

APPLICATION TO MAKE THE WORKFORCE ADMINISTRATION SOLUTION BY USING CRM (DEVELOPER)

ABSTRACT:

This project details the development of a comprehensive Workforce Administration Solution (WAS) designed to streamline, automate, and centralize key human resource and operational processes. The existing manual or fragmented administration methods often result in inefficiencies, increased errors, and a lack of real-time visibility, hindering effective resource management and organizational decision-making.

The developed solution provides a unified, cloud-based platform for managing the complete employee lifecycle, with core features including centralized employee data management, automated project and asset assignment, time and attendance tracking, and real-time reporting via analytical dashboards.

Implemented using a modern, scalable development framework (e.g., Salesforce, in the context of one example), the WAS significantly enhances operational efficiency, ensures data accuracy and compliance, and fosters improved collaboration through features like internal communication tools. The project successfully demonstrates the creation of a robust and user-friendly system that mitigates administrative bottlenecks, ultimately enabling an organization to optimize its workforce deployment and achieve strategic business objectives.

OBJECTIVE:

The core objective of the Workforce Administration Solution (WAS) development project is to design, build, and deploy a secure, centralized digital platform that optimizes workforce deployment and streamlines all administrative tasks.

- **Streamline Operations & Centralize Data:** Consolidate all critical workforce information (employee records, skills, projects, and asset assignments) into a single, unified WAS platform to simplify management.
- **Enhance Employee Experience:** Provide employees with self-service features for managing their personal details, viewing assignments, and logging time, leading to increased engagement and transparency.
- **Ensure Robust Security & Access Control:** Implement a strong role-based access control (RBAC) model and data policies to guarantee the confidentiality and integrity of sensitive employee and project data.
- **Improve Efficiency through Automation:** Automate routine administrative functions, such as onboarding workflows, task assignments, and absence management, to drastically reduce manual effort and minimize human errors.

- **Enable Data-Driven Decisions:** Establish a flexible and scalable architecture capable of generating real-time analytics, dashboards, and compliance reports to support strategic workforce planning and utilization.

TECHNOLOGY DESCRIPTION:

Salesforce:

A cloud-based CRM platform used to manage customer relationships, streamline operations, and securely store data. It provides tools for creating custom objects, automation, user roles, and reporting.

Custom objects:

These Objects in Salesforce are user-defined database tables used to store information specific to a business. They allow you to create fields, relationships, and layouts to manage and organize data unique to your organization.

Tabs:

Tabs in Salesforce are user interface elements that provide easy access to objects, apps, or web pages. They allow users to quickly navigate and work with custom or standard objects within a Lightning App.

Lightning App:

An app is a collection of items-such as objects, tabs, and utilities-bundled together to serve a specific function. It provides a branded, user-friendly interface that allows employees to access and switch between related objects and tools efficiently.

Page Layouts:

Fields and sections are organized on a record page to make data entry easier, more structured, and user-friendly.

Profiles:

Define user permissions and access in Salesforce, determining what objects, fields, and features a user can view or modify.

Roles and hierarchy:

Control record-level access, defining who can see or act on data based on their position in the

organizational structure.

Users:

These are individual accounts that allow people to log in and access the system, with permissions and roles assigned based on their profiles and responsibilities.

Permission sets:

Grant additional access rights to users without changing their profiles, allowing flexible, role based permissions for specific objects or actions.

Organization-Wide Defaults (OWD):

Define the baseline level of access users have to records they do not own, ensuring data security and controlled visibility across the organization.

Reports and dashboards:

Provide visual insights and summaries of business data, helping users track performance, analyse trends, and make informed decisions.

Flows:

Automate business processes by collecting, updating, and managing data, allowing tasks to run automatically based on record changes or user actions.

Apex triggers:

These are custom codes that execute before or after specific events on records, automating complex business logic like validations, updates, or notifications.

Project Implementation Steps :

1. Setting Up a Salesforce Developer Org:

- Sign up for a Developer Org with your details using
<https://developer.salesforce.com/signup>
- Verify your email, set a password, and access the setup page



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First name Last name

PRASANTH TEJA VUJULA

Job title Work email

Developer tejavujula@gmail.com

Company Country/Region

Lendi Institute of Engt India

Your org may be provisioned or migrated to Hyperforce, Salesforce's public cloud Infrastructure.

I agree to the [Main Services Agreement – Developer Services](#) and [Salesforce Program Agreement](#). I acknowledge, as described in the [Developer Documentation](#): (1) the Developer Edition includes autonomous and other generative AI features; and (2) Salesforce may limit use of those features and the org, and may terminate any org that has been inactive for 45 days.

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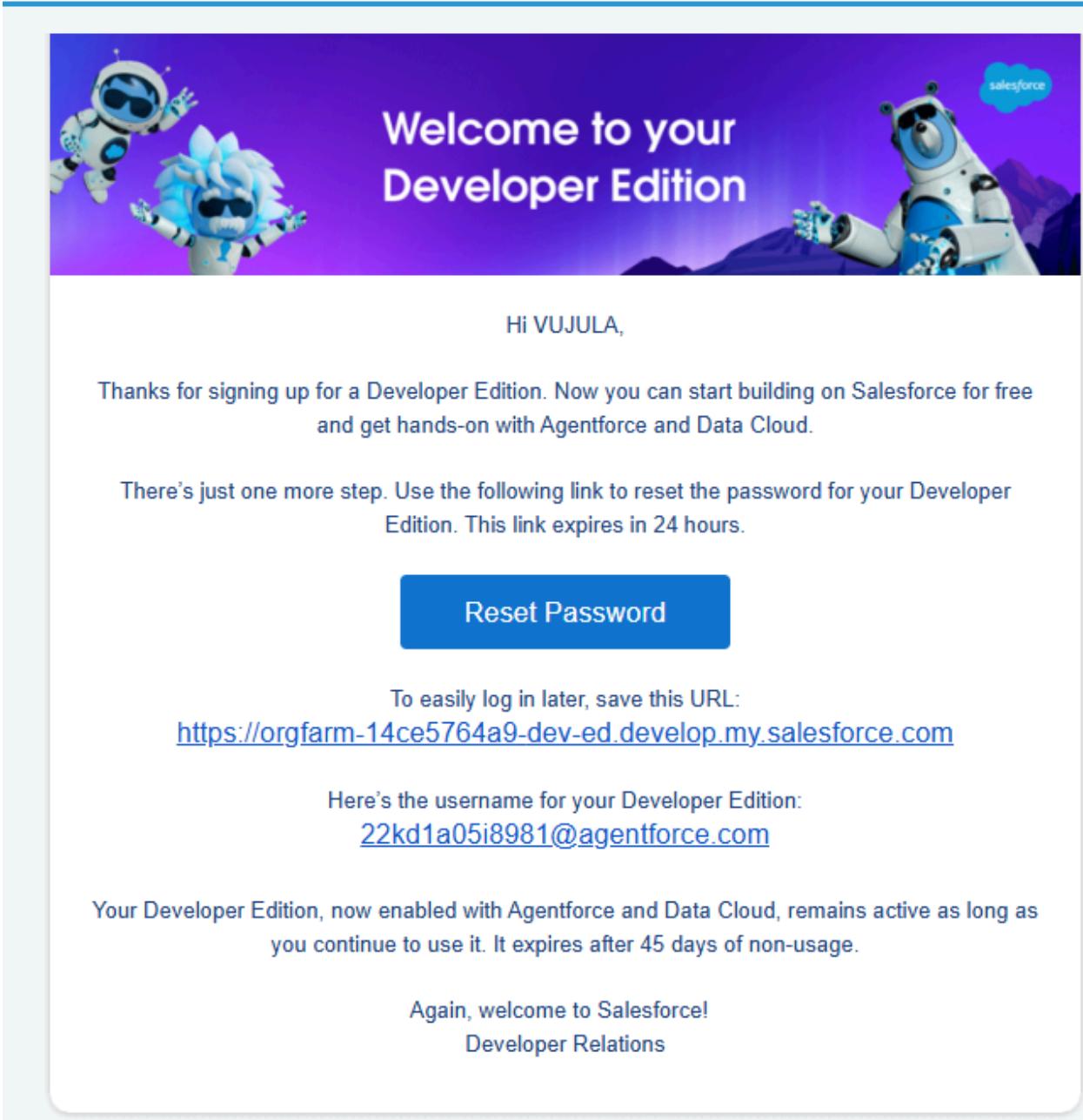
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Activation through the salesforce developer mail

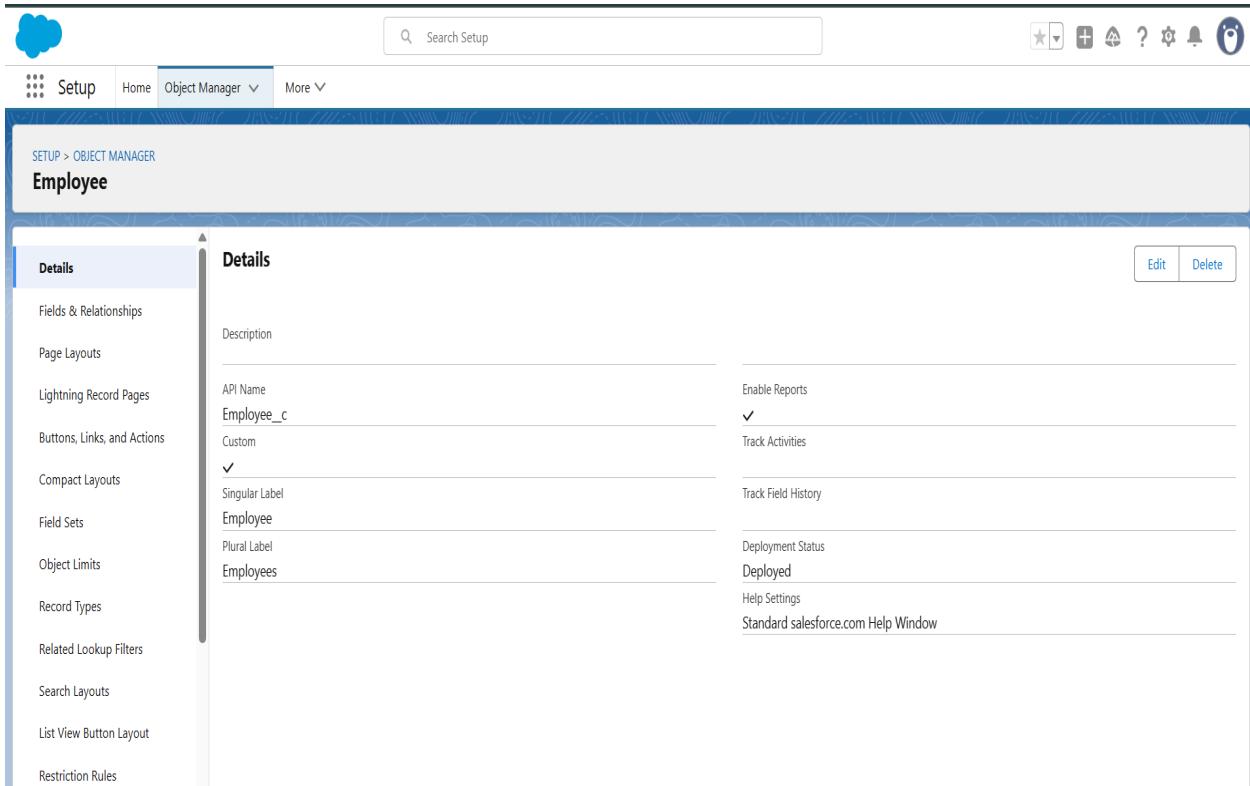


2. Custom Objects Creation:

Four custom objects:

- Employee__c: Stores employees details and manages their records.
- Manager__c: Maintains all employees details in our sector.
- Project__c: Storing projects data with the specific naming records.

- Asset__c: It is used to store and manage detailed information about a company's owned items, such as equipment or products, for tracking and maintenance purposes.



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

- Header:** Includes the Salesforce logo, a search bar labeled "Search Setup", and various navigation icons.
- Breadcrumbs:** "SETUP > OBJECT MANAGER".
- Section:** "Employee".
- Left Sidebar (Details):**
 - API Name: Employee__c
 - Singular Label: Employee
 - Plural Label: Employees
- Right Panel (Details):**
 - Description: (empty)
 - Enable Reports: ✓
 - Track Activities: (empty)
 - Track Field History: (empty)
 - Deployment Status: Deployed
 - Help Settings: Standard salesforce.com Help Window
- Buttons:** "Edit" and "Delete" located at the top right of the main content area.

3. Custom Tabs:

Represents a way to access Salesforce objects easily.

- Tabs are created for each custom object - Employee, Asset, Asset Service, and Project Tasks allowing users to navigate and manage records efficiently within the Lightning App.

Custom Object Tabs

Action	Label	New	What Is This?	Description
Edit Del	Assets		Box	
Edit Del	Asset Services		Headset	
Edit Del	Employees		Laptop	
Edit Del	Projects		Building	
Edit Del	ProjectTasks		Presenter	

Web Tabs

No Web Tabs have been defined.

Visualforce Tabs

No Visualforce Tabs have been defined.

Lightning Component Tabs

No Lightning component tabs have been defined.

Lightning Page Tabs

No Lightning Page Tabs have been defined.

3. Create Lightning App:

Developed a “Workforce Administration” Lightning App for managing employee and operational activities. Configured essential custom objects — Employee, Department, Attendance, and Payroll — with necessary fields to ensure smooth workforce management and efficient HR operations. The app was assigned to the System Administrator profile for comprehensive access and control.

ProjectTasks

Recently Viewed

0 items • Updated 10 minutes ago

New Import Assign Label

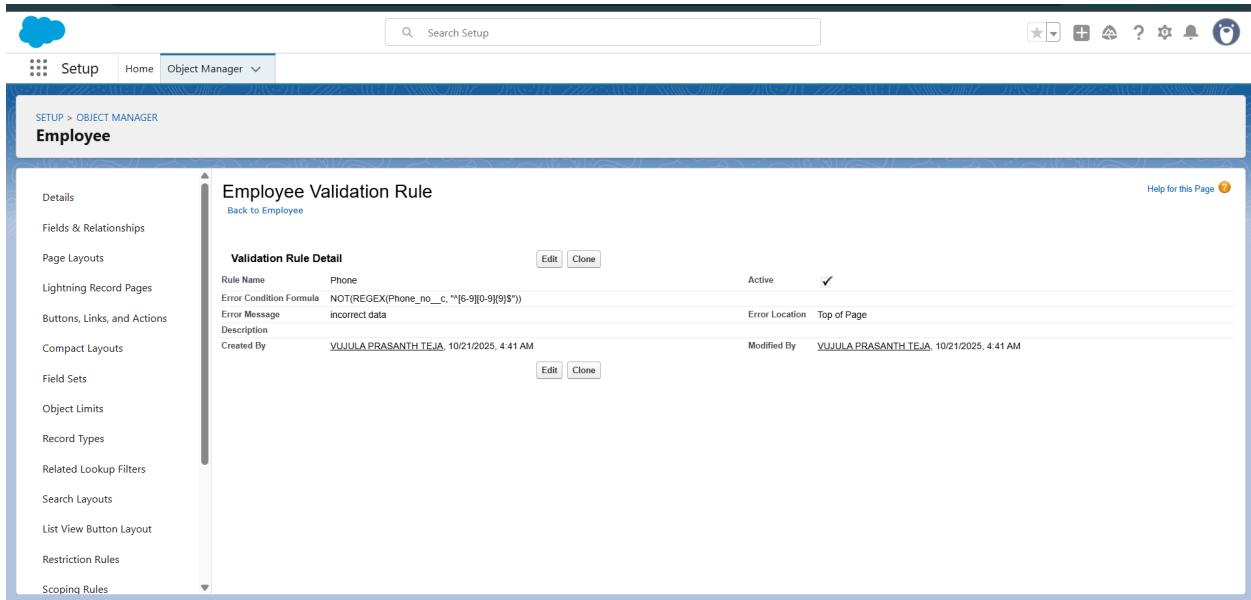
Search this list...

Nothing to see here
There's nothing in your list yet. Try adding a new record.

4. Fields to be created:

- Employee__c:Employee name,Gender(picklist),Qualification,Experience,E-mail,Phone number, Joining date(formula),Date of birth(personal details),Linkedin profile(url)

Validation in Employee object(Phone number)



The screenshot shows the Salesforce Object Manager interface for the 'Employee' object. On the left, a sidebar lists various configuration options like Details, Fields & Relationships, Page Layouts, and Lightning Record Pages. The main content area is titled 'Employee Validation Rule' and displays the following details:

Validation Rule Detail	Active
Rule Name: Phone	<input checked="" type="checkbox"/>
Error Condition Formula: NOT(REGEX(Phone_no__c, "[^0-9][0-9]{9}"))	
Error Message: incorrect data	
Description:	
Created By: VUJULA PRASANTH TEJA	Modified By: VUJULA PRASANTH TEJA
Created Date: 10/21/2025, 4:41 AM	Modified Date: 10/21/2025, 4:41 AM

- Project__c:Project Name,Project Lead,Start Date(Date),End Date(Date),Project Status(Picklist)
- Project__Task__c:Project taskName,Employee Name(Maste-Detail),Project task,Working Hours(Number)
- Assests:Assest Name,Model Name,Assest Type(Picklist),Employee Name(Lookup)
- Assest__Services__c:Assest service Name,Assest Service Id(Lookup),Type(Picklist),Technician,Subject

Setup Home Object Manager

Employee

Fields & Relationships 25 Items, Sorted by Field Label

FIELD LABEL	FIELD NAME	DATA TYPE	CONTROLLING FIELD	INDEXED
Address	Address__c	Text Area(255)		
Age	Age__c	Formula (Number)		
Cab Allowance	Cab_Allowance__c	Checkbox		
Cab Allowance Amount	Cab_Allowance_Amount__c	Currency(18, 0)		
Created By	CreatedById	Lookup(User)		
Date of Birth	Date_of_Birth__c	Date		
Email	Email__c	Email		
Employee ID	Name	Auto Number		
Employee Name	Employee_Name__c	Text(18)		

<https://orgfarm-14ce5764a9-dev-ed.develop.my.salesforce.com/one/one.app#/setup/ObjectManager/01gj0000001z9XF/view>

Setup Home Object Manager

Project

Fields & Relationships 9 Items, Sorted by Field Label

FIELD LABEL	FIELD NAME	DATA TYPE	CONTROLLING FIELD	INDEXED
Created By	CreatedBy	Lookup(User)		
End Date	End_Date__c	Date		
Last Modified By	LastModifiedBy	Lookup(User)		
Owner	OwnerId	Lookup(User,Group)		
Project ID	Name	Auto Number		
Project Lead	Project_Lead__c	Text(18)		
Project Name	Project_Name__c	Text(20)		
Project Status	Project_Status__c	Picklist		
Start Date	Start_Date__c	Date		

Setup | Home | Object Manager

SETUP > OBJECT MANAGER
ProjectTask

Details

Fields & Relationships
7 Items, Sorted by Field Label

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

<https://orgfarm-14ce5764a9-dev-ed.develop.my.salesforce-setup.com/cn/one/app#/setup/ObjectManager/01lgl000001z81j/FieldsAndRelationships/view>

Setup | Home | Object Manager

SETUP > OBJECT MANAGER
Asset

Details

Fields & Relationships
7 Items, Sorted by Field Label

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)		▼
Employee Name	Employee_Name__c	Lookup(Employee)		▼
Last Modified By	LastModifiedBy	Lookup(User)		▼
Model Name	Model_Name__c	Text(20)		▼
Owner	OwnerId	Lookup(User,Group)		✓

Asset Service

Fields & Relationships
9 Items, Sorted by Field Label

FIELD LABEL	FIELD NAME	DATA TYPE	CONTROLLING FIELD	INDEXED
Asset Id	Asset_Id_c	Lookup(Asset)		✓
Asset Service Name	Name	Text(80)		✓
Created By	CreatedById	Lookup(User)		✓
Description	Description__c	Long Text Area(32768)		✓
Last Modified By	LastModifiedById	Lookup(User)		✓
Owner	OwnerId	Lookup(User,Group)		✓
Subject	Subject__c	Text Area(255)		✓
Technician	Technician__c	Text(20)		✓
Type	Type__c	Picklist		✓

5. Create Page Layout for Objects:

Created page layouts for objects, organized sections, and arranged fields for better usability.

- Go to Setup → Object Manager → [Object] → Page Layouts → New.
- Create sections as needed and drag relevant fields into each section.
- Arrange fields for clear organization and improved usability.
- Click Save to apply the layout across the object.

Project

Page Layouts
1 Items, Sorted by Page Layout Name

PAGE LAYOUT NAME	CREATED BY	MODIFIED BY
Project Layout	VUJULA PRASANTH TEJA, 9/4/2025, 2:53 AM	VUJULA PRASANTH TEJA, 9/8/2025, 1:16 AM

6. Create Profiles:

Profiles ensure proper access control and define what data/actions each role can perform. They also help in maintaining security and restricting unnecessary access.

- Cloned an existing profile Standard User for manager and Salesforce Platform User for remaining.
- Give a Profile Name (Manager, Sales Executive, Sales Person) and click Save.

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

- Header:** Search bar with "Search Setup", a gear icon, and other navigation icons.
- Left Sidebar:** "Setup" tab selected. Under "Profiles", there is a search bar with "profiles" and a note: "Didn't find what you're looking for? Try using Global Search."
- Central Content:** Title "Profiles" with a "SETUP" button. Below it is a table titled "All Profiles".
- Table Headers:** Action, Profile Name, User License, Custom.
- Table Data:**

Action	Profile Name	User License	Custom
<input type="checkbox"/> Edit Del ...	Manager	Salesforce Platform	<input checked="" type="checkbox"/>
<input type="checkbox"/> Edit Clone	Marketing User	Salesforce	<input type="checkbox"/>
<input type="checkbox"/> Edit Clone	Minimum Access - A...	Salesforce Integration	<input type="checkbox"/>
<input type="checkbox"/> Edit Clone	Minimum Access - S...	Salesforce	<input type="checkbox"/>
- Page Navigation:** "Help for this Page" and a vertical scroll bar on the right.
- Page Footer:** "1-4 of 4" and "0 Selected".

- Click Edit to configure Custom App Settings and Object Permissions for relevant objects.
- Adjust Session Settings and Password Policies as needed.

Basic Access

	Read	Create	Edit	Delete	View All Records	Modify All Records	View All Fields
Assets	✓	✓	✓	✓	✓	✓	✓
Asset Services	✓	✓	✓	✓	✓	✓	✓
Employees	✓	✓	✓	✓	✓	✓	✓
Leaves	✓	✓	✓	✓	✓	✓	✓
Projects	✓	✓	✓	✓	✓	✓	✓
ProjectTasks	✓	✓	✓	✓	✓	✓	✓

Data Administration

	Read	Create	Edit	Delete	View All Records	Modify All Records	View All Fields
Assets	✓	✓	✓	✓	✓	✓	✓
Asset Services	✓	✓	✓	✓	✓	✓	✓
Employees	✓	✓	✓	✓	✓	✓	✓
Leaves	✓	✓	✓	✓	✓	✓	✓
Projects	✓	✓	✓	✓	✓	✓	✓
ProjectTasks	✓	✓	✓	✓	✓	✓	✓

Session Settings

Session Times Out After: 2 hours of inactivity

Session Security Level Required at Login: None

Password Policies

- User passwords expire in: 90 days
- Enforce password history: 3 passwords remembered
- Minimum password length: 8
- Password complexity requirement: Must include alpha and numeric characters
- Password question requirement: Cannot contain password
- Maximum invalid login attempts: 10
- Lockout effective period: 15 minutes
- Obfuscate secret answer for password resets:
- Require a minimum 1 day password lifetime:

7. Creating Roles & Hierarchy:

- Go to Setup → Roles → Set Up Roles → Expand All and click Add Role under the relevant parent.
- Enter the Role Label (Manager); the Role Name auto-populates, then click Save.
- Create Sales Executive and Sales Person roles under the Manager with the assigned profiles.
- Ensure the hierarchy reflects reporting lines: Manager → Sales Executive → Sales Person.

```

graph TD
    Lendi[Lendi Institute Of Engineering And Technology] --> CEO[CEO]
    Lendi --> CFO[CFO]
    Lendi --> COO[COO]
    Lendi --> HR[HR]
    Lendi --> Manager[Manager]
    Manager --> Emp1[Emp1]
    Manager --> Emp2[Emp2]
    Manager --> SVP[SVP Customer Service & Support]
    Manager --> CSInt[Customer Support International]
    Manager --> CSNA[Customer Support North America]
    Manager --> IRS[Installation & Repair Services]
    Manager --> SHR[SVD Human Resources]
  
```

Users are Salesforce accounts that allow access based on role and profile.

In this project, users were created for Manager, Sales Executive, and Sales Person.

- Exec Sales – Sales Executive
- Mikaelson, Niklaus – Manager
- Person, Sales – Sales Person

Created users displayed

Action	Full Name	Alias	Username	Role	Active	Profile
<input type="checkbox"/>	Chatter_Expert	Chatter	chatty00dg00000anw uat.r14xpo0jh0rk@chatter.salesforce.com		<input checked="" type="checkbox"/>	Chatter Free User
<input type="checkbox"/>	EPIC_OrgFarm	GEPIC	epic.0ba44c61f0dd@orgfarm.salesforce.com		<input checked="" type="checkbox"/>	System Administrator
<input type="checkbox"/>	Mikaelson_Kol	kmika	kolmn12@gmail.com	Manager	<input checked="" type="checkbox"/>	Manager
<input type="checkbox"/>	Mikaelson_Niklaus	nmika	nlarkin45@mnwhite.com	HR	<input checked="" type="checkbox"/>	HR
<input type="checkbox"/>	Mikaelson_sanjay	smika	sanjay34@gmail.com	Empl	<input checked="" type="checkbox"/>	On Site Employee
<input type="checkbox"/>	PRASANTH_TEJA_VUJULA	22k	22kd1a05b981@agentforce.com		<input checked="" type="checkbox"/>	System Administrator
<input type="checkbox"/>	User_Integration	integ	integration@00dg00000anw uat.com		<input checked="" type="checkbox"/>	Analytics Cloud Integration User
<input type="checkbox"/>	User_Security	sec	insightssecurity@00dg00000anw uat.com		<input checked="" type="checkbox"/>	Analytics Cloud Security User

9. Create Permission Sets:

Permission sets extend users' access without changing their profiles. In this project, a permission set was created to give additional access to relevant objects.

- Assigning Per to emp set to sales executive.

The screenshot shows the Salesforce Setup interface. The left sidebar navigation includes 'Setup', 'Home', 'Object Manager', and sections for 'Users' (selected), 'Permission Set Groups', and 'Permission Sets'. Under 'Users', there are links for 'Profiles', 'Public Groups', 'Queues', 'Roles', 'User Management Settings', and 'Prospector'. A search bar at the top says 'Search Setup' and a message below it says ' Didn't find what you're looking for? Try using Global Search.' The main content area displays the 'Per to Emp' permission set details. The title bar says 'Per to Emp' with a user icon. Below it, the 'Current Assignments' section lists one assignment: Sanjay Mikaelson (Full Name), Active, Role Emp1, Profile On Site Employee, User License Salesforce Platform, and Expires On (not specified). There are edit and delete icons for each row, and an 'Add Assignment' button.

10. OWD (Organization-Wide Defaults):

OWD settings define the baseline level of access users have to records they don't own.

- In this project, Gas Station and Supplier objects were set to Public Read-Only, while roles and profiles controlled additional access.

The screenshot shows the 'Sharing Settings' page in the Salesforce Setup. The left sidebar has a search bar with 'sharing se' and a 'Sharing Settings' link under 'Sharing'. The main content area is titled 'Sharing Settings' and contains a table of default sharing settings for various objects. The table has columns for 'Object', 'Default Internal Access', 'Default External Access', and 'Grant Access Using Hierarchies'. Most objects have 'Public Read/Write' or 'Public Read/Write/Transfer' as internal access and 'Private' as external access. The 'User' object has 'Public Read Only' as internal access and 'Private' as external access. A note at the top says 'This page displays your organization's sharing settings. These settings specify the level of access your users have to each others' data. Go to Background Jobs to monitor the progress of a change to an organization-wide default or a parallel sharing recalculations.'

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

11. Create, View, Delete Records:

User adoption measures how effectively users engage with Salesforce features.

- In this project, creating roles, profiles, permission sets, and intuitive layouts ensured smooth usage and higher adoption of the Gas Station CRM application.

The screenshot shows the 'Edit EMS-0007' screen for an employee record. The left sidebar shows the 'Employees' tab is selected. The main form has tabs for 'Related' and 'Details'. The 'Details' tab is active and contains fields for Employee ID (EMS-0007), Employee Name (Jackie Chan), Gender (Male), Reports to (Search Employees...), Qualification, Experience, Phone no, Email, and Joining date. The 'Owner' field shows 'VUJULA PRASANTH TEJA'. At the bottom are 'Cancel', 'Save & New', and 'Save' buttons.

- **View record**

The screenshot shows a software application window titled "Workforce Administ...". The main content area displays an "Employee" record for "EMS-0002". The "Details" tab is selected. The record includes the following fields:

Field	Value
Employee ID	EMS-0002
Employee Name	Pravalika
Date of Birth	9/21/2004
Age	21.00
Gender	Female
Reports to	(empty)
Qualification	(empty)
Degree	(empty)
Address	(empty)
Experience	2 years
Phone no	(empty)

The "Owner" field shows "VUJULA PRASANTH TEJA" with a small profile icon. At the top right of the record view, there are buttons for "New Contact", "Edit", and "New Opportunity".

- **Delete record**

The screenshot shows a software application window titled "Workforce Administ...". The main content area displays an "Employee" record for "EMS-0007". The "Details" tab is selected. The record includes the following fields:

Field	Value
Employee ID	EMS-0007
Employee Name	Jackie Chan
Gender	Male
Reports to	(empty)
Qualification	(empty)
Experience	(empty)
Phone no	(empty)
Email	(empty)
Joining date	(empty)
Mode of Work	(empty)

The "Owner" field shows "VUJULA PRASANTH TEJA" with a small profile icon. At the top right of the record view, there are buttons for "New Contact", "Edit", and "New Opportunity".

12. Creating Reports:

Reports are used to analyse and display Salesforce data in a structured format.

- In this project, custom reports were created to track fuel usage, customer activity, and sales for better decision-making.

The screenshot shows a Salesforce Lightning Report titled "New Employees Report". The report displays data for 7 employees. The columns include Employee Name, Employee ID, Reports to, Login Time, Logout Time, and Mode of Work. The data is as follows:

	Employee Name	Employee ID	Reports to	Login Time	Logout Time	Mode of Work
Jackie Chan	EMS-0007	-	-	EMS-0007	-	-
Diana Prince	EMS-0006	-	-	EMS-0006	-	-
Charlie Brown	EMS-0005	-	-	EMS-0005	-	-
Bob Smith	EMS-0004	-	-	EMS-0004	-	-
Alice Johnson	EMS-0003	-	-	EMS-0003	-	-
Pravallika	EMS-0002	-	11:15 AM	EMS-0002	11:15 AM	Remote
Prasanth	EMS-0001	-	1:15 AM	EMS-0001	1:15 AM	On Site

At the bottom of the report, there are checkboxes for Row Counts, Detail Rows, Subtotals, and Grand Total.

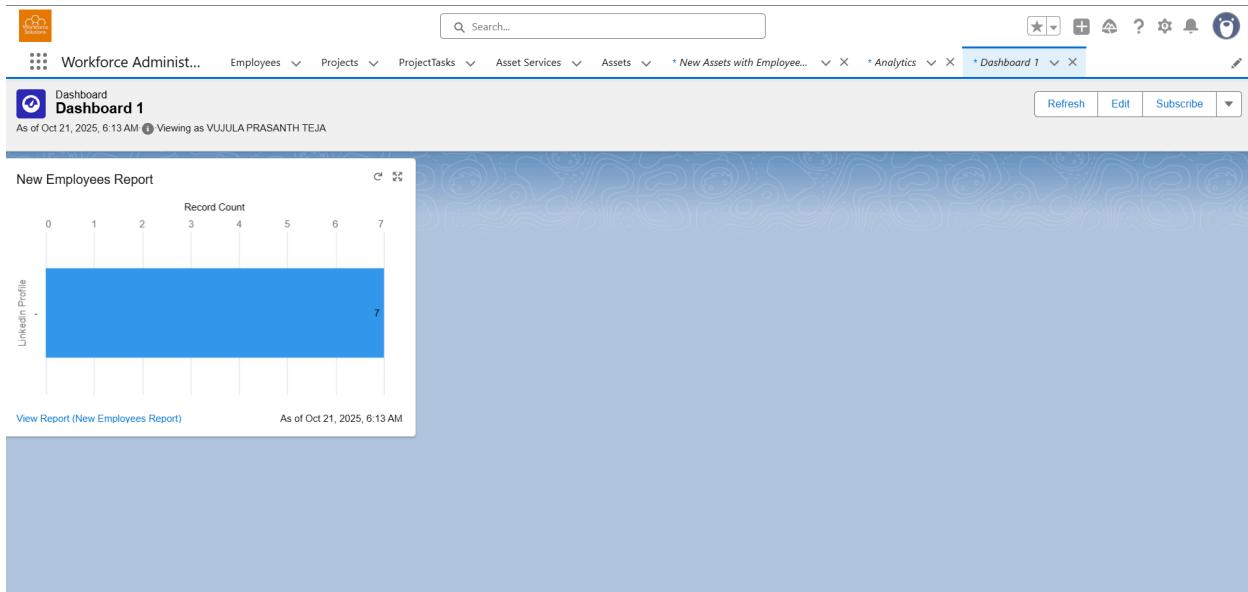
The screenshot shows a Salesforce Lightning Report titled "Report: Employees New Employees Report". The report displays a table of employee data with the following columns: LinkedIn Profile (checkbox), Employee Name, Employee: Employee ID, Reports to, Login Time, Logout Time, and Mode of Work. The data includes rows for Jackie Chan, Diana Prince, Charlie Brown, Bob Smith, Alice Johnson, Pravallika, and Prasanth. The table has sorting and filtering options at the top. The interface includes a navigation bar with links like Home, Employees, Projects, ProjectTasks, Asset Services, Assets, and Analytics.

LinkedIn Profile	Employee Name	Employee: Employee ID	Reports to	Login Time	Logout Time	Mode of Work
- (7)	Jackie Chan	EMS-0007	-	-	EMS-0007	-
	Diana Prince	EMS-0006	-	-	EMS-0006	-
	Charlie Brown	EMS-0005	-	-	EMS-0005	-
	Bob Smith	EMS-0004	-	-	EMS-0004	-
	Alice Johnson	EMS-0003	-	-	EMS-0003	-
	Pravallika	EMS-0002	-	11:15 AM	EMS-0002	Remote
	Prasanth	EMS-0001	-	1:15 AM	EMS-0001	On Site

13. Creating Dashboards :

Dashboards visually display key metrics and report data in charts and graphs.

- In this project, dashboards were created to provide insights on fuel estimation, sales, and customer activity



14.Approval Process:

The approval process helps streamline HR tasks like leave requests, shift changes, and employee updates. It ensures that each request goes through the right levels of review before being finalized.

- Employees submit requests for HR actions like leave, shift changes, or updates.
- Each request goes through a structured approval workflow with designated reviewers.
- Notifications keep approvers and requesters informed of progress and decisions.
- All approvals are tracked for transparency, compliance, and reporting.

Search Setup

SETUP Approval Processes

Open Approvals App

Approvals are complex business processes that require information gathering and planning before implementing. It is recommended that you follow the instructions below before getting started.

1. Read the help topic
2. View the checklist
3. Create a custom user hierarchical relationship field
4. Create email templates
5. Create approval processes using either the Jump Start or Standard Wizard
6. Add Approval History Related List to all page layouts
7. Activate the process to deploy to your users

Manage Approval Processes For: Leave

A listing of both active and inactive approval processes for Leaves is displayed below. To create a new approval process, click Create New Approval Process then select Use Jump Start Wizard to set up your approval process in a few short steps. Or, select Use Standard Wizard to configure all approval options.

Create New Approval Process

Active Approval Processes

No approval processes available

Inactive Approval Processes

Action	Approval Process Name	Description
Edit Activate Del	Leave Approval Request	

Search Setup

SETUP Approval Processes

Process Definition Detail

Field	Value	Actions
Process Name	Leave Approval Request	Edit Clone Delete Activate
Unique Name	Leave_Approval_Request	Active <input type="checkbox"/>
Description		Next Automated Approver Determined By Manager of Record Submitter
Entry Criteria		
Record Editability	Administrator ONLY	Allow Submitters to Recall Approval Requests <input type="checkbox"/>
Approval Assignment Email Template		
Initial Submitters	Leave Owner	
Created By	VIJJULA PRASANTH TEJA 9/27/2025, 12:01 AM	Modified By VIJJULA PRASANTH TEJA 9/27/2025, 12:08 AM

Initial Submission Actions

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

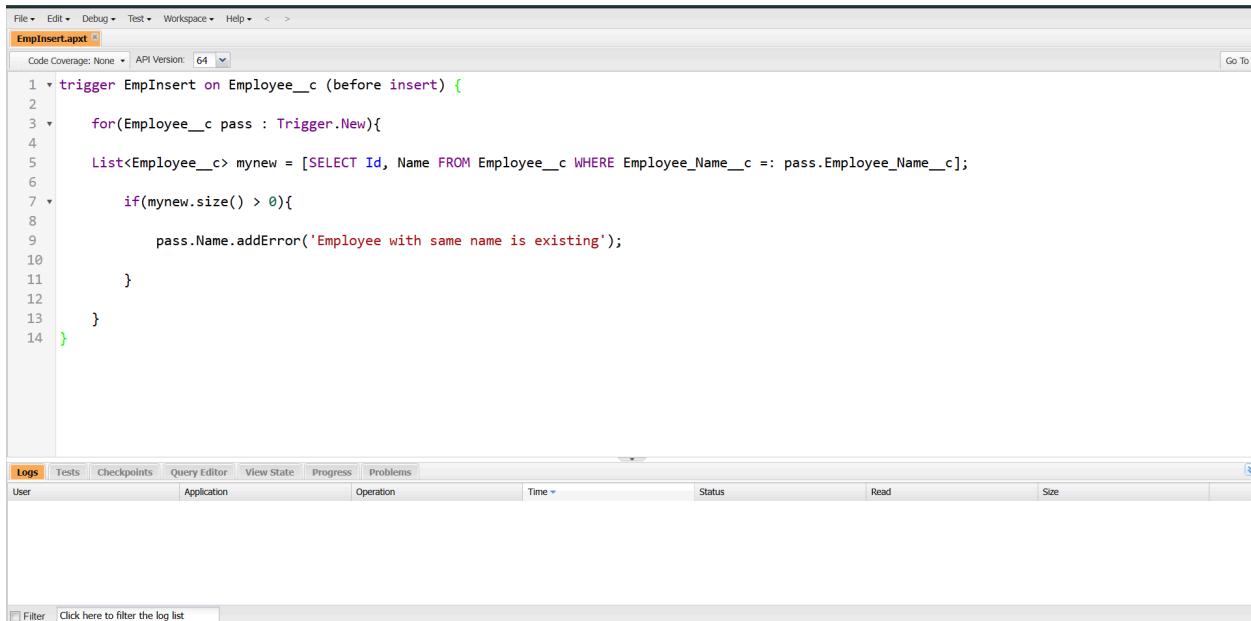
Approval Steps

Action	Step Number	Name	Description	Criteria	Assigned Approver	Reject Behavior
Show Actions Edit Del	1	Step 1		Leave: No. of Days EQUALS 5	Manager User Niklaus Mikaelson	Final Rejection
Show Actions Edit Del	2	Approval from HR				Final Rejection

15. Creating Apex Triggers:

Apex triggers are custom code that execute before or after events on records. Handler (EmpInsert.apxc)

Validates before inserting the employee record creation.



The screenshot shows the Salesforce IDE interface with the file 'EmpInsert.apxc' open. The code editor contains the following Apex trigger:

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

The code is syntax-highlighted with purple for keywords like 'trigger' and 'SELECT', green for numbers like '14', and red for error messages. Below the code editor is a tabs bar with 'Logs' selected, followed by 'Tests', 'Checkpoints', 'Query Editor', 'View State', 'Progress', and 'Problems'. At the bottom is a log list with a 'Filter' input field.

To prevent duplicate entries in the Workforce Administration Solution (Dev), a validation rule checks for existing employee names before saving a new record. If a name like “Jackie Chan” already exists, the system blocks the creation of another record with the same name. This helps maintain clean and consistent employee data across the platform.

The screenshot shows the 'Edit EMS-0007' screen in the Workforce Administration module. The main form contains the following data:

- Employee ID:** EMS-0007
- Employee Name:** Jackie Chan
- Gender:** Male
- Reports to:** Search Employees...
- Qualification:** (empty)
- Experience:** (empty)
- Phone no:** (empty)
- Email:** (empty)
- Joining date:** (empty)
- Mode of Work:** (empty)

An error message box is displayed in the center of the screen:

We hit a snag.

Review the errors on this page.

- incorrect data

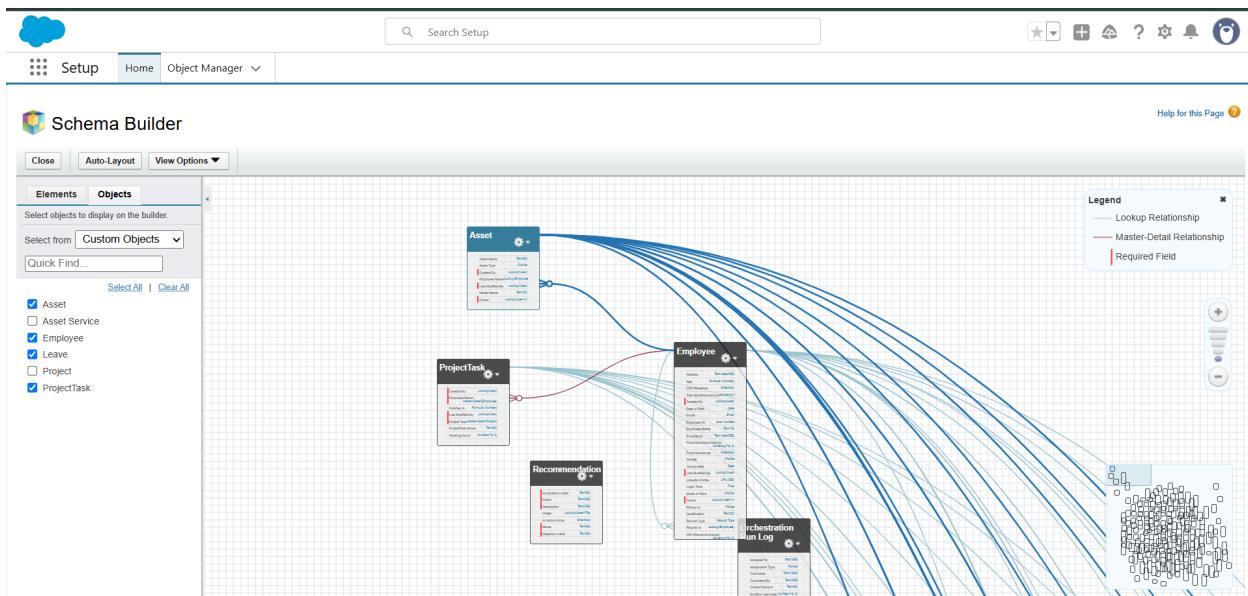
Buttons at the bottom of the form include: **Cancel**, **Save & New**, and **Save**.

Feature Enhancements for Workforce Administration Solution (Dev)

- **Intuitive Dashboard Improvements**
 - Enhanced visual layout for better navigation and data visibility.
 - Real-time updates on employee status, project assignments, and asset usage.
- **Automated Asset Management**
 - Tracks assignment and return of company assets (e.g., laptops, ID cards).
 - Reduces manual errors and improves accountability.
- **Employee Performance Monitoring**
 - Integrated tools to log and review employee performance metrics.
 - Supports goal tracking and feedback loops for HR and managers.
- **Project Involvement Tracking**
 - Displays which employees are assigned to which projects.
 - Helps managers allocate resources more efficiently.
- **Approval Workflow Enhancements**
 - Multi-level approval routing based on role and department.
 - Notifications and audit trails for transparency and compliance.
- **Data Management and Reporting**
 - Exportable reports for HR analytics and workforce planning.
 - Filters and search options for quick access to employee records.

- **Improved Efficiency:** Reduces time spent on manual tracking and approvals.
- **Greater Transparency:** Clear audit trails and performance logs.
- **Scalability:** Easily adapts to growing teams and evolving HR policies.
- **User-Friendly Interface:** Simplifies access to key workforce data.

Additional Screenshots:



Conclusion:

The Workforce Administration Solution (Dev), built on Salesforce CRM, is a comprehensive platform designed to streamline and automate HR operations across an organization. By leveraging Salesforce's robust features like custom objects, approval workflows, Apex triggers, and real-time dashboards, this solution enables efficient management of employee records, leave requests, performance tracking, and asset allocation. It ensures data accuracy through validation rules and prevents duplication with smart error handling, such as blocking repeated employee names. The approval process is structured to route requests through multiple levels, ensuring transparency and compliance. Enhanced reporting tools allow HR teams to analyze workforce trends and make informed decisions. With recent feature upgrades,

including intuitive dashboards and automated asset tracking, the solution supports scalability and adaptability for growing teams. Overall, it empowers HR departments to maintain a centralized, reliable, and user-friendly system for workforce administration.