a new Administrator, you perform user management tasks like creating and editing users, resetting passwords, granting permissions, configuring data access, and much more.

The screenshots illustrate the Salesforce Employee Management interface. The top window shows the 'Details' tab for an existing employee record (EMS-0017). The fields include:

- Employee ID: EMS-0017
- Employee Name: pavani
- Gender: Female
- Reports to: EMS-0010
- Qualification: Btech
- Experience: (empty)
- Phone no: (empty)
- Email: (empty)
- Joining date: (empty)
- Mode of Work: (empty)

The status bar at the bottom right indicates 'Employee "EMS-0017" was created.'

The bottom window shows the 'New Employee: On Site Employee' creation form. The fields are:

- Employee ID: (empty)
- Employee Name: pavani
- Gender: Female
- Reports to: EMS-0010
- Qualification: Btech
- Experience: (empty)
- Phone no: (empty)

Buttons at the bottom right include 'Cancel', 'Save & New', and 'Save'.

The screenshot shows the Salesforce Employee Management interface. The page title is "Recently Viewed | Employees". The main content area displays a list of employees under the heading "Recently Viewed". There are four items listed, each with a checkbox and the employee ID: EMS-0002, EMS-0017, EMS-0010, and EMS-0015. To the right of the list, there is a toolbar with buttons for "New", "Import", "Change Owner", and "Assign Label". Below the toolbar is a search bar labeled "Search this list...". A context menu is open over the fourth record (EMS-0015), with the "Delete" option highlighted. The bottom left corner of the screen shows the JavaScript code "javascript:void(0);".

- Click on Arrow at right hand side on that Particular record.
- Click delete

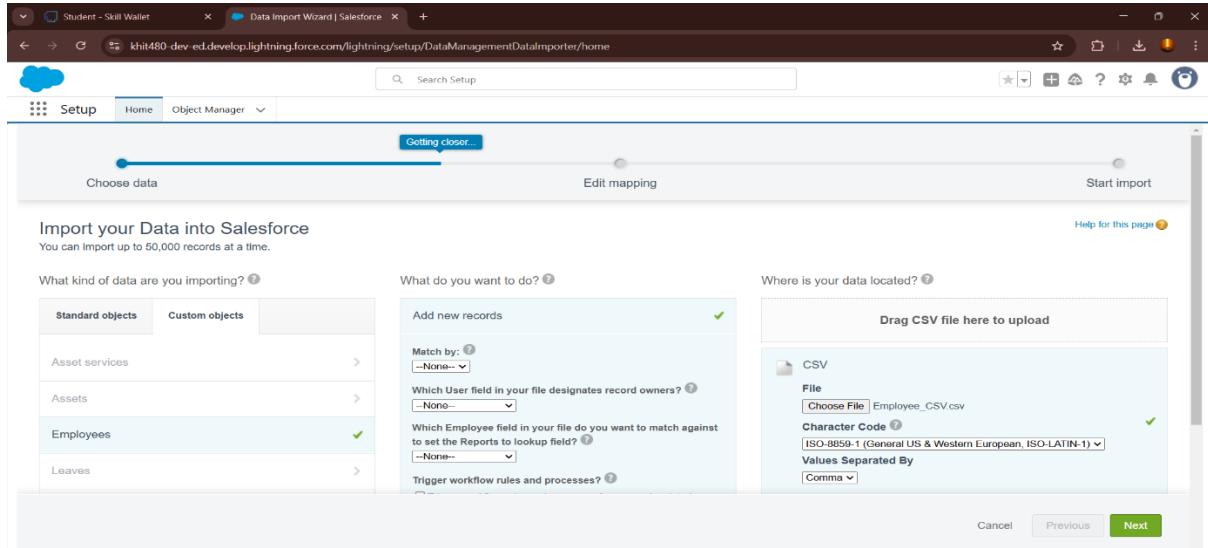
## 5. Import Data

- First create your own collection of data in an excel sheet.

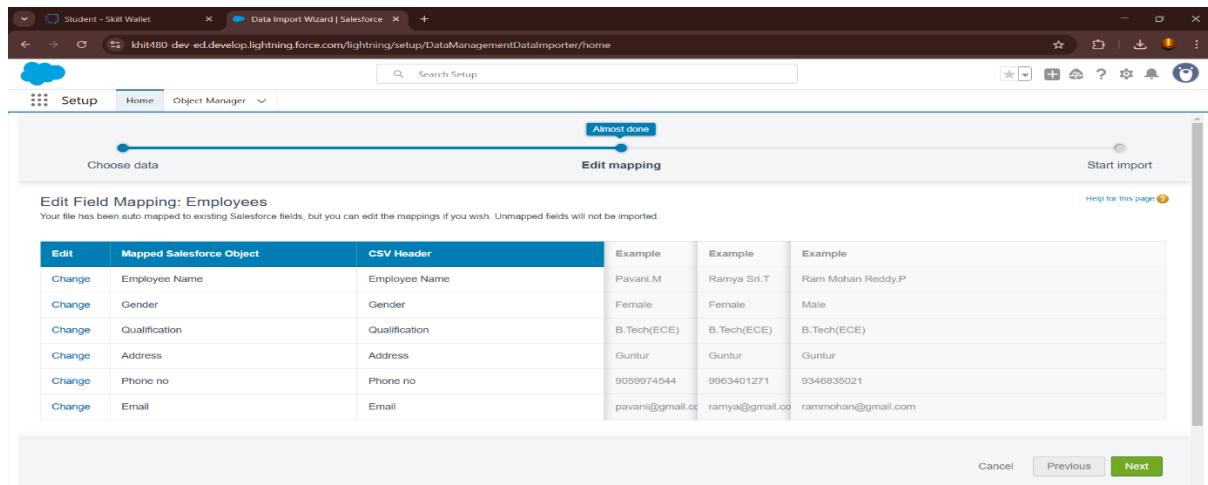
The screenshot shows a Microsoft Excel spreadsheet titled "Employee\_CS1". The data is organized into columns: A (Employee Name), B (Gender), C (Qualification), D (Address), E (Phone no), and F (Email). The data entries are as follows:

	A	B	C	D	E	F
1	Employee Name	Gender	Qualification	Address	Phone no	Email
2	Pavani.M	Female	B.Tech(ECE)	Guntur	9059974544	pavani@gmail.com
3	Ramya Sri.T	Female	B.Tech(ECE)	Guntur	9963401271	ramya@gmail.com
4	Ram Mohan Reddy.P	Male	B.Tech(ECE)	Guntur	9346835021	rammohan@gmail.com
5	Venu.Y	Male	B.Tech(ECE)	Guntur	9581590567	venu@gmail.com
6	Pichaiah.T	Male	B.Tech(ECE)	Guntur	9856767844	pichaiah@gmail.com
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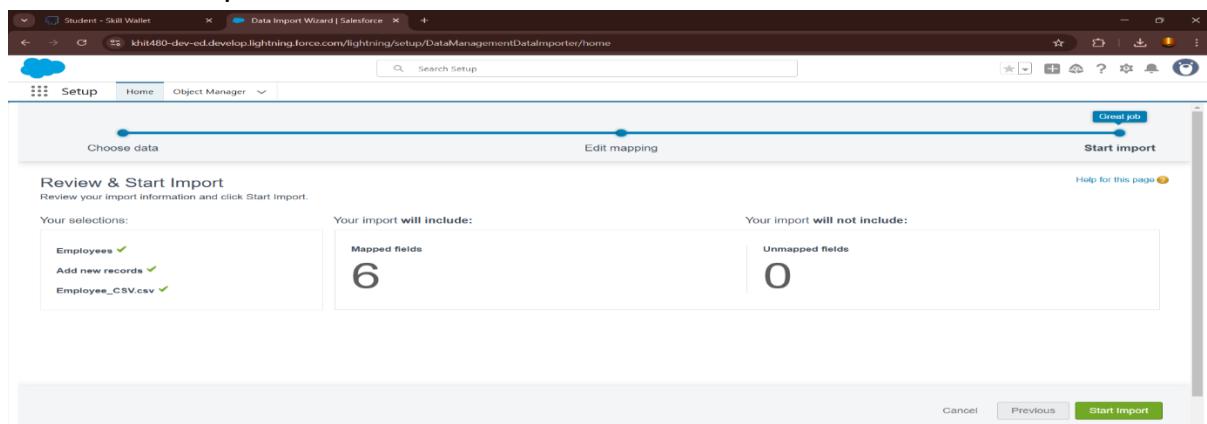
- Importing data using Data Wizard.
- Go to setup and search for Data Import Wizard.
- Click CSV and choose file Employee\_CSV which we made earlier.



Since the field names in the CSV file are the same as the field names in your object, the fields are automatically mapped. Click Next.



Click Start Import.



Click OK on the popup.

The screenshot shows two screenshots of the Salesforce Data Import Wizard. The top screenshot displays the 'Review & Start Import' step. A modal window titled 'Congratulations' appears, stating 'your import has started!' and 'Click OK to view your import status on the Bulk Data Load Job page.' An 'OK' button is visible in the bottom right of the modal. The bottom screenshot shows the 'Bulk Data Load Jobs' page, listing a single job with the following details:

Job ID	750Qy00000J5lfk	Job Type	Bulk V1	Status	Closed
Submitted By	Pavani team KHT	Operation	Insert	Total Processing Time (ms)	351
Start Time	05/03/2025, 2:10 am IST	Queued Batches	0	API Active Processing Time (ms)	279
End Time	05/03/2025, 2:10 am IST	In Progress Batches	0	Apex Processing Time (ms)	45
Time to Complete (hh:mm:ss)	00:01	Completed Batches	1		
Object	Employee	Failed Batches	0		
External ID Field		Progress	100%		
Content Type	CSV	Records Processed	5		
Concurrency Mode	Parallel	Records Failed	0		
API Version	63.0	Retries	0		

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

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.

## 9. Profiles

Types of profiles in salesforce

### 1. Standard profiles:

By default salesforce provides below standard profiles.

1 Contract Manager

2 Read Only

3 Marketing User

4 Solutions Manager

5 Standard User

6 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.

- HR Profile

- Go to setup / type profiles in quick find box / click on profiles / clone the desired profile (Standard user) / enter profile name (HR) / Save.
- While still on the profile page, then click Edit.
- Scroll down to Custom Object Permissions and Give access permissions for Assets and Asset Services objects.
- Scroll down and Click on Save.

- Manager Profile

- Same as HR profile steps create manager profile cloning (Salesforce Platform User) and give permission access for Employee, Project and Project Task objects.
- Create Employee Profile
  - Create Employee Profiles for “On Site Employee”, “Remote Employee” as in Manager profile, but in this employee profile only allow permission access for Project and Project Task objects only.

The screenshots illustrate the configuration of profiles in the Salesforce Setup interface:

- Manager Profile Screenshot:** Shows the "Profiles" page under the "Users" section. It displays various permissions for custom objects like Assets, Asset Services, and Employees. For Employees, "Basic Access" is granted for Read, Create, Edit, Delete, View All, and Modify All. "Data Administration" is also granted for View All and Modify All.
- Employee Profile Screenshot:** Shows the "Profiles" page under the "Users" section. It displays the same permission matrix as the Manager profile, but with more extensive grants. For Employees, "Basic Access" includes Create, Edit, Delete, View All, and Modify All. "Data Administration" includes View All and Modify All.
- Another Employee Profile Screenshot:** Shows the "Profiles" page under the "Users" section. This profile appears to have identical permission settings to the first Employee profile, specifically granting full CRUD and DA access to Employees.

## 10. Roles

A role in Salesforce defines a user's visibility access at the record level. Roles may be used to specify the types of access that people in your Salesforce organization can have to data. Simply put, it describes what a user could see within the Salesforce organization.

- Creating HR Role
- Go to quick find / Search for Roles / click on set up roles
- Click on Expand All and click on add role under whom this role works.
- Give Label as “HR” and Role name gets auto populated. Check to whom this role (HR) reports. Then click on Save.

The screenshot shows the Salesforce Setup interface with the 'Roles' page open. A new role named 'HR' is being created. The 'Role Detail' section displays the following information:

Label	HR	Role Name as displayed on reports	HR
This role reports to	CEO	Sharing Groups	Role, Role and Internal Subordinates
Modified by	Pavan.Jegan (PJI)	Date	04/03/2025, 6:45 am
Opportunity Access	Users in this role can edit all opportunities associated with accounts that they own, regardless of who owns the opportunities	Case Access	Users in this role can edit all cases associated with accounts that they own, regardless of who owns the cases

The 'Users in HR Role' section lists one user:

Action	Full Name	Alias	Username	Active
Edit	Niklaus.Mikacich0	nikita	niklaus.mikacich0@gmail.com	<input checked="" type="checkbox"/>

- Creating Various Roles

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

The screenshot shows the Salesforce Setup interface with the 'Role Edit New Role' page open. A new role named 'Manager' is being created. The 'Role Edit' section displays the following information:

Label	Manager	Role Name	Manager	This role reports to	CEO
Role Name as displayed on reports					

The 'Save' button is located at the bottom right of the form.

Search Setup

roles

Users

Roles

Feature Settings

Sales

Contact Roles on Contracts

Contact Roles on Opportunities

Service

Case Teams

Case Team Roles

Contact Roles on Cases

Help for this Page

Role Edit  
New Role

Role Edit

Label: Remote Employee

Role Name: Remote\_Employee

This role reports to: Manager

Role Name as displayed on reports

Save Save & New Cancel

Search Setup

roles

Users

Roles

Feature Settings

Sales

Contact Roles on Contracts

Contact Roles on Opportunities

Service

Case Teams

Case Team Roles

Contact Roles on Cases

Help for this Page

Role Edit  
New Role

Role Edit

Label: On Site Employee

Role Name: On\_Site\_Employee

This role reports to: Manager

Role Name as displayed on reports

Save Save & New Cancel

Student - Skill Wallet

Roles | Salesforce

Search Setup

roles

Users

Roles

Feature Settings

Sales

Contact Roles on Contracts

Contact Roles on Opportunities

Service

Case Teams

Case Team Roles

Contact Roles on Cases

Help for this Page

Role Detail

Label: Remote Employee

Role Name: Remote\_Employee

This role reports to: Manager

Modified By: Payani team KHTI 04/03/2026, 6:48 am

Opportunity Access: Users in this role can edit all opportunities associated with accounts that they own, regardless of who owns the opportunities.

Case Access: Users in this role can edit all cases associated with accounts that they own, regardless of who owns the cases.

Sharing Groups: Role and Internal Subordinates

Users in Remote Employee Role

No records to display

Users in Remote Employee Role Help

## 11. USERS

- Creating various users.

User1:-

- First Name : Niklaus
- Last Name : Mikaelson
  - . Role : HR
  - . User license: Salesforce
  - . Profiles : HR

The screenshots show the Salesforce Setup interface for managing users.

**Screenshot 1: User Creation**

The 'Users' page is displayed under the 'Setup' tab. A new user record is being created with the following details:

Field	Value
First Name	Niklaus
Last Name	Mikaelson
Alias	nick
Email	nick12@gmail.com
Username	nick12@gmail.com
Nickname	nicko
Title	
Company	
Department	
Division	
Role	HR
User License	Salesforce
Profile	HR
Active	✓
Marketing User	<input type="checkbox"/>
Offline User	<input type="checkbox"/>
Knowledge User	<input type="checkbox"/>
Flow User	<input type="checkbox"/>
Service Cloud User	<input type="checkbox"/>
Site.com Contributor User	<input type="checkbox"/>
Site.com Publisher User	<input type="checkbox"/>
WDC User	<input type="checkbox"/>
Data.com User Type	-None-
Data.com Monthly	Default Limit (300)

**Screenshot 2: User Detail View**

The 'User Detail' page for 'Niklaus Mikaelson' shows the same information, with the 'Edit' button highlighted.

Name	Niklaus Mikaelson
Alias	nick
Email	ali12@gmail.com [Verify]
Username	nic12@mnc.com
Nickname	nicko
Title	
Company	
Department	
Division	
Address	
Role	HR
User License	Salesforce
Profile	HR
Active	✓
Marketing User	<input type="checkbox"/>
Offline User	<input type="checkbox"/>
Knowledge User	<input type="checkbox"/>
Flow User	<input type="checkbox"/>
Service Cloud User	<input type="checkbox"/>
Site.com Contributor User	<input type="checkbox"/>

## User2:-

- 1 First Name : Kol
- 2 Last Name : Mikaelson
- Role : Manager
- User license : Salesforce Platform
- Profiles : Manager

## User 3:-

Create your own user by following the same steps in user2.

The screenshot shows the Salesforce Setup interface with the 'Users' tab selected. On the right, the 'User Detail' page is displayed for a user named 'Kol Mikaelson'. The user's details include:

Name	Kol Mikaelson	Role	Manager
Alias	kmika	User License	Salesforce Platform
Email	ali12@gmail.com [Verify]	Profile	Manager
Username	kol12@mnc.com	Active	<input checked="" type="checkbox"/>
Nickname	mike	Marketing User	<input type="checkbox"/>
Title		Offline User	<input type="checkbox"/>
Company		Knowledge User	<input type="checkbox"/>
Department		Flow User	<input type="checkbox"/>
Division		Service Cloud User	<input type="checkbox"/>
Address		Site.com Contributor User	<input type="checkbox"/>

The screenshot shows the Salesforce Setup interface with the 'Users' tab selected. On the right, the 'User Edit' page is displayed for a user named 'Tony Stark'. The user's details are being edited:

First Name	Tony	Role	Manager
Last Name	Stark	User License	Salesforce Platform
Alias	tstar	Profile	Manager
Email	pavanirsh@gmail.com	Active	<input checked="" type="checkbox"/>
Username	pavanirsh@2@gmail.com	Marketing User	<input type="checkbox"/>
Nickname	User174105364796780754	Offline User	<input type="checkbox"/>
Title		Knowledge User	<input type="checkbox"/>
Company		Flow User	<input type="checkbox"/>
Department		Service Cloud User	<input type="checkbox"/>
Division		Site.com Contributor User	<input type="checkbox"/>

## 12. Page Layouts

- Creating a page layout for Employee object
- Go to Setup / Click on Object Manager /
- Search for the object (Employee) / From drop down click on Edit.
- Click on Page layout / Click on New.
- Give Page layout Name as “On Site Employee Layout” and click on Save.

Drag and drop the Section from the highlight panel below the Information and name it as “Personal Information” and click Ok.

Drag Date of Birth, Address and Age fields from Employee Information to Personal Information section.

Similarly perform the above step to create “Allowances” and add allowances fields in it

- Creating another page layout
- 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 top screenshot shows the "Create New Page Layout" dialog for the Employee object. The "Page Layout Name" field is set to "On Site Employee Layout". The bottom screenshot shows the "Edit Page Layout" screen for the "On Site Employee Layout" for the Employee object. It displays the "Fields" section with fields like Cab Allowance, Email, Food Allowance Amount, etc., and the "Allowances" section which includes "Cab Allowance" and "Food Allowance".

**Screenshot 1: Create New Page Layout - Employee**

Field	Type	Label	Value
Existing Page Layout	dropdown	-None-	
Page Layout Name	text	On Site Employee Layout	

**Screenshot 2: Edit Page Layout - Employee**

Field	Type	Label	Value
Cab Allowance	checkbox	Cab Allowance	✓
Food Allowance	checkbox	Food Allowance	✓
Cab Allowance Amount	text	Cab Allowance Amount	₹123.45
Food Allowance Amount	text	Food Allowance Amount	₹123.45

The screenshot shows the Salesforce Setup Object Manager. The top navigation bar includes 'Setup', 'Home', and 'Object Manager'. The main title is 'SETUP > OBJECT MANAGER' followed by 'Employee'. On the left, a sidebar lists various configuration options under 'Page Layouts': Details, Fields & Relationships, Lightning Record Pages, Buttons, Links, and Actions, Compact Layouts, Field Sets, Object Limits, Record Types, and Related Lookup Filters. The main workspace displays the 'Fields' section of the page layout editor. It shows a table of fields with columns for Field Name and Type. Fields listed include Cab Allowance, Cab Allowance Amount, Email, Food Allowances, Last Modified By, Mode of Work, Reports to, Created By, Employee ID, Employee Name, Gender, Login Time, Phone no, WiFi Allowance Am..., Date of Birth, Experience, Joining date, Logout Time, and Qualification. Below the table, sections for 'Allowances' (WiFi Allowances checked) and 'personal information' (Date of Birth: 15/10/2024, Address: Sample Text, Age: 240.40) are visible. A 'Layout Properties' tab is at the top right.

### 13. Chatter Groups

- Creating a chatter group for your organization.

To Create a chatter group:

Click the App Launcher.

Enter Groups in the Search apps and items... box and select Groups.

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

The screenshot shows the Salesforce Groups creation dialog. The title is 'New Group'. A note says '\* = Required Information'. The 'Name' field contains 'Internal Discussion'. The 'Description' field has the placeholder 'Give a understanding Description on your own'. Under 'Information', there are dropdowns for 'Salesforce Sans' font and '12' size, along with text styling buttons for bold (B), italic (I), underline (U), strikethrough (S), and other options. At the bottom are 'Cancel' and 'Save & Next' buttons.

5. Click Save & Next.
6. On the Manage Members screen, click Add next to users you created in the previous step and click Save.

## 14. Record Types

- Creating On Site Employee Record Type
- Go to Setup / click on Object Manager / Search for the object (Employee) click Edit.
- From the left panel click Record Types click new.
- Give Record Type Label as “On Site Employee” and make it active.
- Uncheck for “Make Available”.
- Scroll down and check for the Manager & System Administrator profile and click on Next.
- Select “Apply a different layout for each profile”, and change page layout to On Site Employee Layout for manager profile and System Administrator. Click save.
  
- Creating "Remote Employee" Record type

Create another Record Type with name “Remote Employee” following On Site Employee. Use Remote Employee page layout for Remote Employee record type.

Record Type  
**On Site Employee**

[Help for this Page](#)

[« 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.

Record Type: On Site Employee ~ Salesforce - Developer Edition

Edit

Record Type Label	On Site Employee	Active	<input checked="" type="checkbox"/>
Record Type Name	On_Site_Employee		
Namespace Prefix			
Description			
Created By	<a href="#">Pavani team KHIT</a> , 04/03/2025, 8:07 am	Modified By	<a href="#">Pavani team KHIT</a> , 04/03/2025, 10:34 am

Record Type  
**Remote Employee**

[Help for this Page](#)

[« 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	Remote Employee	Active	<input checked="" type="checkbox"/>
Record Type Name	Remote_Employee		
Namespace Prefix			
Description			
Created By	<a href="#">Pavani team KHIT</a> , 04/03/2025, 8:11 am	Modified By	<a href="#">Pavani team KHIT</a> , 04/03/2025, 8:11 am

## 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.

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

Student - Skill Wallet

Permission Sets | Salesforce

khit480-dev-ed.develop.lightning.force.com/lightning/setup/PermSets/home

The screenshot shows the Salesforce Setup interface under the 'Permission Sets' tab. The left sidebar includes 'Setup', 'Home', 'Object Manager', and search fields for 'Q. permission' and 'Users'. Under 'Permission Set Groups', 'Permission Sets' is selected. A message says ' Didn't find what you're looking for? Try using Global Search.' The main content area is titled 'Permission Sets' with a sub-header 'On this page you can create, view, and manage permission sets.' It shows a table of permission sets with columns for Action, Permission Set Name, Description, and License. The table lists various roles like 'Authenticated Page', 'Buyer', 'Buyer Manager', etc., each with a detailed description and license information. A navigation bar at the bottom shows '1-25 of 60' and a page number 'Page 1 of 3'.

Student - Skill Wallet

Permission Sets | Salesforce

khit480-dev-ed.develop.lightning.force.com/lightning/setup/PermSets/page?address=%2F0PS0y00000EDApv

The screenshot shows the 'Permission Set' details for 'Per to Emp'. The left sidebar is identical to the previous screen. The main content area is titled 'Per to Emp' with tabs for 'Find Settings...', 'Clone', 'Edit Properties', 'Manage Assignments', and 'View Summary'. The 'Edit Properties' tab is active. It shows the 'Permission Set Overview' with fields for 'Description', 'License' (set to 'Commerce'), 'Session Activation Required' (unchecked), and 'Permission Set Groups Added To' (empty). On the right, it shows API Name 'Per\_to\_Emp', Namespace Prefix 'Payani\_team\_KHIT', Created By 'Payani team KHIT' on '04/03/2025, 10:20 am', and Last Modified By 'Payani team KHIT' on '04/03/2025, 10:20 am'. Below this is the 'Apps' section with sections for 'Assigned Apps', 'Assigned Connected Apps', 'Object Settings', 'App Permissions', 'Apex Class Access', and 'Visualforce Page Access'.

SETUP

Permission Sets

Per to Emp

Find Settings... | Clone | Edit Properties | Manage Assignments | View Summary

Permission Set Overview > Object Settings Employees

**Employees**

Tab Settings

Available	Visible
<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>

**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"/>
View All	<input type="checkbox"/>
Modify All	<input type="checkbox"/>

## 16. Reports And Dashboards • Create Report

- Create 2 more Report

1. Go to the app / click on the reports tab
2. Click New Report. Select report type from category. click on start report.
3. Customize your report, Save or run it.

The screenshot shows the 'Create Report' interface in the Salesforce Reports section. On the left, there's a sidebar with categories like 'Recently Used', 'All', 'Accounts & Contacts', etc. A search bar at the top right says 'Select a Report Type' with 'employee' typed in. Below it, a list of 'Recently Used Report Types' shows 'Assets with Employee Name' and 'Employees' under the 'Standard' category. The main area has a search bar 'Search...' and a table for creating a new report:

Report Type Name	Category
Assets with Employee Name	Standard
Employees	Standard

Below this, the browser address bar shows 'khit480-dev-ed-develop.lightning.force.com/lightning/o/Report/home?queryScope=mr'.

The bottom part of the screenshot shows the 'Reports' tab in the navigation bar, with a list of recent reports:

Report Name	Description	Folder	Created By	Created On	Subscribed
New Employees Report		Private Reports	Pavani team KHIT	4/3/2025, 10:54 am	
New Assets Report		Private Reports	Pavani team KHIT	4/3/2025, 11:07 am	
New Report		Private Reports	Pavani team KHIT	4/3/2025, 10:59 am	

- Create Dashboard
- Go to the app/ click on the Dashboards tabs. Give a Name and click on Create.
- Select add component. Select a Report and click on select.
- Click Add then click on Save and then click on Done.

**New Dashboard**

---

\* Name

Description

Folder

---

Workforce Employees Projects ProjectTasks Assets Asset services Reports Dashboards \* Internal Discussion X

Search...

DASHBOARDS	Dashboard Name	Description	Folder	Created By	Created On	Subscribed
Recent	Dashboard 2		Private Dashboards	Pavani team KHIT	4/3/2025, 11:20 am	<input type="button" value=""/>
Created by Me	Dashboard 1		Private Dashboards	Pavani team KHIT	4/3/2025, 11:08 am	<input type="button" value=""/>
Private Dashboards						
All Dashboards						
FOLDERS						
All Folders						
Created by Me						
Shared with Me						
FAVORITES						
All Favorites						

## 17.Approval Process:

1.Create the leave object with the Employee Name, No. of Days, Subject, Description Status fields.

2.Create an Approval Process for Leave object.

Name: **Leave Approval Request**

Select Approver: select Automatically assign to approver(s) and for users select the name of the user with the Manager role.

Leave | Salesforce

khit480-dev-ed.lightning.force.com/lightning/setup/ObjectManager/01Qy000003jZpV/FieldsAndRelationships/view

Setup Home Object Manager

Search Setup

SETUP > OBJECT MANAGER Leave

**Fields & Relationships**

9 Items, Sorted by Field Label

FIELD LABEL	FIELD NAME	DATA TYPE	CONTROLLING FIELD	INDEXED
Created By	CreatedById	Lookup(User)		
Description	Description__c	Rich Text Area(32768)		
Employee Name	Employee_Name__c	Lookup(Employee)		
Last Modified By	LastModifiedById	Lookup(User)		
Leave Name	Name	Text(80)		
No. of Days	No_of_Days__c	Number(18, 0)		
Owner	OwnerId	Lookup(User,Group)		
Status	Status__c	Picklist		
Subject	Subject__c	Text(18)		

Student - Skill Wallet | Recent | Dashboards | Salesforce | Approval Processes | Approval Processes/page?address=%2F04aQy000000Spv

Setup Home Object Manager

Search Setup

SETUP Approval Processes

Approval Processes

Leave: Leave Approval Request

Process Definition Detail

Process Name	Leave Approval Request	Active	
Unique Name	Leave_Approval_Request	Next Automated Approver Determined By	
Description			
Entry Criteria			
Record Editability	Administrator ONLY	Allow Submitters to Recall Approval Requests	
Approval Assignment Email Template			
Initial Submitters	Leave Owner		
Created By	Pavani team KHIT, 04/03/2025, 11:59 am	Modified By	Pavani team KHIT, 04/03/2025, 12:04 pm

Initial Submission Actions

Action	Type	Description
Record Lock	Field Update	Lock the record from being edited
Edit   Remove	Field Update	Approval Status to Approved
Edit   Remove	Field Update	Approval Status to Submitted

Approval Steps

### 3.Initial

Submission Action: Give name as “Approval Status to Submitted”.

Setup Home Object Manager

Search Setup

SETUP Field Updates

field to update may be on a related object. Fields are shown only for the type that you select.

**Field Update Edit**

**Identification**

Name	Approval Status to Submitte
Unique Name	Approval_Status_to_Submitte
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

4. Approval Steps: Under approval steps click the new approval step.

Give the name as “Approval from HR”

5. Final Approval Action: Give name as “Approval Status to Approved”.

Select Status for the field to update.

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

6. Final Rejection Action: Give name as “Approval Status to Rejected”.

Select Status for the field to update.

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

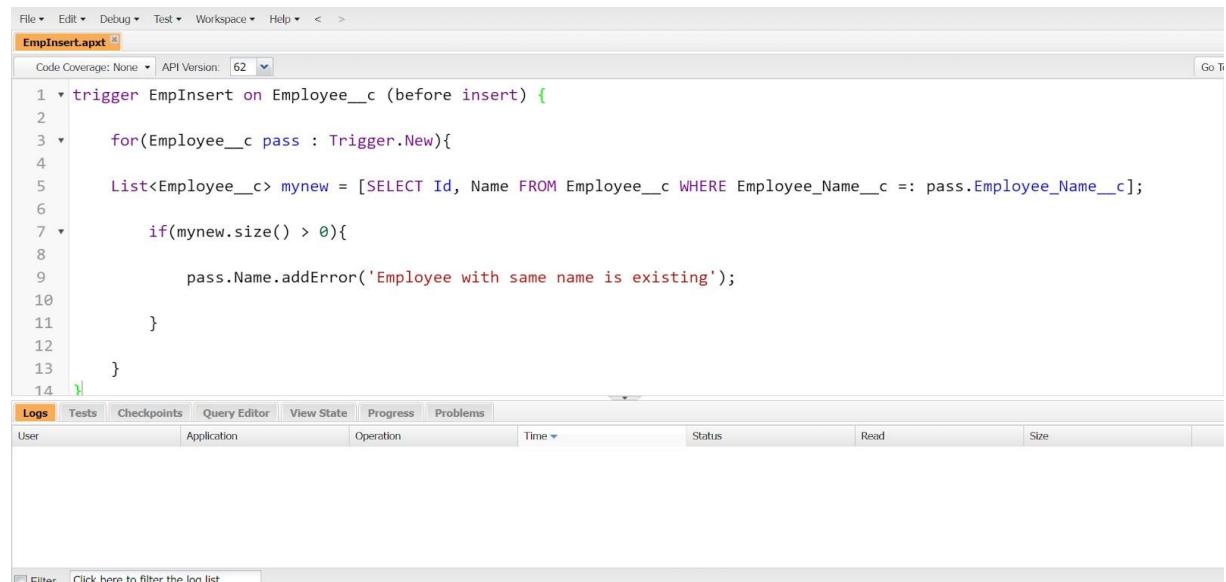
The screenshot shows the Salesforce Setup interface for Approval Processes. The left sidebar includes links for Data, Feature Settings (with Approval Settings selected), Process Automation, and Approval Processes. The main content area is titled "Approval Processes". It contains four sections:

- Initial Submission Actions:** Shows two actions: Record Lock (Description: Lock the record from being edited) and Field Update (Description: Approval Status to Approved). Buttons for "Add Existing" and "Add New" are present.
- Approval Steps:** Shows one step named "Step 1" (Action: Show Actions, Step Number: 1, Name: Approval from HR, Description: Leave: No. of Days EQUALS 5, Criteria: Leave: No. of Days EQUALS 5, Assigned Approver: User.Kol Mikaelson, Reject Behavior: Final Rejection). A "New Approval Step" button is available.
- Final Approval Actions:** Shows one action: Record Lock (Description: Lock the record from being edited).
- Final Rejection Actions:** Shows one action: Record Lock (Description: Unlock the record for editing).

## 18.Create an Apex Trigger

- To create a new Apex Trigger go to Developer Console:  
Click on the file / New / Apex Trigger.
- Give the Apex Trigger name as “EmplInsert”, and select “Employee\_\_c” from the dropdown for sObject.
- Click Submit.

## Write the code.



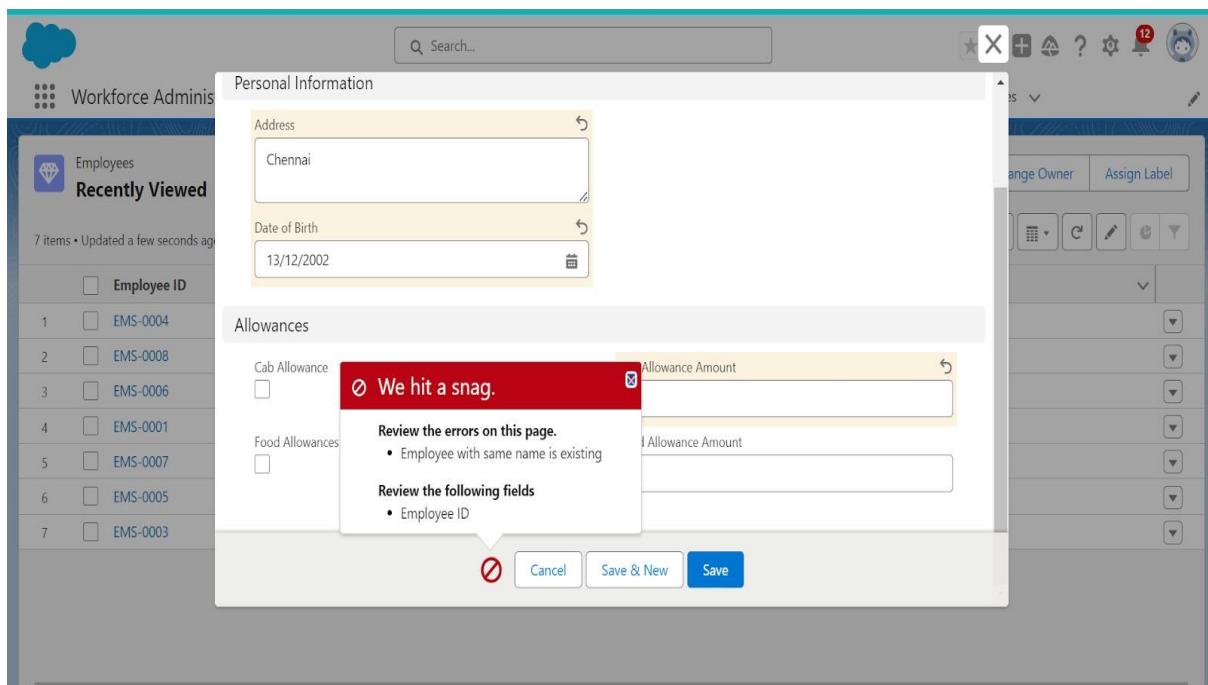
```
File ▾ Edit ▾ Debug ▾ Test ▾ Workspace ▾ Help ▾ < >
EmpInsert.apxt 1
Code Coverage: None | API Version: 62 ▾ Go To
1 trigger EmpInsert on Employee__c (before insert) {
2
3   for(Employee__c pass : Trigger.New){
4
5     List<Employee__c> mynew = [SELECT Id, Name FROM Employee__c WHERE Employee_Name__c =: pass.Employee_Name__c];
6
7     if(mynew.size() > 0){
8
9       pass.Name.addError('Employee with same name is existing');
10
11    }
12
13  }
14 }
```

The screenshot shows the Workforce Admin studio interface. The top menu includes File, Edit, Debug, Test, Workspace, Help, and navigation buttons. The title bar shows "EmpInsert.apxt". The main area displays the Apex trigger code for "EmpInsert.apxt". The code checks if an employee with the same name already exists before inserting a new record. If found, it adds an error message to the new record's Name field. Below the code editor is a logs tab and a table for monitoring application activity. At the bottom, there is a filter for the log list.

- Save the code.

### ❖ Testing The Trigger

- Try to create a record with the existing Employee Name say “Tony Stark” you’ll face the error while saving the record saying “Employee with same name is existing”.



## 5. Conclusion

The Workforce Administration Solution (Dev) has successfully established a modular and scalable workforce as well as asset management system using core Salesforce functionality. Highlights include:

- Structured Data — Implemented custom Objects, Tabs to Organise critical data around Employees, Projects, Tasks and Assets with fields.
- Lightning app for the user-friendly interface—Configured lightning app with customized page layout and navigation tabs improve the user experience as well as help users to achieve data entry and access.
- Restriction of data access with the help of OWD setting, profiles, and roles. Ensured that data security is not compromised and that it follows an organizational hierarchy.
- Automated Processes: Created Screen Flows, Apex triggers, approval workflows to automate the tasks and minimize manual entries leading to increased operational efficiency.
- Improved Collaboration: Using Chatter groups and permission sets, teams can communicate while ensuring flexible data access without losing security.
- Analytics: Created reports and dashboards for real-time tracking of workforce records, project visibility, and asset utilization to enable data-driven decisions.

The solution has delivered a scalable, user-friendly and secure workforce management system that empowers operations, enhances collaboration and provides actionable insights for strategic impact to the organization.