

Workforce Administration Solution

Project Overview

The Workforce Administration Solution is a Salesforce-based software application developed to centralize, streamline, and automate employee data management, project tracking, performance monitoring, and asset assignment within an organization. This platform enhances efficiency by providing a unified system to manage and track employee activities, ensuring accuracy in project assignments and asset records.

Objectives

1. Real-Time Salesforce Project Implementation

- Learn to build and configure a Salesforce project, applying real-time use cases in workforce administration.

2. Data Modeling

- Design and implement custom objects, fields, and relationships to represent employees, projects, tasks, and assets within the Salesforce data model.

3. Creating an Application

- Develop a custom Lightning App tailored for workforce and asset management, with tabs and page layouts specific to business requirements.

4. User Interface Customization

- Customize the user interface using page layouts, record types, and tabs, providing a seamless experience for HR and administrative users.

5. Importing Bulk Data

- Utilize Salesforce Data Import Wizard or Data Loader for efficient bulk data import, simulating real-world data migration scenarios.

6. Security in Salesforce

- Implement role-based access control, permission sets, profiles, and organization-wide default (OWD) settings to safeguard data.

7. Group Collaboration

- Set up Salesforce Chatter for team collaboration, facilitating efficient communication and coordination within the workforce.

8. Reports & Dashboards

- Create insightful reports and dashboards to monitor employee performance, project progress, and asset utilization, supporting data-driven decision-making.

Salesforce Key Features and Concepts Utilized

Centralized Management: A single source of truth for employee, project, and asset information.

Enhanced Productivity: Automation of repetitive tasks, allowing administrators and HR teams to focus on higher-value work.

Increased Data Accuracy: Real-time data synchronization and easy data access help reduce errors in workforce and asset tracking.

Improved Security: Role-based access and permission settings protect sensitive information.

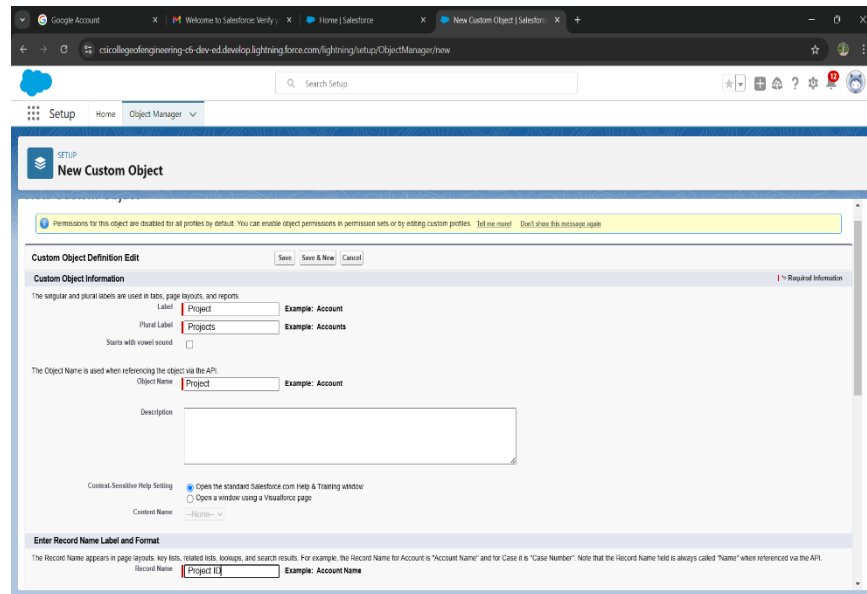
Effective Decision-Making: Dashboards and reports provide visual insights, allowing managers to make informed decisions.

Detailed Steps to Solution Design

. Data Model Documentation

This section explains the structure and relationships of the data model within Salesforce, detailing each object and its fields, relationships, and purpose in the system.

Overview Diagram: Provide an entity-relationship diagram (ERD) showcasing the custom objects (Employee, Project, ProjectTask, Asset, Asset Service) and standard objects with their relationships.

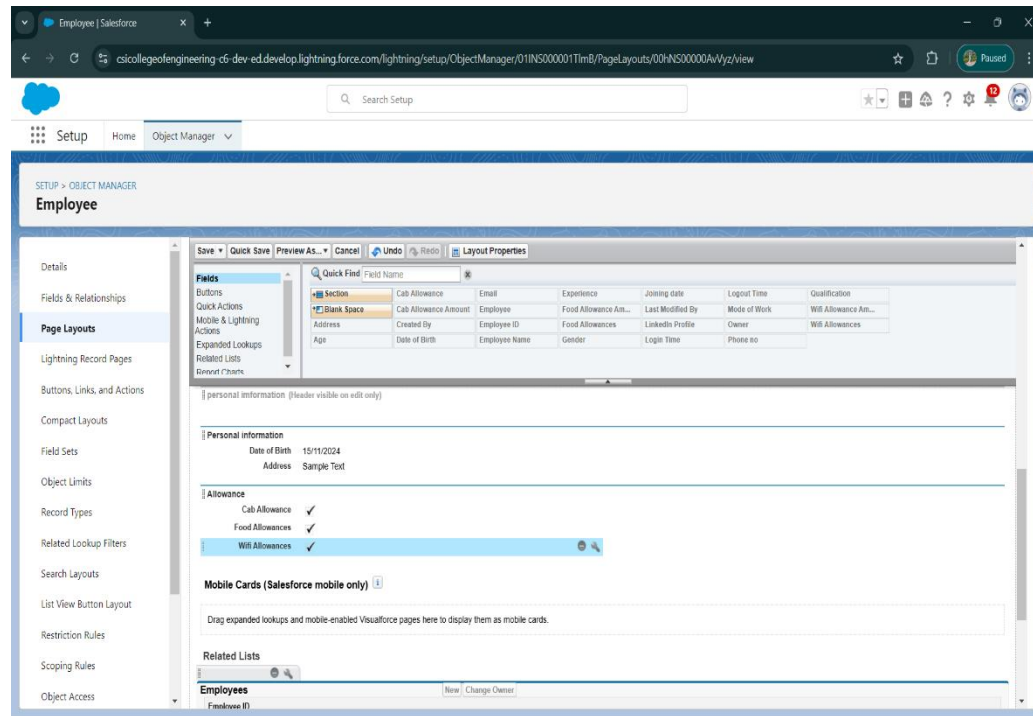


1. **Field Descriptions:** Describe each custom field, its data type (e.g., text, date, picklist), purpose, and validation rules.
2. **Relationship Definitions:** Document how each object relates to others (e.g., Lookup, Master-Detail) and why the relationship type is chosen.

2. User Interface Design Documentation

This section provides details on the custom tabs, page layouts, record types, and app design.

1. **Lightning App Design:**
 - Screenshot of the Lightning App homepage.
 - Description of each tab (Employee, Project, ProjectTask, Asset, Asset Service) and its functionality.
2. **Custom Tabs:**
 - **Employee Tab:** List view and search functionality for all employees.
 - **Project Tab:** Shows a list of active projects and project details.
 - Screenshots of each tab with annotations.
3. **Page Layouts:**
 - Employee Page Layout:
 - Screenshot of the layout with fields, related lists, and component placements.
 - Explanation of field grouping and purpose (e.g., Personal Details, Job Information, Related Assets).
 - Project Page Layout:
 - Screenshot and description of layout fields.
 - Explanation of components used, like related lists showing assigned employees and tasks.



3. Business Logic Documentation

Describe the customizations that enforce specific business processes, including Apex triggers, workflow rules, and approval processes.

1. Apex Trigger Documentation:

- **Trigger for Employee Status Update:** Description of the trigger, its purpose, and the conditions under which it runs.
- Code snippet (or screenshot) of the Apex trigger.
- Explanation of each trigger method and its logic (e.g., update Employee status when Asset is assigned).

2. Approval Process Documentation:

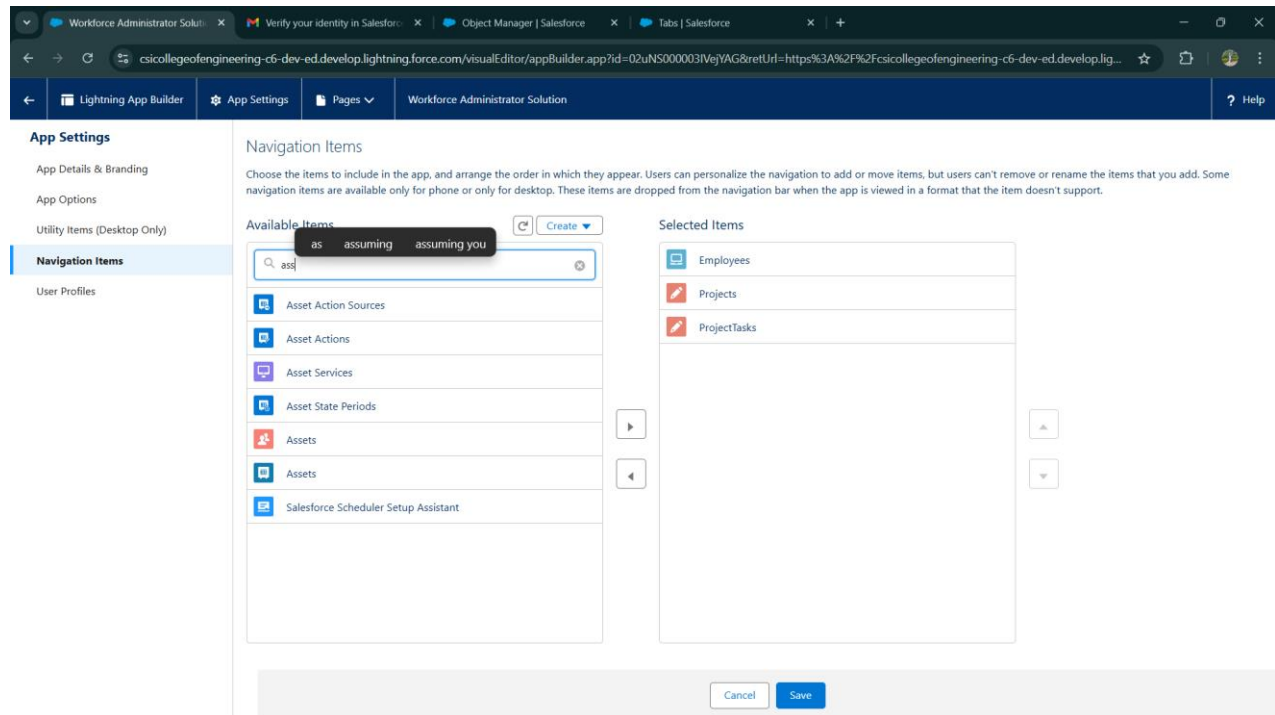
- Approval Process for Employee Asset Assignment:
 - Flowchart showing approval stages (e.g., HR approval, Manager approval).
 - Screenshots of the approval process settings in Salesforce.

3. Workflow Rules and Automation:

- **Workflow Rule for Project Completion Notification:**
 - Description and criteria for triggering.
 - Screenshot of the workflow rule and email alert settings.

4. Process Builder and Flow:

- Use case for any automated flow, e.g., assigning assets automatically to new employees.
- Flow diagram and screenshots for each step within the Salesforce Flow builder.

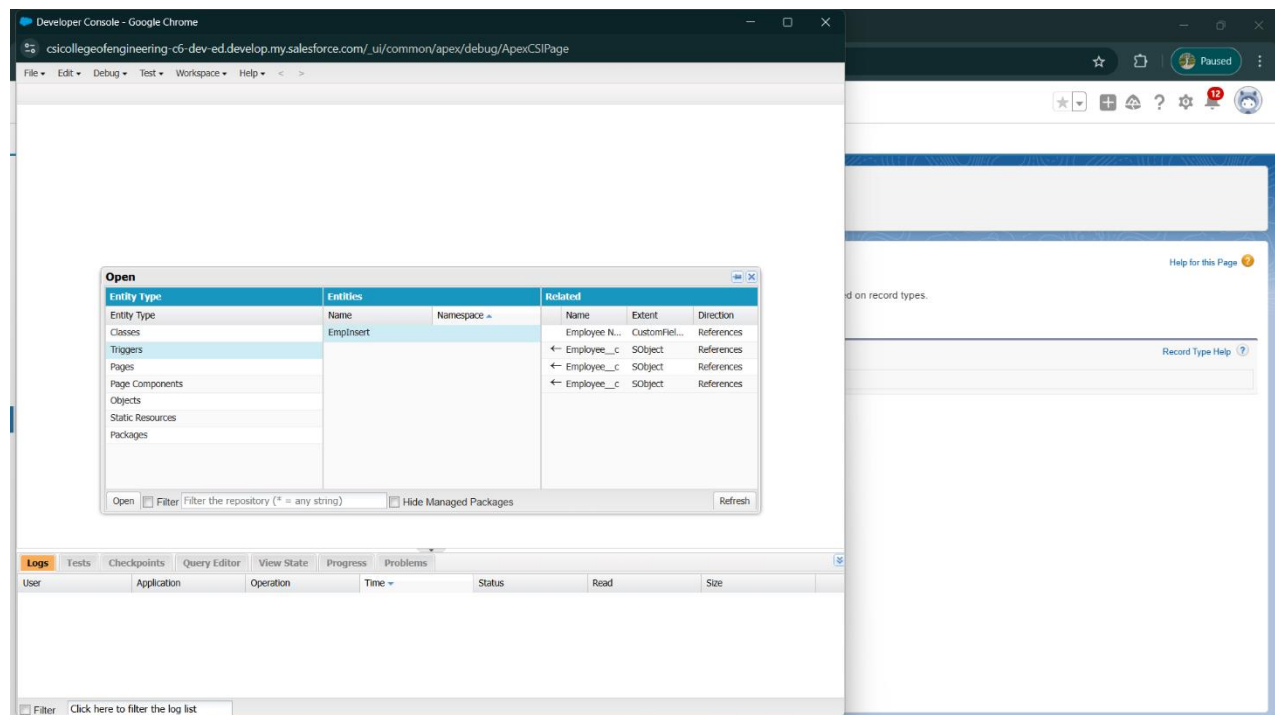


The screenshot shows the Salesforce Lightning App Builder interface. The left sidebar contains 'App Settings' with sub-items: 'App Details & Branding', 'App Options', 'Utility Items (Desktop Only)', 'Navigation Items' (selected), and 'User Profiles'. The main area is titled 'Navigation Items' and includes a description: 'Choose the items to include in the app, and arrange the order in which they appear. Users can personalize the navigation to add or move items, but users can't remove or rename the items that you add. Some navigation items are available only for phone or only for desktop. These items are dropped from the navigation bar when the app is viewed in a format that the item doesn't support.'

Below the description are two panels: 'Available Items' and 'Selected Items'. The 'Available Items' panel has a search bar with 'ass' entered, showing a dropdown with 'as', 'assuming', and 'assuming you'. The list includes: 'Asset Action Sources', 'Asset Actions', 'Asset Services', 'Asset State Periods', 'Assets', 'Assets', and 'Salesforce Scheduler Setup Assistant'. The 'Selected Items' panel shows: 'Employees', 'Projects', and 'ProjectTasks'. At the bottom are 'Cancel' and 'Save' buttons.

1. Testing and Validation

The Workforce Administration Solution developed on Salesforce addresses several key scenarios essential for efficient workforce and asset management. These scenarios demonstrate how Salesforce's features and customizations handle real-world use cases to meet the business requirements of managing employees, projects, and assets.



The screenshot shows the Salesforce Developer Console. The 'Open' dialog is open, displaying a table of entities and related items. The table has columns: 'Entity Type', 'Entities' (with sub-columns 'Name' and 'Namespace'), and 'Related' (with sub-columns 'Name', 'Extent', and 'Direction').

Entity Type	Name	Namespace	Name	Extent	Direction
Entity Type	Employee N...		Employee N...	CustomFel...	References
Classes	Employee__c		Employee__c	Subject	References
Triggers	Employee__c		Employee__c	Subject	References
Pages	Employee__c		Employee__c	Subject	References
Page Components					
Objects					
Static Resources					
Packages					

Below the table are buttons for 'Open', 'Filter: Filter the repository (* = any string)', 'Hide Managed Packages', and 'Refresh'. At the bottom, there is a 'Logs' tab with a table showing log entries.

User	Application	Operation	Time	Status	Read	Size

Home | Salesforce

Permission Sets | Salesforce

cscollegeofengineering-c6-dev-ed.develop.lightning.force.com/lightning/setup/PermSets/page?address=%2F0P5NS000003Ogrh%2Fe%3F%3DEntityPermissions%26%3D011NS0000...

Setup

Home Object Manager

Search Setup

perm

Users

Permission Set Groups

Permission Sets

Custom Code

Custom Permissions

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

SETUP Permission Sets

Permission Set
Per to Emp

Find Settings Clone Delete Edit Properties Manage Assignments View Summary

Permission Set Overview Object Settings Employees

Employees

Save Cancel

Tab Settings

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

Employee: Record Type Assignments

Record Types	Assigned Record Types
On Site Employee	<input checked="" type="checkbox"/>
Remote Site	<input type="checkbox"/>

Object Permissions

Permission Name	Enabled
Read	<input checked="" type="checkbox"/>
Create	<input checked="" type="checkbox"/>
Edit	<input type="checkbox"/>
Delete	<input type="checkbox"/>
View All	<input type="checkbox"/>
Modify All	<input type="checkbox"/>

Conclusion

The implementation of the **Workforce Administration Solution** has successfully transformed workforce and asset management for TheSmartBridge. This Salesforce-based platform centralizes data, streamlines administrative tasks, and enhances overall efficiency.

Key accomplishments include creating a robust data model with custom objects and relationships, designing a user-friendly interface, and automating key processes like approvals and notifications. Security measures, such as role-based access and organization-wide defaults, ensure data integrity and confidentiality. Additionally, real-time insights through reports and dashboards empower decision-makers with actionable information.

By integrating scalable and secure cloud technology, the solution not only addresses current operational challenges but also lays a foundation for future growth and adaptability. This project demonstrates the power of Salesforce in driving digital transformation and fostering an environment of collaboration and productivity.