# Application to make the gas filling station easy using CRM (admin)

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# Abstract

This project focuses on developing an innovative application to optimize the management of gas filling stations using a Customer Relationship Management (CRM) system tailored for administrative tasks. The application aims to streamline key operational processes, including customer engagement, sales tracking, and inventory management, enhancing overall efficiency.

By leveraging a CRM platform, administrators will have access to real-time data and analytics, enabling them to monitor fuel levels, analyze sales trends, and maintain effective customer communication. Features such as automated reporting, customer feedback management, and targeted marketing campaigns will empower station managers to make informed decisions and improve customer satisfaction.

This application not only simplifies the daily operations of gas filling stations but also fosters stronger relationships with customers, driving loyalty and increasing revenue. By integrating CRM capabilities into gas station management, this project will ultimately enhance the operational effectiveness and competitiveness of filling stations in a dynamic market.

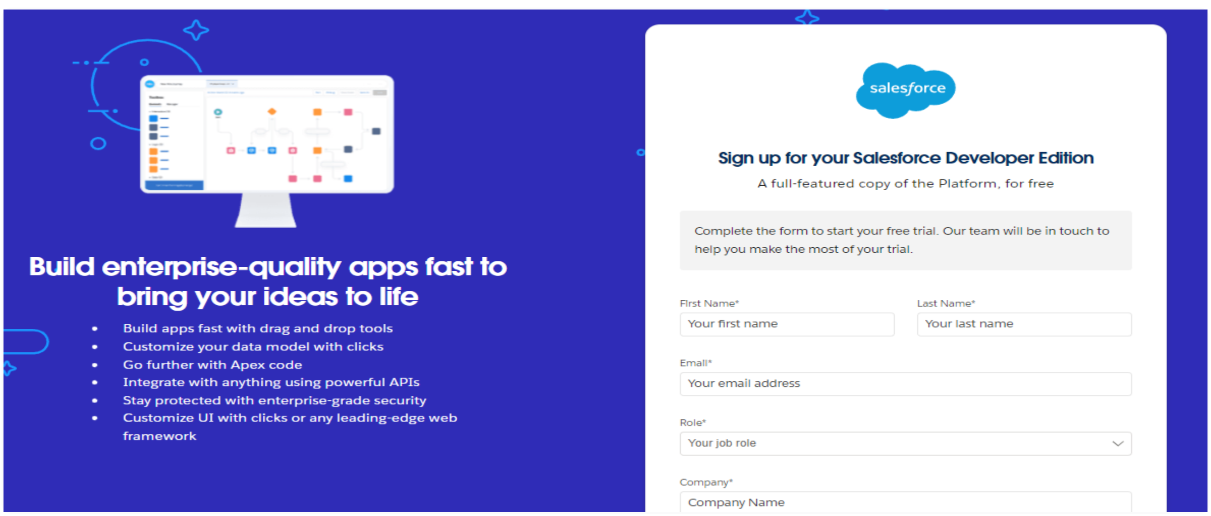
# INDEX PAGE

# Salesforce

Are you new to Salesforce? Not sure exactly what it is, or how to use it? Don't know where you should start on your learning journey? If you've answered yes to any of these questions, then you're in the right place. This module is for you. Welcome to Salesforce! Salesforce is game-changing technology, with a host of productivity-boosting features, that will help you sell smarter and faster.

**1.Creating Developer Account**

Creating a developer org in salesforce.
1. Go to https://developer.salesforce.com/signup
2. On the sign up form, enter the following details :

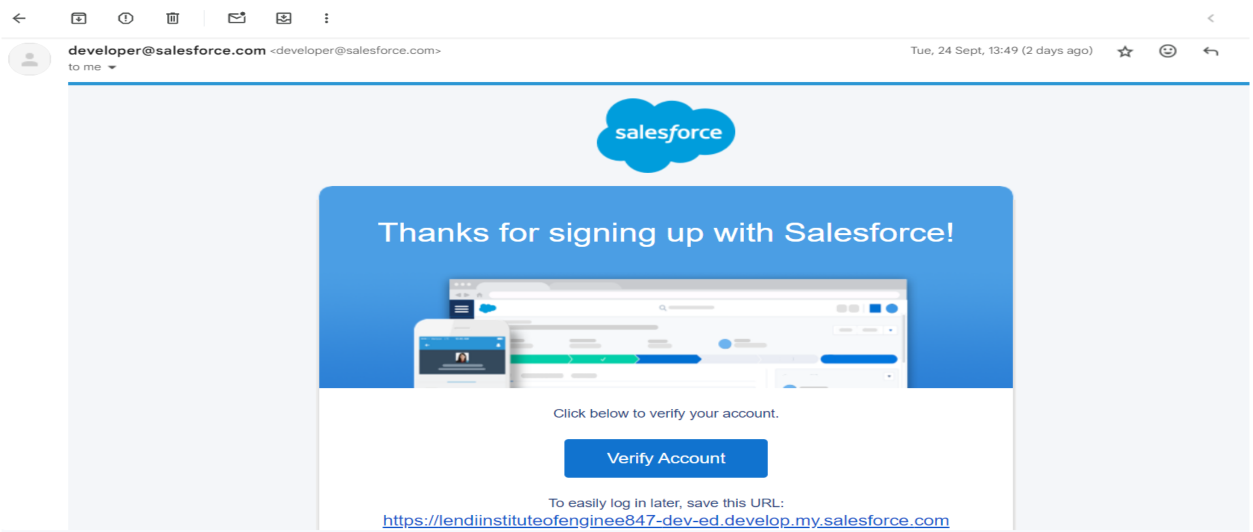



1. First name & Last name
2. Email
3. Role : Developer
4. Company : College Name
5. County : India
6. Postal Code : pin code

Username : should be a combination of your name and company

**2.Account Activation**

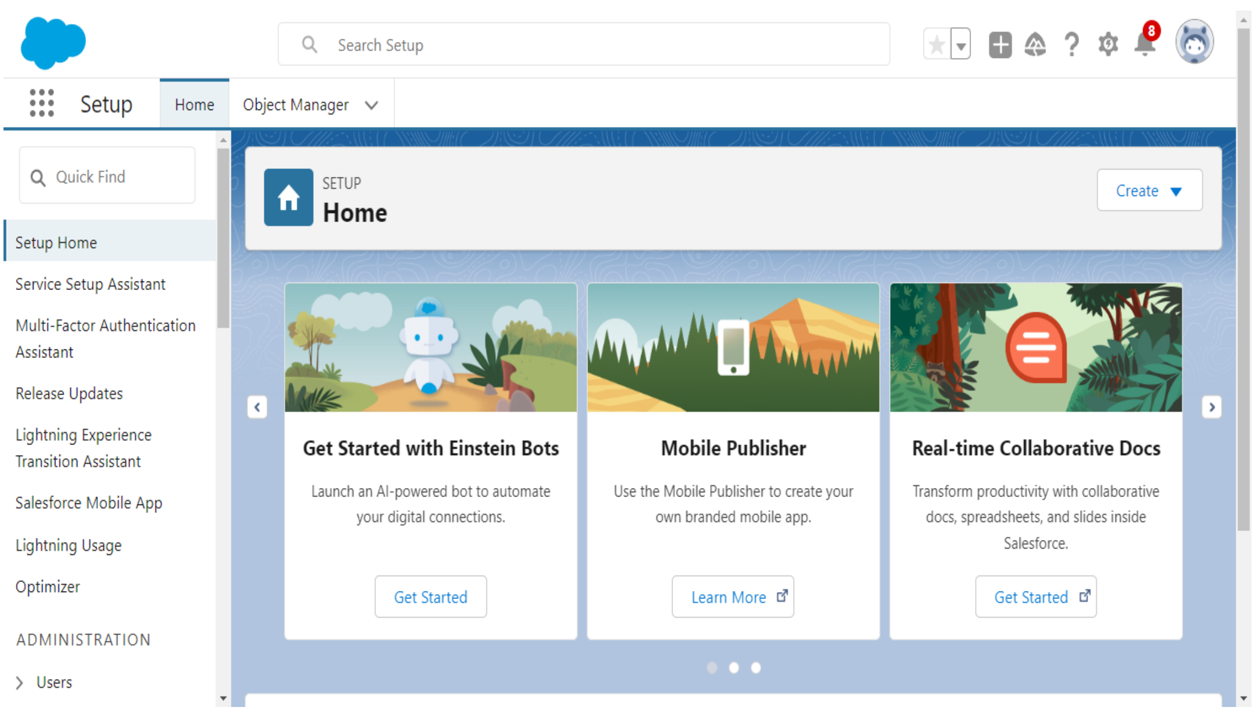
1. Go to the inbox of the email that you used while signing up. Click on the verify account to activate your account. The email may take 5-10mins.




2. Click on Verify Account

3. Give a password and answer a security question and click on change password.

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



## 2.Object

What Is an Object?
Salesforce objects are database tables that permit you to store data that is specific to an organization. What are the types of Salesforce objects

**1.Create Supplier Object**
To create an object:

1. From the setup page ? Click on Object Manager ? Click on Create ? Click on Custom Object.
   1. Enter the label name? Supplier
   2.Plural label name? Suppliers
   3.Enter Record Name Label and Format
      1.Record Name ? Supplier Name
      2.Data Type ? Name
2. Click on Allow reports and Track Field History,
3. Allow search ? Save.

## 2.Create Gas Station Object

To create an object:

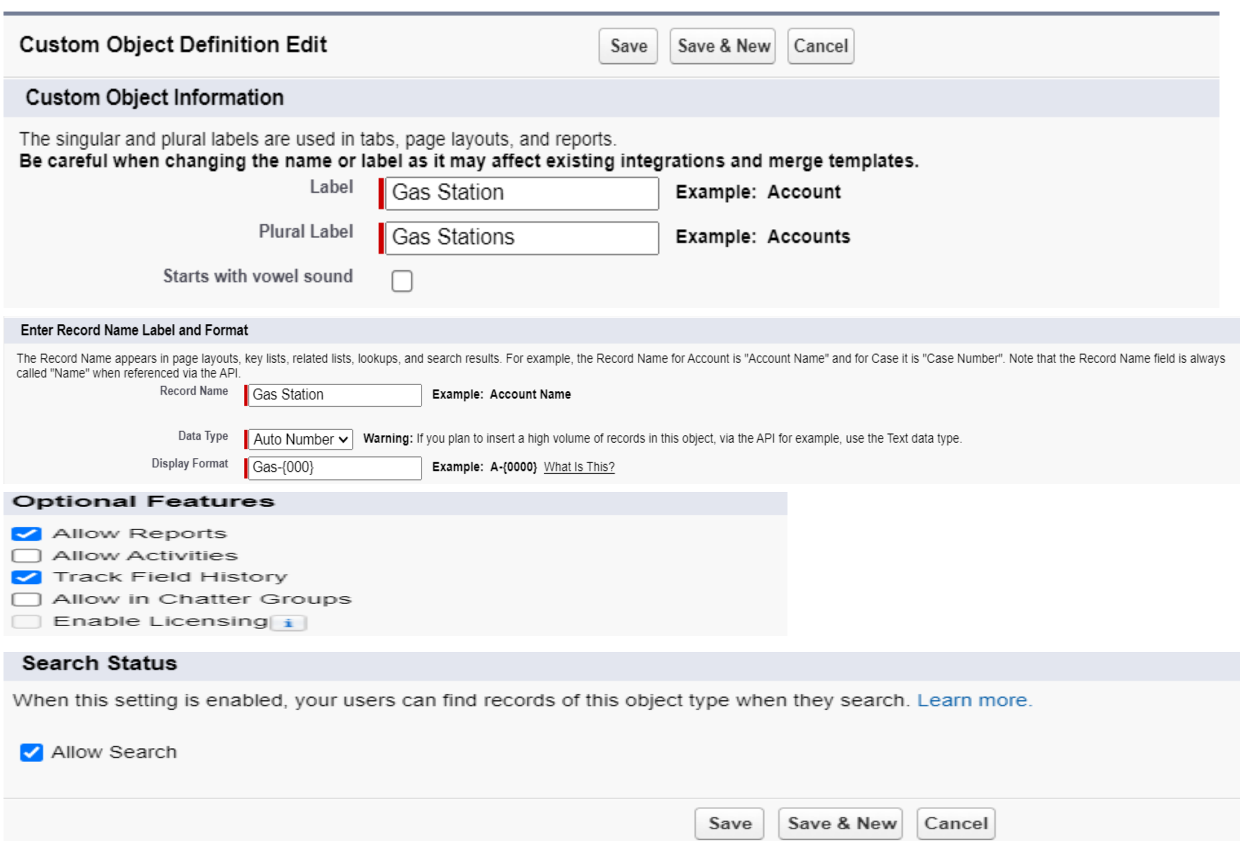
1. From the setup page ? Click on Object Manager ? Click on Create ? Click on Custom Object.

1. Enter the label name? Gas Station
2. Plural label name? Gas Stations
3. Enter Record Name Label and Format

- Record Name ? Gas Station
- Data Type ? Auto Number
- Display Format ? Gas-{000}
- Starting number ? 1

2. Click on Allow reports and Track Field History,
3. Allow search ? Save.

Gas Station

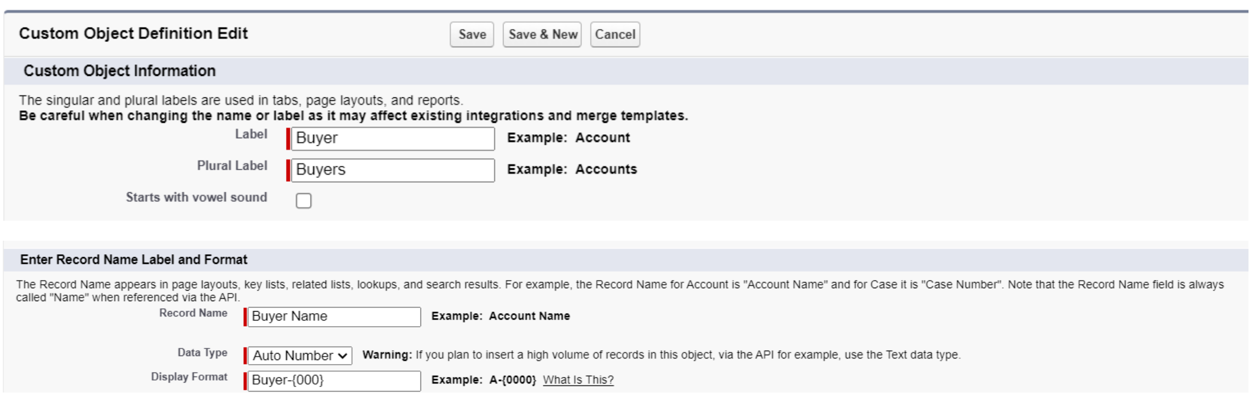


**3.Create Buyer and Fuel details Objects**

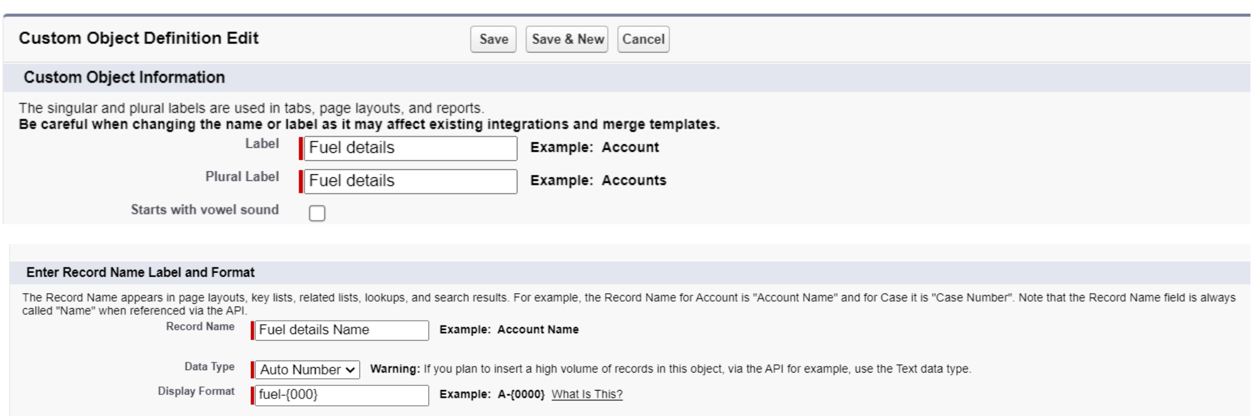
**Note:** Follow the same steps as mentioned in above for the Buyer and Receipt objects.

1. Use these display format for the Buyer
- label name ? Buyer
- Plural label name ? Buyers
- Display Format ? Buyer-{000}
- Starting number ? 1
2. Use these display format for the Fuel details
- label name ? Fuel details
- Plural label name ? Fuel details
- Display Format ? fuel-{000}
- Starting number ? 1

Buyer




Fuel details



## 3.Tabs

**What is Tab :** A tab is like a user interface that is used to build records for objects and to view the records in the objects.

**Types of Tabs:**

1.Custom Tabs
2.Web Tabs
3.Visual forcsTabs
4.Lightning Component Tabs
5.Lightning Page Tabs

### 1.Creating a Custom Tab

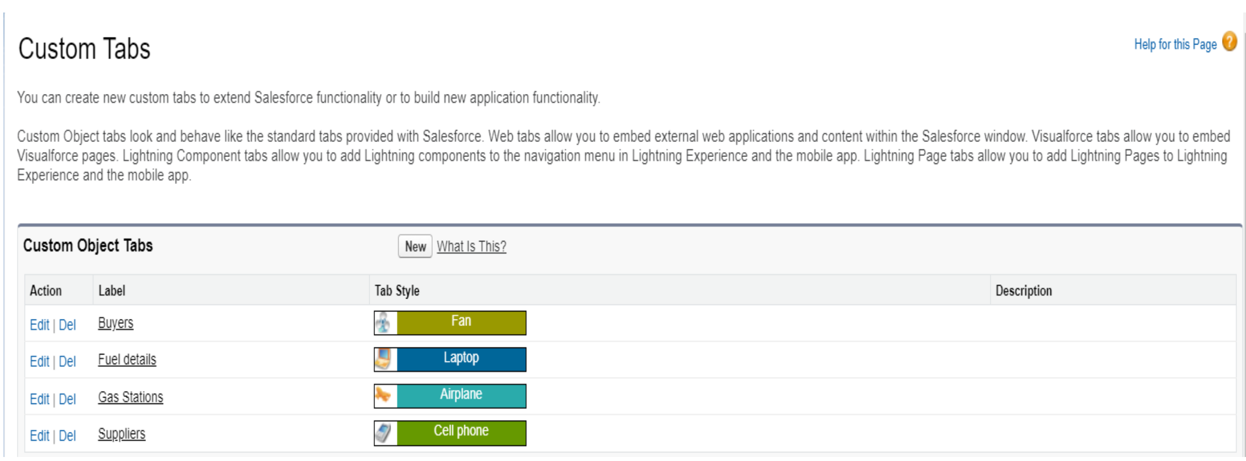
**To create a Tab:(supplier)**

1. Go to setup page ? type Tabs in Quick Find bar ? click on tabs ? New (under custom object tab)
2. Select Object(Supplier) ? Select the tab style ? Next (Add to profiles page) keep it as default ? Next (Add to Custom App) uncheck the include tab .
3. Make sure that Append tab to users' existing personal customizations is checked.
4. Click save.

## 2.Creating Remaining Tabs

1. Now create the Tabs for the remaining Objects, they are " Gas station, Buyer, Fuel details".
2. By using the above same process create the reamaining tabs


After adding all the tabs the Custom tabs shown be like in below figure



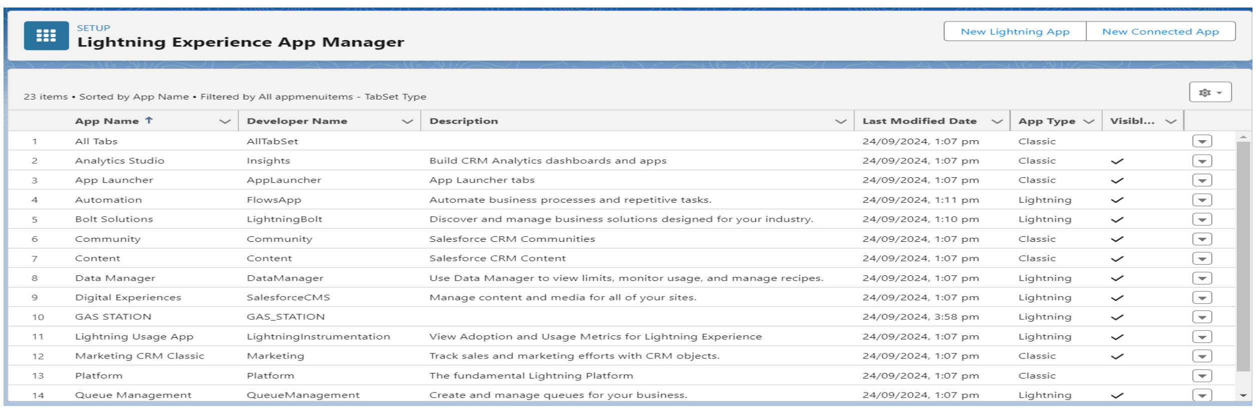
# 4.The Lightning App

An app is a collection of items that work together to serve a particular function. In Lightning Experience, Lightning apps give your users access to sets of objects, tabs, and other items all in one convenient bundle in the navigation bar.

## 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.



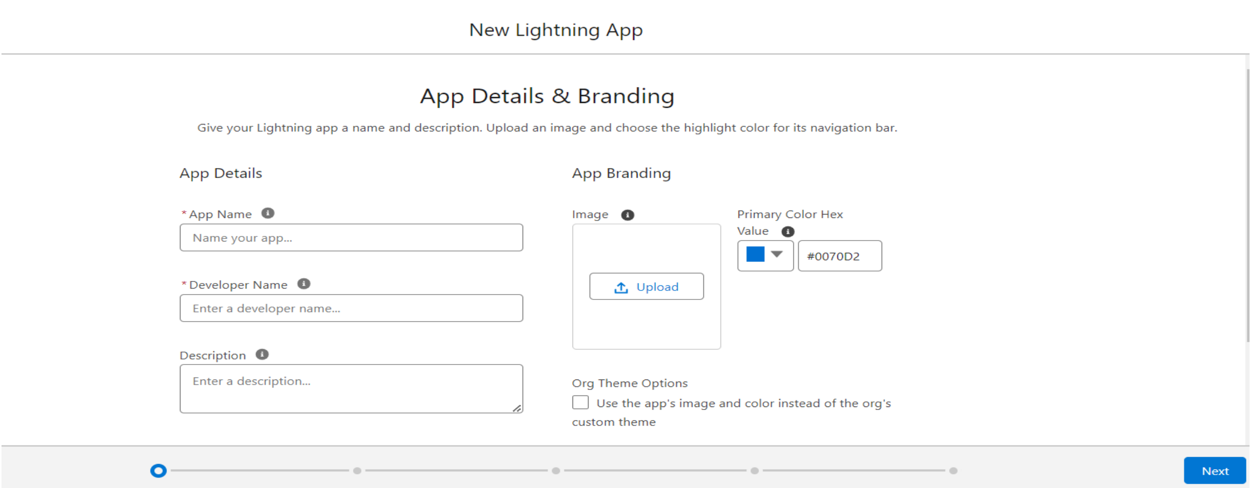
SETUP
Lightning Experience App Manager

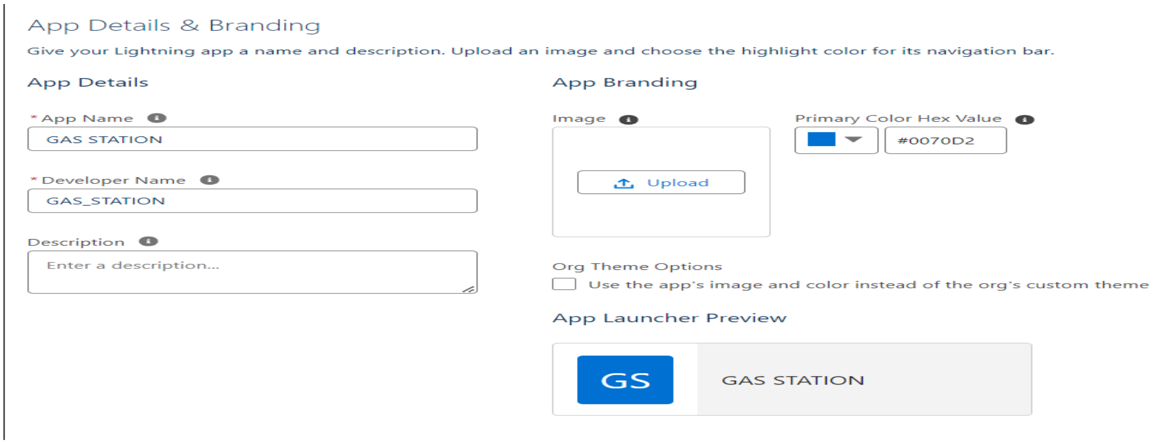
New Lightning App | New Connected App

23 items • Sorted by App Name • Filtered by All appmenuitems - TabSet Type

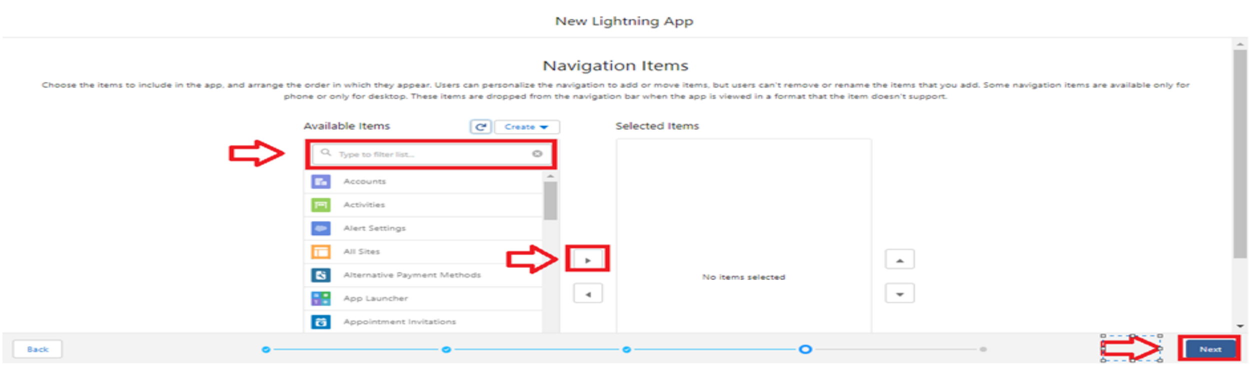
| | App Name | Developer Name | Description | Last Modified Date | App Type | Visibl... |
|---|---|---|---|---|---|---|
| 1 | All Tabs | AllTabSet | | 24/09/2024, 1:07 pm | Classic | |
| 2 | Analytics Studio | Insights | Build CRM Analytics dashboards and apps | 24/09/2024, 1:07 pm | Classic | ✓ |
| 3 | App Launcher | AppLauncher | App Launcher tabs | 24/09/2024, 1:07 pm | Classic | ✓ |
| 4 | Automation | FlowsApp | Automate business processes and repetitive tasks. | 24/09/2024, 1:11 pm | Lightning | ✓ |
| 5 | Bolt Solutions | LightningBolt | Discover and manage business solutions designed for your industry. | 24/09/2024, 1:10 pm | Lightning | ✓ |
| 6 | Community | Community | Salesforce CRM Communities | 24/09/2024, 1:07 pm | Classic | ✓ |
| 7 | Content | Content | Salesforce CRM Content | 24/09/2024, 1:07 pm | Classic | ✓ |
| 8 | Data Manager | DataManager | Use Data Manager to view limits, monitor usage, and manage recipes. | 24/09/2024, 1:07 pm | Lightning | ✓ |
| 9 | Digital Experiences | SalesforceCMS | Manage content and media for all of your sites. | 24/09/2024, 1:07 pm | Lightning | ✓ |
| 10 | GAS STATION | GAS_STATION | | 24/09/2024, 3:58 pm | Lightning | ✓ |
| 11 | Lightning Usage App | LightningInstrumentation | View Adoption and Usage Metrics for Lightning Experience | 24/09/2024, 1:07 pm | Lightning | ✓ |
| 12 | Marketing CRM Classic | Marketing | Track sales and marketing efforts with CRM objects. | 24/09/2024, 1:07 pm | Classic | ✓ |
| 13 | Platform | Platform | The fundamental Lightning Platform | 24/09/2024, 1:07 pm | Classic | |
| 14 | Queue Management | QueueManagement | Create and manage queues for your business. | 24/09/2024, 1:07 pm | Lightning | ✓ |

2.Fill the app name in app details as GAS STATION ?Next ? (App option page) keep it as default ? Next ? (Utility Items) keep it as default ? Next.



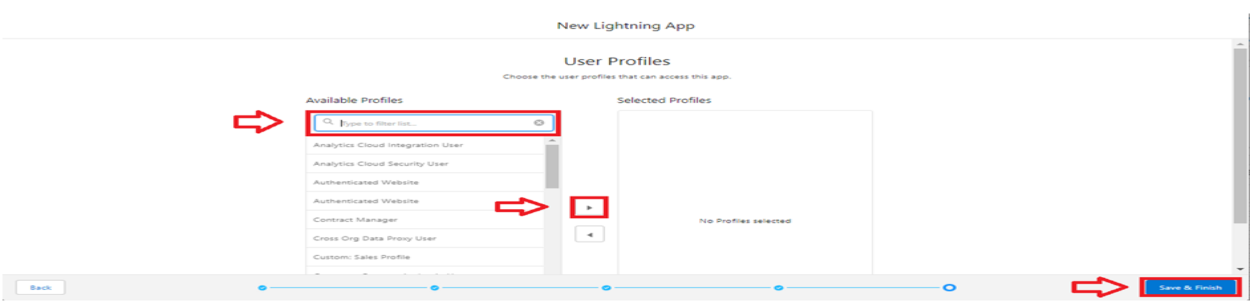



3.To Add Navigation Items:




Select the items (Supplier, Gas Station, Buyer, Receipt ) from the search bar and move it using the arrow button ? Next.

4.To Add User Profiles:




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

# 5.Fields

Types of Fields

1. Standard Fields
2. Custom Fields

## 1.Creating Junction Object

Creating junction object as Fuel details with Supplier & Gas station

To create junction object

1. Go to the setup page ? click on object manager ? From drop down click edit for Fuel details object.
2. Click on fields & relationship ? click on New.
3. Select “Master-Detail relationship” as data type and click Next.
4. Select the related object “ Supplier ” and click next.
5. Give Field Label as “Supplier Name” and click Next.
6. Next ? Next ? Save & New.
7. Follow the same steps from  1 to 3.
8. Select the related object “ Gas station ” and click Next.
9. Give Field Label as “Gas Station” and click Next.
10. Next ? Next ? Save.

## 2.Creating a Master-Detail Relationship

**Creating Master-Detail Relationship between Buyer & Gas Station Object**

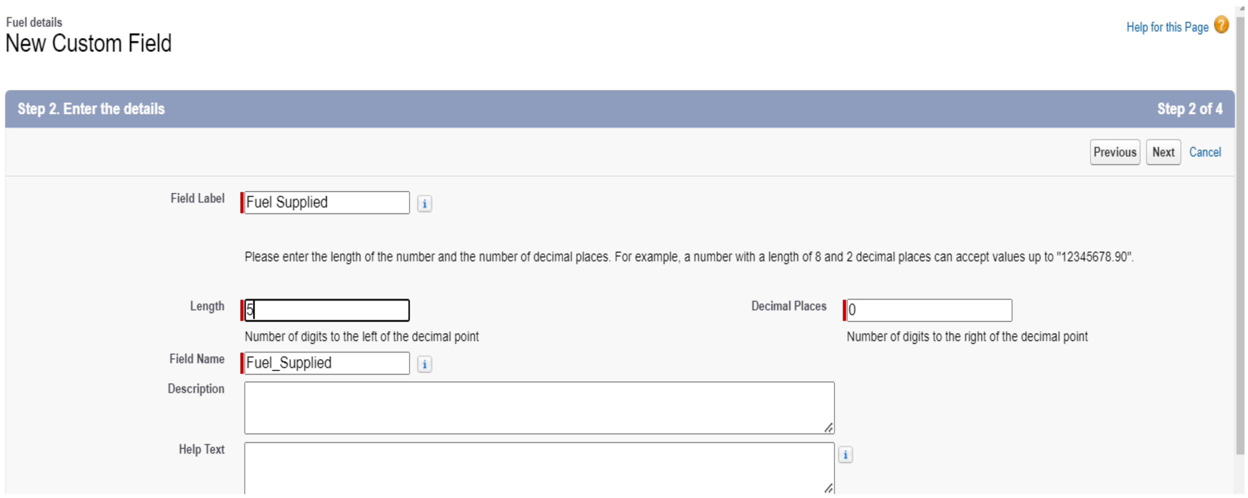
To Create a Master-Detail relationship

1. Go to the setup page ? click on object manager ? From drop down click edit for Buyer object.
2. Click on fields & relationship ? click on New.
3. Select “Master-Detail relationship” as data type and click Next.
4. Select the related object “ Gas station ”.
5. Give Field Label as “Gas Station name” and click Next.
6. Next ? Next ? Save.

## 3.Creating the number field in Fuel details object

Creating the number field in Fuel details object

1. Go to the setup page ? click on object manager ? From drop down click edit for Fuel details object.
2. Click on fields & relationship ? click on New.
3. Select Data type as “Number” and click Next.
4. Given the Field Label as “ Fuel Supplied ” and length as “ 5 ”.




5.Field Name will be auto populated, and click on Next? Next ? Save.

## 4.Creating the Roll-up Summary

**Creating the Roll-up summary field on Supplier & Gas Station Objects.**

1. Go to setup ? click on Object Manager ? type object name(Supplier) in search bar ? click on the object.
2. Now click on “Fields & Relationships” ? New
3. Select the data type as “Rollup summary ”,and click Next.
4. Give the Field label as “ sum of Fuel supplied ”,Field Name will be Auto generated, and click Next.
5. Select the summarized object as “ Fuel details ”.
6. Select the Rollup type as “sum”.
7. Select the field to aggregate as “ Fuel supplied ”, and click Next ? Next ? Save.

8. Follow the same steps for the Gas station Object from 1 to 3
9. Give the Field label as “ Fuel supplied to bunk ”,Field Name will be Auto generated, and click Next.
10. Select the summarized object as “ Fuel details ”.
11. Select the Rollup type as “sum”.
12. Select the field to aggregate as “ Fuel supplied ”, and click Next ? Next ? Save.

**Note :** create the field as “ Fuel filled in vehicle ” using number datatype in Buyer

13. Follow the same steps for the Gas station Object from 1 to 3
14. Give the Field label as “ Fuel used ”,Field Name will be Auto generated, and click Next.
15. Select the summarized object as “ Buyer”.
16. Select the Rollup type as “sum”.
17. Select the field to aggregate as “ Fuel filled in vehicle ”, and click Next ? Next ? Save.

## 5.Creating Formula Field in Gas Station Object

1. Go to setup ? click on Object Manager ? type object name(Gas station ) in search bar ? click on the object.
2. Click on fields & relationship ? click on New.
3. Select Data type as “Formula” and click Next.
4. Give Field Label and Field Name as “Fuel Available in bunk” and select formula return type as “Number” and click next.
5. Under Advanced Formula write down the formula and click “Check Syntax” and Save.
6. Insert field formula should be : Fuel_supplied_to_bunk__c - Fuel_Used__c

**7.Creating the Formula field in Buyer Object**

8. Go to setup ? click on Object Manager ? type object name(Buyer) in search bar ? click on the object.
9. Click on fields & relationship ? click on New.
10. Select Data type as “Formula” and click Next.
11. Give Field Label and Field Name as “Customer Name” and select formula return type as “TEXT” and click next.
12. Insert field formula should be : First_Name__c + ' ' + Last_Name__c
13. click “Check Syntax” and Save.

## 6.Creating Cross Object Formula Field in Buyer Object

1. Go to setup ? click on Object Manager ? type object name(Buyer) in search bar ? click on the object.
2. Click on fields & relationship ? click on New.
3. Select Data type as “Formula” and click Next.
4. Give Field Label and Field Name as “Amount Paid ” and select formula return type as “Number” and click next.
5. Insert fields formula should be :
   Fuel_filled_in_vehicle__c * Gas_Station_name__r.Fuel_price_liter__c
6. Under Advanced Formula write down the formula and click “Check Syntax” and Save.

## 7.Creating Picklist Field in Buyer Object

1. Go to setup ? click on Object Manager ? type object name(Buyer) in search bar ? click on the object.
2. Click on fields & relationship ? click on New.
3. Select Data type as “Picklist” and click Next.
4. Enter Field Label as “Vehicle type”, under values select “Enter values, with each value separated by a new line" and enter values as shown below.
5. The values are: two wheeler, three wheeler, four wheeler, six wheeler, eight wheeler and Others.
6. Click Next.
7. Next ? Next ? Save & New.
8. Repeat the process 1 and 2 steps .
9. Enter Field Label as “Mode of payment”, under values select “Enter values, with each value separated by a new line" and enter values as shown below.
10. The values are : credit card, debit card, net banking, upi, cash.
11. Click Next.
12. Next ? Next ? Save & New.

## 8.Creating the validation rule

1. Go to the setup page ? click on object manager ? From drop down click edit for Buyer object.
2. Click on the validation rule ? click New.

3. Enter the Rule name as “Phone ”.
4. Insert the Error Condition Formula as : -
   NOT(REGEX( Phone_Number__c , "[6-9]{1}[0-9]{9}")).
5. Enter the Error Message as “ incorrect data”, select the Error location as Field and select the field as “phone number”, and click Save.

## 9.Creating Remaining Fields in Objects

### Creating Remaining Fields In Objects

| s.no | Object name | Field Name | Data type |
|---|---|---|---|
| 1 | Fuel details | Fuel supplied | number |
| | | Supplier name | Master details |
| | | Gas station | Master details |
| 2 | Supplier | Sum of fuel supplied | Rollup summary (Fuel detail object) |
| 3 | Gas station | Fuel supplied to bunk | Rollup summary (Fuel detail object) |
| | | Fuel Price/litre | Number (length = 5) |
| 4 | Buyer | First name | Text |
| | | Last name | Text |
| | | Customer name | Formula |
| | | Phone number | phone |
| | | email | email |
| | | Fuel filled in vehicle | Number (length = 5) |
| | | Vehicle type | picklist values<br>• Two wheeler<br>• Three wheeler<br>• Four wheeler<br>• Six wheeler<br>• Eight wheeler<br>• others |
| | | Mode of payment | Picklist values<br>• Credit card<br>• Debit card<br>• Net banking<br>• UPI<br>• Cash |
| | | Amount paid | Formula |

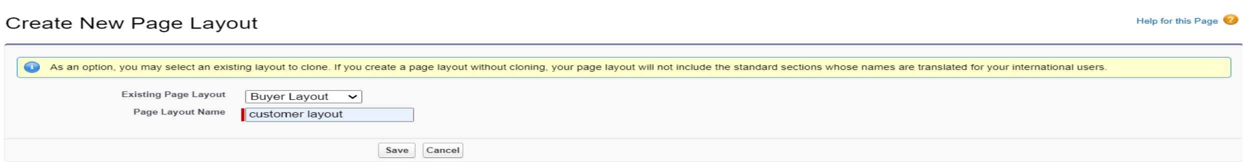
Check once if all remaining fields in objects are created or not.

# 6.Page layouts

## creating the page layout

### To Create a Page layout:

1. Go to Setup ? Click on Object Manager ? Search for the object (Buyer) ? From drop down select the object and click on it.
2. Click on Page layout ? Click on New.
3. Select the existing page layout, and give the page layout name as “customer layout”, and click save.




4. Drag and drop the section field to Buyer details and create the section.
5. Enter the section name as “Persoanl details”, ? click Ok.


6. Now drag the fields to this section that mentioned , they are

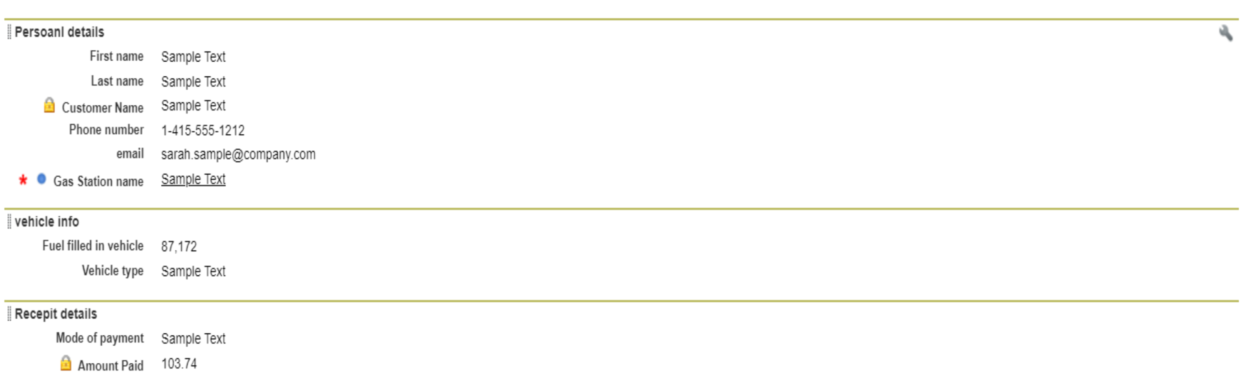
- First name , last name , customer name , phone number, email, Gas station name.

7. Follow the same process for another two sections as shown above , they are
8. One section is “ vehicle info ” , drag the fields that are

- Fuel filled in vehicle, vehicle type.

9. Another section is “Recepit details ”, and drag the fields that are

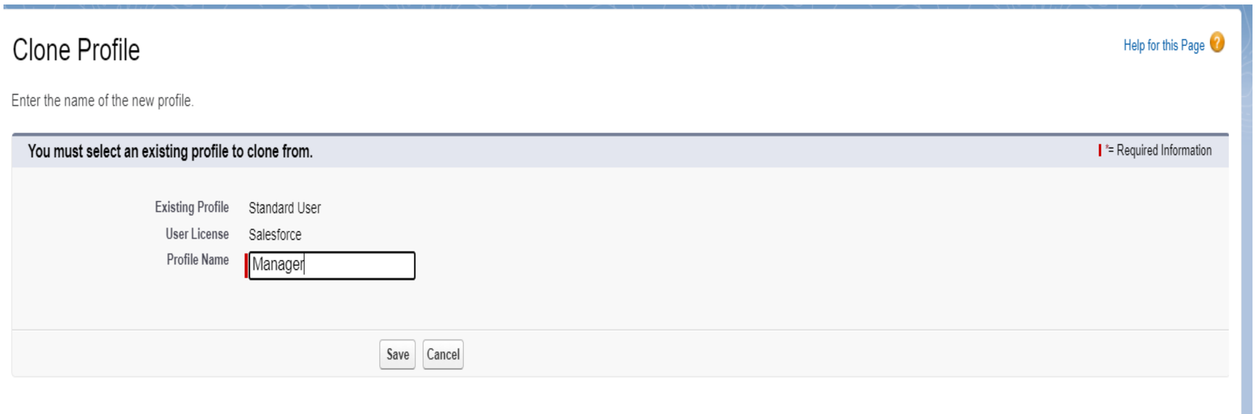
- Mode of payment , Amount paid.



# 7.Profiles

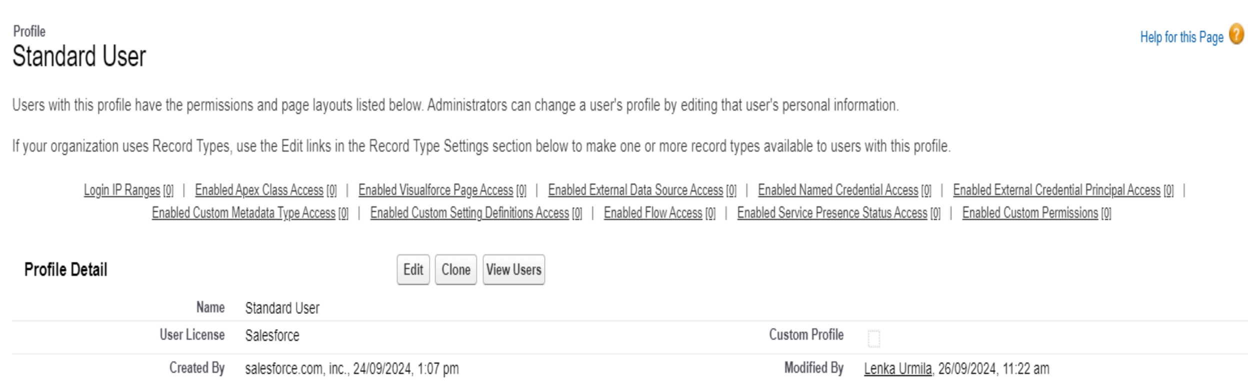
## 1.To create a new profile:

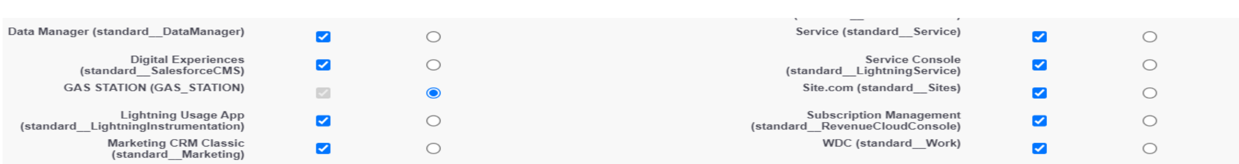
1. Go to setup ? type profiles in quick find box ? click on profiles ? clone the desired profile (Standard User) ? enter profile name (Manager) ? Save.




2.While still on the profile page, then click Edit.

3.Select the Custom App settings as default for the Gas station.




4.Scroll down to Custom Object Permissions and Give access permissions for Buyers, Fuel details , gas station and suppliers objects as mentioned in the below diagram.

5.Change the session times out after should be “ 8 hours of inactivity”.

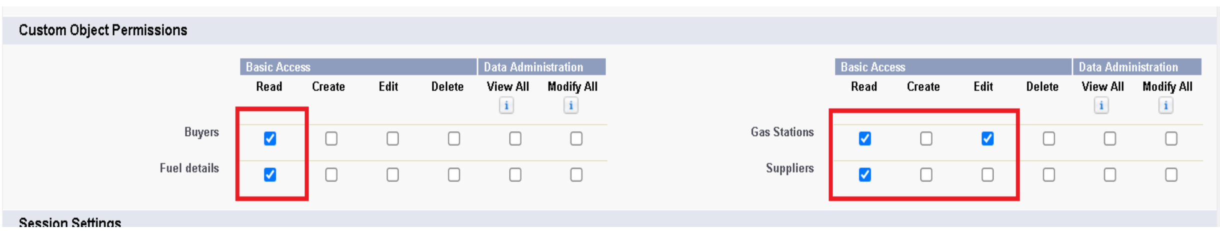
6.Change the password policies as mentioned :

7.User passwords expire in should be “ never expires ”.

8.Minimum password length should be “ 8 ”, and click save.

## 2.sales executive Profile

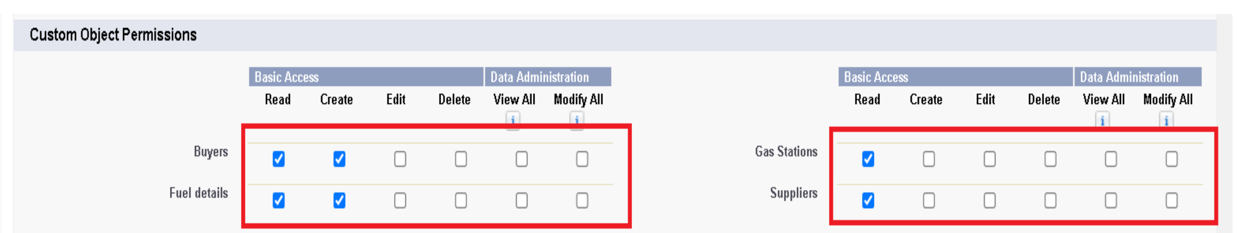
1. Go to setup ? type profiles in quick find box ? click on profiles ? clone the desired profile (Salesforce Platform User) ? enter profile name (sales executive) ? Save.
2. While still on the profile page, then click Edit.
3. Select the Custom App settings as default for the Gas station.
4. Scroll down to Custom Object Permissions and Give access permissions for Buyers, Fuel details , gas station and suppliers objects as mentioned in the below diagram.




5.And click save.

## 3.sales person Profile

1. Go to setup ? type profiles in quick find box ? click on profiles ? clone the desired profile (Salesforce Platform User) ? enter profile name (sales person) ? Save.
2. While still on the profile page, then click Edit.
3. Select the Custom App settings as default for the Gas station.
4. Scroll down to Custom Object Permissions and Give access permissions for Buyers, Fuel details , gas station and suppliers objects as mentioned in the below diagram.



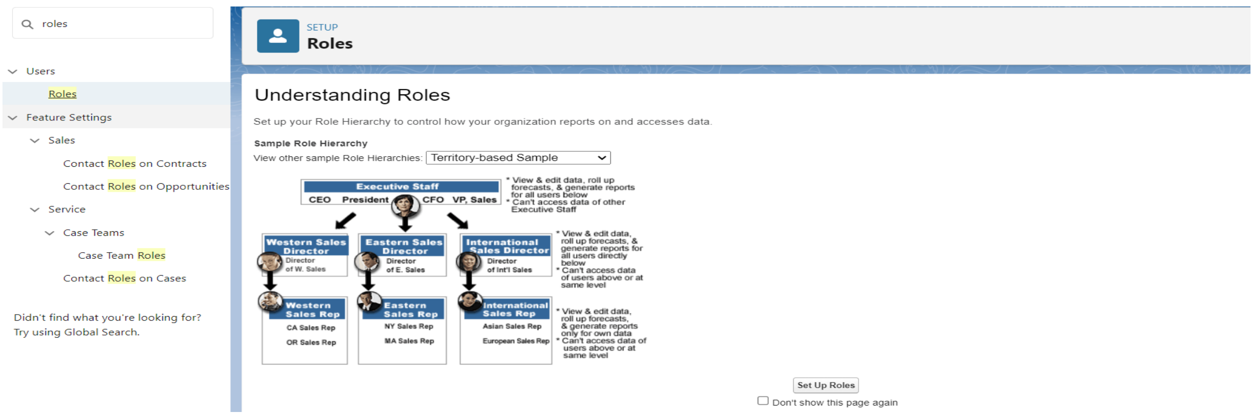

5. And click save.

# 8.Role & Role Hierarchy

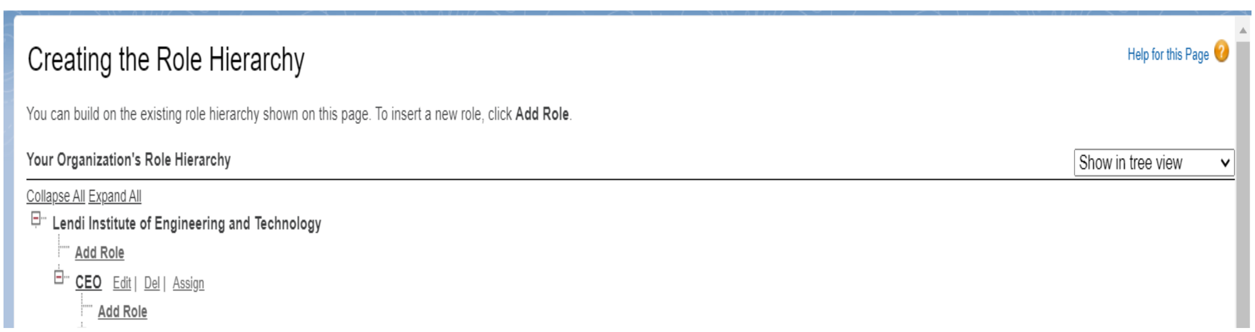
## 1.Creating Manager Role

Creating Manager Role:

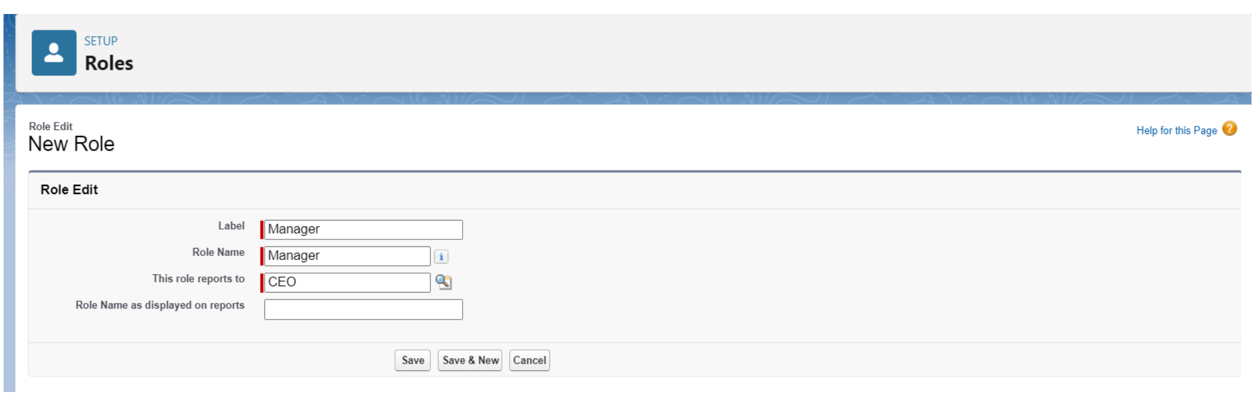
1. Go to quick find ? Search for Roles ? click on set up roles.




2. Click on Expand All and click on add role under whom this role works.



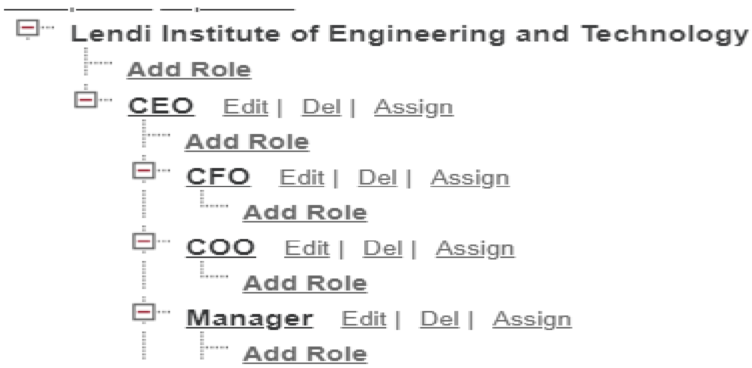

3.Give Label as “Manager” and Role name gets auto populated. Then click on Save.



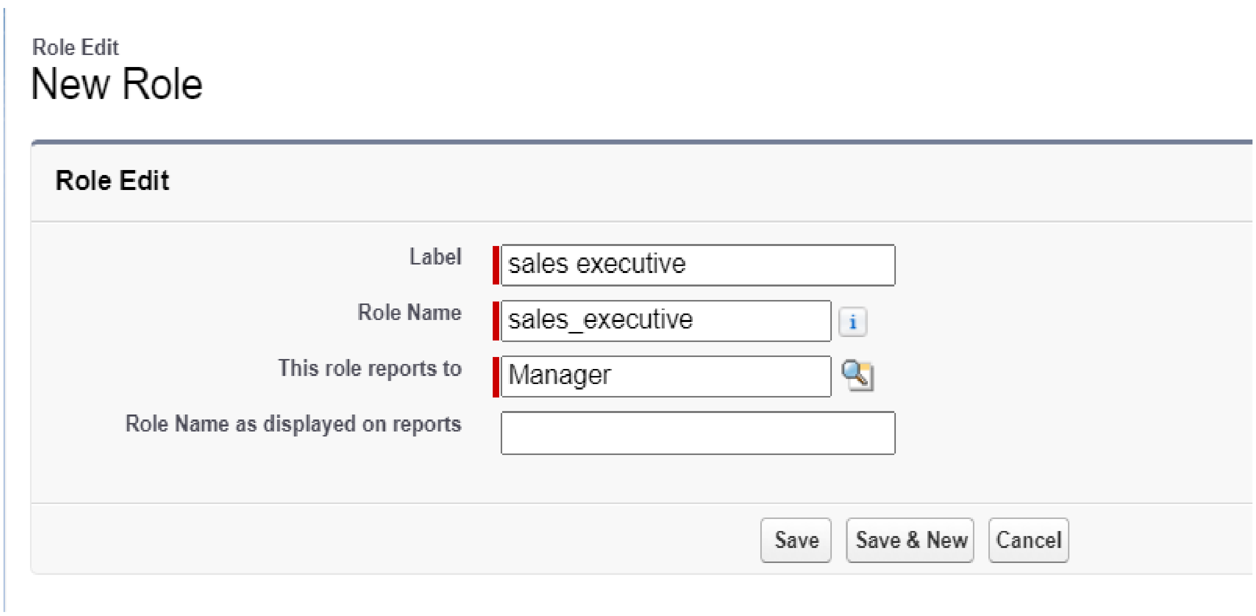
## 2.Creating another roles

Creating another two roles under manager

1. Go to quick find ? Search for Roles ? click on set up roles.
2. Click plus on CEO role, and click add role under manager.




3. Give Label as “sales executive” and Role name gets auto populated. Then click on Save.




4.Repeat the same steps,another role.

5.Click plus on CEO role, and click plus on manager, and click add role under sales

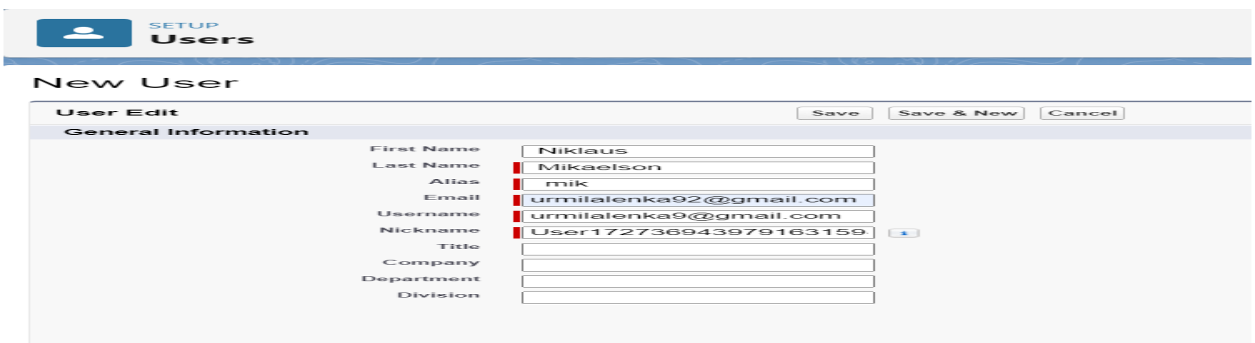
6.give Label as “sales person” and Role name gets auto populated.

7.click on save.

# 9.Users

## 1.Create User

1. Go to setup ? type users in quick find box ? select users ? click New user.
2. Fill in the fields
1. First Name : Niklaus
2. Last Name : Mikaelson
3. Alias : Give a Alias Name
4. Email id : Give your Personal Email id
5. Username : Username should be in this form: text@text.text
6. Nick Name : Give a Nickname
7. Role : Manager
8. User licence : Salesforce
9. Profiles : Manager

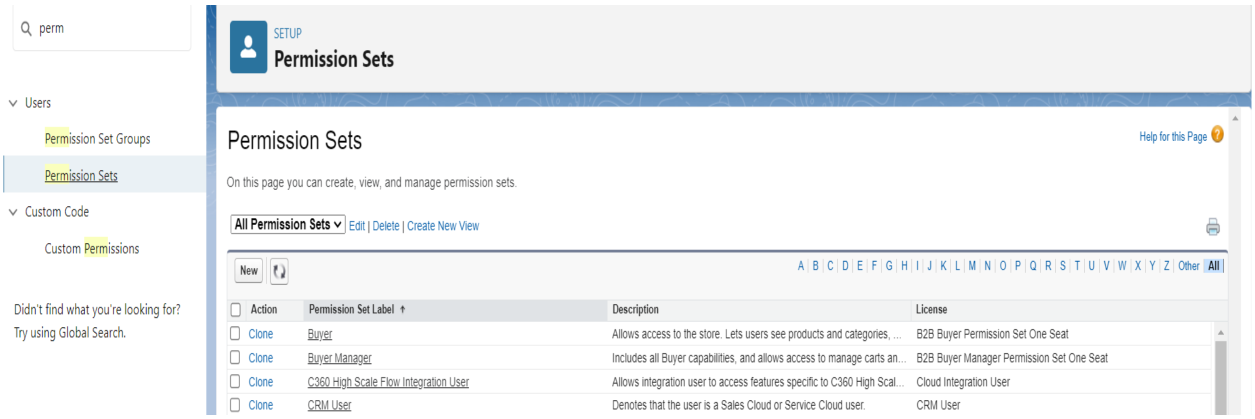



## 2.creating another users

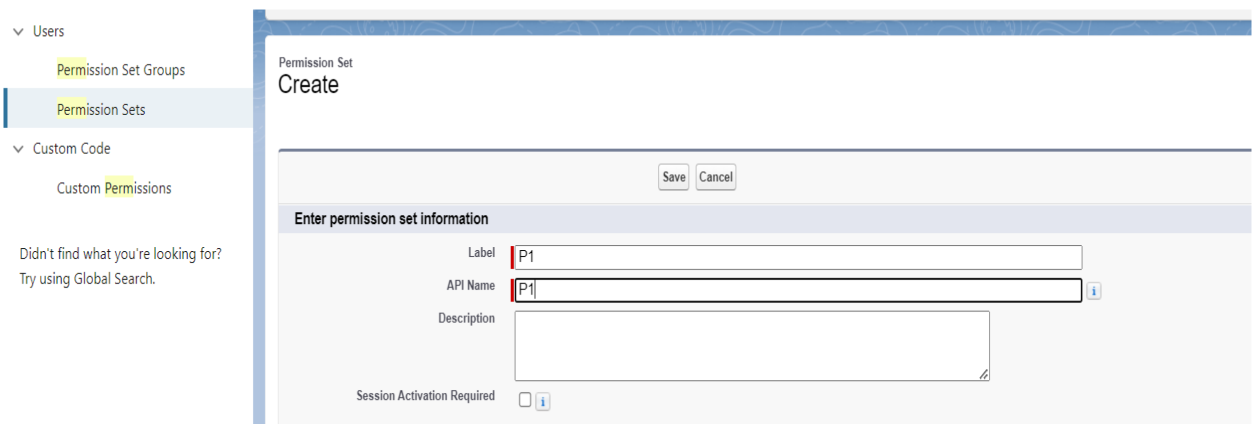
1. Follow the same steps from above activity and create another user using
    1. Role : sales executive
    2. User licence : Salesforce Platform
    3. Profile : sales executive
2. Repeat the steps and create another user using
    1. Role : sales person
    2. User licence : Salesforce Platform
    3. Profile : sales person

# 10.Permission sets

1. Go to setup ? type “permission sets” in quick search ? select permission sets ? New.




2. Enter the label name as “P1”, API will be auto populated ? save.

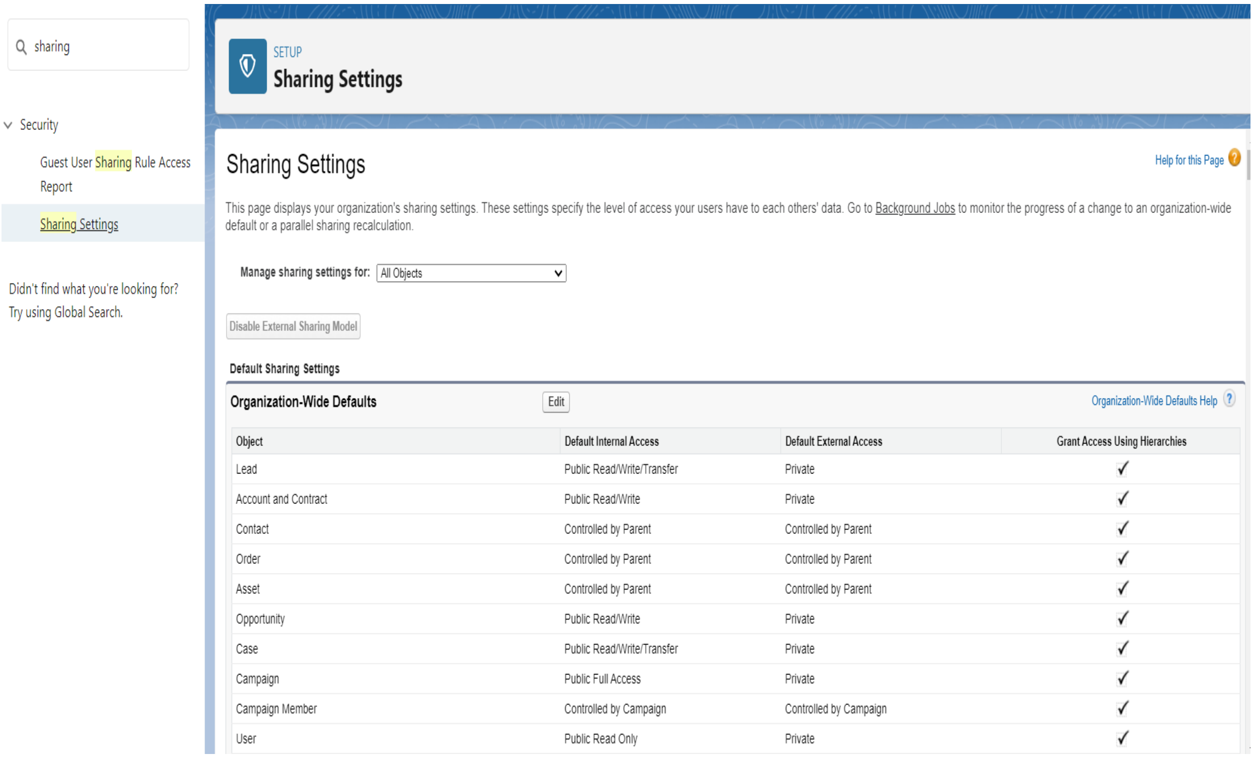



3. Under Apps Select object settings.
4. Click on Fuel details object ? click on Edit ? under object permission check for read and create.
5. Click on Save.
6. After saving the permission click on the Manage assignment
7. Now click on the Add Assignment.
8. Now select the users which you have created in user milestone, using  sales executive profile and click on Next ? Assign? Done.

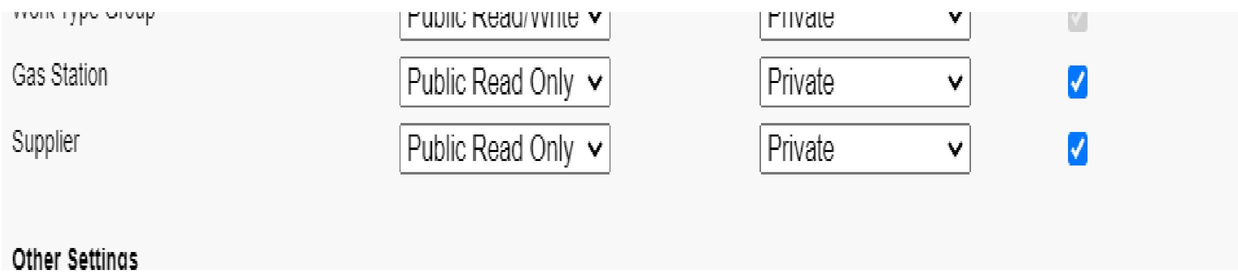
# 11.Setup For OWD

## Create OWD Setting

1.Go to setup ? type “sharing settings ” in quick search ? Click edit.




2.Scroll down, change the default internal access to “ public read-only” for Gas station and Supplier object.




3.Click save.

4.Extra information, By these every profile has their own access, according to their profile.

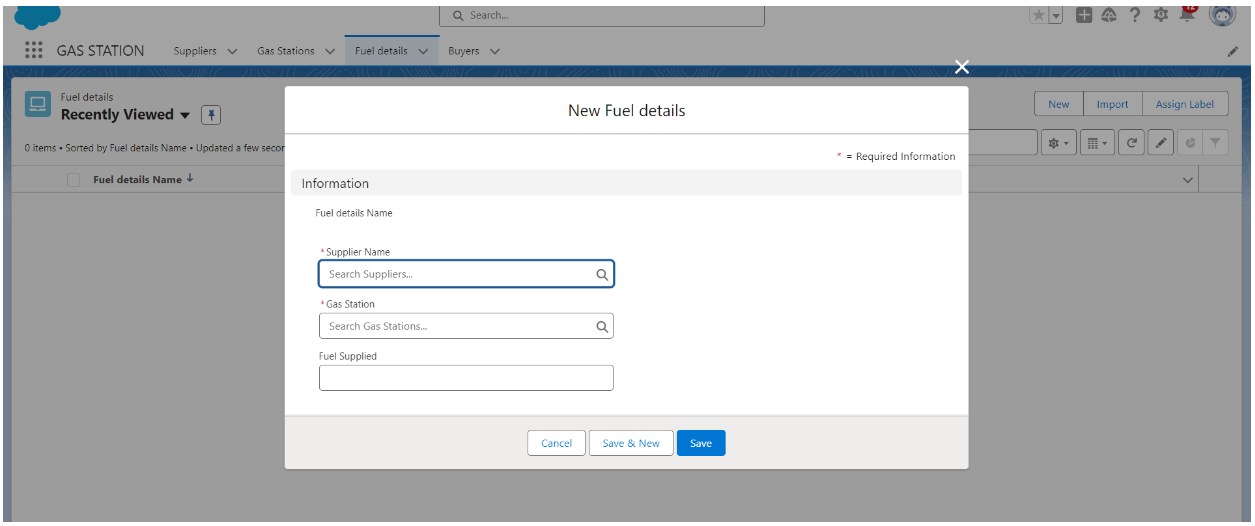
5.But in our case we created a roles and given the roles in such a way that manager can see sales executive and sales person records , sales executive can see the sales person records.

# 12.User Adoption

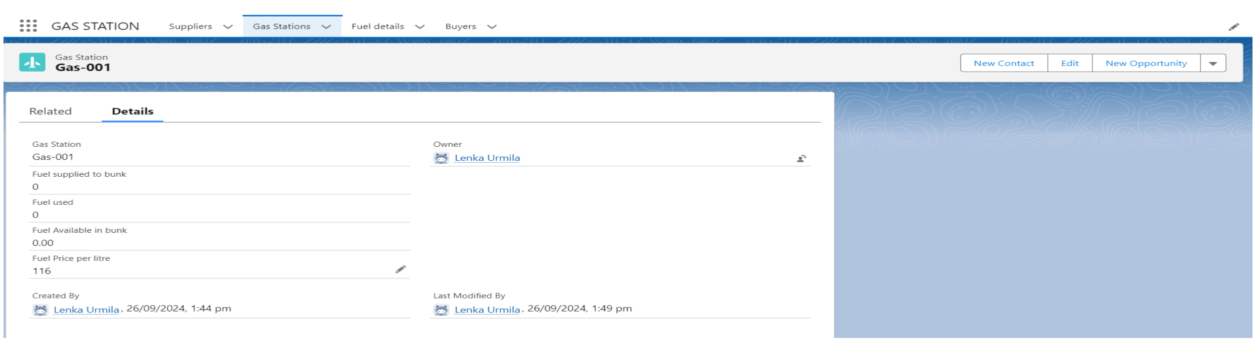
## 1.create a record

To create a record in junction object follow these steps

1. Click on the app launcher locate at left side of the screen.
2. Search for “ Gas station” and click on it.
3. Click on “ fuel details tab”.
4. Click on new and fill the details as shown below figs, and click save.



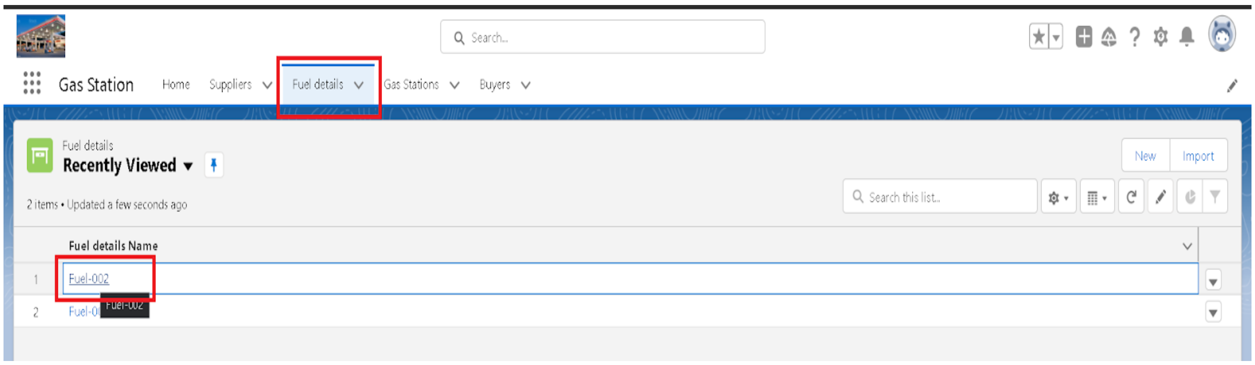

5. Creating the supplier record in fuel detail record, by clicking the “ new supplier ”.
6. Fill the details in supplier record and click on save.
7. Creating the Gas station record in fuel details record, by clicking on new gas station.
8. Fill the details in gas station record, Click save.
9. Fill the remaining details in fuel detail record , and click save.
10. Followed by these create 10 more records in Buyer object.

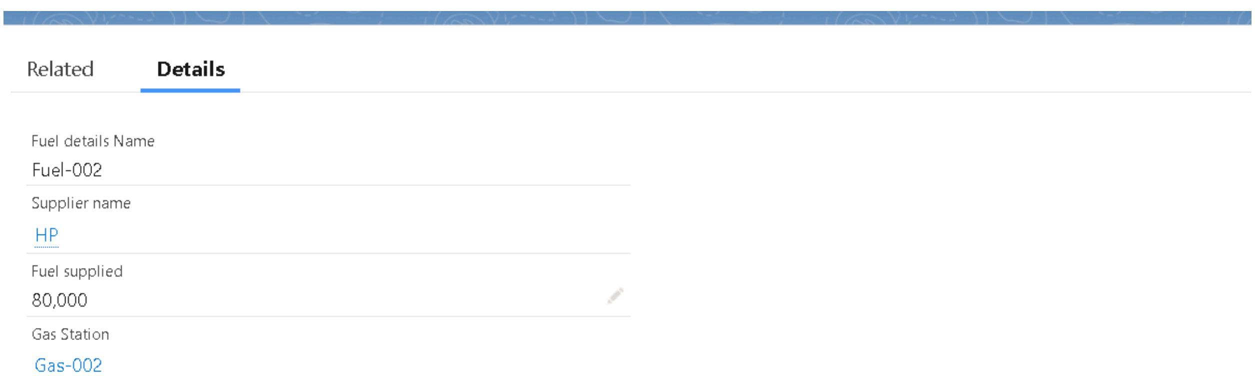


## 2.View a record

To create a record in junction object follow these steps

1. Click on the app launcher locate at left side of the screen.
2. Search for “ Gas station” and click on it.
3. Click on “ fuel details tab”.
4. Click on the records that are already created.




## 3.Delete a record

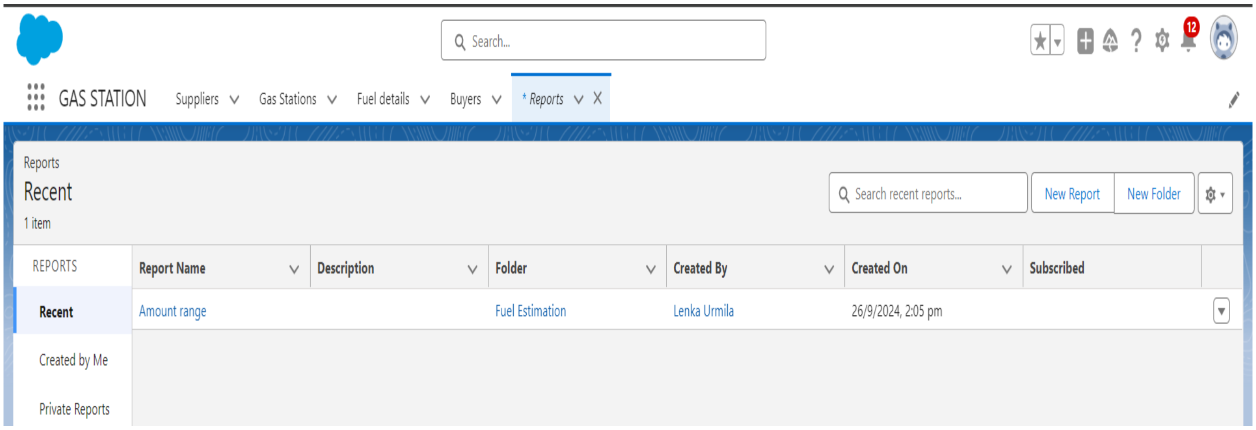
To create a record in junction object follow these steps

1. Click on the app launcher locate at left side of the screen.
2. Search for “ Gas station” and click on it.
3. Click on “ fuel details tab”.
4. Click on Arrow at right hand side on that Particular record.
5. Click delete and delete again.

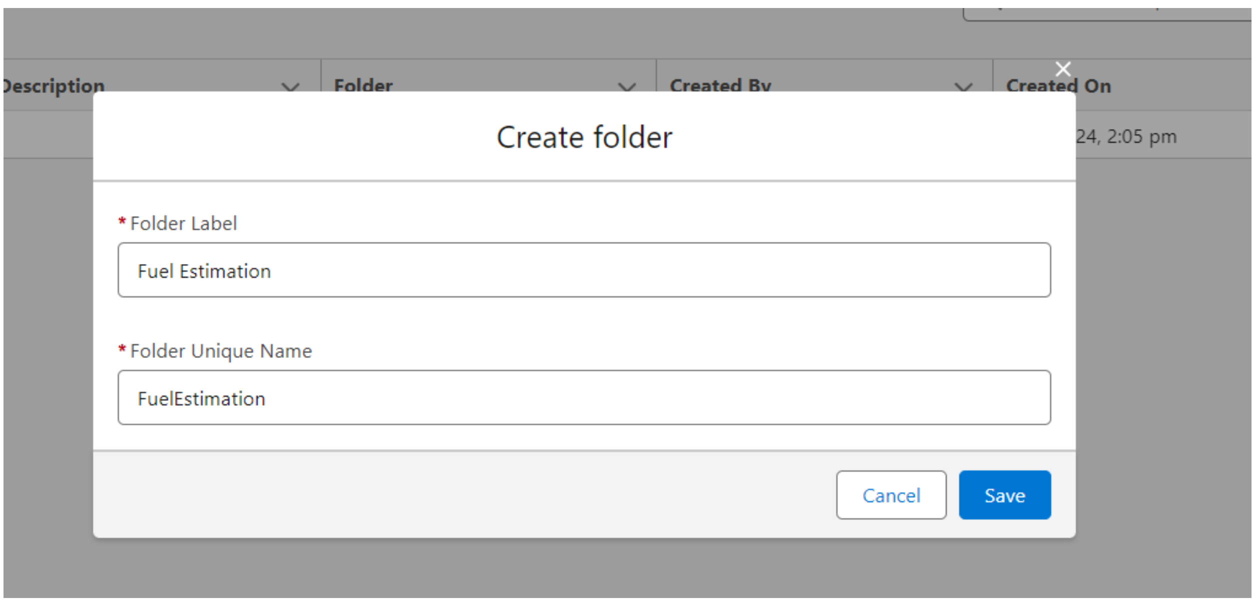
# 13.Reports

## create a report folder

1. Click on the app launcher and search for reports.
2. Double click on the report,  “ reports tab” will be autopopulated in navigation bar.
3. Click on the report tab, click on new folder.



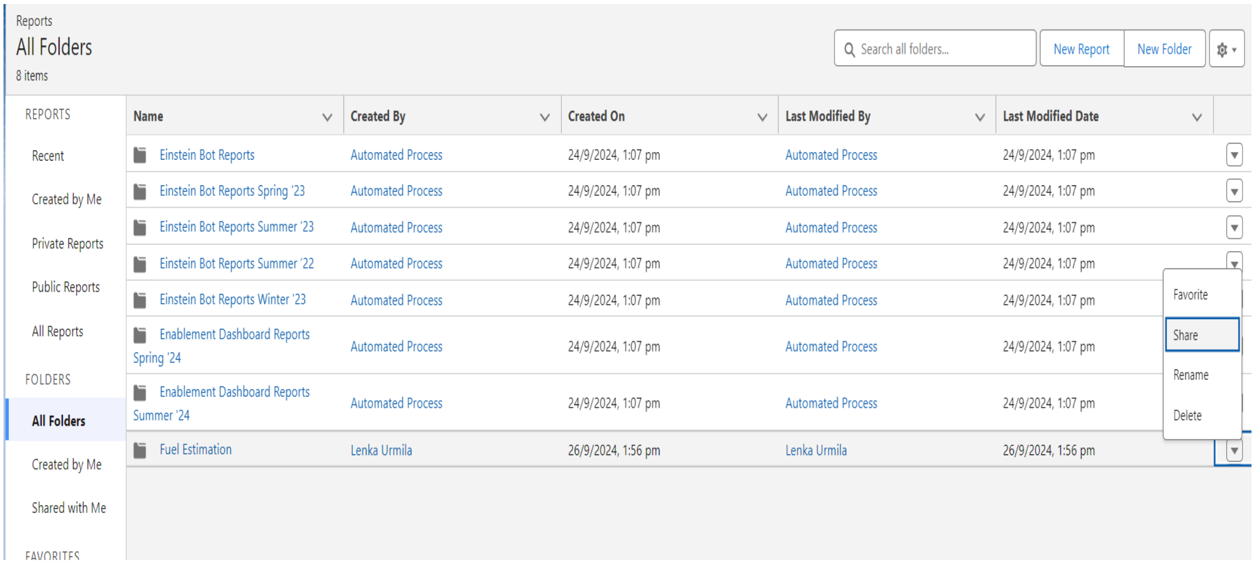

4. Give the Folder label as “Fuel Estimation ”, Folder unique name will be auto populated.



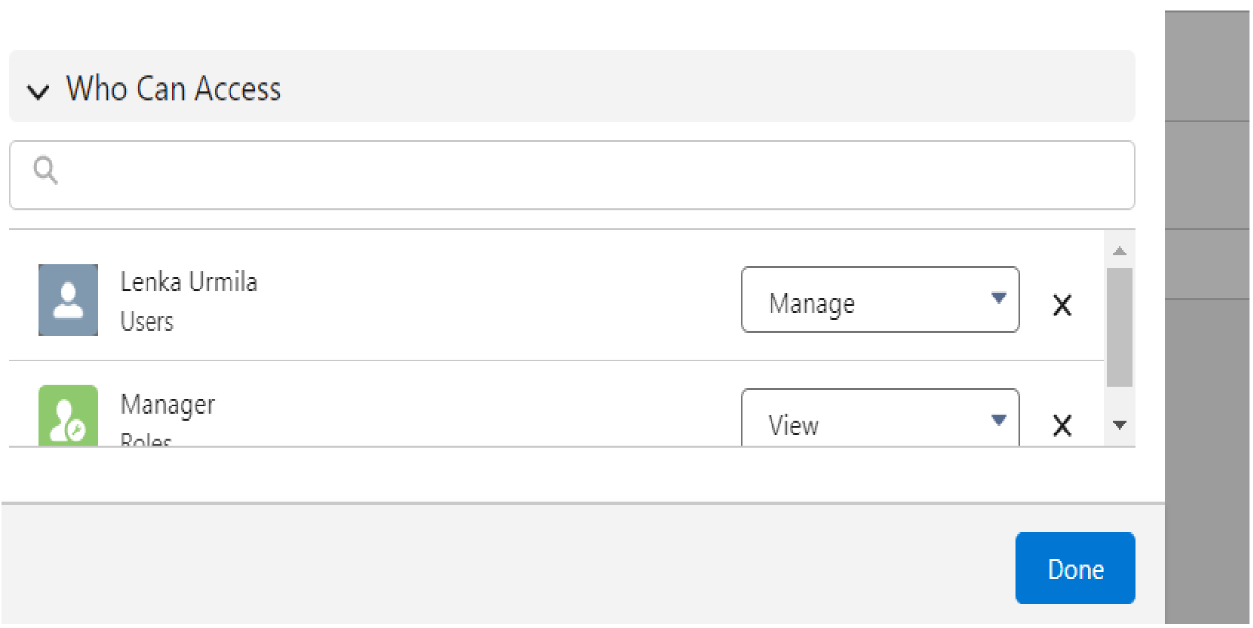

5. Click save.

## 2.Sharing a report folder

1. Go to the app ? click on the reports tab.
2. Click on the All folder , click on the arrow for Fuel estimation folder, and Click on share.




3. Select the share with as “roles”, in name field search for “manager”, give “view” as access for that role.
4. Then click share, and click on Done.



## 3.Create Report

Note : Before creating report, create latest “10” records in buyer object.

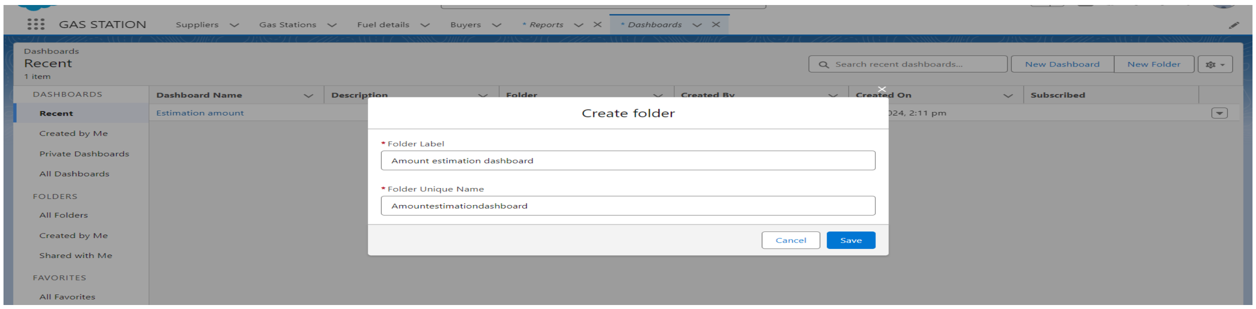
Try to fill every field in each record for better experience.

1. Go to the app ? click on the reports tab
2. Click New Report.
3. select for report type, search for “Gas station with buyers” click on it. And click on start report.
4. Their outline pane is opened alredy, select the fields that mentioned below in column section.
    1. Fuel filled in vehicle
    2. Amount paid
5. Remove the unnecessary fields.
6. Select the fields that mentioned below in GROUP ROWS section.
    1. Fuel Available in bunk
    2. Customer name
7. Click on conditional formatting located at the bottom of the preview pane.
8. Click on add conditional formatting rule.
9. Change the apply conditional formatting to “ sum of Amount paid ”.
10. Mention the range form “ 1000 to 5000 ”.
11. Dont change the colours, and click on Done.
12. Click apply.
13. Click save, give the report name as “Amount range”, report unique name will be auto populated.
14. Click on select folder, select “ Fuel estimation” , click select folder
15. Click save.
16. Click save & run , then the preview will be shown below.

# 14.Dashboards

## 1.Create Dashboard Folder

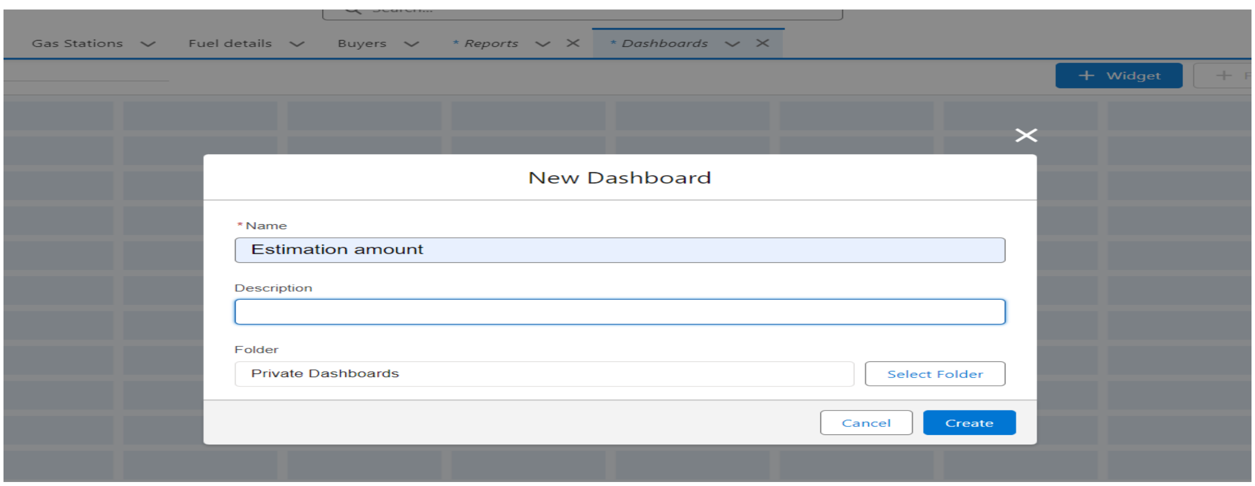
1. Click on the app launcher and search for dashboard.
2. Click on dashboard tab.
3. Click new folder, give the folder label as “ Amount estimation dashboard”.
4. Folder unique name will be auto populated.
5. Click save




Follow the same steps, and provide the sharing settings for the folder that just created.

## 2.Create Dashboard

1. Go to the app ? click on the Dashboards tabs.
2. Give a Name and select the folder that created, and click on create.



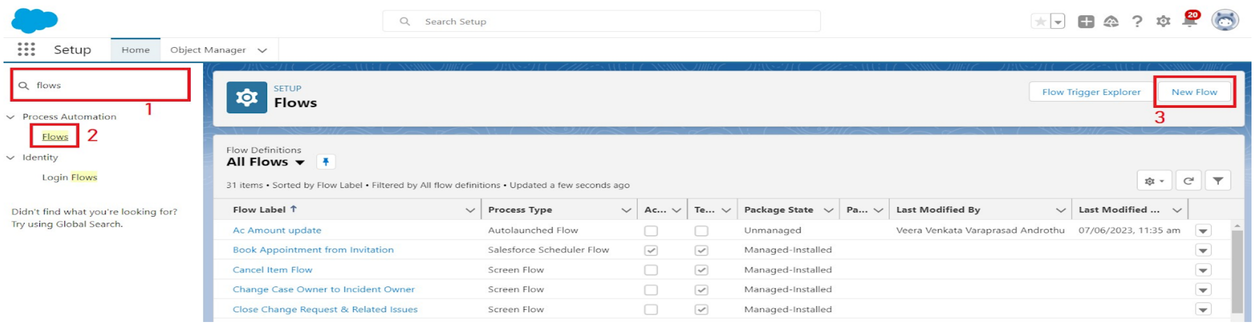

3. Select add component.
4. Select a Report and click on select.
5. Click Add then click on Save and then click on Done.
6. Preview is shown below.

# 15.Flows

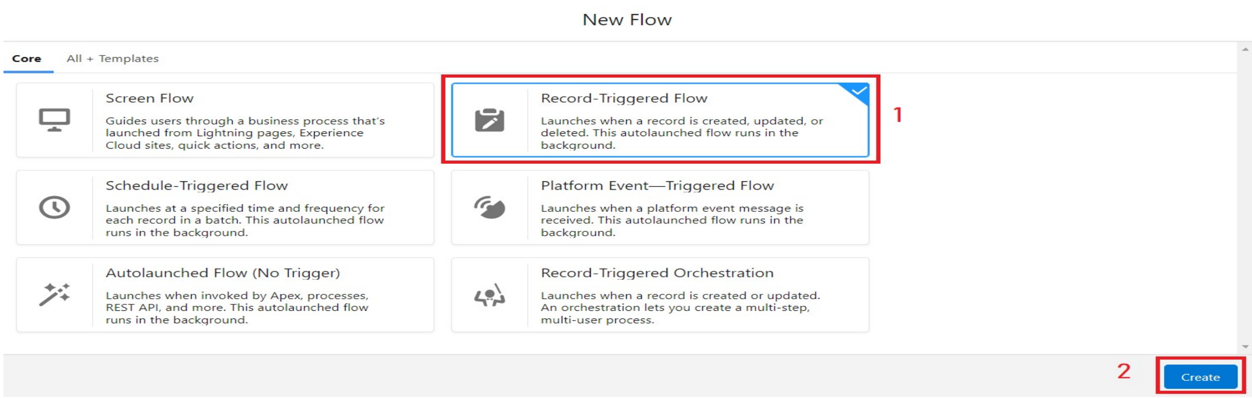
In Salesforce, a flow is a powerful tool that allows you to automate business processes, collect and update data, and guide users through a series of screens or steps. Flows are built using a visual interface and can be created without any coding knowledge.

## Create a Flow

1. Go to setup ? type Flow in quick find box ? Click on the Flow and Select the New Flow.



2. Select the Record-triggered flow and Click on Create.



3. Select the Object as a "buyer" in the Drop down list.
4. Select the Trigger Flow when: "A record is Created or Updated".
5. Select the Optimize the flow for: "Actions and Related Records".
6. Now change the mode form Auto-layout to free-form.
7. Now select the manger option in toolbox, click New resource.
8. Select the resource type as text template.
9. Enter the API name as " emailbody".

10. In body field  paste the syntax that given below.

Hello  {!$Record.Customer_name__c},

Thank you for coming , we are glad and considering that we provided the best survise.

RECEPIT DETAILS :

Customer name : {!$Record.Customer_name__c}

Amount paid by Customer : {!$Record.Amount_Paid__c}

Vehicle type : {!$Record.Vehicle_type__c}

Fuel intake in vehicle : {!$Record.Fuel_filled_in_vehicle__c}

11. Change the view as Rich Text ? View to Plain Text.
12. Click done.
13. Now click on elements, and drag the action element into the preview pane.
14. Their action bar will be opened in that search for “ send email ” and click on it.
15. Give the label name as “ notice”
16. API name will be auto populated.
17. Enable the body in set input values for the selected action.
18. Select the text template that created
19. Include recipient address list select the email form the record.
20. Include subject as “ welcome to gas station”.
21. Click done.