



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

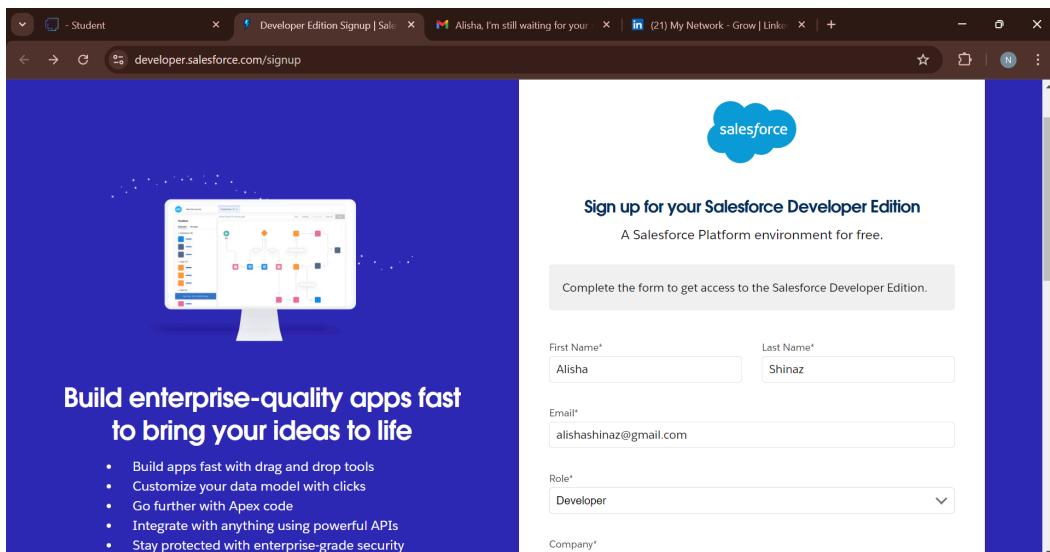
- User Profiles: Defined profiles (e.g., HR, Project Manager, Employee) to control access to objects, fields, and features based on user roles and responsibilities.
- Role
 - Role Hierarchy: Set up a role hierarchy to define data visibility and reporting structure, ensuring managers can access subordinate 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

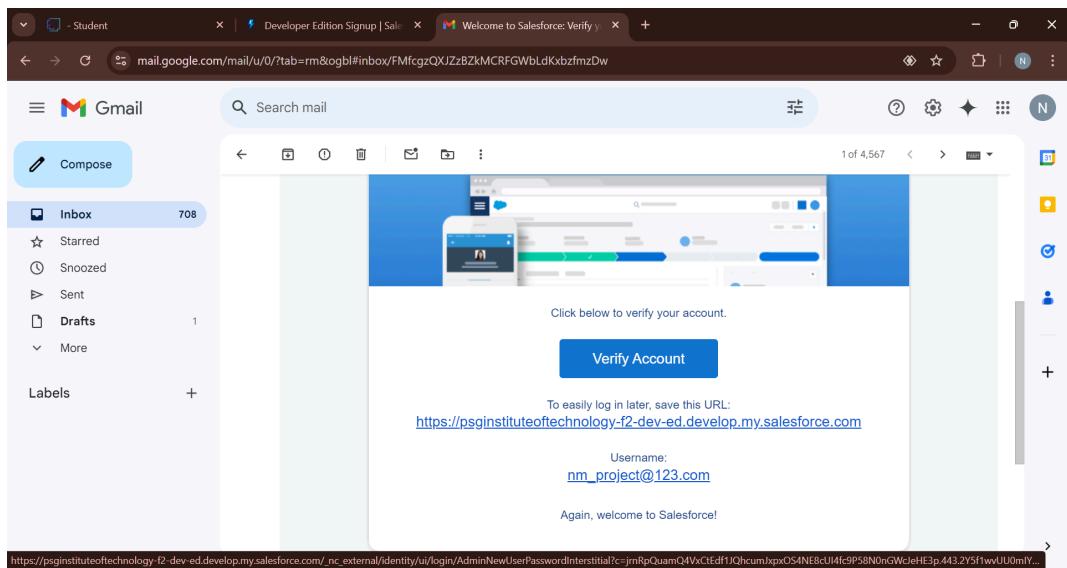
- Workforce Dashboard: Created a comprehensive dashboard displaying metrics such as resource allocation, project status, and asset distribution for management visibility.
- Approval Process
 - Approval Workflow for Asset Requests: Set up an approval process for employees to request assets, which requires **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

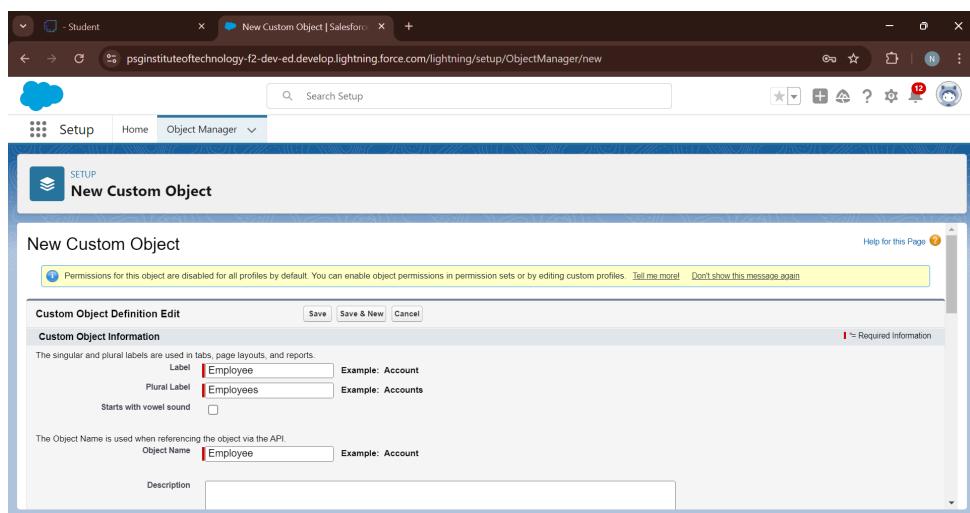
- We began by creating a Salesforce Developer Account to access a development environment where we could build and customize the application. This setup provided the necessary tools to design, test, and deploy the application.





2. Defined Objects

- Employee objects and Project objects were created.
- Create 3 more objects with label names as ProjectTask, Asset, Asset Service.



The image displays three separate screenshots of the Salesforce Setup Object Manager interface, each showing the configuration details for a specific object: Employee, Project, and ProjectTask.

Employee Object Configuration:

- API Name:** Employee__c
- Custom:** ✓
- Singular Label:** Employee
- Plural Label:** Employees
- Description:** (empty)
- Enable Reports:** ✓
- Track Activities:** (empty)
- Track Field History:** (empty)
- Deployment Status:** Deployed
- Help Settings:** Standard salesforce.com Help Window

Project Object Configuration:

- API Name:** Project__c
- Custom:** ✓
- Singular Label:** Project
- Plural Label:** Projects
- Description:** (empty)
- Enable Reports:** ✓
- Track Activities:** (empty)
- Track Field History:** (empty)
- Deployment Status:** Deployed
- Help Settings:** Standard salesforce.com Help Window

ProjectTask Object Configuration:

- API Name:** ProjectTask__c
- Custom:** ✓
- Singular Label:** ProjectTask
- Plural Label:** ProjectTasks
- Description:** (empty)
- Enable Reports:** ✓
- Track Activities:** (empty)
- Track Field History:** (empty)
- Deployment Status:** Deployed
- Help Settings:** Standard salesforce.com Help Window

The screenshot shows the Salesforce Setup interface with the URL `psginstitutetechnology-f2-dev-ed.develop.lightning.force.com/lightning/setup/ObjectManager/01dM000002pUkT/Details/view`. The page title is "Asset | Salesforce". The main content area is titled "SETUP > OBJECT MANAGER" and "Asset". On the left, there is a sidebar with a "Details" tab selected, followed by a list of configuration options: Fields & Relationships, Page Layouts, Lightning Record Pages, Buttons, Links, and Actions, Compact Layouts, Field Sets, Object Limits, Record Types, and Related Lookup Filters. The main right panel is titled "Details" and contains fields for Description, API Name (Asset__c), Singular Label (Asset), Plural Label (Assets), and various status and reporting settings like Enable Reports, Track Activities, and Deployment Status (Deployed). There are "Edit" and "Delete" buttons at the top right.

The screenshot shows the Salesforce Setup interface with the URL `psginstitutetechnology-f2-dev-ed.develop.lightning.force.com/lightning/setup/ObjectManager/01dM000002pUqy/Details/view`. The page title is "Asset Service | Salesforce". The main content area is titled "SETUP > OBJECT MANAGER" and "Asset Service". The sidebar and main panel structure are identical to the Asset object, with the API Name being Asset_Service__c, Singular Label being Asset Service, and Plural Label being Asset Services. The right panel includes fields for Description, API Name (Asset_Service__c), Singular Label (Asset Service), Plural Label (Asset Services), and various status and reporting settings like Enable Reports, Track Activities, and Deployment Status (Deployed).

3. 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.

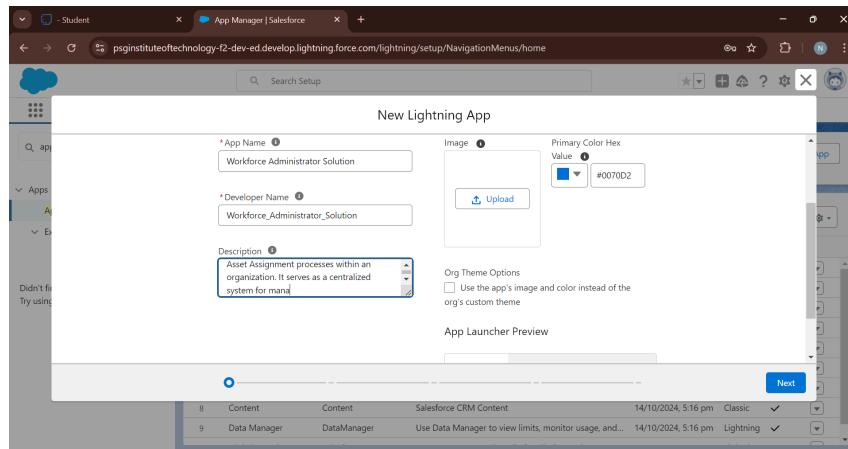
The screenshot shows the Salesforce Setup interface with the 'Tabs' page open. The URL is psginstituteoftechnology-f2-dev-ed.lightning.force.com/lightning/setup/CustomTabs/page?address=%2Fsetup%2Fui%2FobjectCustomTa.... The page title is 'Tabs | Salesforce'. The left sidebar shows 'User Interface' and 'Tabs'. The main content area is titled 'Step 1. Enter the Details' and 'New Custom Object Tab'. It asks to choose a custom object or create a new one. The 'Object' dropdown is set to 'Employee' and 'Tab Style' is 'Jewel'. An optional 'Splash Page Custom Link' is set to 'None'. A 'Description' field is present.

This screenshot is identical to the one above, showing the 'Tabs' configuration page for a new custom object tab. The URL is the same: psginstituteoftechnology-f2-dev-ed.lightning.force.com/lightning/setup/CustomTabs/page?address=%2Fsetup%2Fui%2FobjectCustomTa.... The setup steps are identical, with 'Object' set to 'Employee' and 'Tab Style' set to 'Jewel'.

The screenshot shows the 'Custom Tabs' configuration page in the Salesforce Setup interface. The URL is psginstituteoftechnology-f2-dev-ed.lightning.force.com/lightning/setup/CustomTabs/page?address=%2Fsetup%2Fui%2Fcustomtabs.jsp%3Fs.... The page title is 'Custom Tabs'. It includes a 'Quick Find' search bar and a 'Help for this Page' link. The main content area is titled 'Custom Object Tabs' and lists tabs for 'Assets', 'Asset Services', 'Employees', 'Projects', and 'Project Tasks'. Each row has 'Action' (Edit | Del) and 'Label' columns, and a 'Tab Style' column showing icons for Leaf, Postage, Jewel, Lightning, and Airplane respectively. A 'Description' column is also present.

4. 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 Experience App Manager						
24 items • Sorted by Last Modified Date • Filtered by All appmenuitems - TabSet Type, App Type						
App Name	Developer Name	Description	Last Modified...	App ...	Visi...	Actions
1 Workforce Administrator Solution	Workforce_Administrator...	Workforce Administration Solution is a software application or platform designed t...	14/10/2024, 7:45 pm	Lightning	✓	
2 Business Rules Engine	ExpressionSetConsole	Create and maintain business rules that perform complex lookups and calculations.	14/10/2024, 5:21 pm	Lightning	✓	
3 Automation	FlowsApp	Automate business processes and repetitive tasks.	14/10/2024, 5:21 pm	Lightning	✓	
4 Salesforce Scheduler Setup	LightningScheduler	Set up personalized appointment scheduling.	14/10/2024, 5:18 pm	Lightning	✓	
5 Queue Management	QueueManagement	Create and manage queues for your business.	14/10/2024, 5:16 pm	Lightning	✓	
6 All Tabs	AllTabSet		14/10/2024, 5:16 pm	Classic		
7 Subscription Management	RevenueCloudConsole	Get started automating your revenue processes	14/10/2024, 5:16 pm	Lightning	✓	
8 Data Manager	DataManager	Use Data Manager to view limits, monitor usage, and manage recipes.	14/10/2024, 5:16 pm	Lightning	✓	
9 Digital Experiences	SalesforceCMS	Manage content and media for all of your sites.	14/10/2024, 5:16 pm	Lightning	✓	
10 Platform	Platform	The fundamental Lightning Platform	14/10/2024, 5:16 pm	Classic		
11 Sales	Sales	The world's most popular sales force automation (SFA) solution	14/10/2024, 5:16 pm	Classic		

5. Added Fields to Objects

- Creating Text Field in Employee Object
- 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

Employee

Fields & Relationships

- Geolocation
- Number
- Percent
- Phone
- Picklist
- Picklist (Multi-Select)
- Text**
- Text Area
- Text Area (Long)
- Text Area (Rich)
- Text (Encrypted) i
- Time
- URL

Allows users to define locations. Includes latitude and longitude components, and can be used to calculate distance.
Allows users to enter any number. Leading zeros are removed.
Allows users to enter a percentage number, for example, '10' and automatically adds the percent sign to the number.
Allows users to enter any phone number. Automatically formats it as a phone number.
Allows users to select a value from a list you define.
Allows users to select multiple values from a list you define.
Allows users to enter any combination of letters and numbers.
Allows users to enter up to 255 characters on separate lines.
Allows users to enter up to 131,072 characters on separate lines.
Allows users to enter formatted text, add images and links. Up to 131,072 characters on separate lines.
Allows users to enter any combination of letters and numbers and store them in encrypted form.
Allows users to enter a local time. For example, "2:40 PM", "14:40", "14:40:00", and "14:40:50.600" are all valid times for this field.
Allows users to enter any valid website address. When users click on the field, the URL will open in a separate browser window.

Employee

Fields & Relationships

- External Lookup Relationship
- Checkbox
- Currency
- Date**
- Date/Time
- Email
- Geolocation
- Number
- Percent
- Phone

When a user deletes the master record, all detail records are deleted.
You can create rollup summary fields on the master record to summarize the detail records.
The relationship field allows users to click on a lookup icon to select a value from a popup list. The master object is the source of the values in the list.
Creates a relationship that links this object to an external object whose data is stored outside the Salesforce org.
Allows users to select a True (checked) or False (unchecked) value.
Allows users to enter a dollar or other currency amount and automatically formats the field as a currency amount. This can be useful if you export data to Excel or another spreadsheet.
Allows users to enter a date or pick a date from a popup calendar.
Allows users to enter a date and time, or pick a date from a popup calendar. When users click a date in the pop-up, that date and the current time are entered into the Date/Time field.
Allows users to enter an email address, which is validated to ensure proper format. If this field is specified for a contact or lead, users can choose the address when clicking Send an Email. Note that custom email addresses cannot be used for mass emails.
Allows users to define locations. Includes latitude and longitude components, and can be used to calculate distance.
Allows users to enter any number. Leading zeros are removed.
Allows users to enter a percentage number, for example, '10' and automatically adds the percent sign to the number.
Allows users to enter any phone number. Automatically formats it as a phone number.

Screenshot of the Salesforce Object Manager setup page for the Employee object.

The left sidebar shows navigation links: Details, Fields & Relationships (selected), Page Layouts, Lightning Record Pages, Buttons, Links, and Actions, Compact Layouts, Field Sets, Object Limits, Record Types, and Related Lookup Filters.

The main content area is titled "Data Type". It lists several options:

- None Selected
- Auto Number
- Formula
- Roll-Up Summary
- Lookup Relationship
- Master-Detail Relationship
- External Lookup Relationship

Each option has a detailed description and examples.

Screenshot of the Salesforce Object Manager setup page for the Employee object, showing the creation of a new field.

The left sidebar shows navigation links: Details, Fields & Relationships (selected), Page Layouts, Lightning Record Pages, Buttons, Links, and Actions, Compact Layouts, Field Sets, Object Limits, Record Types, and Related Lookup Filters.

The main content area shows the configuration for a new field named "Age".

Field Label: Age

Field Name: Age

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

Formula Return Type: Number

Other options shown but not selected: None Selected, Checkbox, Currency, Date, Date/Time.

Employee

Step 2: Define the Values

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
-

A system-generated sequence number that uses a display format you define. The number is automatically incremented for each new record.

A read-only field that derives its value from a formula expression you define. The formula field is updated when any of the source fields change.

A read-only field that displays the sum, minimum, or maximum value of a field in a related list or the record count of all records listed in a related list.

Creates a relationship that links this object to another object. The relationship field allows users to click on a lookup icon to select a value from a popup list. The other object is the source of the values in the list.

Creates a special type of parent-child relationship between this object (the child, or "detail") and another object (the parent, or "master") where:

- The relationship field is required on all detail records.
- The ownership and sharing of a detail record are determined by the master record.
- When a user deletes the master record, all detail records are deleted.
- You can create rollup summary fields on the master record to summarize the detail records.

The relationship field allows users to click on a lookup icon to select a value from a popup list. The master object is the source of the values in the list.

Creates a relationship that links this object to an external object whose data is stored outside the Salesforce org.

Allows users to select a True (checked) or False (unchecked) value.

Allows users to enter a dollar or other currency amount and automatically formats the field as a currency amount. This can be useful if you export data to Excel or another spreadsheet.

Allows users to enter a date or pick a date from a popup calendar.

ProjectTask

Fields & Relationships

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

A system-generated sequence number that uses a display format you define. The number is automatically incremented for each new record.

A read-only field that derives its value from a formula expression you define. The formula field is updated when any of the source fields change.

A read-only field that displays the sum, minimum, or maximum value of a field in a related list or the record count of all records listed in a related list.

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The relationship field allows users to click on a lookup icon to select a value from a popup list. The master object is the source of the values in the list.

Creates a relationship that links this object to an external object whose data is stored outside the Salesforce org.

Allows users to select a True (checked) or False (unchecked) value.

Allows users to enter a dollar or other currency amount and automatically formats the field as a currency amount. This can be useful if you export data to Excel or another spreadsheet.

6. Setting OWD

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

Sharing Settings

Work Plan Template	Private	Private	<input checked="" type="checkbox"/>
Work Step Template	Private	Private	<input checked="" type="checkbox"/>
Work Type	Private	Private	<input checked="" type="checkbox"/>
Work Type Group	Public Read/Write	Private	<input checked="" type="checkbox"/>
Asset	Public Read/Write	Private	<input checked="" type="checkbox"/>
Asset Service	Public Read/Write	Private	<input checked="" type="checkbox"/>
Employee	Private	Private	<input checked="" type="checkbox"/>
Project	Public Read/Write	Private	<input checked="" type="checkbox"/>

Other Settings

Standard Report Visibility [i](#) Manual User Record Sharing [i](#) Manager Groups [i](#)

Secure guest user record access [i](#) Require permission to view record names in lookup fields [i](#)

[i](#)

Save Cancel

Sharing Settings

Waitlist	Private	Private	<input checked="" type="checkbox"/>
Web Cart Document	Private	Private	<input checked="" type="checkbox"/>
Work Order	Private	Private	<input checked="" type="checkbox"/>
Work Plan	Private	Private	<input checked="" type="checkbox"/>
Work Plan Template	Private	Private	<input checked="" type="checkbox"/>
Work Step Template	Private	Private	<input checked="" type="checkbox"/>
Work Type	Private	Private	<input checked="" type="checkbox"/>
Work Type Group	Public Read/Write	Private	<input checked="" type="checkbox"/>
Asset	Public Read/Write	Private	<input checked="" type="checkbox"/>
Asset Service	Private	Private	<input checked="" type="checkbox"/>
Employee	Private	Private	<input checked="" type="checkbox"/>
Project	Private	Private	<input checked="" type="checkbox"/>

Other Settings

Standard Report Visibility [i](#) Manual User Record Sharing [i](#) Manager Groups [i](#)

Secure guest user record access [i](#) Require permission to view record names in lookup fields [i](#)

[i](#)

7. User Adoption

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

Sales Home Opportunities

Employees Recently Viewed

1 item • Updated a few seconds ago

- Employee ID
 - 1 EMS-0001

New Employee

* = Required Information

Information

Employee ID	Owner
	Alisha Shinaz
Employee Name	
Harshitaa G A	
Date of Birth	
14/11/2003	
Gender	
Female	

Reports to:

Search Employees... Cancel Save & New Save

To Do List

Sales Home Opportunities Leads Tasks Files Accounts Contacts Campaigns Dashboards Employees More

Employee EMS-0001

New Contact Edit New Opportunity

Related Details

Employee ID	Owner
EMS-0001	Alisha Shinaz
Employee Name	
Harshitaa G A	
Date of Birth	
14/11/2003	
Age	
21.00	
Gender	
Female	
Reports to	

To Do List

- ← → ⌂ psginstituteoftechnology-f2-dev-ed.lightning.force.com/lightning/o/Employee_c/list?filterName=_Recent
- Sales Home Opportunities Leads Tasks Files Accounts Contacts Campaigns Dashboards Employees More
- Employees Recently Viewed
- 2 items • Updated a few seconds ago
- Employee ID
 - 1 EMS-0002
 - 2 EMS-0001
- New Import Change Owner Assign Label
- Search this list...
- Edit Delete Change Owner Edit Labels
- javascript:void(0);

8. Import Data

- Importing data using Data Wizard.

	A	B	C	D	E	F	G	H	I	J	K	L	M	N
1	Employee Name	Date of Birth	Age	Gender	Qualification	Address	Phone no	Email						
2	Alisha	15/10/2003	21	Female	B.E CSE	Coimbatore	9933221134	alishaa@gmail.com						
3	Thanisha	13/12/2002	22	Female	B.E CSE	Chennai	9873421736	thanisha@gmail.com						
4	Shrishti	23/11/2001	23	Female	B.E CSE	Coimbatore	9875637281	shrishti@gmail.com						
5	Lakshana	24/11/2004	20	Female	B.E CSE	Chennai	9764256783	lakshana@gmail.com						
6	Harshitaa	14/11/2002	22	Female	B.E CSE	Coimbatore	9863678234	harshitaa@gmail.com						

Getting closer...

Choose data

Edit mapping

Start import

Match by: None

Which User field in your file designates record owners? None

Which Employee field in your file do you want to match against to set the Reports to lookup field? None

Trigger workflow rules and processes?

Edit	Mapped Salesforce Object	CSV Header	Example	Example	Example
Change	Employee Name	Employee Name	Alisha	Thanisha	Shrishti
Change	Date of Birth	Date of Birth	15/10/2003	13/12/2002	23/11/2001
Change	Gender	Gender	Female	Female	Female
Change	Qualification	Qualification	B.E CSE	B.E CSE	B.E CSE
Change	Address	Address	Coimbatore	Chennai	Coimbatore
Change	Phone no	Phone no	9933221134	9873421736	9875637281

psginstituteoftechnology-f2-dev-ed.lightning.force.com/lightning/setup/DataManagementDataImporter/home

Setup Home Object Manager

Choose data Edit mapping Start import

Review & Start Import

Great job

Help for this page ?

Your selections:

- Employees ✓
- Add new records ✓
- Employee_CS1.csv ✓

Your import will include:

Mapped fields 7

Unmapped fields 0

Cancel Previous Start Import

psginstituteoftechnology-f2-dev-ed.lightning.force.com/lightning/setup/DataManagementDataImporter/home

Setup Home Object Manager

Choose data Edit mapping Start import

Review & Start Import

Congratulations, your import has started!

Click OK to view your import status on the Bulk Data Load Job page.

OK

Help for this page ?

Your selections:

- Employees ✓
- Add new records ✓
- Employee_CS1.csv ✓

Your import will include:

Mapped fields 7

Unmapped fields 0

Cancel Previous Start Import

SETUP Bulk Data Load Jobs

Time to Complete 00:00 (hh:mm:ss)

Object Employee

External ID Field

Content Type CSV

Concurrency Mode Parallel

API Version 62.0

Completed Batches 1

Failed Batches 0

Progress 100%

Records Processed 5

Records Failed 0

Retries 0

Reload

Batches

View Request	View Result	Batch ID	Start Time	End Time	Total Processing Time (ms)	API Active Processing Time (ms)	Apex Processing Time (ms)	Records Processed	Records Failed	Retry Count	State Message	Status
View Request	View Result	751dM000004wpxV	14/10/2024, 10:42 pm	14/10/2024, 10:42 pm	83	34	0	5	0	0	Complete	

9. Profiles

- HR Profile
- Manager Profile
- Create Employee Profile

The screenshot shows the Salesforce Setup - Profiles page. The left sidebar has a search bar and navigation links for Home and Object Manager. The main content area is titled "Profiles". It displays "Custom Object Permissions" for various objects:

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

Below the permissions, there are sections for "Session Settings" and "Password Policies".

The screenshot shows the Salesforce Setup - Profiles page. The left sidebar has a search bar and navigation links for Home and Object Manager. The main content area is titled "Profiles". It displays "Contact Point Consents" and "Streaming Channels" sections, followed by "Custom Object Permissions" for various objects:

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

Below the permissions, there are sections for "Session Settings" and "Password Policies".

The screenshot shows the Salesforce Setup interface with the 'Profiles' page open. The left sidebar shows 'Users' and 'Profiles' selected. The main content area displays 'Custom Object Permissions' for several objects. For Assets, Asset Services, and Employees, there are sections for 'Basic Access' (Read, Create, Edit, Delete) and 'Data Administration' (View All, Modify All). For Projects and Project Tasks, similar permissions are listed. Below this, 'Session Settings' and 'Password Policies' are shown.

10. Roles

- Creating HR Role
- Creating Various Roles

The screenshot shows the Salesforce Setup interface with the 'Roles' page open. The left sidebar shows 'Users' and 'Roles' selected. The main content area displays the 'Role Detail' for the 'HR' role. It includes fields for 'Label' (HR), 'Reports To' (CEO), 'Modified By' (Alisha Shinaz), 'Opportunity Access', and 'Case Access'. A note indicates that users in this role can edit opportunities and cases regardless of ownership.

The screenshot shows the Salesforce Setup interface with the 'Roles' page open. The left sidebar shows 'Users' and 'Roles' selected. The main content area displays the 'Role Edit' for a new role. The 'Label' is set to 'Manager', 'Role Name' is 'Manager', 'This role reports to' is 'CEO', and 'Role Name as displayed on reports' is empty. Buttons at the bottom include 'Save', 'Save & New', and 'Cancel'.

The screenshot shows the Salesforce Setup interface. The left sidebar is titled "Setup" and contains a search bar, "Home", and "Object Manager". Under "Users", the "Roles" option is selected. The main content area is titled "SETUP Roles" and shows a "New Role" form. The form has fields for "Label" (Remote Employee), "Role Name" (Remote_Employee), and "This role reports to" (Manager). There is also a field for "Role Name as displayed on reports" which is empty. At the bottom are "Save", "Save & New", and "Cancel" buttons. A help link "Help for this Page" is in the top right.

This screenshot is identical to the one above, showing the "New Role" form in the Salesforce Setup interface. The "Label" is set to "Remote Employee", "Role Name" is "Remote_Employee", and "This role reports to" is "Manager". The "Role Name as displayed on reports" field is empty. The "Save", "Save & New", and "Cancel" buttons are at the bottom. A help link "Help for this Page" is in the top right.

11. USERS

- Creating various users.

The screenshot shows the Salesforce Setup interface. The left sidebar is titled 'Users' and includes options like Permission Set Groups, Permission Sets, Profiles, Public Groups, Queues, Roles, User Management Settings, and a selected 'Users' option. Under 'Users', there are sub-options for Feature Settings, Data.com, and Prospector Users. The main content area is titled 'SETUP Users' and shows a user detail for 'Kol Mikaelson'. The user's name is 'Kol Mikaelson' with alias 'kmika', email 'ali12@gmail.com [Verify]', and username 'kol12@mnc.com'. The user has a nickname 'mike' and title 'Title'. The user is assigned to a 'Marketing User' profile, has a 'Manager' role, and is active. The user license is 'Salesforce Platform' and the profile is 'Manager'. Other checkboxes for Offline User, Knowledge User, Flow User, Service Cloud User, and Site.com Contributor User are present but unchecked.

The screenshot shows the Salesforce Setup interface. The left sidebar is identical to the previous one, with 'Users' selected. The main content area is titled 'SETUP Users' and shows a 'New User' creation page. The page is titled 'User Edit' with buttons for Save, Save & New, and Cancel. The 'General Information' section contains fields for First Name ('Harry'), Last Name ('Potter'), Alias ('hpott'), Email ('ali123@gmail.com'), Username ('hp@hog.com'), Nickname ('theboywholived'), Title ('Title'), Company ('Company'), Department ('Department'), and Division ('Division'). To the right of these fields are dropdown menus for Role ('Manager'), User License ('Salesforce Platform'), Profile ('Manager'), and Active status ('Active'). Other checkboxes for Marketing User, Offline User, Knowledge User, Flow User, Service Cloud User, and Site.com Contributor User are also present.

12. Page Layouts

- Creating a page layout for Employee object
- Creating another page layout

Cloud icon

Setup Home Object Manager

SETUP > OBJECT MANAGER Employee

Create New Page Layout

Help for this Page ?

As an option, you may select an existing layout to clone. If you create a page layout without cloning, your page layout will not include the standard sections whose names are translated for your international users.

Existing Page Layout: --None--

Page Layout Name: On Site Employee Layout

Save Cancel

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

Cloud icon

Setup Home Object Manager

SETUP > OBJECT MANAGER Employee

Fields Quick Save Preview As... Cancel Undo Redo Layout Properties

Quick Find Field Name

Fields

- Buttons
- Quick Actions
- Mobile & Lightning Actions
- Expanded Lookups
- Related Lists
- Report Charts

Section	Cab Allowance	Email	Food Allowance Am...	Last Modified By	Mode of Work	Reports to
Blank Space	Cab Allowance Amount	Employee ID	Food Allowances	LinkedIn Profile	Owner	Wifi Allow...
Address	Created By	Employee Name	Gender	Login Time	Phone no	Wifi Allow...
Age	Date of Birth	Experience	Joining date	Logout Time	Qualification	

Allowances

Cab Allowance ✓ Cab Allowance Amount ₹123.45

Food Allowances ✓ Food Allowance Amount ₹123.45

Personal Information

Address Sample Text Date of Birth 15/10/2024 Age 240.40

Save Quick Save Preview As... Cancel Undo Redo Layout Properties

Fields

- Buttons
- Quick Actions
- Mobile & Lightning Actions
- Expanded Lookups
- Related Lists

Custom Buttons

Cloud icon

Setup Home Object Manager

SETUP > OBJECT MANAGER Employee

Fields Quick Save Preview As... Cancel Undo Redo Layout Properties

Quick Find Field Name

Fields

- Buttons
- Quick Actions
- Mobile & Lightning Actions
- Expanded Lookups
- Related Lists

Cab Allowance	Email	Food Allowance Am...	Last Modified By	Mode of Work	Reports to
Cab Allowance Amount	Employee ID	Food Allowances	LinkedIn Profile	Owner	Wifi Allow...
Created By	Employee Name	Gender	Login Time	Phone no	Wifi Allow...
Date of Birth	Experience	Joining date	Logout Time	Qualification	

Allowances

Wifi Allowances ✓ Wifi Allowance Amount ✓

Personal Information

Date of Birth 15/10/2024 Address Sample Text Age 240.40

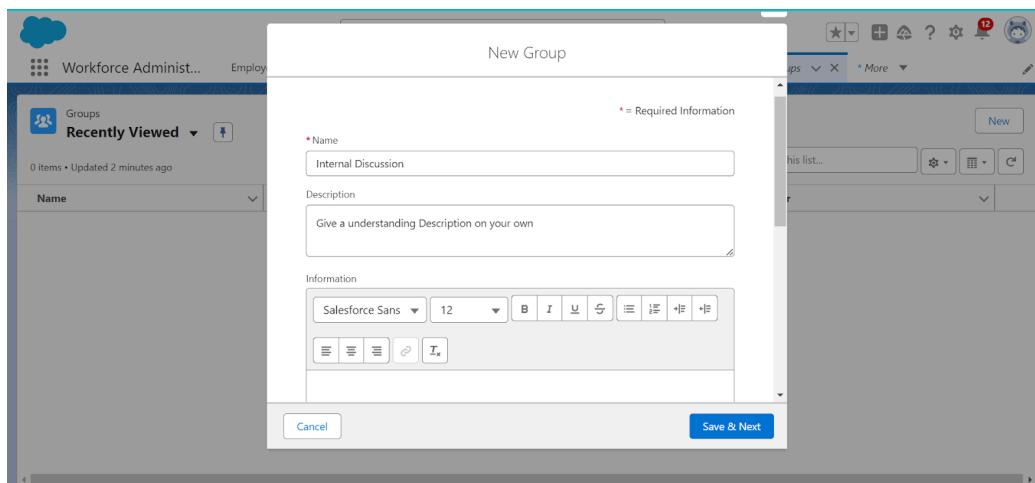
Save Quick Save Preview As... Cancel Undo Redo Layout Properties

Fields

- Buttons
- Quick Actions
- Mobile & Lightning Actions
- Expanded Lookups
- Related Lists

13. Chatter Groups

- Creating a chatter group for your organization.



The screenshot shows the 'Internal Discussion' group page. The top navigation bar includes links for Employees, Projects, Asset Services, Project Tasks, Reports, Dashboards, and the current group ('Internal Discussion'). The main content area features a large orange decorative header with two cartoon animals. Below it, the group name 'Internal Discussion' is displayed along with ownership information ('Owner', 'Limited') and sharing options ('New Contact', 'New Opportunity', 'New Case'). The left sidebar has tabs for 'Chatter' and 'Engagement'. The 'Chatter' tab is active, showing a post input field with tabs for 'Post', 'Poll', and 'Question', and a 'Share' button. A search bar and sort dropdown ('Most Recent Activity') are also present. The right sidebar is titled 'Group Details' and lists the group's email address ('0F9dM000000BLqjSAG@post.dmn3uh.ind136.chatter.salesforce.com') and owner ('Alisha Shinaz').

14. Record Types

- Creating On Site Employee Record Type
- Creating "Remote Employee" Record type

Record Type
On Site Employee

[« Back to Custom Object: Employee](#)

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

Edit		Active	✓
Record Type Label	On Site Employee		
Record Type Name	On_Site_Employee		
Namespace Prefix			
Description			
Created By	Alisha Shinaz, 15/10/2024, 9:08 pm	Modified By	Alisha Shinaz, 09/11/2024, 11:21 am

Record Type
Remote Employee

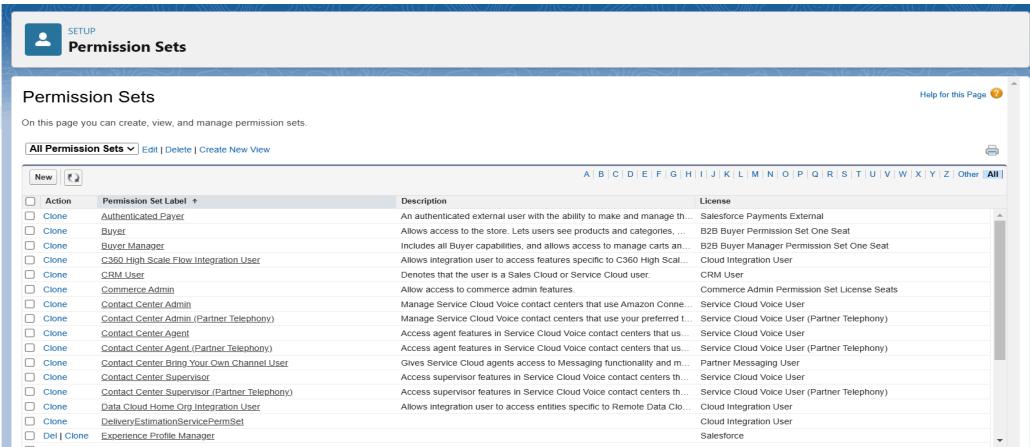
[« Back to Custom Object: Employee](#)

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

Edit		Active	✓
Record Type Label	Remote Employee		
Record Type Name	Remote_Employee		
Namespace Prefix			
Description			
Created By	Alisha Shinaz, 15/10/2024, 9:14 pm	Modified By	Alisha Shinaz, 09/11/2024, 11:23 am

15. Permission sets

- Creating a permission set



The screenshot shows the Salesforce 'Permission Sets' page under the 'SETUP' tab. The left sidebar includes a global search bar and navigation sections for 'Users', 'Permission Set Groups', and 'Custom Code'. The main content area is titled 'Permission Sets' and contains a sub-header: 'On this page you can create, view, and manage permission sets.' Below this is a toolbar with buttons for 'All Permission Sets', 'Edit', 'Delete', and 'Create New View'. A table lists 24 permission sets, each with an 'Action' column (containing 'Clone' or 'Del | Clone') and a 'Permission Set Label' column. The table also includes columns for 'Description' and 'License'. The 'Description' column provides a brief overview of the permissions granted by each set, such as 'Salesforce Payments External' for 'Authenticated User'. The 'License' column indicates which license is required for certain features, like 'Commerce Admin' for 'Commerce Admin'. The table is paginated with letters A through Z at the top and a 'All' link at the bottom right.

Action	Permission Set Label	Description	License
<input type="checkbox"/>	Authenticated User	An authenticated external user with the ability to make and manage th...	Salesforce Payments External
<input type="checkbox"/>	Buyer	Allows access to the store. Lets users see products and categories, ...	B2B Buyer Permission Set One Seat
<input type="checkbox"/>	Buyer Manager	Includes all Buyer capabilities, and allows access to manage carts an...	B2B Buyer Manager Permission Set One Seat
<input type="checkbox"/>	C360 High Scale Flow Integration User	Allows integration user to access features specific to C360 High Scal...	Cloud Integration User
<input type="checkbox"/>	CRM User	Denotes that the user is a Sales Cloud or Service Cloud user.	CRM User
<input type="checkbox"/>	Commerce Admin	Allow access to commerce admin features.	Commerce Admin Permission Set License Seats
<input type="checkbox"/>	Contact Center Admin	Manage Service Cloud Voice contact centers that use Amazon Connec...	Service Cloud Voice User
<input type="checkbox"/>	Contact Center Admin (Partner Telephony)	Manage Service Cloud Voice contact centers that use your preferred t...	Service Cloud Voice User (Partner Telephony)
<input type="checkbox"/>	Contact Center Agent	Access agent features in Service Cloud Voice contact centers that us...	Service Cloud Voice User
<input type="checkbox"/>	Contact Center Agent (Partner Telephony)	Access agent features in Service Cloud Voice contact centers that us...	Service Cloud Voice User (Partner Telephony)
<input type="checkbox"/>	Contact Center Bring Your Own Channel User	Give Service Cloud agents access to Messaging functionality and m...	Partner Messaging User
<input type="checkbox"/>	Contact Center Supervisor	Access supervisor features in Service Cloud Voice contact centers th...	Service Cloud Voice User
<input type="checkbox"/>	Contact Center Supervisor (Partner Telephony)	Access supervisor features in Service Cloud Voice contact centers th...	Service Cloud Voice User (Partner Telephony)
<input type="checkbox"/>	Data Cloud Home Org Integration User	Allows integration user to access entities specific to Remote Data Clo...	Cloud Integration User
<input type="checkbox"/>	DeliveryEstimationServicePermSet		Salesforce
<input type="checkbox"/>	DeliveryProfileManager		

SETUP Permission Sets

Permission Set **Per to Emp**

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

Permission Set Overview

Description	API Name	Per_to_Emp
License	Namespace Prefix	
Session Activation Required	Created By	Alisha.Shinaz_ 15/10/2024, 11:46 pm
Permission Set Groups Added To	Last Modified By	Alisha.Shinaz_ 09/11/2024, 11:26 am

Apps

- Assigned Apps**: Settings that specify which apps are visible in the app menu.
- Assigned Connected Apps**: Settings that specify which connected apps are visible in the app menu.
- Object Settings**: Permissions to access objects and fields, and settings such as tab availability.
- App Permissions**: Permissions to perform app-specific actions, such as "Manage Call Centers".
- Apex Class Access**: Permissions to execute Apex classes.
- Visualforce Page Access**: Permissions to execute Visualforce pages.
- External Data Source Access**: Permissions to authenticate against external data sources.
- Flow Access**: Settings that apply to Salesforce apps, such as Sales, and

SETUP Permission Sets

PERMISSION SET **Per to Emp**

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

Permission Set Overview > Object Settings ▾ Employees ▾

Employees Save | Cancel

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
- Create Dashboard

Create Report

Category	Report Type Name	Category
Recently Used	Assets with Employee Name	Standard
All	Employees	Standard
Accounts & Contacts		
Opportunities		
Customer Support Reports		
Leads		
Campaigns		
Activities		
Contracts and Orders		
Price Books, Products and Assets		
Administrative Reports		
File and Content Reports		
Individuals		
Other Reports		
Hidden Report Types		

New Dashboard

* Name

Description

Folder

Private Dashboards

Workforce Administ...

Employees Projects Asset Services ProjectTasks Reports Dashboards Assets Leaves

Search recent dashboards... New Dashboard New Folder

DASHBOARDS	Dashboard Name	Description	Folder	Created By	Created On	Subscribed
Recent	Dashboard 2		Private Dashboards	Alisha Shinaz	16/10/2024, 12:01 am	
Created by Me	Dashboard 1		Private Dashboards	Alisha Shinaz	15/10/2024, 11:58 pm	
Private Dashboards						
All Dashboards						
FOLDERS						
All Folders						
Created by Me						
Shared with Me						
FAVORITES						
All Favorites						

17.Approval Process And Apex Trigger

- Leave Approval Request

- Create an Apex Trigger
- Testing The Trigger

Search Setup

approval

Setup Home Object Manager

Data

Mass Transfer Approval Requests

Process Automation

Approval Processes

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

Approval Processes

Leave: Leave Approval Request

Help for this Page

Process Definition Detail

Process Name		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	Alisha Shinaz, 20/10/2024, 1:44 pm	
Modified By	Alisha Shinaz, 20/10/2024, 1:44 pm	

Initial Submission Actions

Search Setup

Quick Find

Setup Home Object Manager

Service Setup Assistant

Commerce Setup Assistant

Hyperforce Assistant

Release Updates

Lightning Experience Transition Assistant

Salesforce Mobile App

Lightning Usage

Optimizer

Sales Cloud Everywhere

ADMINISTRATION

Leave

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

Specify New Field Value

Picklist Options

File ▾ Edit ▾ Debug ▾ Test ▾ Workspace ▾ Help ▾ < >

EmpInsert.apxt ▾ 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

```

Logs | Tests | Checkpoints | Query Editor | View State | Progress | Problems |

User	Application	Operation	Time ▾	Status	Read	Size

Filter Click here to filter the log list

Workforce Adminis

Employees Recently Viewed

7 items • Updated a few seconds ago

	Employee ID
1	EMS-0004
2	EMS-0008
3	EMS-0006
4	EMS-0001
5	EMS-0007
6	EMS-0005
7	EMS-0003

Personal Information

Address
Chennai

Date of Birth
13/12/2002

All allowances

Cab Allowance

Food Allowances

We hit a snag.

Review the errors on this page.
• Employee with same name is existing

Review the following fields
• Employee ID

Allowance Amount

Allowance Amount

Cancel Save & New Save

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.