Application to make the Gas filling Station easy using CRM

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Abstract

The Gas Filling Station CRM Application is designed to enhance the efficiency and customer service of gas stations by integrating advanced Customer Relationship Management (CRM) functionalities. This application aims to streamline operations, automate routine tasks, and improve overall customer experience by offering a comprehensive solution tailored specifically for gas filling stations.

The primary focus of the application is to improve customer management by automating processes such as customer registration, order tracking, billing, and fuel inventory management. This automation reduces manual errors, speeds up service delivery, and allows gas stations to offer personalized services based on customer preferences and fueling history. These improvements lead to higher customer satisfaction and retention.

For gas station administrators, the CRM system provides real-time access to key operational data, including fuel levels, customer orders, and billing information. This allows for better decision-making, inventory control, and timely service. The system can also generate detailed reports on sales trends and customer behavior, enabling better business forecasting and growth strategies. Additionally, automated alerts notify administrators when critical tasks, such as refueling or equipment maintenance, need attention.

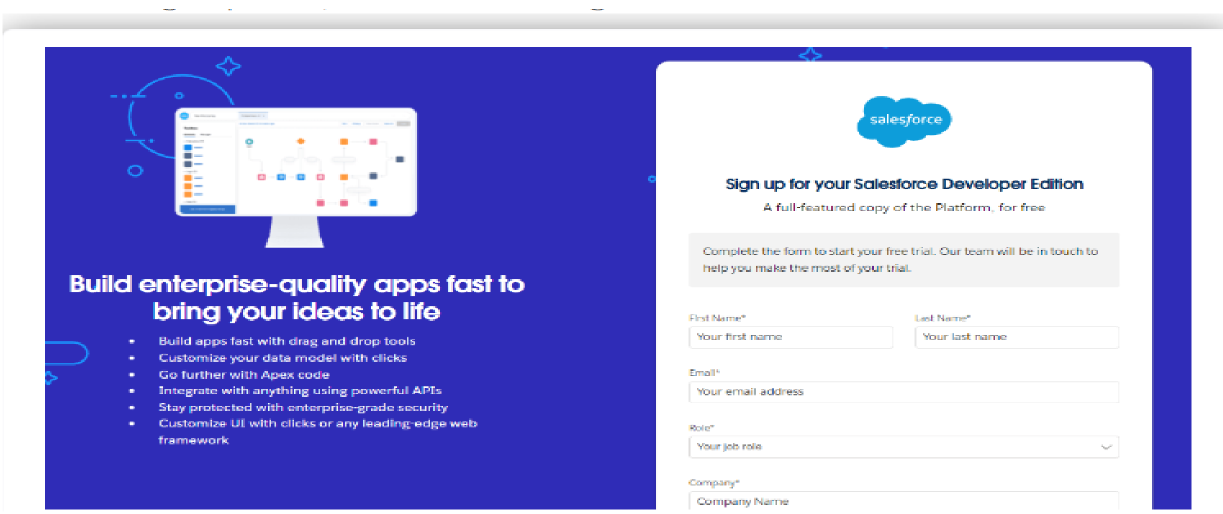
From a customer perspective, the application offers convenient features such as online ordering, scheduling refills, and making payments. The system can send automatic reminders for services and notify customers about promotions, enhancing their overall experience. Loyalty programs and personalized offers can also be implemented to reward frequent customers, fostering stronger

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.

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
This need not be an actual email id, you can give anything in the format : username@organization.com
Click on sign me up after filling these.

Objects

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

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
4. Record Name ? Supplier Name
5. Data Type ? Name

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

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
4. Record Name ? Gas Station
5. Data Type ? Auto Number
6. Display Format ? Gas-{000}
7. Starting number ? 1

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

Create Buyer and Fuel details Objects

Note: Follow the same steps as mentioned in Activity 2 for the Buyer and Receipt objects.

1. Use these display format for the Buyer

2.label name ? Buyer

3.Plural label name ? Buyers

4.Display Format ? Buyer-{000}Starting number ? 1

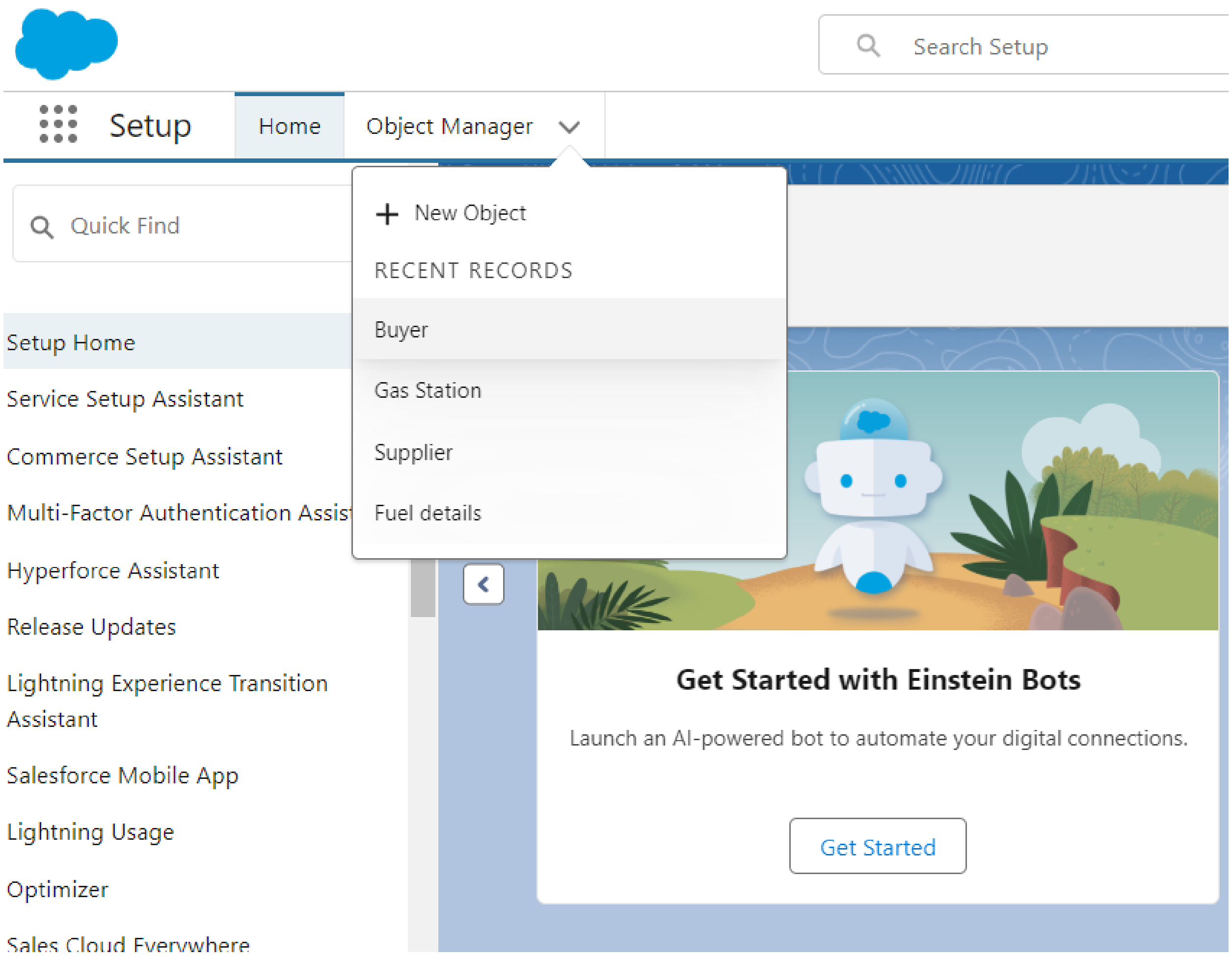
5.Use these display format for the Fuel details

6.label name ? Fuel details

7.Plural label name ? Fuel details

8.Display Format ? fuel-{000}

9.Starting number ? 1



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.

1.Custom Tabs

2.Web Tabs

3.Visualforce Tabs

4.Lightning Component Tabs

5.Lightning Page Tabs

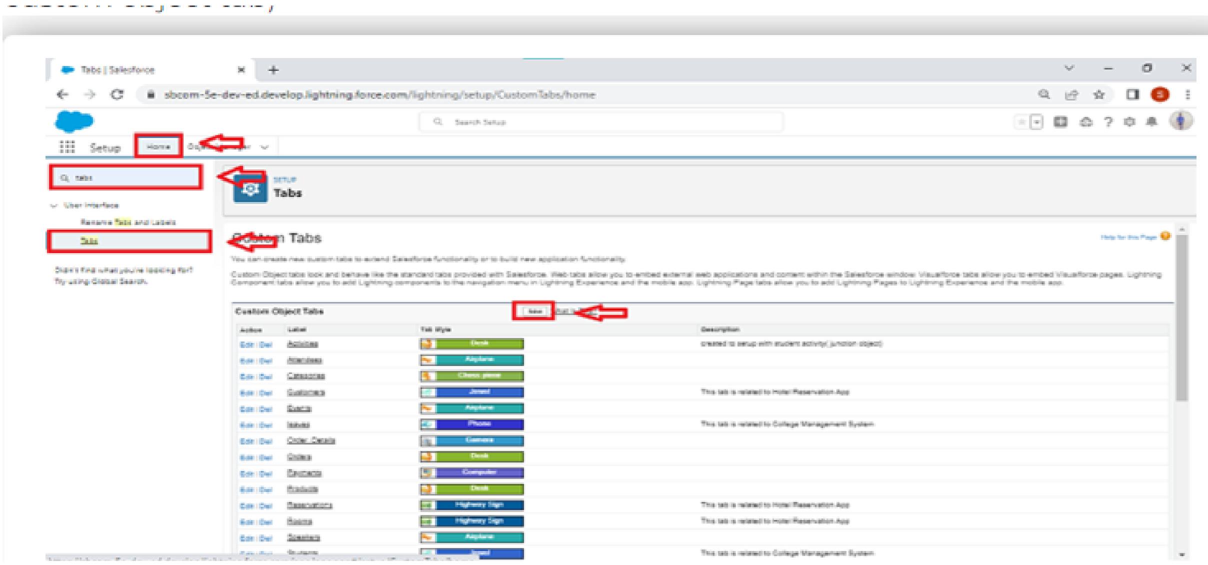
Creating a Custom Tab

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 .

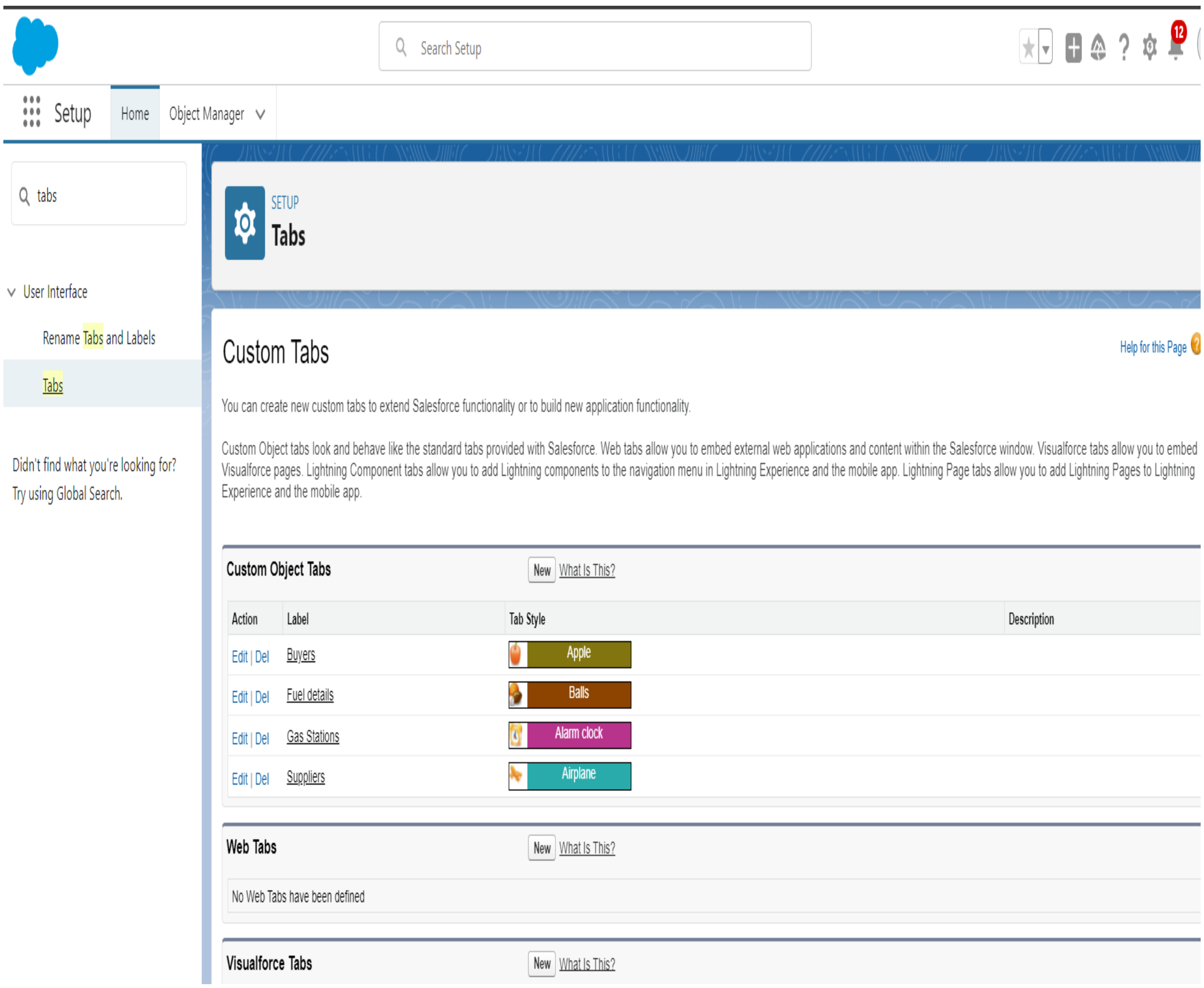
3.Make sure that Append tab to users' existing personal customizations is checked.

4.Click save



Creating Remaining Tabs

1. Now create the Tabs for the remaining Objects, they are “ Gas station, Buyer, Fuel details”.
2. Follow the same steps as mentioned in Activity -1

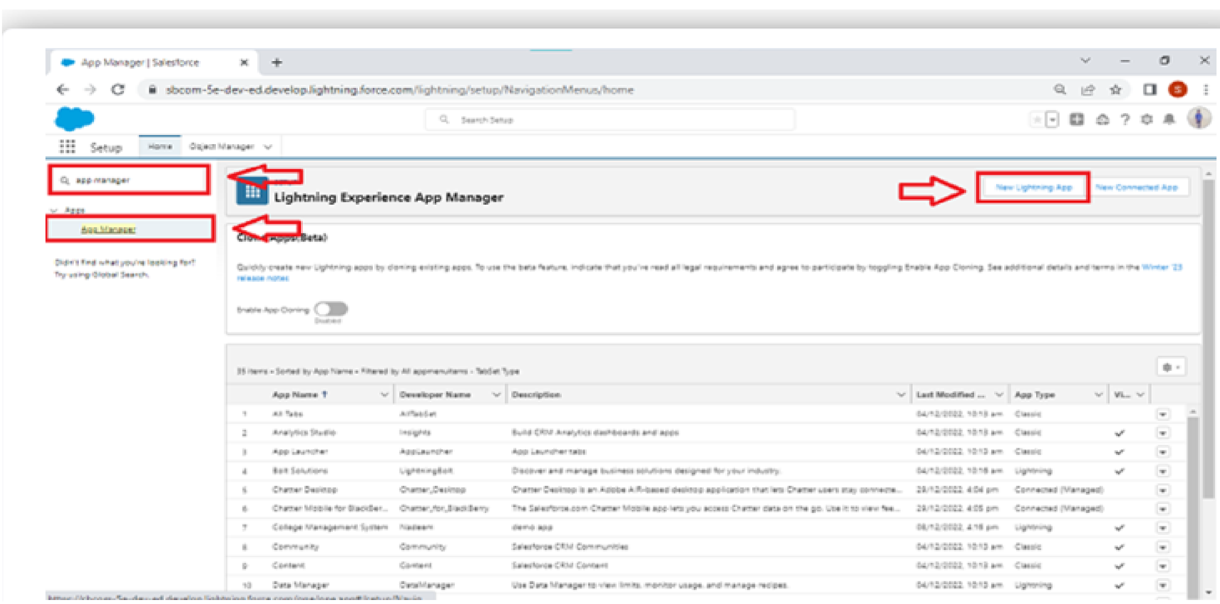


The Lightning App

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.
Lightning apps let you brand your apps with a custom color and logo. You can even include a utility bar and Lightning page tabs in your Lightning app. Members of your org can work more efficiently by easily switching between apps.

Create a Lightning App

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

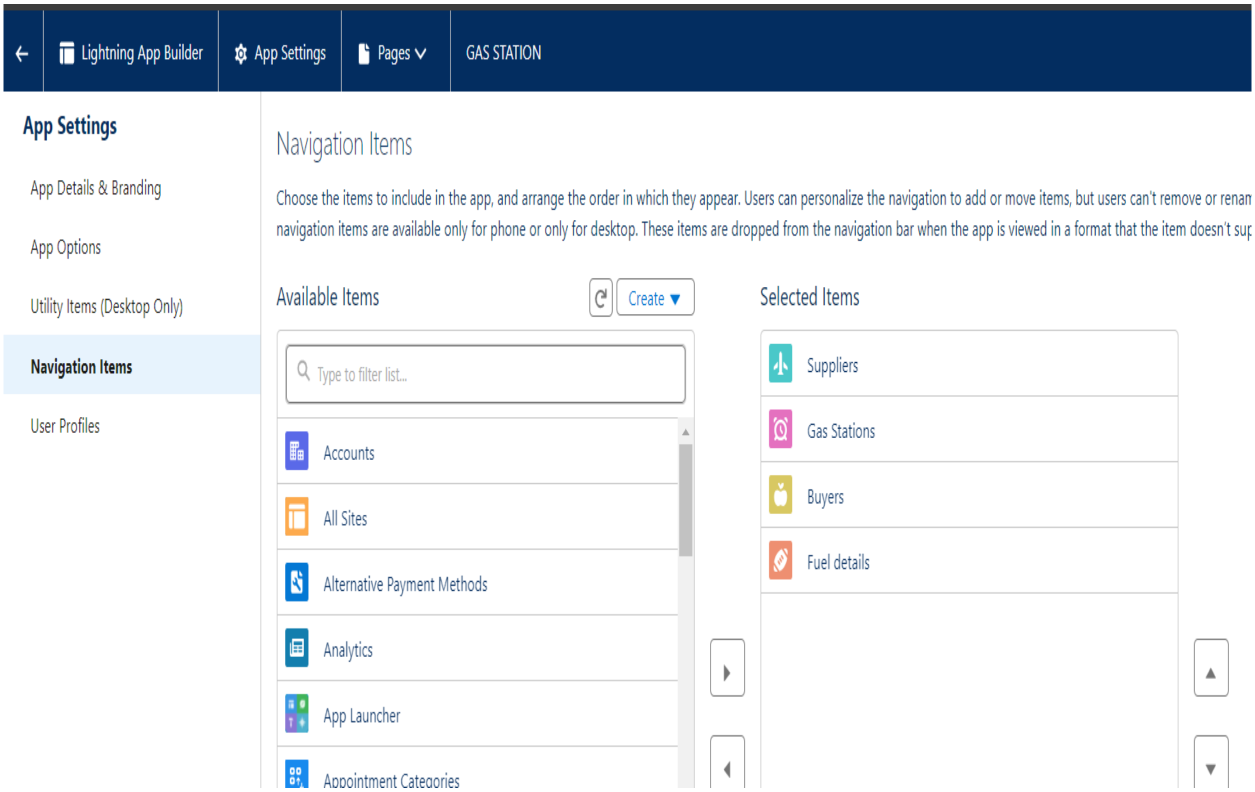


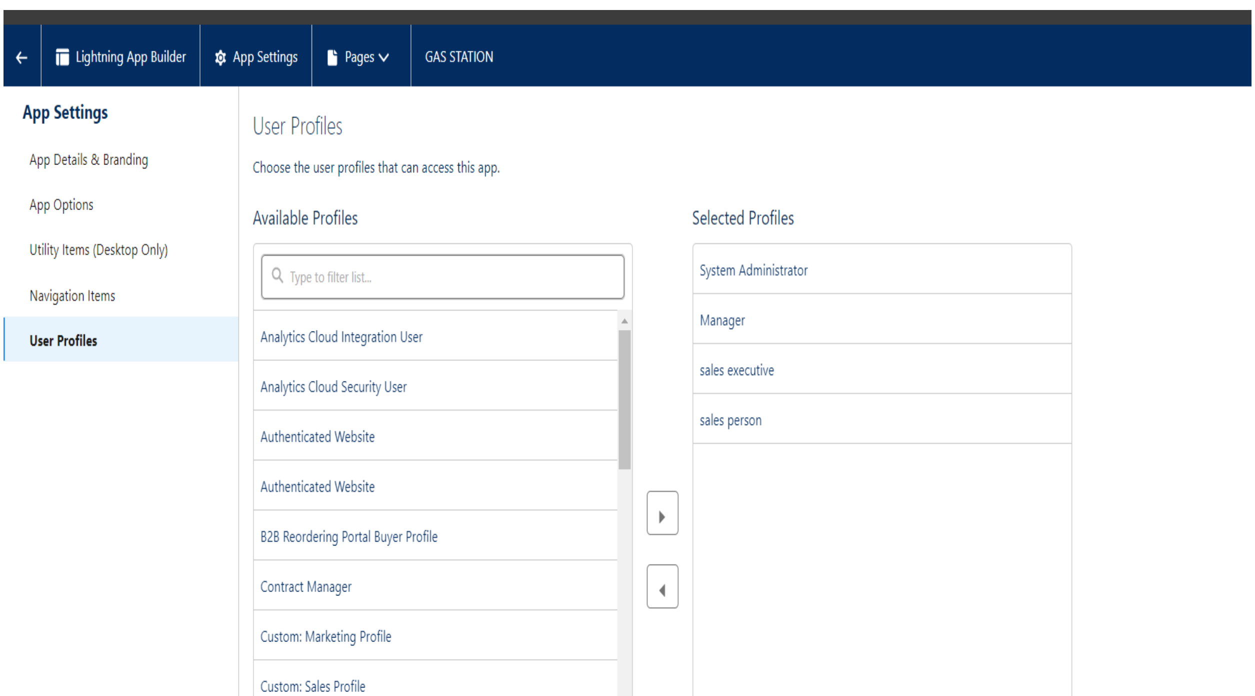
2.Fill the app name in app details as GAS STATION ?Next ? (App option page) keep it as default ? Next ? (Utility Items) keep it as default ? Next.

3.To Add Navigation Items

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

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


Lightning App Builder
App Settings
Pages
GAS STATION
App Settings
App Details & Branding
App Options
Utility Items (Desktop Only)
Navigation Items
User Profiles
Navigation Items
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 renam
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 sup
Available Items
Create
Type to filter list...
Accounts
All Sites
Alternative Payment Methods
Analytics
App Launcher
Appointment Categories
Selected Items
Suppliers
Gas Stations
Buyers
Fuel details


Lightning App Builder
App Settings
Pages
GAS STATION
App Settings
App Details & Branding
App Options
Utility Items (Desktop Only)
Navigation Items
User Profiles
User Profiles
Choose the user profiles that can access this app.
Available Profiles
Type to filter list...
Analytics Cloud Integration User
Analytics Cloud Security User
Authenticated Website
Authenticated Website
B2B Reordering Portal Buyer Profile
Contract Manager
Custom: Marketing Profile
Custom: Sales Profile
Selected Profiles
System Administrator
Manager
sales executive
sales person

Fields

Creating Junction Object

1.Creating junction object as Fuel details with Supplier & Gas station
To create junction object
2.Go to the setup page ? click on object manager ? From drop down click edit for Fuel details object
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.
Below their is an overview of junction object for better understanding.

Creating a Master-Detail Relationship

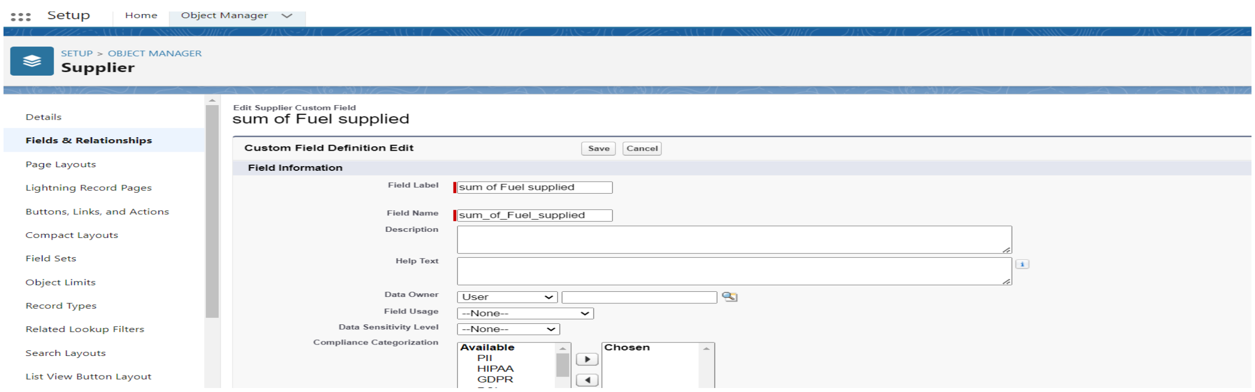
To Create a Master-Detail relationship

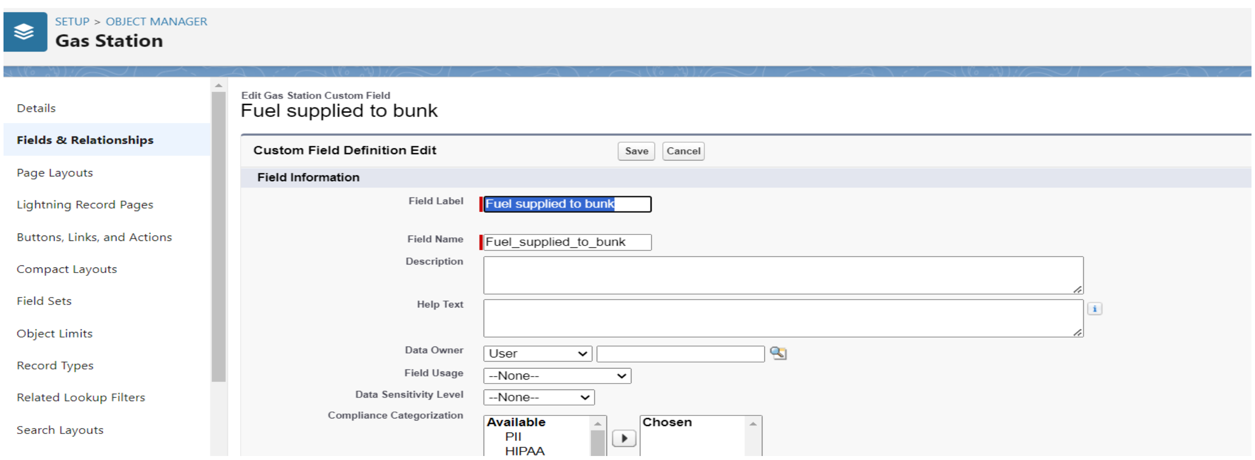
1. Go to the setup page ? click on object manager ? From drop down click edit for Buyer object.
2. Click on fields & relationship ? click on New.
3. Select “Master-Detail relationship” as data type and click Next.
4. Select the related object “ Gas station ”.
5. Give Field Label as “Gas Station name”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

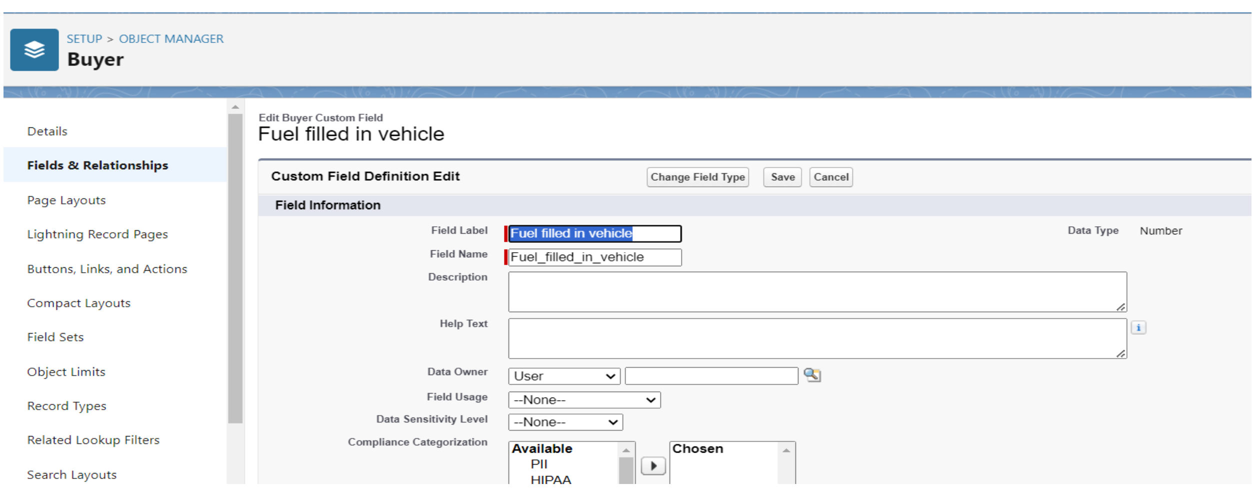
Creating the number field in Fuel details object

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

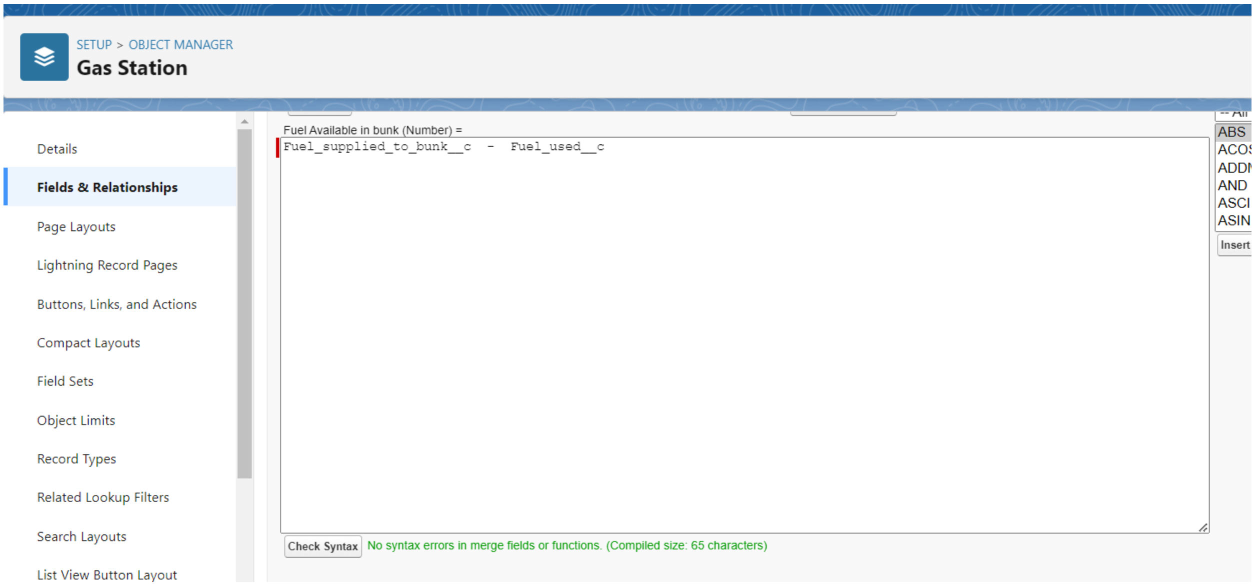
Creating the Roll-up Summary

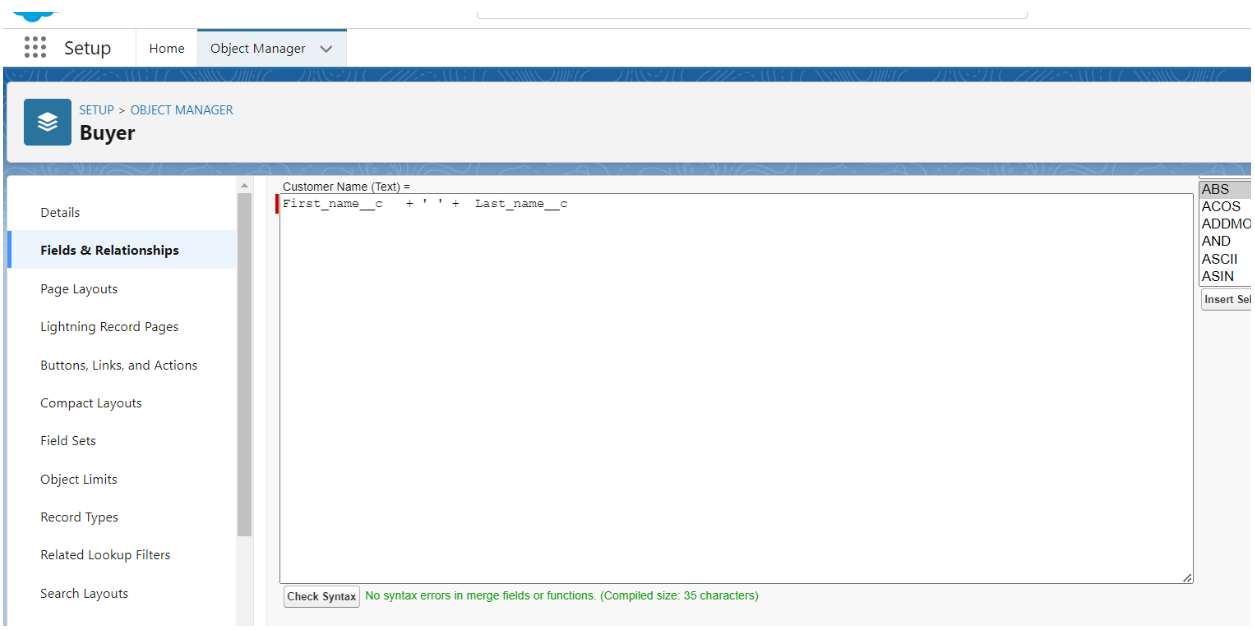






Creating Formula Field in Gas Station Object





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.

Creating Picklist Field in Buyer Object

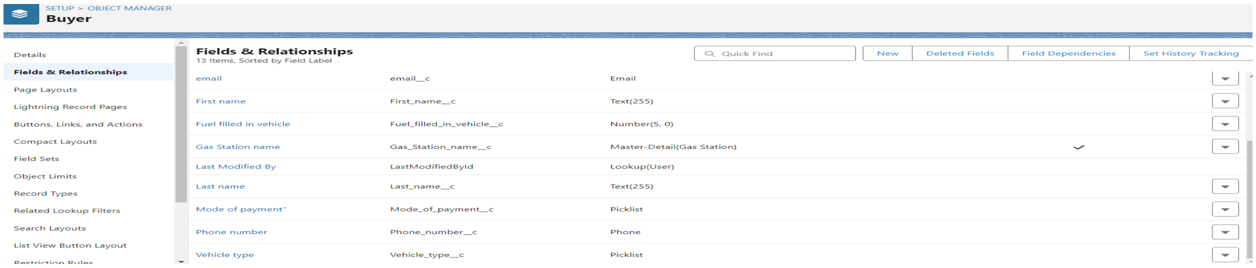
1. Go to setup ? click on Object Manager ? type object name(Buyer) in search bar ? click on the object.
2. Click on fields & relationship ? click on New.
3. Select Data type as “Picklist” and click Next.
4. Enter Field Label as “Vehicle type”, under values select “Enter values, with each value separated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

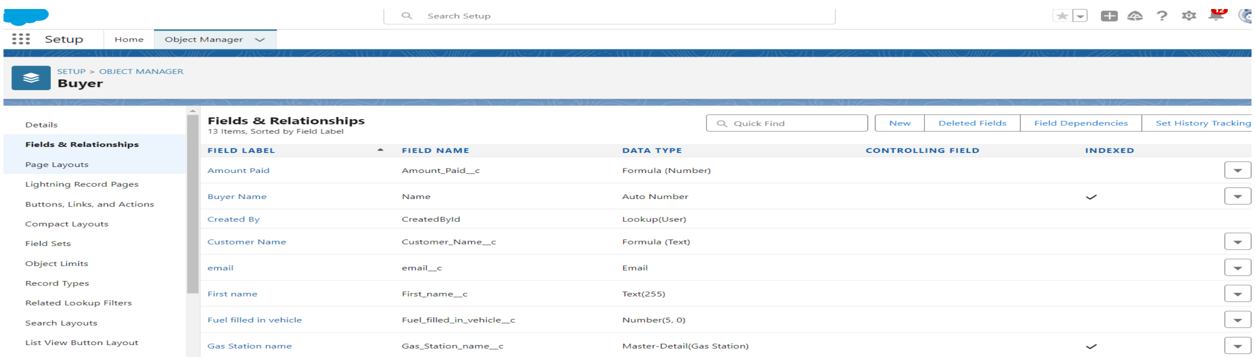
Creating the validation rule

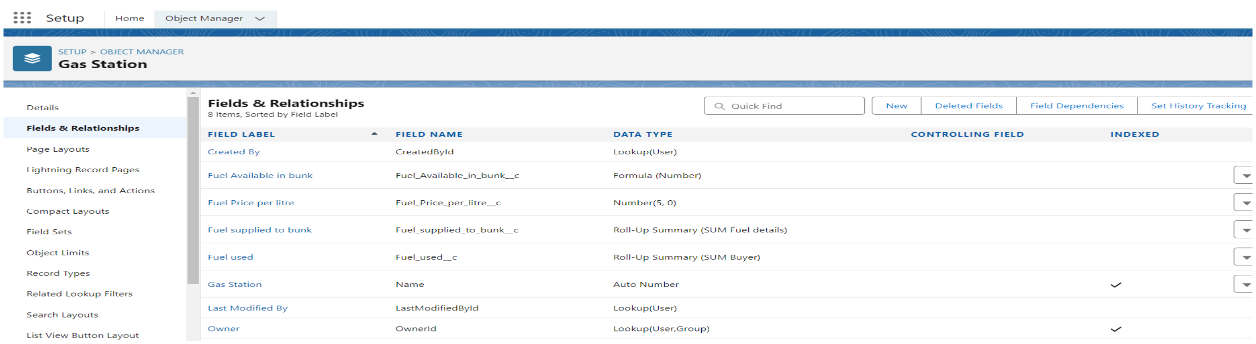
1.Go to the setup page ? click on object manager ? From drop down click edit for Buyer object.
2.Click on the validation rule ? click New
3.Enter the Rule name as “Phone ”.
4.Insert the Error Condition Formula as : -
NOT(REGEX(Phone_Number__c , "[6-9]{1}[0-9]{9}"))

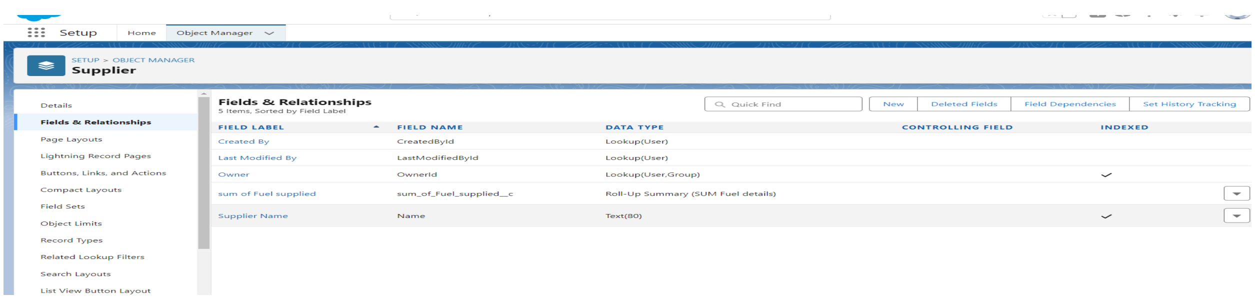
5.Enter the Error Message as “ incorrect data”, select the Error location as Field and select the field as “phone number”, and click Save

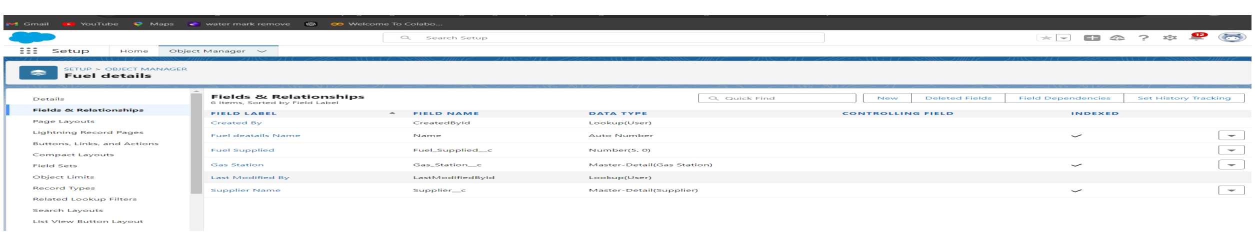
Creating Remaining Fields in Objects











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.

creating the 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.

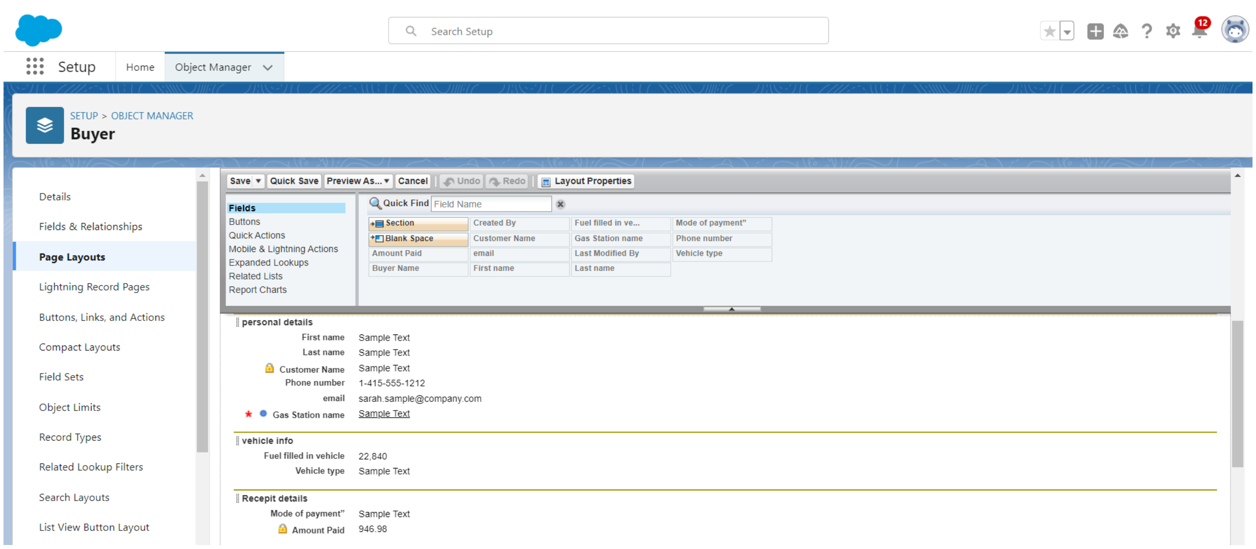
7. Follow the same process for another two sections as shown above , they are
8. One section is " vehicle info " , drag the fields that are

- Fuel filled in vehicle, vehicle type.

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

- Mode of payment , Amount paid.

10. Then , Click save.

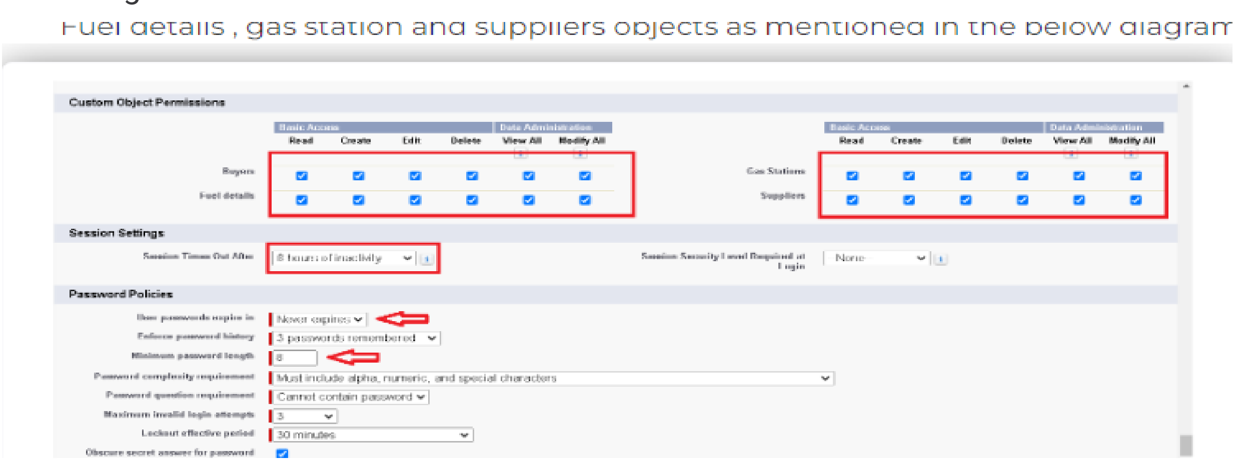


Profiles

A profile is a group/collection of settings and permissions that define what a user can do in salesforce. Profile controls “Object permissions, Field permissions, User permissions, Tab settings, App settings, Apex class access, Visualforce page access, Page layouts, Record Types, Login hours & Login IP ranges. You can define profiles by the user's job function. For example System Administrator, Developer, Sales Representative

Manager 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

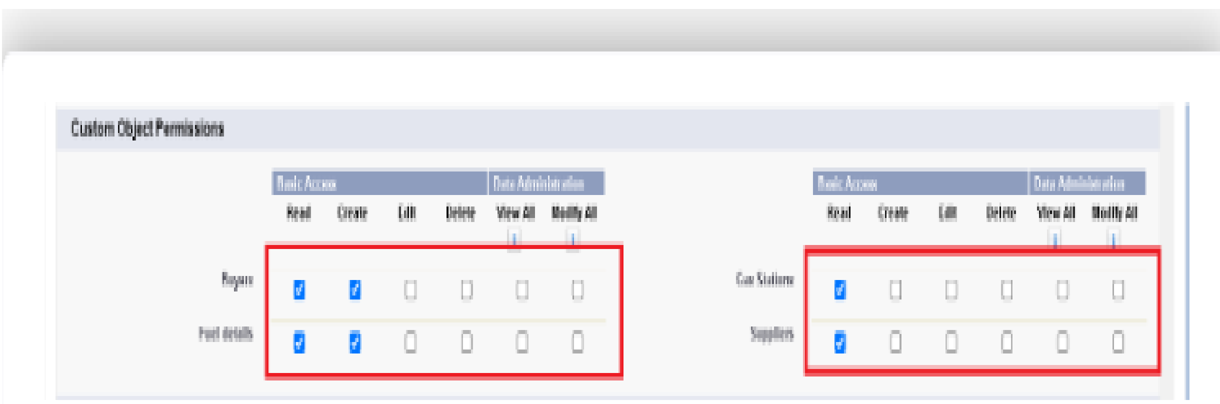


sales executive Profile

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

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.

Role & Role Hierarchy

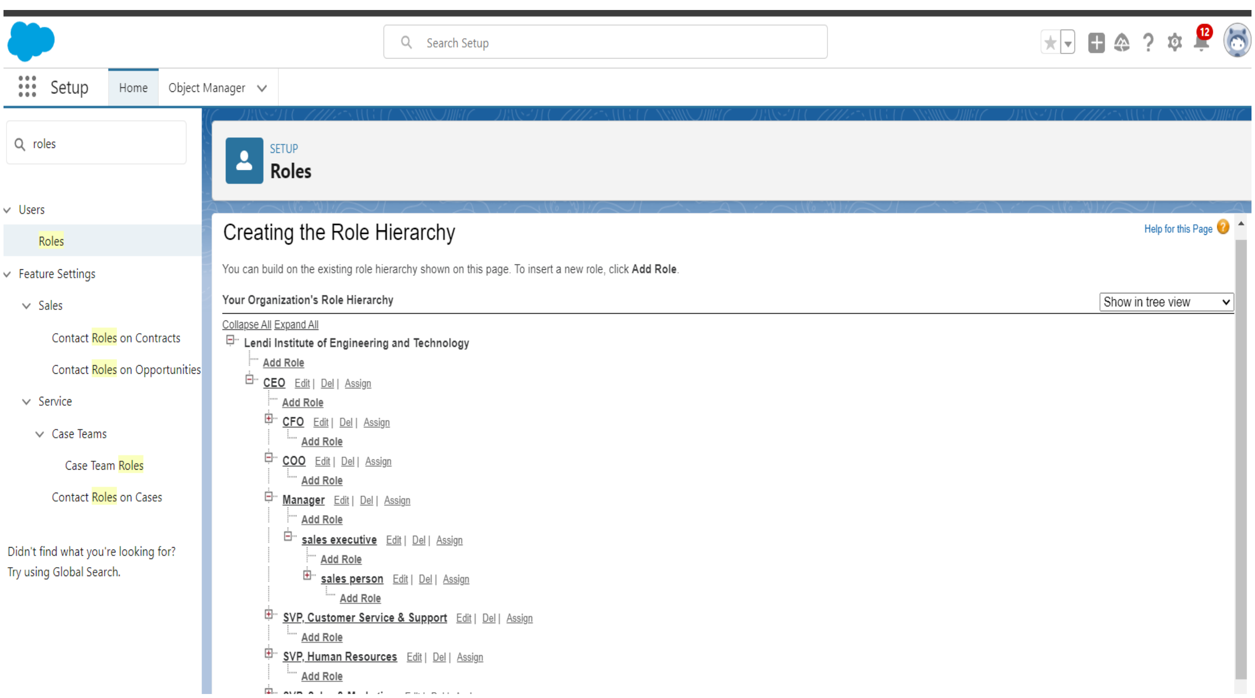
A role in Salesforce defines a user's visibility access at the record level. Roles may be used to specify the types of access that people in your Salesforce organization can have to data. Simply put, it describes what a user could see within the Salesforce organization.

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.

Creating another roles

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



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

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

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

Permission sets

A standard permission set consists of a group of common permissions for a particular feature associated with a permission set license. Using a standard permission set saves you time and facilitates administration because you don't need to create the custom permission set.

Creating permission set

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

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

3.Under Apps Select object settings.

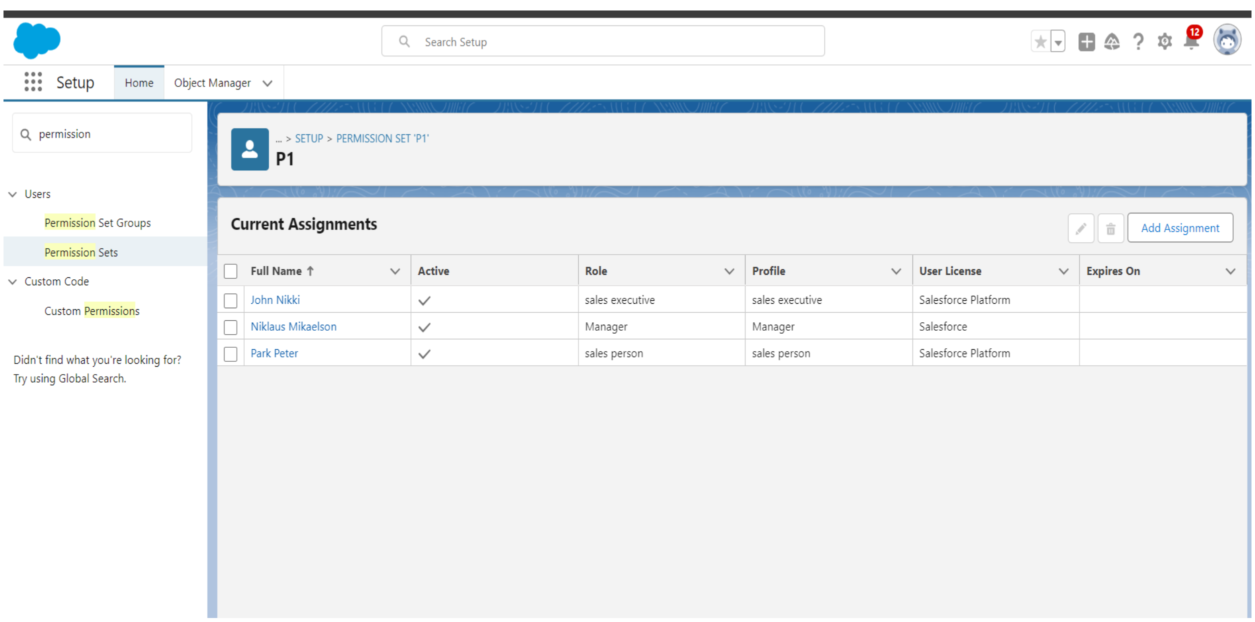
4.Click on Fuel details object ? click on Edit ? under object permission check for read and create.

5.Click on Save.

6.After saving the permission click on the Manage assignment

7.Now click on the Add Assignmen

8.Now select the users which you have created in user milestone, using sales executive profile and click on Next ? Assign? Done



Setup For 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).

Primarily, there are four levels of access that can be set in Salesforce OWD and they are-

? Public Read/Write/Transfer (only available of Enquiry and Cases)

? Public Read/Write

? Public Read/Only

? Private

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.

User Adoption

Create a record

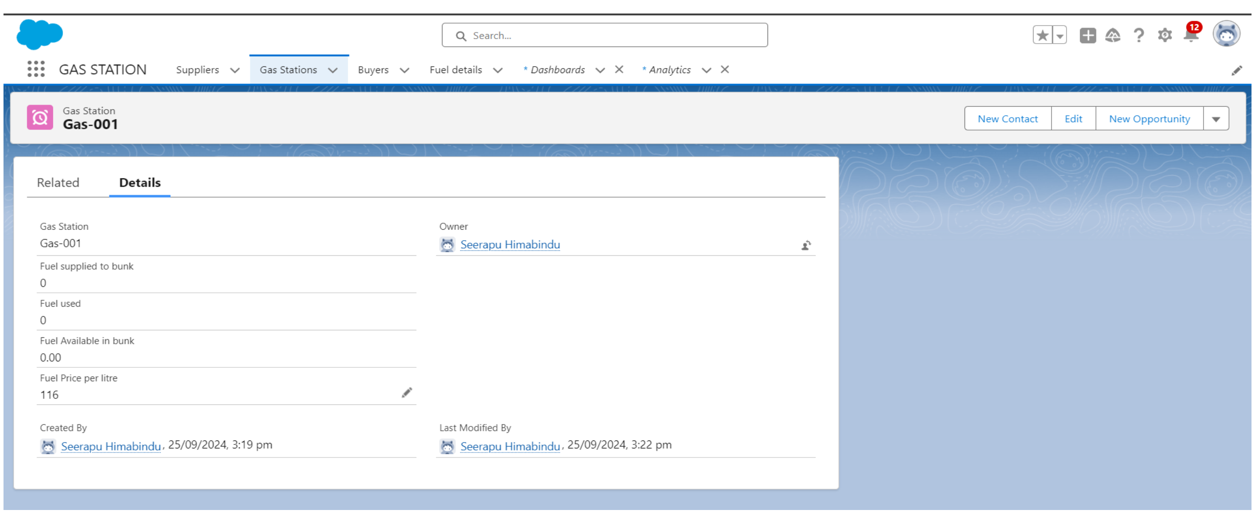
To create a record in junction object follow these steps

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

View a record

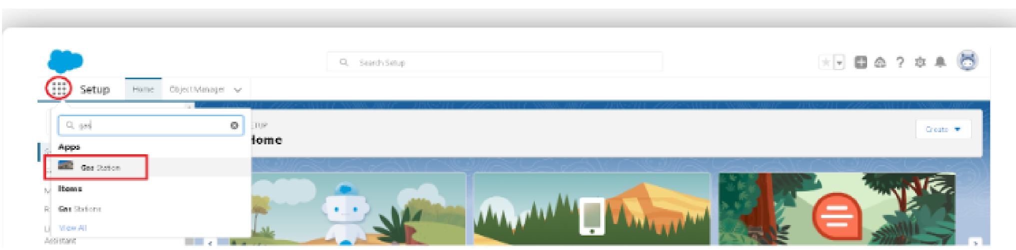
1. Click on the app launcher locate at left side of the screen.
2. Search for “ Gas station” and click on it.
3. Click on “ fuel details tab”.
4. Click on the records that are already created.

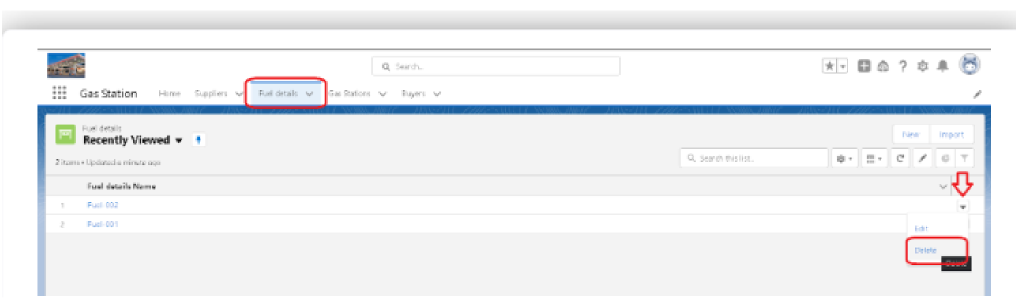


Delete a record

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.





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

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

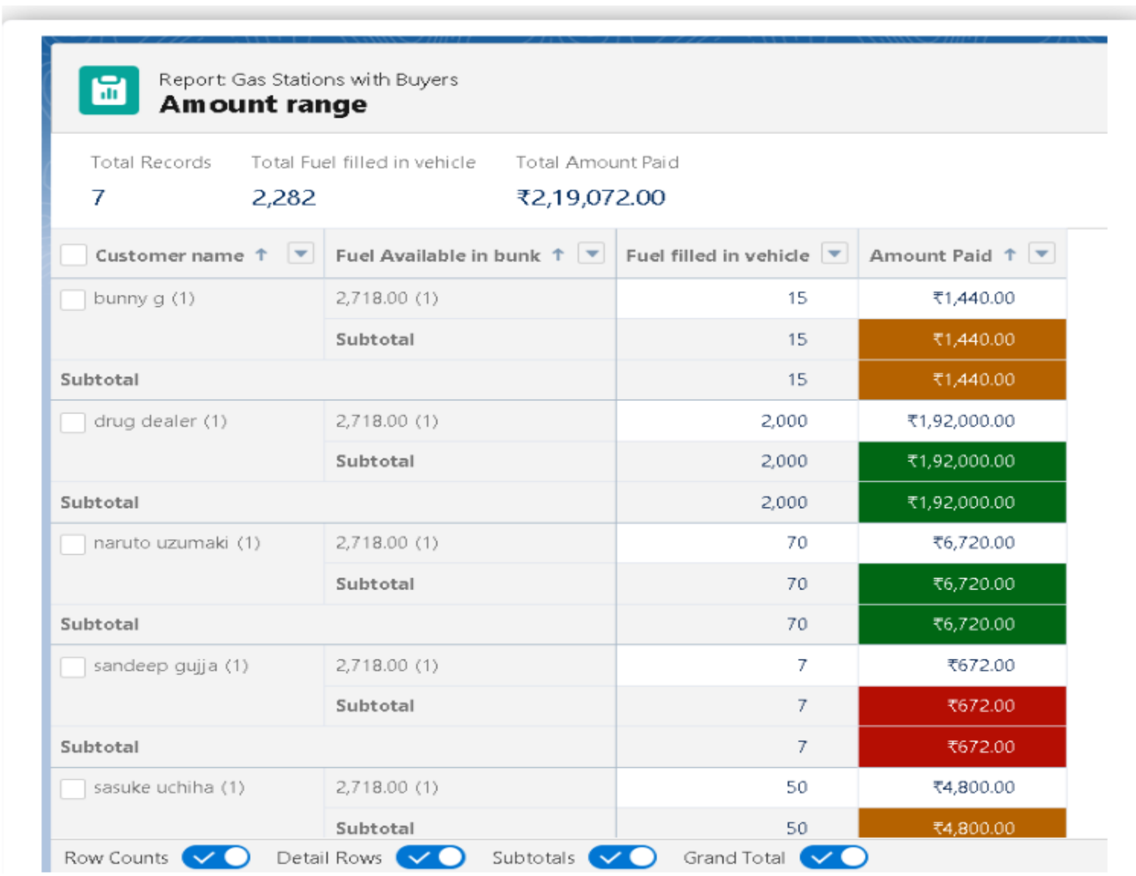
Sharing a report folder

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.

Create Report

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



Report: Gas Stations with Buyers
Amount range

Total Records	Total Fuel filled in vehicle	Total Amount Paid
7	2,282	₹2,19,072.00

Customer name ↑	Fuel Available in bunk ↑	Fuel filled in vehicle	Amount Paid ↑
bunny g (1)	2,718.00 (1)	15	₹1,440.00
	Subtotal	15	₹1,440.00
Subtotal		15	₹1,440.00
drug dealer (1)	2,718.00 (1)	2,000	₹1,92,000.00
	Subtotal	2,000	₹1,92,000.00
Subtotal		2,000	₹1,92,000.00
naruto uzumaki (1)	2,718.00 (1)	70	₹6,720.00
	Subtotal	70	₹6,720.00
Subtotal		70	₹6,720.00
sandeep gujja (1)	2,718.00 (1)	7	₹672.00
	Subtotal	7	₹672.00
Subtotal		7	₹672.00
sasuke uchiha (1)	2,718.00 (1)	50	₹4,800.00
	Subtotal	50	₹4,800.00

Row Counts Detail Rows Subtotals Grand Total

Dashboards

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.
6. Follow the same steps, form milestone 12, and activity 2, and provide the sharing settings for the folder that just created

Create Dashboard

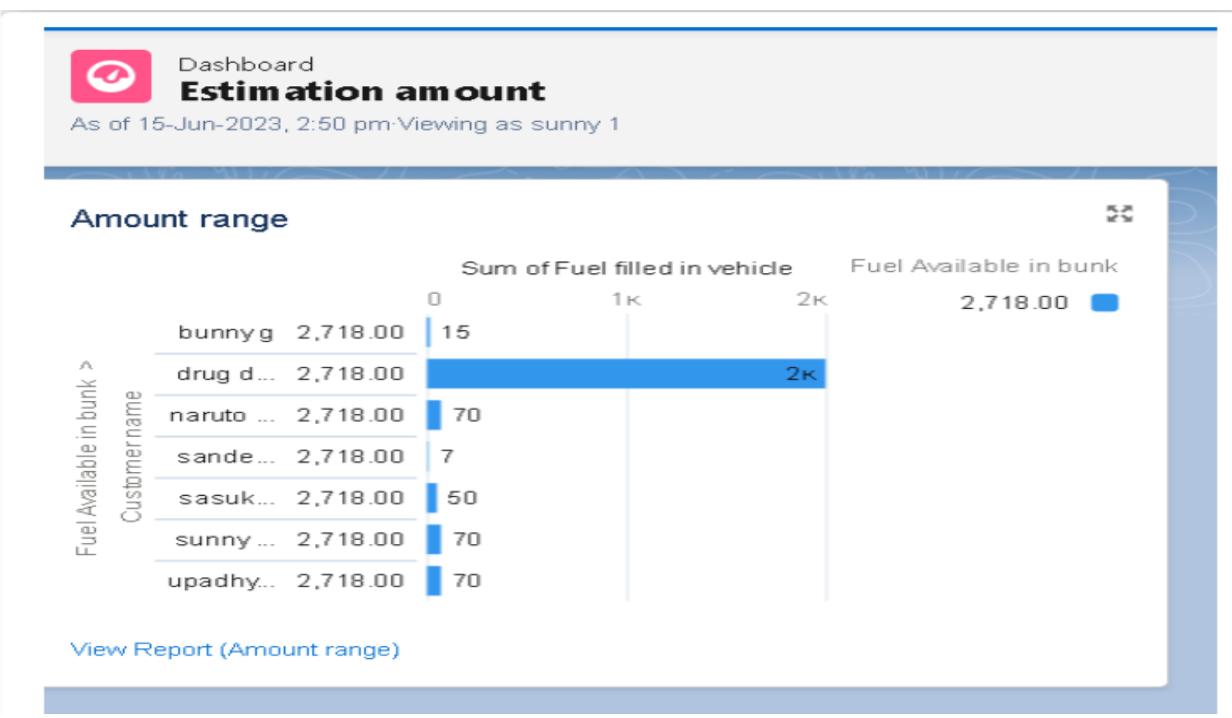
1.Go to the app ? click on the Dashboards tabs.

2.Give a Name and select the folder that created, and click on create.

3. elect add component.Select a Report and click on select.

4.Click Add then click on Save and then click on Done.

5.Preview is shown below.



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” and Click on Done.
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.
22. Now drag the path form the start to action element.
23. Click on save. Give the Flow label , Flow Api name will be autopopulated.
24. And click save, and click on activate

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