

Workforce Administration Solution (Admin)

By

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Project Abstract

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

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INTRODUCTION :

The SmartBridge organization is moving to the cloud-based Salesforce platform in order to enhance performance, simplify system administration, and secure data. The business uses Salesforce to store confidential information securely using encryption and backups, and automated data replication improves disaster recovery.

Performance is optimized for quick and dependable data access thanks to the scalable cloud resources. By doing this, administrative complexity is decreased and system administrators are free to concentrate on higher-value work, which increases output and improves overall operational efficiency.

Objectives:

A workforce administration solution aims to achieve the following goals:

Centralized Employee Data Management: Establish a single, integrated system for handling employee data.

Project tracking: Keep tabs on how many projects each worker is engaged in.

Employee performance is monitored and assessed through performance monitoring.

Asset Assignment Management: Keep track of and keep an eye on the resources allocated to your staff.

Process Automation: Simplify and automate procedures related to asset and personnel management.

Increased Efficiency: Cut down on manual labor to increase operational efficiency.

Data Accessibility: To improve decision-making, make sure that personnel and project-related data is easily accessible.

Methodology :

These techniques can be applied to Salesforce in order to deploy a Workforce Administration Solution:

Custom Objects: To store and manage data, create custom objects for workers, projects, and assets.

Object Relationships: For simple tracking, use relationships to connect staff members to projects and assets.

Automation: To automate processes like asset assignment and project updates, use technologies like Workflow Rules, Process Builder, and Flows.

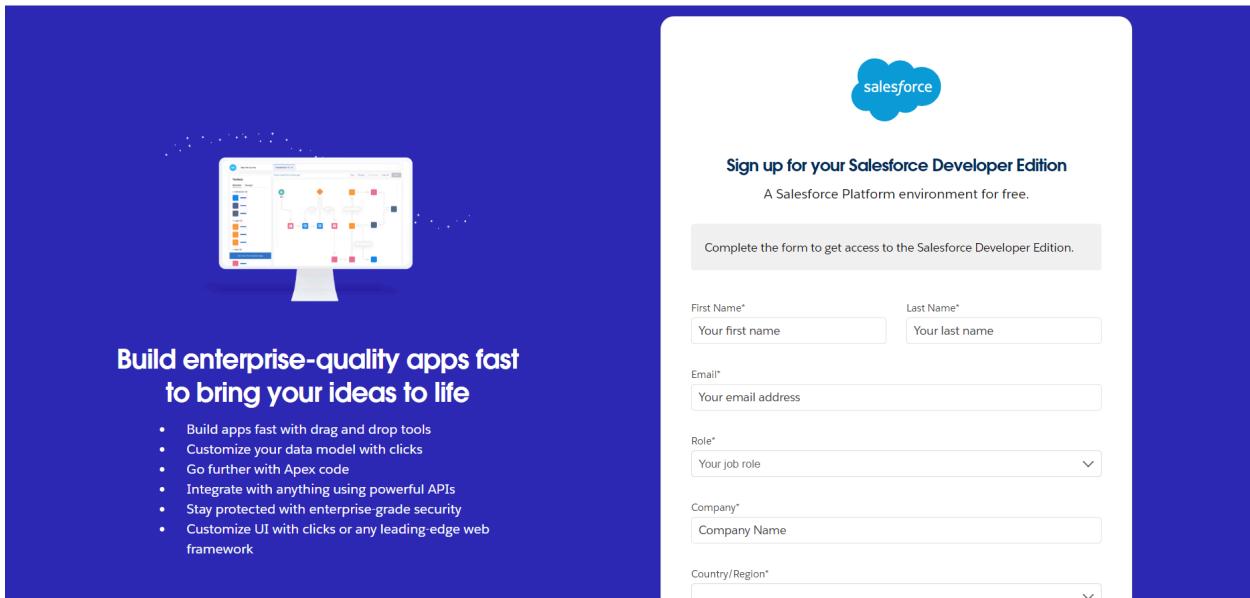
Dashboards and Reports: Create reports to keep an eye on project advancement and staff performance.

Implementation Details :

The first step to create this project is "Creation of a Salesforce Developer Account"

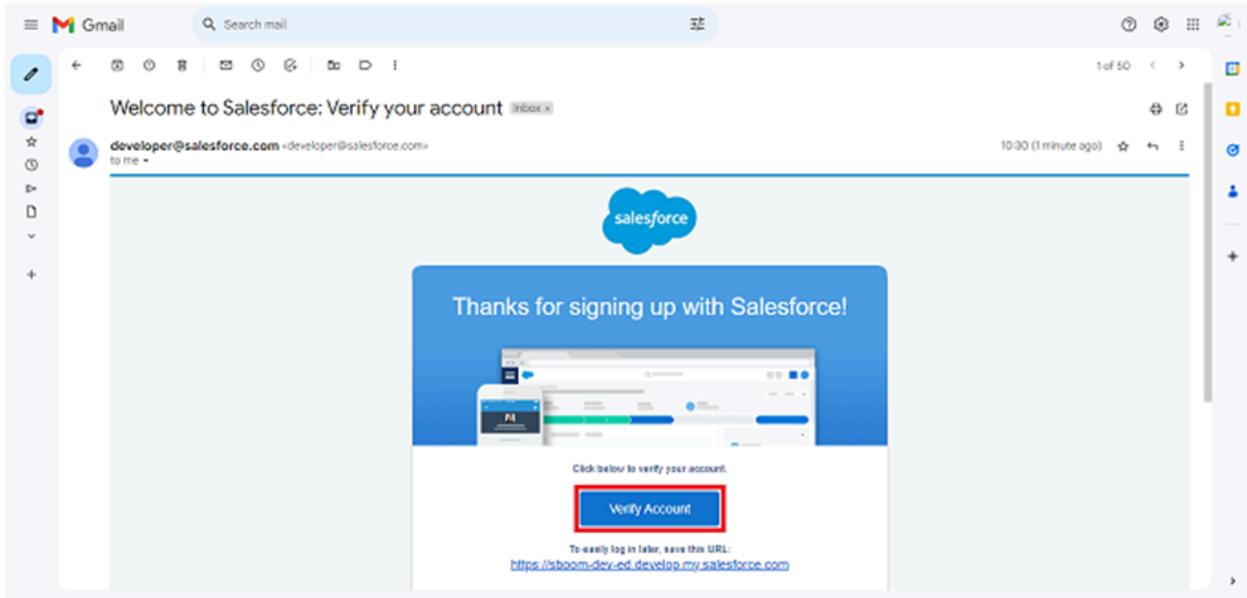
Activity 1: Creating Developer Account

1. Visit the signup page at <https://developer.salesforce.com>
2. Fill out the following information on the sign-up form:



Activity 2: Account Activation

1. Access the inbox using the email address you used to register. To activate your account, click the "Verify Account" button. It could take five to ten minutes to send the email.



2. Select "Verify Account."
3. Enter your password, respond to the security question, and then select "Change Password."

Change Your Password

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

- 8 characters
- 1 letter
- 1 number

* New Password
 Good

* Confirm New Password
 Match

Security Question
 In what city were you born?

* Answer
 asdfghjkl

Change Password

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

Setup Home

Service Setup Assistant

Multi-Factor Authentication Assistant

Release Updates

Lightning Experience Transition Assistant

Salesforce Mobile App

Lightning Usage

Optimizer

ADMINISTRATION

> Users

SETUP Home

Get Started with Einstein Bots
Launch an AI-powered bot to automate your digital connections.
[Get Started](#)

Mobile Publisher
Use the Mobile Publisher to create your own branded mobile app.
[Learn More](#)

Real-time Collaborative Docs
Transform productivity with collaborative docs, spreadsheets, and slides inside Salesforce.
[Get Started](#)

TASK 1:

Object

What Constitutes an Object?

Database tables known as Salesforce objects let you store information unique to a company.
Which kinds of items are there in Salesforce?

There are two kinds of Salesforce objects:

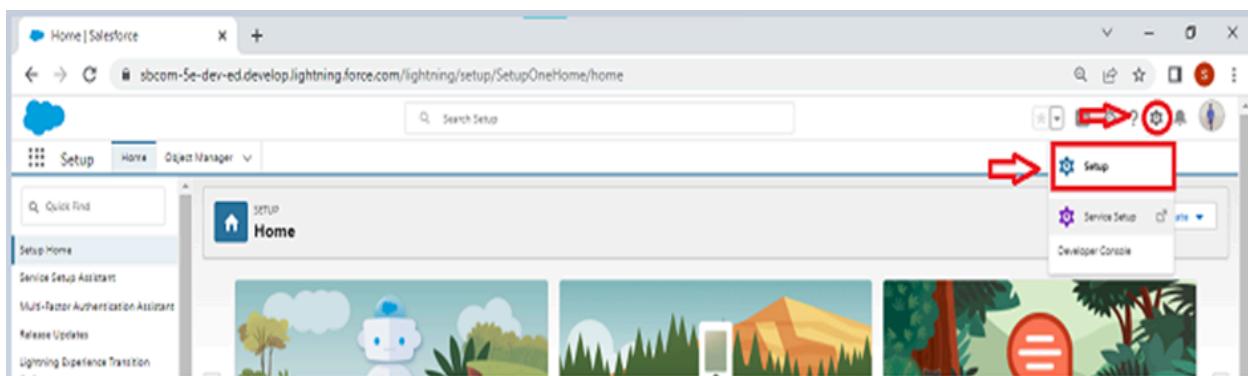
1. Standard Objects: Salesforce.com provides users, contracts, reports, dashboards, and other types of objects as standard objects.
2. Custom Objects: Objects generated by users are known as custom objects. They provide information that is special to them and vital to their business. They serve as the center of every application and offer a framework for data sharing.

Use Case

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

Navigate to Setup page:

Click on gear icon ? click setup.



Activity 1: Create Employee Object

To create an object:

1. From the setup page → Click on Object Manager → Click on Create → Click on Custom Object.
2. Click on Allow reports,
3. Allow search → Save.

Output:

The screenshot shows the Salesforce Setup interface for creating a new object named 'Employee'. The left sidebar lists various configuration options like Fields & Relationships, Page Layouts, and Record Types. The main 'Details' tab is selected, showing fields for API Name ('Employee__c'), Singular Label ('Employee'), and Plural Label ('Employees'). On the right, checkboxes for 'Enable Reports' and 'Track Activities' are checked. Other settings like Deployment Status ('Deployed') and Help Settings ('Standard salesforce.com Help Window') are also visible. The top navigation bar shows the URL as 'srinivasaramanujaninsti-2f6-dev-ed.lightning.force.com/lightning/setup/ObjectManager/01IdM000002cfdh/Details/view'.

Activity 2: Create Project Object

Having comprehensive data on the organization's ongoing and finished projects is the goal of developing a project object.

To create an object:

1. From the setup page -> Click on Object Manager -> Click on Create -> Click on
2. Click on Allow reports,
3. Allow search -> Save

Output:

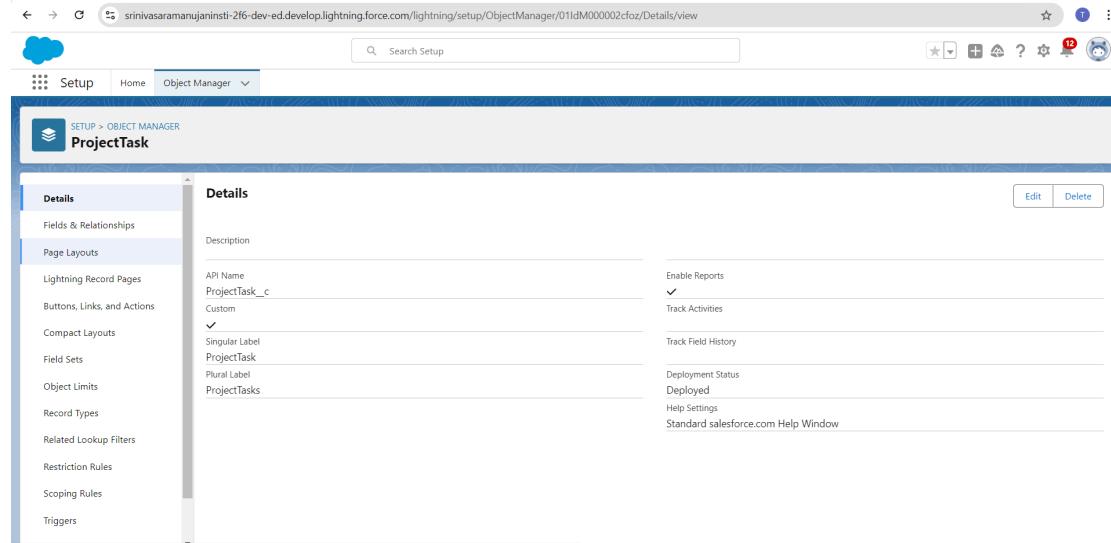
The screenshot shows the Salesforce Object Manager interface. The URL in the browser is <https://srinivasaramujaninsti-2f6-dev-ed.lightning.force.com/lightning/setup/ObjectManager/01IdM000002cfnN/Details/view>. The page title is "SETUP > OBJECT MANAGER". The main content area displays the "Details" tab for a new object named "Project". The "API Name" field is set to "Project_c". Under the "Description" section, the "Singular Label" is "Project" and the "Plural Label" is "Projects". In the "Enable Reports" section, "Enable Reports" is checked and "Track Activities" is unchecked. Other settings include "Track Field History", "Deployment Status" (set to "Deployed"), and "Help Settings" (set to "Standard salesforce.com Help Window"). The left sidebar lists various configuration options: Fields & Relationships, Page Layouts, Lightning Record Pages, Buttons, Links, and Actions, Compact Layouts, Field Sets, Object Limits, Record Types, Related Lookup Filters, Restriction Rules, Scoping Rules, and Triggers. At the bottom right are "Edit" and "Delete" buttons.

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

By following activity-2 steps created 3 more objects

1. ProjectTask

Output:

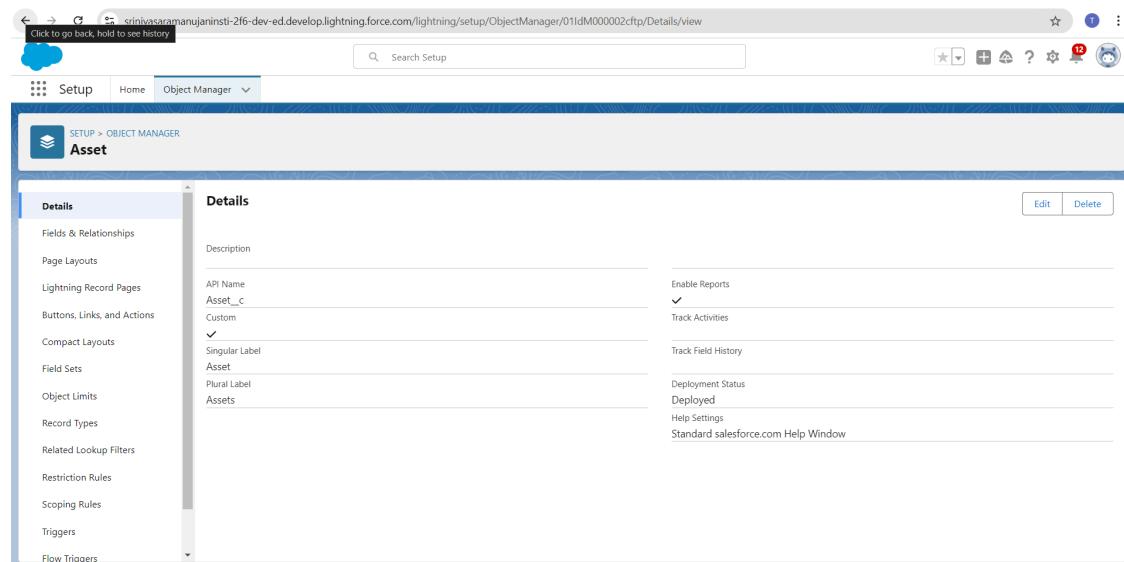


The screenshot shows the Salesforce Object Manager interface for the 'ProjectTask' object. The left sidebar lists various configuration tabs: Details, Fields & Relationships, Page Layouts, Lightning Record Pages, Buttons, Links, and Actions, Compact Layouts, Field Sets, Object Limits, Record Types, Related Lookup Filters, Restriction Rules, Scoping Rules, and Triggers. The main 'Details' tab is selected, showing the following configuration details:

| Setting | Value |
|---------------------|-------------------------------------|
| 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 |

2. Asset

Output:



The screenshot shows the Salesforce Object Manager interface for the 'Asset' object. The left sidebar lists various configuration tabs: Details, Fields & Relationships, Page Layouts, Lightning Record Pages, Buttons, Links, and Actions, Compact Layouts, Field Sets, Object Limits, Record Types, Related Lookup Filters, Restriction Rules, Scoping Rules, and Triggers. The main 'Details' tab is selected, showing the following configuration details:

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

3.Asset Service

Output:

The screenshot shows the Salesforce Object Manager interface. The URL in the address bar is `srinivasaramuanjinsti-2f6-dev-ed.lightning.force.com/lightning/setup/ObjectManager/01IdM000002cfx3/Details/view`. The page title is "Asset Service". The left sidebar has 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, Related Lookup Filters, Restriction Rules, Scoping Rules, Triggers, and Flow Triggers. The main content area is titled "Details" and shows the following fields:

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

At the top right of the main content area are "Edit" and "Delete" buttons.

Tabs:

A tab functions similarly to a user interface and is utilized for creating records for objects as well as viewing the records within those objects.

Tab Types:

1. Individual Tabs

Salesforce.com's custom object tabs serve as the user interface for custom apps that you create. They have the same appearance and functionality as common salesforce.com tabs like contacts, opportunities, and accounts.

2. Online Tabs

Custom tabs known as "Web Tabs" are used to show web apps or material embedded within the Salesforce.com window. With web tabs, users can rapidly access applications and content they use regularly without ever leaving the salesforce.com application.

3. Tabs for Visualforce

Custom tabs that show a Visualforce page are called Visualforce Tabs. Visualforce tabs resemble regular salesforce.com tabs in appearance and functionality.

4. Tabs for Lightning Components

You can add Lightning components to Lightning Experience's and the mobile app's navigation menu by using the Lightning Component tabs.

5. Lightning Tabs on Pages

You can add Lightning Pages to the mobile app's navigation menu using Lightning Page Tabs.

Lightning Page tabs function differently than standard custom tabs. Once established, when you click the Plus button to the right of your currently open tabs, they don't appear on the All Tabs page. Additionally, when you modify the tabs for your apps, Lightning Page tabs are not displayed in the list of Available Tabs.

Use Case

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

Activity 1: Creating a Custom Tab (Employee)

To create a Tab:(Employee)

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

Output:

The screenshot shows the Salesforce Setup interface. The left sidebar has a search bar with 'tabs' typed in, and the 'User Interface' section is expanded, showing 'Rename Tabs and Labels' and 'Tabs'. A message at the bottom says 'Didn't find what you're looking for? Try using Global Search.' The main content area is titled 'SETUP Tabs' and shows a 'Custom Object Tab Employees' section. It contains a sub-section 'Custom Tab Definition Detail' with fields: 'Tab Label' (Employees), 'Object' (Employee), 'Tab Style' (Desk), and 'Created By' (Kanekal Toufdi). The status bar at the bottom right shows the date and time: '25/09/2024, 7:04 pm'.

Activity 2: Creating a Custom Tab (Project)

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

Output:

The screenshot shows the Salesforce Setup interface with the 'Tabs' page selected. In the left sidebar, under 'User Interface', 'Tabs' is highlighted. The main content area displays a 'Custom Tab Definition Detail' for a tab named 'Projects'. The tab is defined for the 'Project' object. The 'Tab Style' is set to 'Building'. Other details shown include 'Created By' (Kanekal Toufique), 'Created Date' (25/09/2024, 7:06 pm), and 'Modified By' (Kanekal Toufique), 'Modified Date' (25/09/2024, 7:06 pm). The tab has a 'Splash Page Custom Link'.

Activity 3: Creating tabs for remaining objects

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

Project Task:

Output:

The screenshot shows the Salesforce Setup interface with the 'Tabs' page selected. In the left sidebar, under 'User Interface', 'Tabs' is highlighted. The main content area displays a 'Custom Tab Definition Detail' for a tab named 'ProjectTasks'. The tab is defined for the 'ProjectTask' object. The 'Tab Style' is set to 'Building'. Other details shown include 'Created By' (Kanekal Toufique), 'Created Date' (25/09/2024, 7:07 pm), and 'Modified By' (Kanekal Toufique), 'Modified Date' (25/09/2024, 7:07 pm). The tab has a 'Splash Page Custom Link'.

Asset:

Output:

The screenshot shows the Salesforce Setup interface under the 'Tabs' section. A custom object tab named 'Assets' has been created for the 'Asset' object. The tab style is set to 'Building'. The 'Tab Style' dropdown shows 'Building' is selected. The 'Custom Tab Definition Detail' table includes fields for Tab Label (Assets), Object (Asset), Description, Created By (Kanekal Touq), and Modified By (Kanekal Touq). The creation date is 25/09/2024, 7:06 pm, and the modification date is 25/09/2024, 7:06 pm.

Asset service:

Output:

The screenshot shows the Salesforce Setup interface under the 'Tabs' section. A custom object tab named 'Asset Services' has been created for the 'Asset Service' object. The tab style is set to 'Real Estate Sign'. The 'Custom Tab Definition Detail' table includes fields for Tab Label (Asset Services), Object (Asset Service), Description, Created By (Kanekal Touq), and Modified By (Kanekal Touq). The creation date is 25/09/2024, 7:07 pm, and the modification date is 25/09/2024, 7:07 pm.

The Lightning App: Use Case

Well done you have reached close to your organizational requirement by creating the objects to store the organization's data. Making a database for an organization is just not enough to reach out the requirements, the task is how the users at the organization can access the objects you have created for them.

Activity 1: Create a Lightning App

To create a lightning app page:

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

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

App Name : Workforce Administrator Solution

Developer Name : this will auto populated

Description : Give a meaningful description

Image : optional (if you want to give any image you can otherwise not mandatory)

Primary color hex value : keep this default

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

- 4.. To Add Navigation Items:

Search the items in the search bar(Employees, Projects, ProjectTask, Assets, Asset Services, Reports, Dashboard) from the search bar and move it using the arrow button → Next.

Note: select asset the custom object which we have created in the previous activity.

5. To Add User Profiles:

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

Output:

Workforce Administrator Solution App created

The screenshot shows the Salesforce Setup Home page. In the top left, there's a sidebar with a blue cloud icon labeled "Setup". Below it, under "App Launcher", a search bar contains the text "workforce". Under "Apps", there's a section titled "Workforce Administrator Solution" with a blue icon. To the right, there's a banner for "Home" with three cards: "Get Started with Einstein Bots", "Mobile Publisher", and "Real-time Collaborative Docs". Below the banner, there's a section titled "Most Recently Used" with a table showing one item: "Asset Services" (Custom Tab Definition). The URL in the browser is "srinivasaramanujaninsti-2f6-dev-ed.develop.lightning.force.com/lightning/setup/SetupOneHome/home".

Fields & Relationships

When we talk about Salesforce, Fields represent the data stored in the columns of a relational database. It can hold any valuable information that you require for a specific object. Hence, the overall searching, deletion, and editing of the records become simpler and quicker.

Types of Fields

1. Standard Fields
2. Custom Fields

Use Case

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

Activity 1 : Creating Text Field in Employee Object

To create fields in an object:

1. Go to setup -> click on Object Manager -> type object name(Employee) in quick find bar -> click on the object.
2. Now click on "Fields & Relationships" -> New
3. Select Data type as "Text".
4. Click on Next
5. Fill the above as following:
 - 1 Field Label: Employee Name
 - 2 Length : 18
 - 3 Field Name : gets auto generated
 - 4 Click on Next -> Next -> Save and new.

Output:

The screenshot shows the Salesforce Object Manager interface. A custom field named 'Employee Name' has been created for the 'Employee' object. The field details are as follows:

- Field Label:** Employee Name
- Field Name:** Employee_Name
- API Name:** Employee__Name__c
- Description:** (empty)
- Help Text:** (empty)
- Data Owner:** (empty)
- Field Usage:** (empty)
- Data Sensitivity Level:** (empty)
- Compliance Categorization:** (empty)
- Created By:** Kanekal Toulop 25/09/2024, 7:22 pm
- Object Name:** Employee
- Data Type:** Text

Activity 2 :Creating Date of Birth Field in Employee Object

1. Repeat step 1 and 2 mentioned in activity 1
2. Select Data type as “Date” and click Next.
3. Click on Next.
4. Fill the above as following:
 - a. Field Label: Date of Birth.
 - b. Field Name : gets auto generated.
 - c. Click on Next → Next → Save and new.

Output:

The screenshot shows the Salesforce Object Manager interface. A custom field named 'Date of Birth' has been created for the 'Employee' object. The field details are as follows:

- Field Label:** Date of Birth
- Field Name:** Date_of_Birth
- API Name:** Date_of_Birth__c
- Description:** (empty)
- Help Text:** (empty)
- Data Owner:** (empty)
- Field Usage:** (empty)
- Data Sensitivity Level:** (empty)
- Compliance Categorization:** (empty)
- Created By:** Kanekal Toulop 25/09/2024, 7:23 pm
- Object Name:** Employee
- Data Type:** Date

Activity 3 : Creating Formula Field in Employee Object

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

Output:

The screenshot shows the Salesforce Object Manager interface. On the left, a sidebar lists various setup options like Page Layouts, Lightning Record Pages, and Buttons, Links, and Actions. The main area displays a custom field named 'Age' for the 'Employee' object. The 'Custom Field Definition Detail' section includes the following details:

| Field Information | Value |
|---------------------------|------------------|
| Field Label | Age |
| Field Name | Age |
| API Name | Age_c |
| Description | |
| Help Text | |
| Data Owner | |
| Field Usage | |
| Data Sensitivity Level | |
| Compliance Categorization | |
| Created By | Kanekal Toufique |
| Modified By | Kanekal Toufique |
| Object Name | Employee |

Below this, under 'Formula Options', the formula is defined as:

```
YEAR(TODAY()) - YEAR(Date_of_Birth_c)
```

The 'Data Type' is set to 'Formula' and 'Decimal Places' is set to '2'.

Activity 4 : Creating Picklist Field in Employee Object

1. Repeat step 1 and 2 mentioned in activity 1
2. Select Data type as "Picklist" and click Next.
3. Enter Field Label as "Gender", under values select "Enter values, with each value separated by a new line" and enter values as shown below.
4. Click Next → Next → Next → Save & New.

Output:

The screenshot shows the Salesforce setup interface for creating a custom field named 'Gender' on the 'Employee' object. The 'Fields & Relationships' tab is selected. The 'Field Information' section shows the field label 'Gender', field name 'Gender', API name 'Gender__c', and data type 'Picklist'. The 'Object Name' is set to 'Employee'. The 'General Options' section indicates that the field is required. The 'Picklist Options' section has a checked checkbox for 'Restrict picklist to the values defined in the value set'. The page also displays validation rules, field-level security, and where the field is used.

Activity 5 : Creating Self-Relationship Field in Employee Object

1. Repeat step 1 and 2 mentioned in activity 1
2. Select Data type as “Lookup Relationship” and click Next.
3. Select Employee from the drop down related to the field and click Next.
4. Give Field Label as “Reports to” and click Next.
5. Next → Next → Save & New.

Output:

The screenshot shows the Salesforce setup interface for creating a custom field named 'Reports to' on the 'Employee' object. The 'Fields & Relationships' tab is selected. The 'Field Information' section shows the field label 'Reports to', field name 'Employee', API name 'Employee__c', and data type 'LOOKUP'. The 'Object Name' is set to 'Employee'. The 'Lookup Options' section shows the related object as 'Employee' and the related list label as 'Employees'. The page also displays validation rules, field-level security, and where the field is used.

Activity 6 :Creating Master-Detail Relationship between Employee & Asset Object

To Create a Master-Detail relationship

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

Output:

The screenshot shows the Salesforce Object Manager interface. The left sidebar lists various setup options like Details, Fields & Relationships, Page Layouts, etc. The main area displays the 'ProjectTask Custom Field' named 'Employee Name'. The 'Field Information' section shows the field label 'Employee Name', field name 'Employee', API name 'Employee__c', and data type 'Master-Detail'. The 'Master-Detail Options' section shows 'Related To' set to 'Employee' and 'Child Relationship Name' set to 'ProjectTasks'. The 'Validation Rules' and 'Where is this used?' tabs are also visible.

Activity 7 : Creating Remaining Fields in Employee Object

Now create the remaining fields using the data types mentioned
Employee, Project, ProjectTask, Asset Service, Asset

Created remaining fields in Employee Object

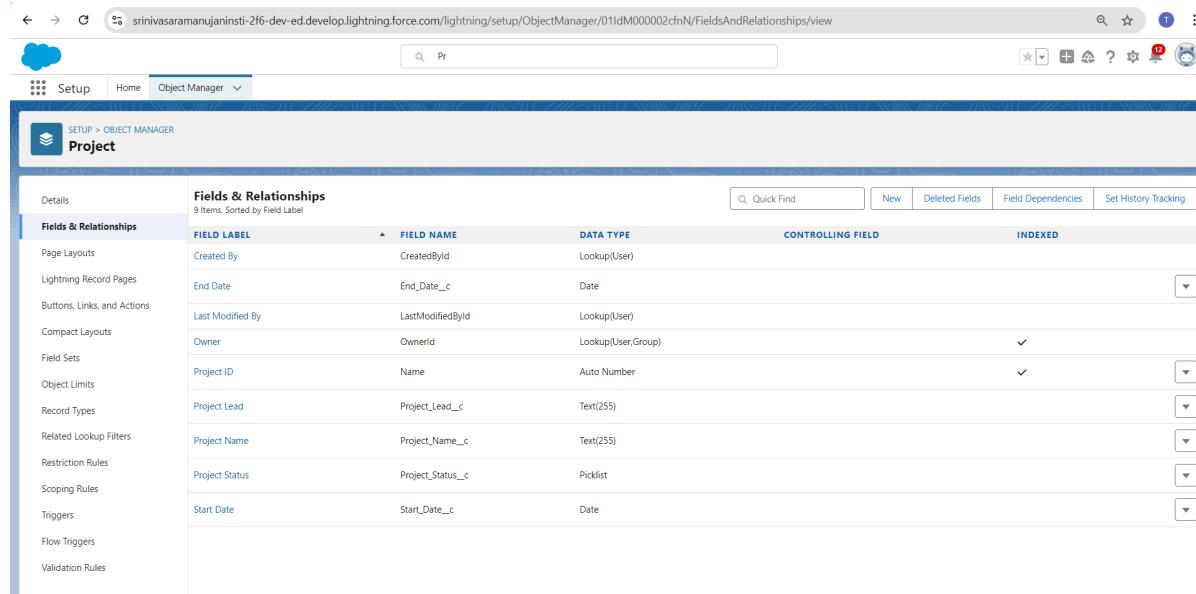
Output:

The screenshot shows the Salesforce Object Manager interface for the Employee object. The left sidebar lists various setup categories like Details, Fields & Relationships, Page Layouts, Lightning Record Pages, Buttons, Links, and Actions, Compact Layouts, Field Sets, Object Limits, Record Types, Related Lookup Filters, Search Layouts, List View Button Layout, Restriction Rules, Scoping Rules, Triggers, Flow Triggers, Validation Rules, and more. The main content area is titled 'Fields & Relationships' and displays a table of fields. The table has columns for FIELD LABEL, FIELD NAME, DATA TYPE, CONTROLLING FIELD, and INDEXED. The indexed column contains dropdown arrows. The fields listed are: Address (Address_c, Text Area(255)), Age (Age_c, Formula Number), Cab Allowance (Cab_Accommodation_c, Checkbox), Cab Allowance Amount (Cab_Accommodation_Amount_c, Currency(18, 0)), Created By (CreatedBy, Lookup(User)), Date of Birth (Date_of_Birth_c, Date), Email (Email_c, Email), Employee ID (Name, Auto Number), Employee Name (Employee_Name_c, Text(18)), Experience (Experience_c, Text Area(255)), Food Allowance Amount (Food_Allowance_Amount_c, Currency(18, 0)), Food Allowances (Food_Allowances_c, Checkbox), Gender (Gender_c, Picklist), Joining date (Joining_date_c, Date), Last Modified By (LastModifiedBy, Lookup(User)), LinkedIn Profile (LinkedIn_Profile_c, URL(255)), and Login Time (Login_Time_c, Time).

| FIELD LABEL | FIELD NAME | DATA TYPE | CONTROLLING FIELD | INDEXED |
|-----------------------|----------------------------|-----------------|-------------------|---------|
| Address | Address_c | Text Area(255) | | |
| Age | Age_c | Formula Number | | |
| Cab Allowance | Cab_Accommodation_c | Checkbox | | |
| Cab Allowance Amount | Cab_Accommodation_Amount_c | Currency(18, 0) | | |
| Created By | CreatedBy | Lookup(User) | | |
| Date of Birth | Date_of_Birth_c | Date | | |
| Email | Email_c | Email | | |
| Employee ID | Name | Auto Number | | |
| Employee Name | Employee_Name_c | Text(18) | | |
| Experience | Experience_c | Text Area(255) | | |
| Food Allowance Amount | Food_Allowance_Amount_c | Currency(18, 0) | | |
| Food Allowances | Food_Allowances_c | Checkbox | | |
| Gender | Gender_c | Picklist | | |
| Joining date | Joining_date_c | Date | | |
| Last Modified By | LastModifiedBy | Lookup(User) | | |
| LinkedIn Profile | LinkedIn_Profile_c | URL(255) | | |
| Login Time | Login_Time_c | Time | | |

Created Remaining fields in Project Object

Output:

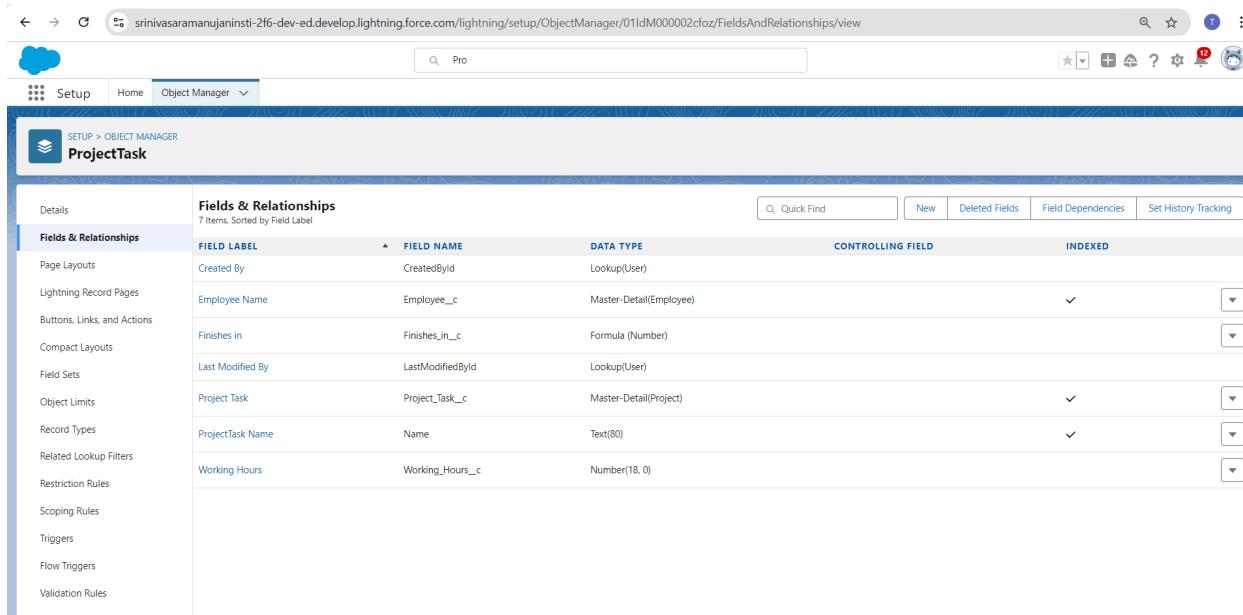


The screenshot shows the Salesforce Setup interface under the Object Manager for the 'Project' object. The left sidebar lists various configuration options like Page Layouts, Lightning Record Pages, Buttons, Links, and Actions, etc. The main content area is titled 'Fields & Relationships' and displays a table with 9 items, sorted by Field Label. The table columns are FIELD LABEL, FIELD NAME, DATA TYPE, CONTROLLING FIELD, and INDEXED. The fields listed are:

| FIELD LABEL | FIELD NAME | DATA TYPE | CONTROLLING FIELD | INDEXED |
|------------------|-------------------|--------------------|-------------------|---------|
| Created By | CreatedById | Lookup(User) | | |
| End Date | End_Date__c | Date | | |
| Last Modified By | LastModifiedById | Lookup(User) | | |
| Owner | OwnerId | Lookup(User,Group) | | ✓ |
| Project ID | Name | Auto Number | | ✓ |
| Project Lead | Project_Lead__c | Text(255) | | |
| Project Name | Project_Name__c | Text(255) | | |
| Project Status | Project_Status__c | Picklist | | |
| Start Date | Start_Date__c | Date | | |

Created Remaining fields in Project Task Object

Output:

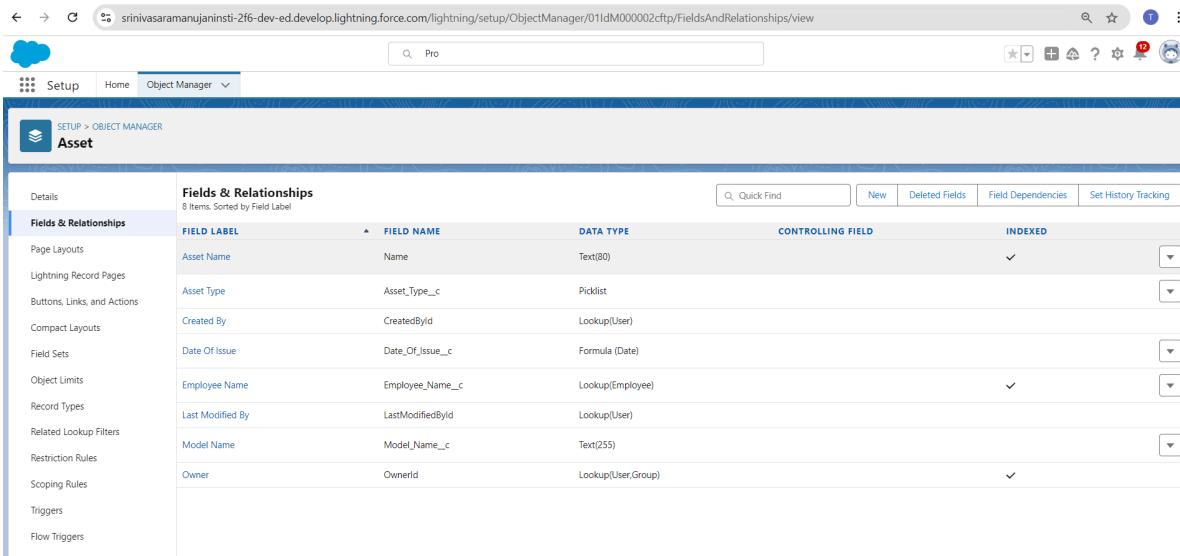


The screenshot shows the Salesforce Setup interface under the Object Manager for the 'ProjectTask' object. The left sidebar lists various configuration options like Page Layouts, Lightning Record Pages, Buttons, Links, and Actions, etc. The main content area is titled 'Fields & Relationships' and displays a table with 7 items, sorted by Field Label. The table columns are FIELD LABEL, FIELD NAME, DATA TYPE, CONTROLLING FIELD, and INDEXED. The fields listed are:

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

Created Remaining fields in Asset Object

Output:

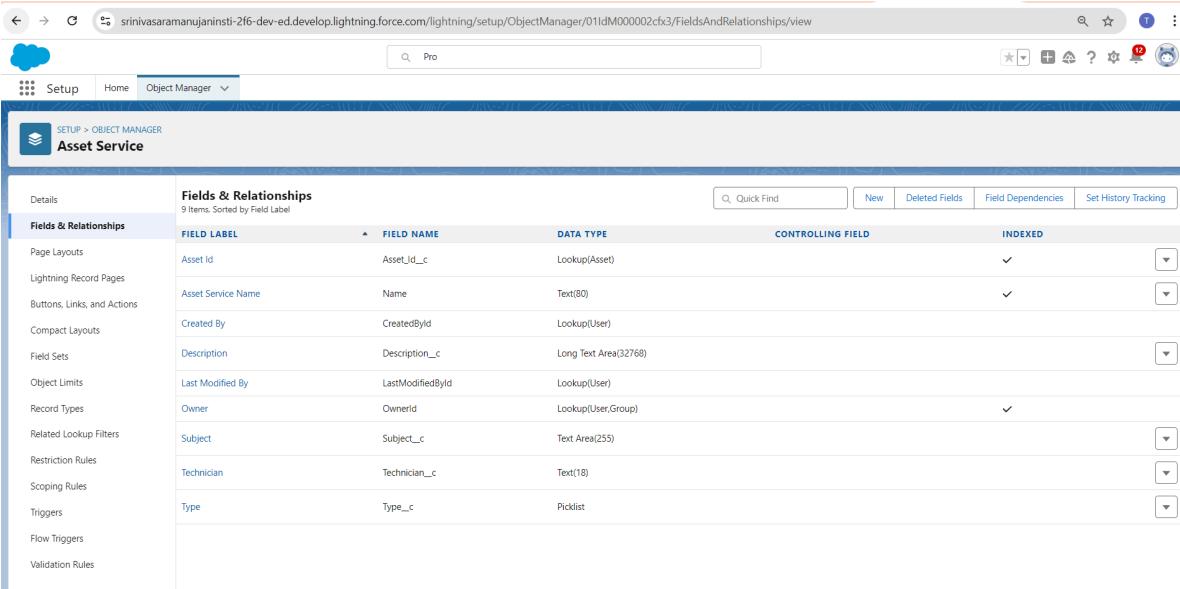


The screenshot shows the Salesforce Setup interface for the Asset object. The left sidebar lists various configuration options like Details, Fields & Relationships, Page Layouts, etc. The main content area is titled 'Fields & Relationships' and displays a table of fields. The table has columns for FIELD LABEL, FIELD NAME, DATA TYPE, CONTROLLING FIELD, and INDEXED. The indexed column contains checkmarks for most fields.

| FIELD LABEL | FIELD NAME | DATA TYPE | CONTROLLING FIELD | INDEXED |
|------------------|------------------|--------------------|-------------------|---------|
| Asset Name | Name | Text(80) | | ✓ |
| Asset Type | Asset_Type__c | Picklist | | |
| Created By | CreatedBy | Lookup(User) | | |
| Date Of Issue | Date_Of_Issue__c | Formula (Date) | | |
| Employee Name | Employee_Name__c | Lookup(Employee) | | ✓ |
| Last Modified By | LastModifiedBy | Lookup(User) | | |
| Model Name | Model_Name__c | Text(255) | | |
| Owner | OwnerId | Lookup(User,Group) | | ✓ |

Created Remaining fields in Asset Services Object

Output:



The screenshot shows the Salesforce Setup interface for the Asset Service object. The left sidebar lists various configuration options like Details, Fields & Relationships, Page Layouts, etc. The main content area is titled 'Fields & Relationships' and displays a table of fields. The table has columns for FIELD LABEL, FIELD NAME, DATA TYPE, CONTROLLING FIELD, and INDEXED. The indexed column contains checkmarks for most fields.

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

Setting OWD

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

Activity 1: Create OWD Setting

1. Go to Set Up → in the Quick Find box type "Sharing Settings" → click on it.
2. Click Edit in the Organization-Wide Defaults area.
3. Search for the Employee object.
4. Under default internal access and default external access change the options to "Private" and under grant access using hierarchies select the check box.
5. Click on save.
6. This Setting is for all the Users Which have been Created.

Output:

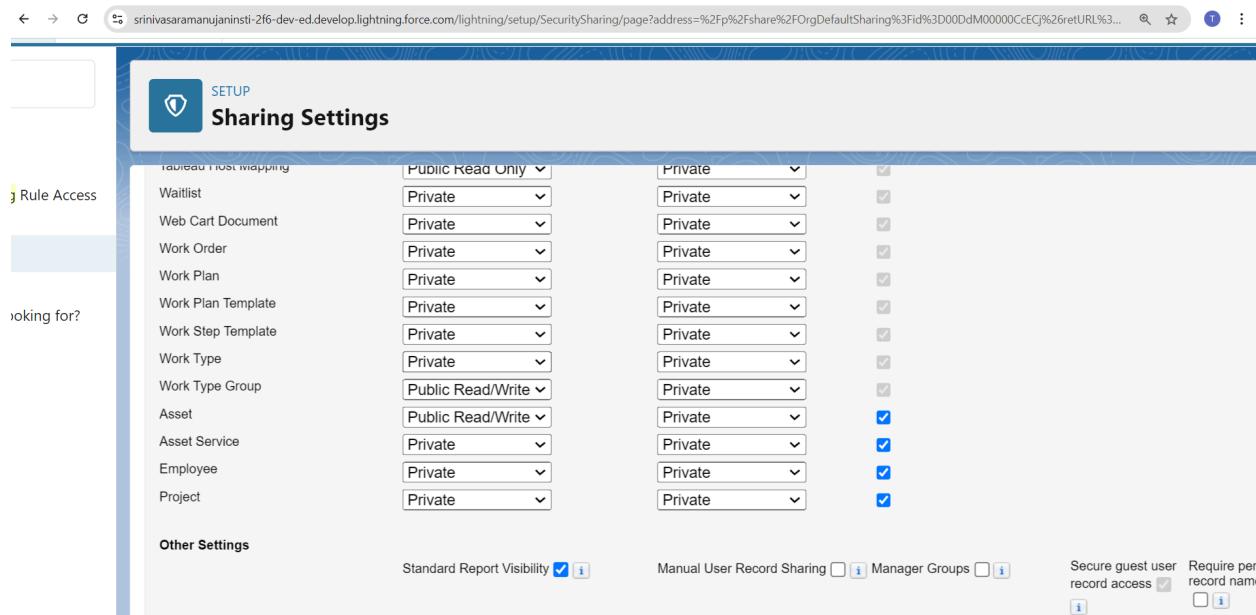
The screenshot shows the 'Sharing Settings' page in the Salesforce Setup. On the left, there are sidebar filters for 'Rule Access' and 'Looking for?'. The main area displays a table of sharing settings for various objects. The columns represent 'Tableau Host Mapping' (dropdown), 'Default Internal Access' (dropdown), 'Default External Access' (dropdown), and 'Grant Access Using Hierarchies' (checkbox). Most objects have 'Private' selected for both internal and external access, except for 'Tableau Host Mapping' which has 'Public Read Only' selected. The 'Employee' object has its 'Grant Access Using Hierarchies' checkbox checked. At the bottom, there are sections for 'Other Settings' and checkboxes for 'Standard Report Visibility', 'Manual User Record Sharing', 'Manager Groups', 'Secure guest user record access', and 'Require per record name'.

| Object | Tableau Host Mapping | Default Internal Access | Default External Access | Grant Access Using Hierarchies |
|--------------------|----------------------|-------------------------|-------------------------|-------------------------------------|
| Waitlist | Public Read Only | Private | Private | <input checked="" type="checkbox"/> |
| Web Cart Document | Private | Private | Private | <input checked="" type="checkbox"/> |
| Work Order | Private | Private | Private | <input checked="" type="checkbox"/> |
| Work Plan | Private | Private | Private | <input checked="" type="checkbox"/> |
| Work Plan Template | Private | Private | Private | <input checked="" type="checkbox"/> |
| Work Step Template | Private | Private | Private | <input checked="" type="checkbox"/> |
| Work Type | Private | Private | Private | <input checked="" type="checkbox"/> |
| Work Type Group | Public Read/Write | Private | Private | <input checked="" type="checkbox"/> |
| Asset | Public Read/Write | Private | Private | <input checked="" type="checkbox"/> |
| Asset Service | Private | Private | Private | <input checked="" type="checkbox"/> |
| Employee | Private | Private | Private | <input checked="" type="checkbox"/> |
| Project | Private | Private | Private | <input checked="" type="checkbox"/> |

Activity 2:

Set OWD as Private for Project and Asset Service objects.

Output:



The screenshot shows the 'Sharing Settings' page in the Salesforce Setup. The left sidebar has 'Rule Access' and a search bar. The main area lists objects with their sharing settings. Most objects have 'Private' selected, except for 'Asset' and 'Asset Service' which have 'Public Read/Write'. A section at the bottom contains checkboxes for 'Standard Report Visibility', 'Manual User Record Sharing', 'Manager Groups', 'Secure guest user record access', and 'Require per record name'.

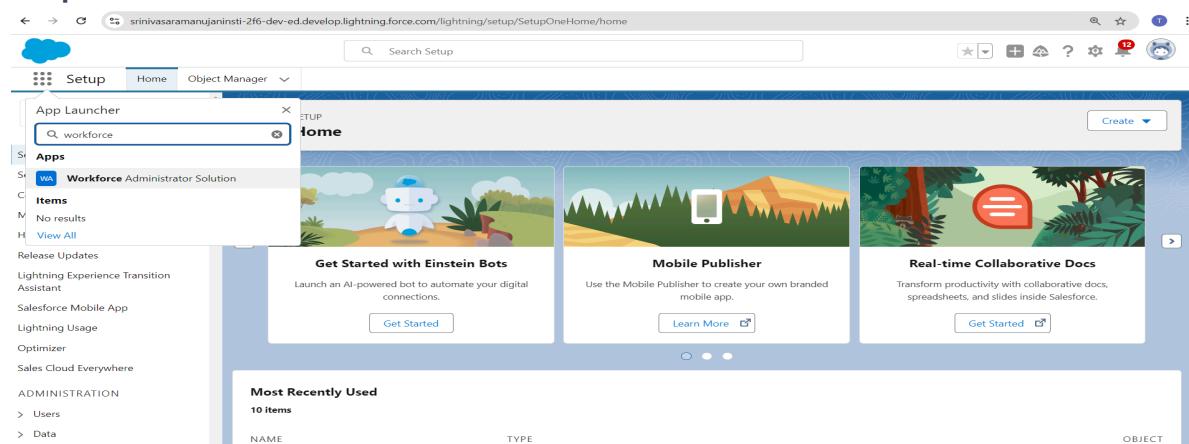
| Object | Sharing Type | Action |
|----------------------|-------------------|--------|
| Tableau Host Mapping | Public Read Only | |
| Waitlist | Private | |
| Web Cart Document | Private | |
| Work Order | Private | |
| Work Plan | Private | |
| Work Plan Template | Private | |
| Work Step Template | Private | |
| Work Type | Private | |
| Work Type Group | Public Read/Write | |
| Asset | Public Read/Write | |
| Asset Service | Private | |
| Employee | Private | |
| Project | Private | |

User Adoption :

Activity 1: Create a Record (Employee)

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

Output :



The screenshot shows the 'Setup One Home' page. The left sidebar has sections for 'App Launcher', 'Setup', 'Home', and 'Object Manager'. The main area features a search bar and three cards: 'Get Started with Einstein Bots', 'Mobile Publisher', and 'Real-time Collaborative Docs'. Below these is a section titled 'Most Recently Used' with 10 items listed. At the bottom, there are 'NAME' and 'OBJECT' filters.

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

Activity 2: View a Record (Employee)

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

Output:

Activity 3: Delete a Record (Employee)

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

Import Data

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

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

Activity-1: Importing data using Data Wizard

1. From Setup, click the Home tab.
2. In the Quick Find box, enter Data Import and select Data Import Wizard.
3. Click Launch Wizard!
4. Click the Custom Objects tab and select the Employee object.
5. Select Add new records.
6. Click CSV and choose file Employee_CSV which we made earlier. Click Next.
Since the field names in the CSV file (CSV Header) are the same as the field names in your object (Mapped Salesforce Object), the fields are automatically mapped. Click Next.
7. The next screen gives you a summary of your data import. Click Start Import
8. Click OK on the popup.
9. Scroll down the page and verify that your data has been imported under batches.

Output:

The screenshot shows the Salesforce Setup interface with the Bulk Data Load Jobs page open. The page displays the following information:

| Start Time | 26/09/2024, 9:10 pm IST | Queued Batches | 0 | Time (ms) |
|-------------------------------|-------------------------|---------------------|------|---------------------------------|
| End Time | 26/09/2024, 9:10 pm IST | In Progress Batches | 0 | API Active Processing Time (ms) |
| Time to Complete ([hh:]mm:ss) | 00:07 | Completed Batches | 1 | 67 |
| Object | Employee | Failed Batches | 0 | Apex Processing Time (ms) |
| External ID Field | | Progress | 100% | 0 |
| Content Type | CSV | Records Processed | 14 | |
| Concurrency Mode | Parallel | Records Failed | 0 | |
| API Version | 61.0 | Retries | 0 | |

Below this, there is a table titled "Batches" with the following columns:

| 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 | 751dM000004G1Dz | 26/09/2024, 9:10 pm | 26/09/2024, 9:10 pm | 113 | 67 | 0 | 14 | 0 | 0 | Completed | |

Profiles

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

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.

2. Custom Profiles:

Custom ones defined by us.

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

Activity 1: HR Profile

To create a new profile:

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

Output:

The screenshot shows the Salesforce Setup interface with the URL <https://srinivasaramanujaninsti-2f6-dev-ed.lightning.force.com/lightning/setup/EnhancedProfiles/page?address=%2F00edM0000073rN7>. The page is titled "Profiles" and shows the "HR" profile. The "Profile Detail" section includes fields for Name (HR), User License (Salesforce), Description, Created By (Kanekal Toufig), and Modified By (Kanekal Toufig). The "Page Layouts" section shows Standard Object Layouts for Global, Email Application, and Home Page Layout, and Location Group Layouts for Location Group Assignment.

Activity 2: Manager Profile

1. Go to setup → type profiles in quick find box → click on profiles → clone the desired profile (Salesforce Platform User) → enter profile name (Manager) → Save.
2. While still on the profile page, then click Edit.
3. Scroll down to Custom Object Permissions and Give access permissions for Employee, Project and Project Task objects.
4. Scroll down and Click on Save.

Output:

The screenshot shows the Salesforce Setup interface with the URL <https://srinivasaramanujaninsti-2f6-dev-ed.lightning.force.com/lightning/setup/EnhancedProfiles/page?address=%2F00edM0000073s1R>. The page is titled "Profiles" and shows the "Manager" profile. The "Profile Detail" section includes fields for Name (Manager), User License (Salesforce Platform), Description, Created By (Kanekal Toufig), and Modified By (Kanekal Toufig). The "Page Layouts" section shows Standard Object Layouts for Global, Email Application, and Home Page Layout, and Location Group Layouts for Invoice Line, Lead, and Location.

Activity 3: Create Employee Profile

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

On Site Employee

Output:

The screenshot shows the Salesforce Setup interface under the 'Profiles' section. A search bar at the top has 'profiles' typed into it. Below the search bar, there's a breadcrumb navigation with 'Setup' and 'Object Manager'. On the left, a sidebar shows 'Users' and 'Profiles' selected. The main content area is titled 'On Site Employee'. It displays the profile details: Name (On Site Employee), User License (Salesforce Platform), Description (empty), and Created By (Kanekal Toufig). It also shows the last modified date and user. Below this, the 'Page Layouts' section lists standard object layouts for Global, Email Application, and Home Page Layout, along with their corresponding page layouts for Invoice Line, Lead, and Location.

Remote Employee

Output:

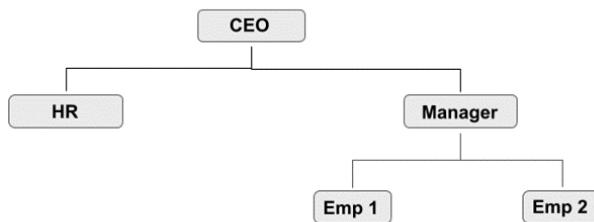
The screenshot shows the Salesforce Setup interface under the 'Profiles' section. A search bar at the top has 'profiles' typed into it. Below the search bar, there's a breadcrumb navigation with 'Setup' and 'Object Manager'. On the left, a sidebar shows 'Users' and 'Profiles' selected. The main content area is titled 'Remote Employee'. It displays the profile details: Name (Remote Employee), User License (Salesforce Platform), Description (empty), and Created By (Kanekal Toufig). It also shows the last modified date and user. Below this, the 'Page Layouts' section lists standard object layouts for Global, Email Application, and Home Page Layout, along with their corresponding page layouts for Invoice Line, Lead, and Location.

Role

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

Activity 1: Creating HR Role

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



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

Output:

The screenshot shows the Salesforce Setup interface for managing roles. The left sidebar navigation includes 'Setup', 'Home', and 'Object Manager'. Under 'Setup', 'Roles' is selected. The main content area displays the 'Roles' page with the following details for the 'HR' role:

- Role Detail:** Label: HR, This role reports to: CEO, Modified By: Kanekal Toufig, 26/09/2024, 2:38 pm. 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.
- Users in HR Role:** A table showing one user assigned to the role: Niklaus Mikaelson (Full Name: Niklaus Mikaelson, Alias: nmika, Username: nmarkin@mnwhite.com, Active: checked).

Activity 2: Creating more roles

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

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

Creating Manager role

Output:

The screenshot shows the Salesforce Setup interface for creating a new role. The left sidebar is collapsed, and the main area displays the 'Roles' page under the 'Users' category. The 'Manager' role is selected. The 'Role Detail' section shows the role's label as 'Manager', it reports to 'CEO', and its name is 'Manager'. The 'Opportunity Access' and 'Case Access' sections are also visible. Below this, a table lists the user 'Kol Mikaelson' assigned to the role. A note at the bottom says 'Didn't find what you're looking for? Try using Global Search.'

Creating On Site Employee role

Output:

The screenshot shows the Salesforce Setup interface for creating a new role. The left sidebar is collapsed, and the main area displays the 'Roles' page under the 'Users' category. The 'On Site Employee' role is selected. The 'Role Detail' section shows the role's label as 'On Site Employee', it reports to 'Manager', and its name is 'On_Site_Employee'. The 'Opportunity Access' and 'Case Access' sections are also visible. Below this, a table lists the user 'John Thomas' assigned to the role. A note at the bottom says 'Didn't find what you're looking for? Try using Global Search.'

Creating Remote Employee role

Output:

The screenshot shows the Salesforce Setup Roles page. On the left, the navigation sidebar is open, showing 'Users' expanded with 'Roles' selected. Other sections like 'Feature Settings', 'Sales', 'Service', and 'Case Teams' are also visible. The main content area is titled 'Role' and shows 'Remote Employee'. It includes a brief description, a 'Hierarchy' section (SRINIVASA RAMANUJAN INSTITUTE OF TECHNOLOGY > CEO > Manager > Remote Employee), and a 'Siblings' section (On-Site Employee). Below this is a 'Role Detail' table with columns for Label (Remote Employee), This role reports to (Manager), Modified By (Kanekal Toufig, 26/09/2024, 2:41 pm), Opportunity Access (Users in this role can edit all opportunities associated with accounts that they own, regardless of who owns the opportunities), and Case Access (Users in this role can edit all cases associated with accounts that they own, regardless of who owns the cases). At the bottom, there's a table titled 'Users in Remote Employee Role' with one row for 'bob Jain' (alias 'bjain', username 'bjain@mnwhite.com', active status checked).

| Action | Full Name | Alias | Username | Active |
|--------|-----------|-------|-------------------|--------|
| Edit | bob Jain | bjain | bjain@mnwhite.com | ✓ |

Users

A user is anyone who logs in to Salesforce. Users are employees at your company, such as sales reps, managers, and IT specialists, who need access to the company's records. Every user in Salesforce has a user account. The user account identifies the user, and the user account settings determine what features and records the user can access.

Activity 1: Create User

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

Output:

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

- Page URL:** srinivasaramanujaninsti-2f6-dev-ed.lightning.force.com/lightning/setup/ManageUsers/page?address=%2F005dM0000082OWH%3Fnoredirect%3D1%26isUserEntityOverride%3D1
- Section:** SETUP > Users
- User Detail:** Niklaus Mikaelson
- Role:** HR
- User License:** Salesforce
- Profile:** HR
- Active:** ✓
- Marketing User:**
- Offline User:**
- Knowledge User:**
- Flow User:**
- Service Cloud User:**
- Site.com Contributor User:**
- Site.com Publisher User:**
- WDC User:**
- Mobile Push Registrations:** View
- Data.com User Type:**

The left sidebar shows the navigation menu under the **Users** section, including Permission Set Groups, Permission Sets, Profiles, Public Groups, Queues, Roles, User Management Settings, and Users.

Activity 2: Creating another user

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

2. Fill in the fields

3. Save.

Output:

The screenshot shows the Salesforce Setup interface. The left sidebar is titled 'Setup' and includes sections for Home, Object Manager, and various administrative tools. Under 'Users', the 'Users' section is selected, showing a list of users. A search bar at the top right is set to 'user'. The main content area displays the 'User Detail' page for a user named 'Kol Mikaelson'. The page includes tabs for Edit, Sharing, Reset Password, Freeze, and View Summary. The user's details are listed in a table, including Name (Kol Mikaelson), Alias (kmika), Email (22495a0421@srit.ac.in), Username (kmik@mwhite.com), Nickname (Kol), Title (Blank), Company (Blank), Department (Blank), Division (Blank), Address (Blank), Time Zone (GMT+05:30) India Standard Time (Asia/Kolkata), Locale (English (India)), Language (English), and Delegated Approver (Blank). To the right of the table, there is a grid of checkboxes for various user roles: Manager (checked), Salesforce Platform Profile (checked), Active (checked), Marketing User (unchecked), Offline User (unchecked), Knowledge User (unchecked), Flow User (unchecked), Service Cloud User (unchecked), Site.com Contributor User (unchecked), Site.com Publisher User (unchecked), WDC User (unchecked), Mobile Push Registrations (View), and Data.com User Type (Blank). A 'User ProfileHelp for this Page' link is also present at the top of the detail page.

Activity 3: Creating more users

Create two more users as we created in activity 2.

Outputs:

The screenshot shows the Salesforce Setup interface. The left sidebar is collapsed, and the main area displays the 'User Management Settings' section under 'Users'. A specific user record for 'John Thomas' is selected. The 'User Detail' section shows the following information:

| Name | Value | Role | Value |
|--------------------|--|---------------------------|-------------------------------------|
| Name | John Thomas | Role | On Site Employee |
| Alias | jthom | User License | Salesforce Platform |
| Email | 22495a0421@srif.ac.in [Verify] | Profile | On Site Employee |
| Username | jthom@mnwhite.com | Active | <input checked="" type="checkbox"/> |
| Nickname | john | 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"/> |
| Time Zone | (GMT+05:30) India Standard Time (Asia/Kolkata) | Site.com Publisher User | <input type="checkbox"/> |
| Locale | English (India) | WDC User | <input type="checkbox"/> |
| Language | English | Mobile Push Registrations | View |
| Delegated Approver | | Data.com User Type | i |

Page layouts

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

Activity 1 : creating a page layout for Employee object

To Create a Page layout:

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

Output:

The screenshot shows the Salesforce Setup interface for creating a new Page Layout for the Employee object. The left sidebar navigation includes 'Details', 'Fields & Relationships', 'Page Layouts' (which is selected), 'Lightning Record Pages', 'Buttons, Links, and Actions', 'Compact Layouts', 'Field Sets', 'Object Limits', 'Record Types', 'Related Lookup Filters', 'Search Layouts', and 'List View Button Layout'. The main workspace displays the 'Fields' section of the Page Layout editor. A table lists fields such as Cab Allowance, Email, Food Allowance Amount, Last Modified By, Mode of Work, and Record Type. Below the table, sections for 'Personal Information' and 'Allowances' are shown, each with their respective field details. The top navigation bar includes 'Save', 'Quick Save', 'Preview As...', 'Cancel', 'Undo', 'Redo', and 'Layout Properties'.

Activity 2 : 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.

Output:

The screenshot shows the Salesforce Setup interface for creating a new page layout. The URL in the browser is <https://srinivasaramanujaninsti-2f6-dev-ed.lightning.force.com/lightning/setup/ObjectManager/01lD0000002cfdh/PageLayouts/00hdM000008amqPQAJ/view>. The page title is "Employee". The left sidebar shows the "Page Layouts" section selected. The main area displays the "Layout Properties" for a new page layout. The "Fields" section includes sections for Buttons, Quick Actions, Mobile & Lightning Actions, Expanded Lookups, Related Lists, and Report Charts. The "Allowances" section is expanded, showing "Wifi Allowances" checked. The "Record Type" section is also visible. The "System Information" and "Custom Links" sections are at the bottom.

Chatter Group

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

Activity 1 : Creating a chatter group for your organization.

To Create a chatter group:

1. Click the App Launcher.
2. Enter Groups in the Search apps and items... box and select Groups.
3. Click New.
4. Fill in the new group information with these details:
 5. Click Save & Next. Skip the Upload Picture section and click Next.
 6. On the Manage Members screen, click Add next to users you created in the previous activity.
 7. Click Done.
 8. This is how your group interface looks like.
 9. Where it says Share an update, post this message to the group: Welcome to the Internal Discussion Group, here you can post anything which is related to ongoing projects.
 10. Click Share.

Output:

The screenshot shows the Salesforce Chatter Group interface for 'Internal Discussion'. At the top, there's a navigation bar with links for Workforce Administ..., Employees, Projects, ProjectTasks, Asset Services, Reports, Dashboards, Assets, and Internal Discussion. Below the navigation is a banner featuring two cartoon characters. The main area has a header titled 'Internal Discussion' with a 'Private with Customers' badge. On the left, there's a 'Chatter' tab and an 'Engagement' section with buttons for Post, Poll, and Question. A text input field says 'Share an update...' with a 'Share' button. On the right, there's a 'Group Details' section with a 'Description' field containing text about the group's purpose. Below that are sections for 'Group Email' (containing an email address), 'Owner' (Kanekal Toufiq), and 'Information'.

Record Types

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

Activity 1: Creating On Site Employee Record Type

To create a Record Type:

1. Go to Setup → click on Object Manager → Search for the object (Employee) → from drop down click Edit.
2. From the left panel click Record Types → New.
3. Give Record Type Label as “On Site Employee” and make it active.
4. Uncheck for “Make Available”.
5. Scroll down and check for the Manager & System Administrator profile and click on Next.
6. Select “Apply a different layout for each profile”, and change page layout to On Site Employee Layout for manager profile and System Administrator.
7. click Save.

Output:

The screenshot shows the Salesforce Setup interface. The top navigation bar includes links for Home, Object Manager, and a search bar labeled "Search Setup". The main content area is titled "SETUP > OBJECT MANAGER" and "Employee". On the left, a sidebar lists various configuration options: Details, Fields & Relationships, Page Layouts, Lightning Record Pages, Buttons, Links, and Actions, Compact Layouts, Field Sets, Object Limits, Record Types (which is selected), Related Lookup Filters, Search Layouts, and List View Button Layout. The main pane displays the "Record Type" details for "On Site Employee". It shows the Record Type Label is "On Site Employee", the Record Type Name is "On_Site_Employee", and the Namespace Prefix is blank. The "Active" checkbox is checked. Below this, there is a "Description" field and a "Created By" field showing "Kanekal Toufig" and the date "26/09/2024, 3:15 pm". A "Modified By" field also shows "Kanekal Toufig" and the date "26/09/2024, 3:18 pm". At the bottom, a section titled "Picklists Available for Editing" lists two entries: "Edit Gender" and "Edit Mode of Work", both modified on "26/09/2024, 3:15 pm". A "Help for this Page" link is located in the top right corner of the main content area.

Activity 2: Creating "Remote Employee" Record Type

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

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

Output:

The screenshot shows the Salesforce Setup interface under the Object Manager. A new Record Type named 'Remote Employee' has been created. The details are as follows:

| Field | Value |
|-------------------|-------------------------------------|
| Record Type Label | Remote Employee |
| Record Type Name | Remote_Employee |
| Namespace Prefix | |
| Description | |
| Created By | Kanekal Toufig, 26/09/2024, 3:17 pm |
| Modified By | Kanekal Toufig, 26/09/2024, 3:17 pm |

Below the main details, there is a section titled 'Picklists Available for Editing' which lists two fields:

| Action | Field | Modified Date |
|--------|--------------|---------------------|
| Edit | Gender | 26/09/2024, 3:17 pm |
| Edit | Mode of Work | 26/09/2024, 3:17 pm |

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.

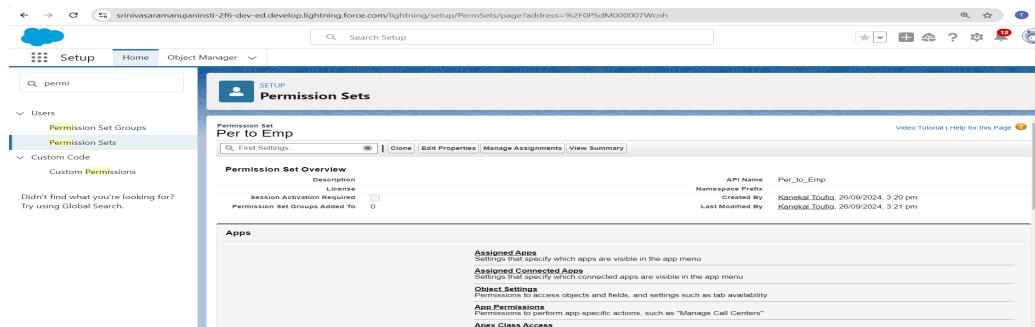
Activity 1: Creating a permission set

To Create a Permission Set:

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

7. Now click on the Manage Assignment.
8. Click on Add Assignment.
9. Now select the users(any one user with the profile “On Site Employee”) and click on Next.
10. Click on Assign and Done.

Output:



Reports

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

Types of Reports in Salesforce

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

Activity 1: Create Report

To Create a Report:

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

Output:

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

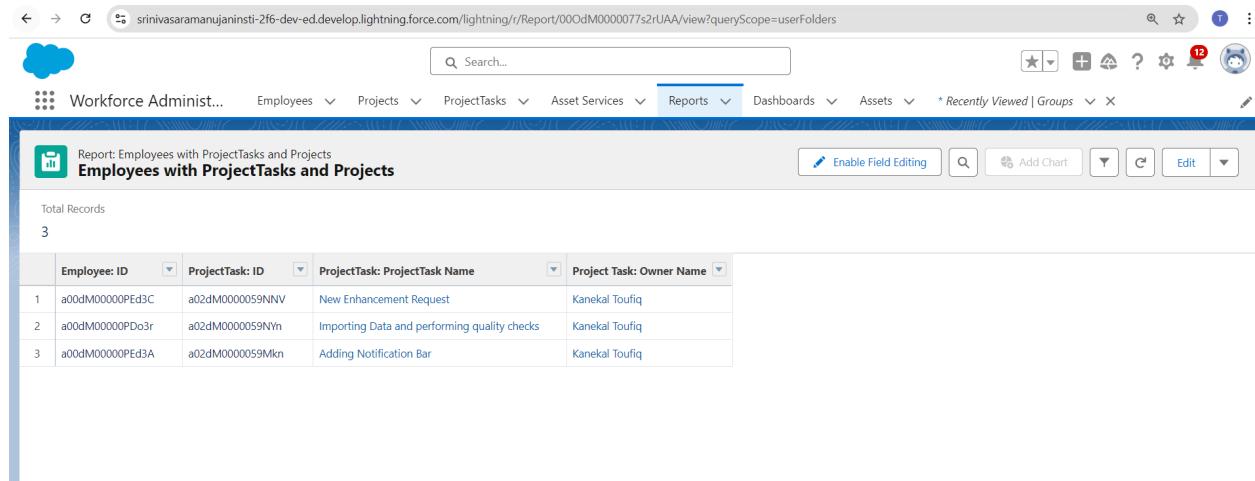
- Page Header:** Workforce Administ..., Employees, Projects, ProjectTasks, Asset Services, Reports, Dashboards, Assets, Recently Viewed, Groups.
- Report Title:** Report: Employees New Employees Report
- Report Type:** Table
- Table Headers:** Employee: ID, Employee Name, Address, Reports to, Login Time, Logout Time, Mode of Work, LinkedIn Profile
- Table Data:** A grid of 13 rows showing employee information. The first few rows include:
 - Employee: ID: a00dM00000PDHjh, Employee Name: shataj, Address: Anantapur, Reports to: -, Login Time: 9:00 am, Logout Time: 5:00 pm, Mode of Work: On Site, LinkedIn Profile: https://www.linkedin.com/in/shataj
 - Employee: ID: a00dM00000PDo3p, Employee Name: Jackie Chan, Address: -, Reports to: -, Login Time: 9:00 am, Logout Time: 5:00 pm, Mode of Work: On Site, LinkedIn Profile: https://www.linkedin.com/in/jackie
 - Employee: ID: a00dM00000PDo3q, Employee Name: James, Address: -, Reports to: -, Login Time: -, Logout Time: -, Mode of Work: Remote, LinkedIn Profile: https://www.linkedin.com/in/james

Activity 2: Create 2 more Report

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

Created report "Employees with ProjectTasks and Projects"

Output:



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

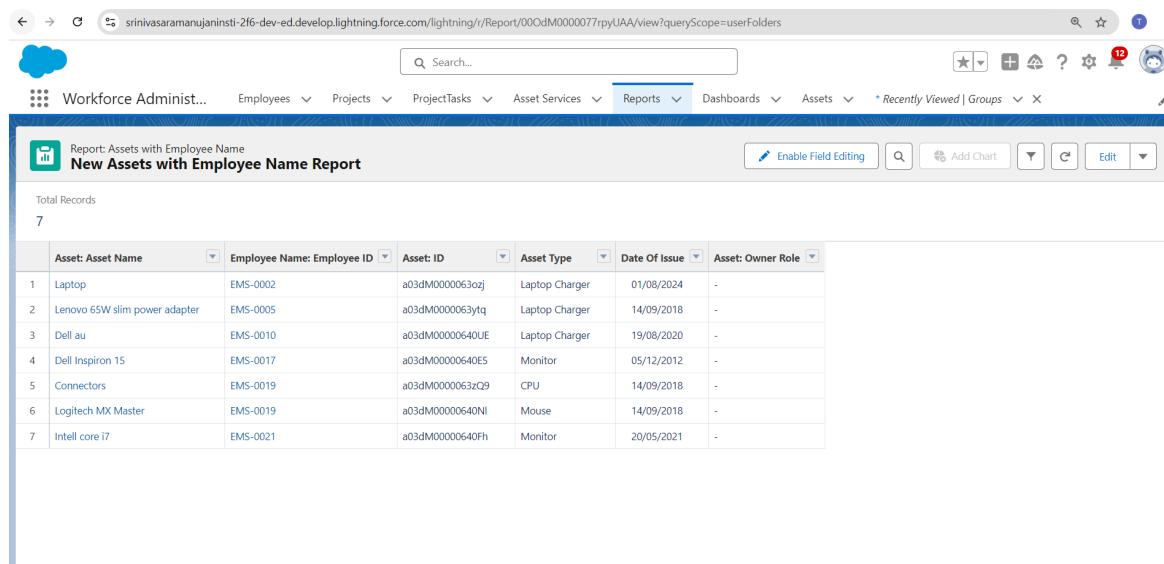
Report Title: Report: Employees with ProjectTasks and Projects
Report Name: Employees with ProjectTasks and Projects

Total Records: 3

| | Employee: ID | ProjectTask: ID | ProjectTask: ProjectTask Name | Project Task: Owner Name |
|---|-----------------|-----------------|--|--------------------------|
| 1 | a00dM00000PEd3C | a02dM0000059NNV | New Enhancement Request | Kanekal Toufiq |
| 2 | a00dM00000PD03r | a02dM0000059Nyn | Importing Data and performing quality checks | Kanekal Toufiq |
| 3 | a00dM00000PEd3A | a02dM0000059Mkn | Adding Notification Bar | Kanekal Toufiq |

Created report "Employees with Assets"

Output:



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

Report Title: Report: Assets with Employee Name
Report Name: New Assets with Employee Name Report

Total Records: 7

| | Asset: Asset Name | Employee Name: Employee ID | Asset: ID | Asset Type | Date Of Issue | Asset: Owner Role |
|---|-------------------------------|----------------------------|-----------------|----------------|---------------|-------------------|
| 1 | Laptop | EMS-0002 | a03dM0000063oj | Laptop Charger | 01/08/2024 | - |
| 2 | Lenovo 65W slim power adapter | EMS-0005 | a03dM0000063yfq | Laptop Charger | 14/09/2018 | - |
| 3 | Dell au | EMS-0010 | a03dM00000640UE | Laptop Charger | 19/08/2020 | - |
| 4 | Dell Inspiron 15 | EMS-0017 | a03dM00000640ES | Monitor | 05/12/2012 | - |
| 5 | Connectors | EMS-0019 | a03dM0000063zQ9 | CPU | 14/09/2018 | - |
| 6 | Logitech MX Master | EMS-0019 | a03dM00000640NI | Mouse | 14/09/2018 | - |
| 7 | Intell core i7 | EMS-0021 | a03dM00000640Fh | Monitor | 20/05/2021 | - |

Dashboards

Dashboards help you visually understand changing business conditions so you can make decisions based on the real-time data you've gathered with reports. Use dashboards to help users identify trends, sort out quantities, and measure the impact of their activities. Before building, reading, and sharing dashboards, review these dashboard basics.

Activity 1: Create Dashboard

To Create a Dashboard

1. Go to the app → click on the Dashboards tabs.
2. Give a Name and click on Create.
3. Select add component.
4. Select a Report and click on select.
5. Click Add then click on Save and then click on Done.

Output:

The screenshot shows a Salesforce Lightning interface. At the top, there's a navigation bar with links for Workforce Administ..., Employees, Projects, ProjectTasks, Asset Services, Reports, Dashboards (which is the active tab), Assets, and Recently Viewed | Groups. On the right side of the header are buttons for Refresh, Edit, and Subscribe. The main content area is titled "Dashboard 1" and shows a report titled "New Employees Report". The report table has columns for Employee ID, Employee Name, Address, Reports, and Login Time. The data includes rows for shataj, Jackie Chan, James, Benjamin, Alexander, and William. A "View Report (New Employees Report)" button is at the bottom of the report component. The background of the dashboard has a blue gradient with white wavy lines.

| Employee ID | Employee Name | Address | Reports | Login Ti... |
|-----------------|---------------|-----------|---------|-------------|
| a00dM00000PDHjh | shataj | Anantapur | - | - |
| a00dM00000PDo3c | Jackie Chan | - | - | 9:00 am |
| a00dM00000PDo3c | James | - | - | - |
| a00dM00000PDo3r | Benjamin | - | - | - |
| a00dM00000PDo3s | Alexander | - | - | 9:00 am |
| a00dM00000PDo3t | William | - | - | 9:00 am |

Activity 2:

Create another Dashboard as we discussed in activity 1.

Output:

The screenshot shows a Salesforce Lightning interface. At the top, there is a navigation bar with links for Workforce Administ..., Employees, Projects, ProjectTasks, Asset Services, Reports, Dashboards (which is currently selected), Assets, and Recently Viewed Groups. Below the navigation bar, the title 'Dashboard 2' is displayed, along with a timestamp 'As of 26-Sept-2024, 4:40 pm Viewing as Kanekal Toufiq'. On the right side of the header, there are buttons for Refresh, Edit, and Subscribe. The main content area features a table titled 'New Assets with Employee Name Report'. The table has columns for Asset: Asset Name, Employee Name: E--, Asset: ID, Asse--, and Dat-. The data in the table is as follows:

| Asset: Asset Name | Employee Name: E-- | Asset: ID | Asse-- | Dat- |
|-------------------------------|--------------------|-----------|---------|------|
| Connectors | EMS-0019 | a03dM000 | CPU | 14/C |
| Dell au | EMS-0010 | a03dM000 | Laptop | 19/C |
| Dell Inspiron 15 | EMS-0017 | a03dM000 | Monitic | 05/1 |
| Intell core i7 | EMS-0021 | a03dM000 | Monitic | 20/C |
| Laptop | EMS-0002 | a03dM000 | Laptop | 01/C |
| Lenovo 65W slim power adapter | EMS-0005 | a03dM000 | Laptop | 14/C |

At the bottom left of the table, there is a link 'View Report (New Assets with Employee Name Report)'. The background of the dashboard features a blue and white wavy pattern.

Challenges and Solutions :

1. Data Integrity & Duplication Challenge: To ensure accurate and consistent data entry, implement validation rules, duplicate rules, and data clean-up tools. When dealing with duplicate employee or asset records, use Data Loader or Einstein Data Detect.
2. Difficulty in Automating Procedures Remedy: Utilize Process Builder and Flows to streamline procedures through automation. Utilize Apex scripts and triggers for more intricate logic. Salesforce Flow is particularly useful for multi-step procedures such as project assignments or onboarding.
3. Access Control & Data Security Challenge: Make sure that only authorized individuals have access to important employee and project data by defining explicit profiles, authorization settings, and sharing guidelines. For increased security, use two-factor authentication (2FA).

Future Recommendations

1. Use AI to enhance predictive analytics

Utilize Salesforce Einstein AI to foresee trends in employee performance, identify bottlenecks in projects, and allocate resources optimally using previous data.

2. Combine Payroll and HR Systems

Processes like pay distribution, leave administration, and performance evaluations can be automated by seamlessly integrating Salesforce with third-party HR and payroll systems.

3. Improved Mobility Features

By adding unique mobile layouts to the Salesforce Mobile App, managers and staff can more easily manage projects and assets while on the road, improving mobile access.

Conclusion :

In conclusion, putting in place a Workforce Administration Solution in Salesforce offers a strong foundation for streamlining asset and personnel administration procedures. Organizations may increase productivity and efficiency by utilizing automation, safe data handling, real-time reporting, and bespoke objects. Workflow automation, transparent access management, and system integration are some of the solutions that guarantee smooth operations even when problems like data integrity, scalability, and access control must be solved. Future developments that further optimize personnel management and promote growth and operational excellence include AI-driven insights, improved mobile capabilities, and system interconnections.