

A CRM APPLICATION FOR WHOLE SALE RICE MILL

1. Introduction to Salesforce

The Rice Mill CRM Application is a comprehensive solution designed to streamline and simplify daily operations in a rice mill factory. This application leverages the power of Customer Relationship Management (CRM) to enhance customer experiences, optimize store operations, and improve overall efficiency. It addresses the specific needs of a rice mill factory, including daily rice quantity management, sales tracking, and reporting.

Features and Functionality

1. Reporting and Dashboards

- **Daily Sales and Inventory Reports:** Generate detailed reports on the quantity of rice sold each day, total income, revenue generated, and the most popular types of rice.
- **Customer Insights:** Analyze data on the most frequent buyers and revenue contribution per customer.
- **Resource Allocation:** Use insights from the reports to improve resource allocation and plan for future development.

2. Rollup Summary Fields

- **Purpose:** Summarize data from a child object to a parent object in a master-detail relationship.
- **Functions:** COUNT, SUM, MIN, and MAX.
- **Example:** Display the total value (amount of rice supplied) from rice details on a related supplier.

3. Cross-Object Formula Fields

- **Purpose:** Reference fields from another object to perform calculations.
- **Example:** Calculate the total amount payable by multiplying the number of rice units taken by the price per kilogram.

4. Validation Rules

- **Purpose:** Ensure data integrity by enforcing specific criteria.
- **Is Blank Formula:** Used to verify whether a field is blank and display an error message if it is.

5. Permission Sets

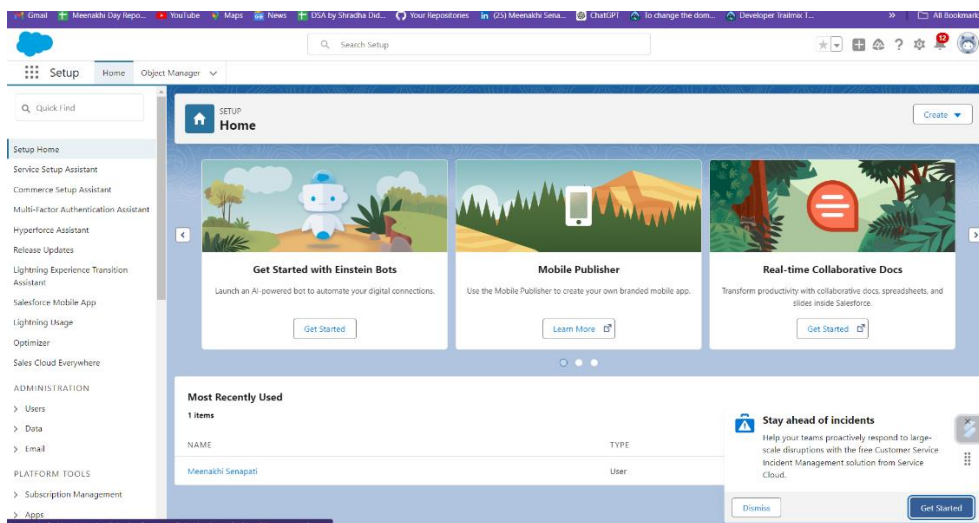
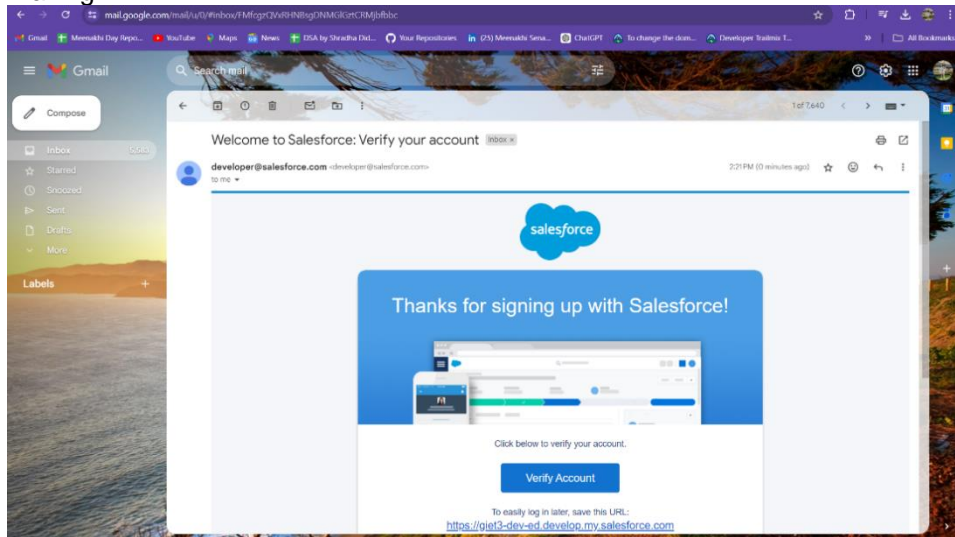
- **Organization Wide Defaults (OWD):** Set the baseline level of access for the most restricted user.
- **Roles and Permissions:**
 - Owner: Can see records of employers and workers.
 - Employer: Can see records of workers.
 - Workers: Restricted to their own records or as defined by the role.

Pre-requisites

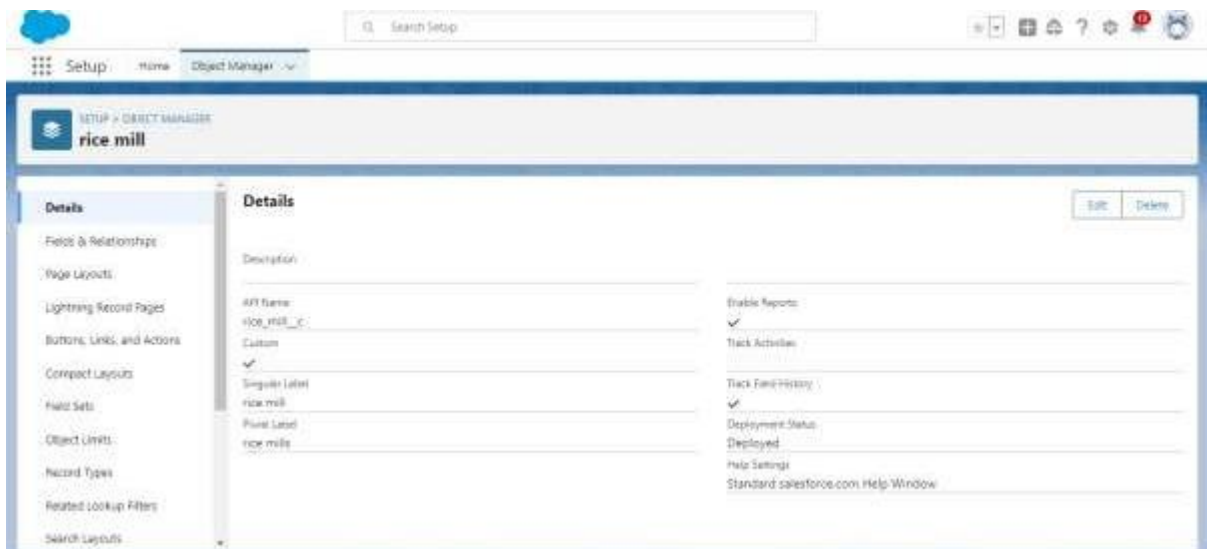
- **Salesforce Developer Account:** Required to implement and test the application.
- **Knowledge of Salesforce Admin Concepts:** Essential for setting up and managing the CRM.
- **Web Browsers:** At least two installed on the machine.
- **Internet Connectivity:** Good internet connection for seamless access and updates.

Learning Outcomes

- **Real-Time Salesforce Project:** Hands-on experience with a real-world Salesforce project.
- **Object & Relationship Management:** Understanding how to create and manage objects and relationships in Salesforce.
- **Formula Fields and Validation Rules:** Creating and implementing formula fields and validation rules to ensure data integrity.
- **Cross-Object Formula Fields:** Leveraging cross-object formula fields for advanced calculations.
- **Page Layouts:** Customizing page layouts to suit business needs.
- **Rollup Summary Fields:** Utilizing rollup summary fields for data aggregation.
- **Reports and Dashboards:** Designing and generating insightful reports and dashboards for decision-making



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

Salesforce objects are of two types:

1. **Standard Objects:** Standard objects are the kind of objects that are provided by salesforce.com such as users, contracts, reports, dashboards, etc.
2. **Custom Objects:** Custom objects are those objects that are created by users. They supply information that is unique and essential to their organization. They are the heart of any application and provide a structure for sharing data.

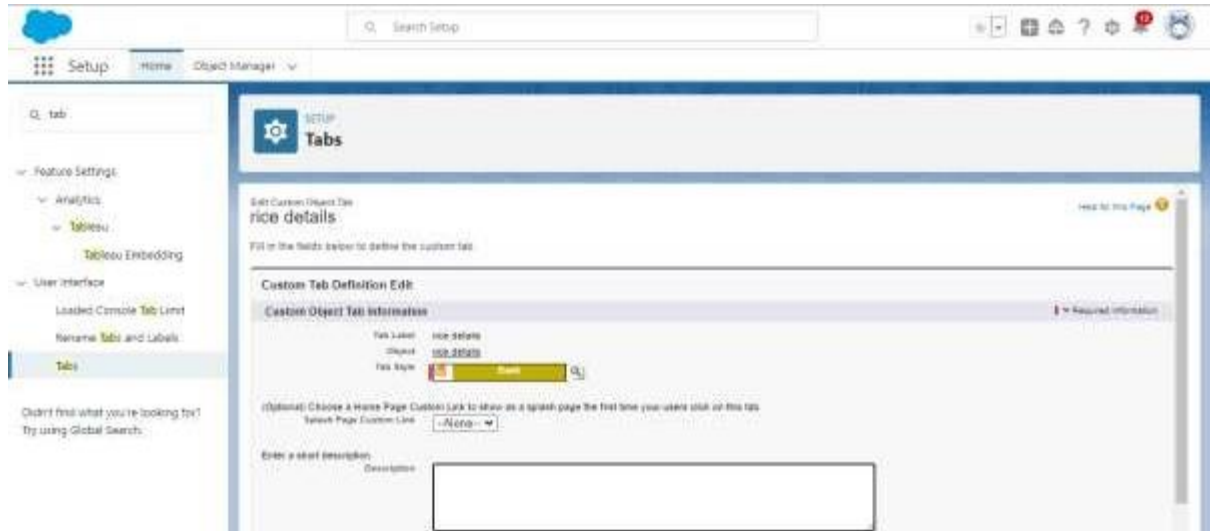
3. Tabs

Creating a Custom tab

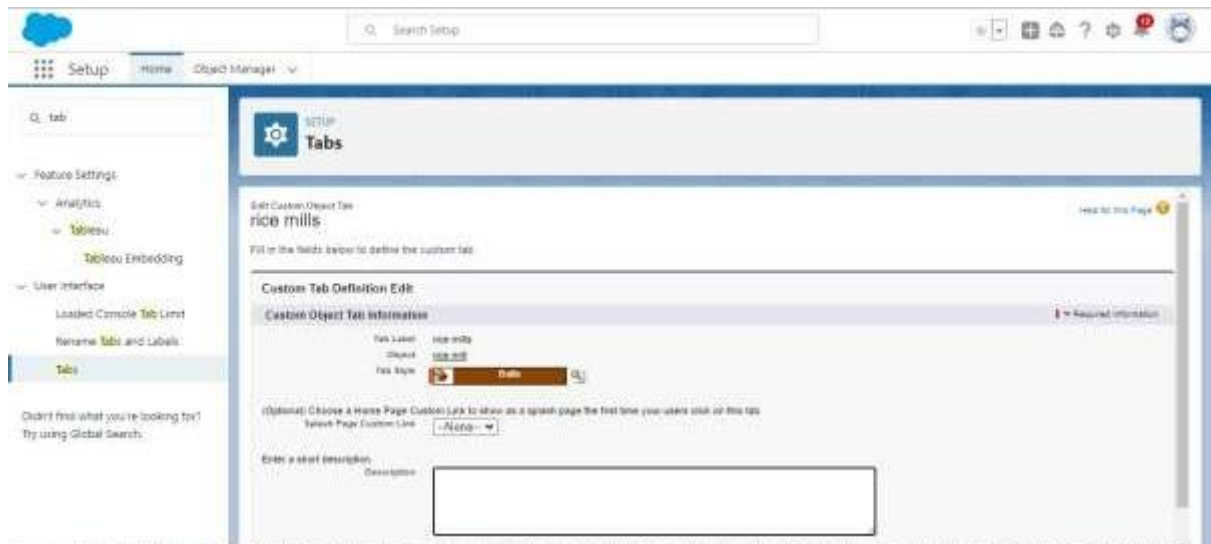
Consumer tab



Rice Detail tab



Rice mills tab



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

Custom object tabs are the user interface for custom applications that you build in salesforce.com. They look and behave like standard salesforce.com tabs such as accounts, contacts, and opportunities.

2. Web Tabs Web Tabs are custom tabs that display web content or applications embedded in the salesforce.com window. Web tabs make it easier for your users to quickly access content and applications they frequently use without leaving the salesforce.com application.

1. Visualforce Tabs

Visualforce Tabs are custom tabs that display a Visualforce page. Visualforce tabs look and behave like standard salesforce.com tabs such as accounts, contacts, and opportunities.

2. Lightning Component Tabs

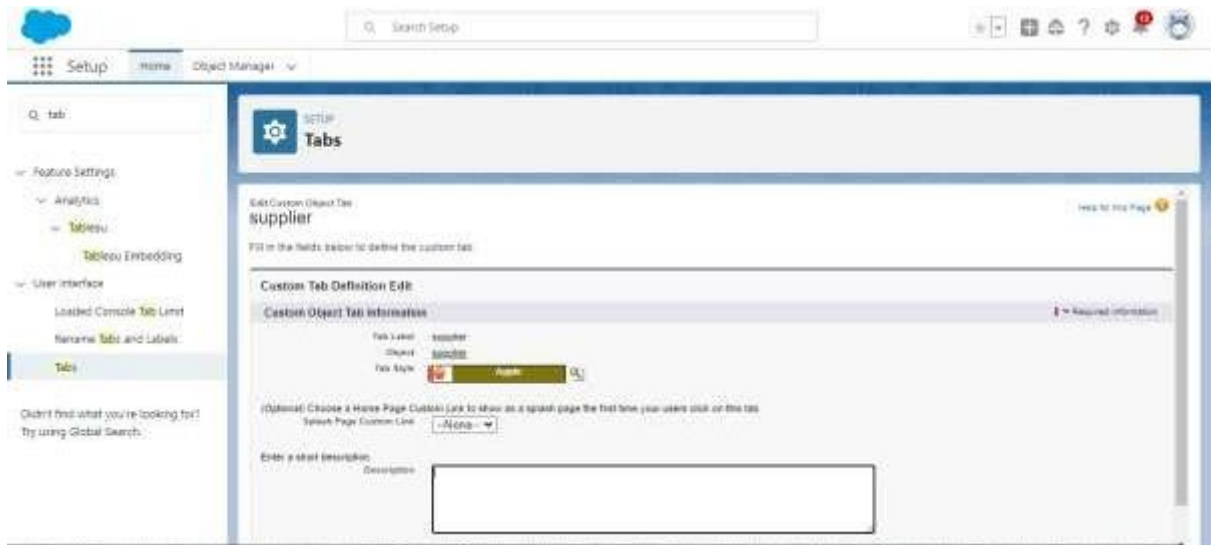
Lightning Component tabs allow you to add Lightning components to the navigation menu in Lightning Experience and the mobile app.

3. Lightning Page Tabs

Lightning Page Tabs let you add Lightning Pages to the mobile app navigation menu.

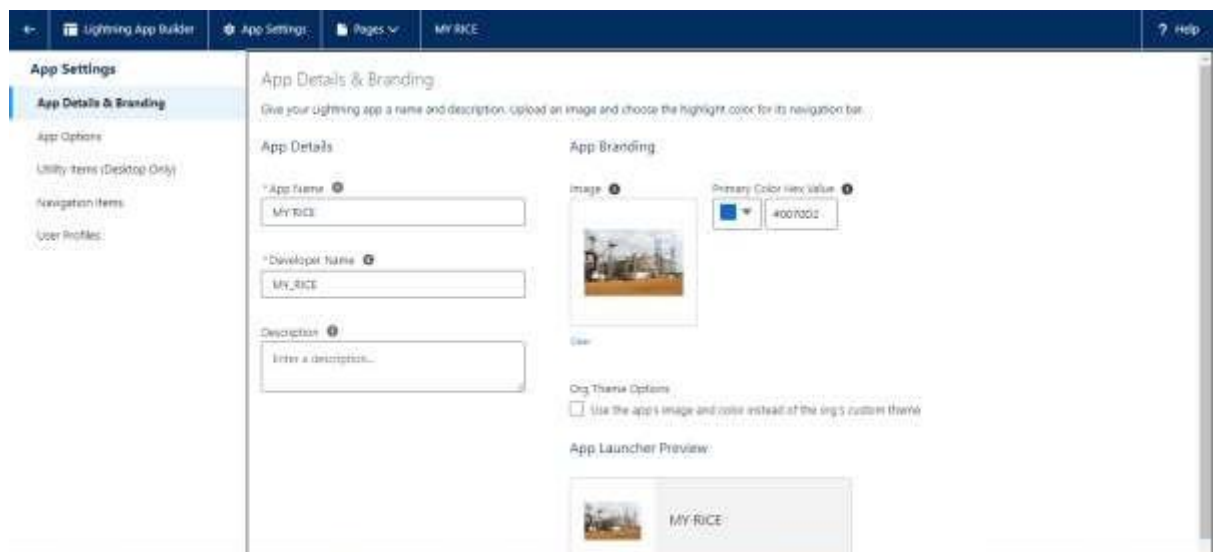
Lightning Page tabs don't work like other custom tabs. Once created, they don't show up on the All Tabs page when you click the Plus icon that appears to the right of your current tabs. Lightning Page tabs also don't show up in the Available Tabs list when you customize the tabs for your apps.

Supplier tab



4. The Lightning app

Create a lightning app



5.Fields

Creating the Number field in rice details object

The screenshot shows the Salesforce Setup interface. The left sidebar contains a navigation menu with options: Details, Fields & Relationships (selected), Page Layouts, Lightning Record Pages, Buttons, Links, and Actions, Compact Layouts, Field Sets, Object Limits, Record Types, Related Lookup Filters, and Search Layouts. The main content area is titled 'rice details' and 'rice distributed'. It displays the 'Custom Field Definition Edit' page. The 'Field Information' section includes the following fields: Field Label (rice distributed), Field Name (rice_distributed), Description, and Help Text. The 'Data Source' is set to 'User', and the 'Field Usage' is set to 'None'. The 'Data Security Level' is set to 'None'. The 'Compliance Categorization' section shows 'Available' and 'Chosen' categories. The 'Data Type' is set to 'Number'.

Creating junction object

The screenshot shows the Salesforce Setup interface. The left sidebar contains a navigation menu with options: Details, Fields & Relationships (selected), Page Layouts, Lightning Record Pages, Buttons, Links, and Actions, Compact Layouts, Field Sets, Object Limits, Record Types, Related Lookup Filters, and Search Layouts. The main content area is titled 'rice details' and 'supplier Name'. It displays the 'Custom Field Definition Edit' page. The 'Field Information' section includes the following fields: Field Label (supplier Name), Field Name (supplier_name), Description, and Help Text. The 'Data Source' is set to 'User', and the 'Field Usage' is set to 'None'. The 'Data Security Level' is set to 'None'. The 'Compliance Categorization' section shows 'Available' and 'Chosen' categories. The 'Data Type' is set to 'Master-Detail'.

Setup Home Object Manager

Search Setup

Setup > OBJECT MANAGER

rice details

Details

Fields & Relationships

Page Layouts

Lightning Record Pages

Buttons, Links, and Actions

Compact Layouts

Field Sets

Object Limits

Record Types

Related Lookup Filters

Search Layouts

Edit rice details Custom Field

rice mill 1(one)

Have feedback on Setup? Want to comment on what we change? Help for this Page

Custom Field Definition Edit Save Cancel

Field Information

Field Label rice mill 1(one) Data Type Master-Detail

Field Name rice_mill

Description

Help Text

Data Source User

Field Usage --None--

Data Security Level --None--

Compliance Categorization Available PII

Chosen

Master detail relation ship

Setup Home Object Manager

Search Setup

Setup > OBJECT MANAGER

consumer

Details

Fields & Relationships

Page Layouts

Lightning Record Pages

Buttons, Links, and Actions

Compact Layouts

Field Sets

Object Limits

Record Types

Related Lookup Filters

Search Layouts

Edit consumer Custom Field

rice mill name

Have feedback on Setup? Want to comment on what we change? Help for this Page

Custom Field Definition Edit Save Cancel

Field Information

Field Label rice mill name Data Type Master-Detail

Field Name rice_mill_name

Description

Help Text

Data Source User

Field Usage --None--

Data Security Level --None--

Compliance Categorization Available PII

Chosen

Creating the Roll-Up Summary

The screenshot shows the Salesforce Setup interface for the 'supplier' object. The left sidebar contains a navigation menu with options like Details, Fields & Relationships, Page Layouts, Lightning Record Pages, Buttons, Links, and Actions, Compact Layouts, Field Sets, Object Limits, Record Types, Related Lookup Filters, and Search Layouts. The main content area is titled 'Custom Field Definition Detail' for the field 'sum of rice distributed'. It includes a 'Field Information' section with details such as Field Label, Field Name, API Name, Description, Help Text, Data Owner, Field Usage, Data Sensitivity Level, and Compliance Categorization. The 'Roll-Up Summary Options' section shows the field type as 'Roll-Up Summary' and the summary type as 'SUM'. The field was created by 'Daniel Ibarra' on 27/08/2024 at 11:28 am.

Supplier Custom Field
sum of rice distributed
[Back to designer](#)

Custom Field Definition Detail

Field Information

Field Label	sum of rice distributed	Object Name	supplier
Field Name	sum_of_rice_distributed		
API Name	sum_of_rice_distributed__c		
Description			
Help Text			
Data Owner			
Field Usage			
Data Sensitivity Level			
Compliance Categorization			
Created By	Daniel Ibarra	Modified By	Daniel Ibarra
Created Date	27/08/2024 11:28 am	Modified Date	27/08/2024 11:28 am

Roll-Up Summary Options

Field Type	Roll-Up Summary	Summary Type	SUM
Summary Field	sum_of_rice_distributed		

The screenshot shows the Salesforce Setup interface for the 'rice mill' object. The left sidebar contains a navigation menu with options like Details, Fields & Relationships, Page Layouts, Lightning Record Pages, Buttons, Links, and Actions, Compact Layouts, Field Sets, Object Limits, Record Types, Related Lookup Filters, and Search Layouts. The main content area is titled 'Custom Field Definition Detail' for the field 'rice taken'. It includes a 'Field Information' section with details such as Field Label, Field Name, API Name, Description, Help Text, Data Owner, Field Usage, Data Sensitivity Level, and Compliance Categorization. The 'Roll-Up Summary Options' section shows the field type as 'Roll-Up Summary' and the summary type as 'SUM'. The field was created by 'Daniel Ibarra' on 27/08/2024 at 11:33 am.

Rice Mill Custom Field
rice taken
[Back to view field](#)

Custom Field Definition Detail

Field Information

Field Label	rice taken	Object Name	rice_mill
Field Name	rice_taken		
API Name	rice_taken__c		
Description			
Help Text			
Data Owner			
Field Usage			
Data Sensitivity Level			
Compliance Categorization			
Created By	Daniel Ibarra	Modified By	Daniel Ibarra
Created Date	27/08/2024 11:33 am	Modified Date	27/08/2024 11:33 am

Roll-Up Summary Options

Field Type	Roll-Up Summary	Summary Type	SUM
Summary Field	rice_taken		

Creating fields in objects

The screenshot shows the Salesforce Setup interface for the 'rice details' object. The left sidebar contains navigation links: Details, Fields & Relationships (selected), Page Layouts, Lightning Record Pages, Buttons, Links, and Actions, Compact Layouts, Field Sets, Object Limits, Record Types, Related Lookup Filters, and Search Layouts. The main content area is titled 'rice details Custom Field: supplier Name' and includes a 'Back to rice details' link. Below the title are tabs: 'Details' (selected), 'Set Field-Level Security', 'View Field Accessibility', and 'Where is this used?'. The 'Field Information' section displays the following details:

Field Label	Field Name	Object Name	Data Type
supplier Name	supplier_name	rice_details	Master-Detail
API Name	supplier_name__c		
Description			
Help Text			
Date Created			
Field Group			
Data Sensitivity Level			
Compliance Categorization			
Created By	DAVID BOWEN	Created By	DAVID BOWEN
Created Date	27/04/2024 11:23 AM	Created Date	27/04/2024 11:23 AM

The 'Master-Detail Options' section shows:

Related To	Child Relationship Name
supplier	rice_details

Creating fields in rice mill objects

The screenshot shows the Salesforce Setup interface for the 'rice mill' object. The left sidebar contains navigation links: Details, Fields & Relationships (selected), Page Layouts, Lightning Record Pages, Buttons, Links, and Actions, Compact Layouts, Field Sets, Object Limits, Record Types, Related Lookup Filters, and Search Layouts. The main content area is titled 'rice mill Custom Field: rice price/kg' and includes a 'Back to rice mill' link. Below the title are tabs: 'Details' (selected), 'Set Field-Level Security', 'View Field Accessibility', and 'Where is this used?'. The 'Field Information' section displays the following details:

Field Label	Field Name	Object Name	Data Type
rice price/kg	rice_price/kg	rice_mill	Number
API Name	rice_price__kg__c		
Description			
Help Text			
Date Created			
Field Group			
Data Sensitivity Level			
Compliance Categorization			
Created By	DAVID BOWEN	Created By	DAVID BOWEN
Created Date	28/04/2024 8:59 AM	Created Date	28/04/2024 8:59 AM

The 'General Options' section shows:

Required
<input type="checkbox"/>

Creating fields in Consumer object First name

The screenshot shows the Salesforce Setup interface for the 'consumer' object. The left sidebar contains a navigation menu with options like 'Details', 'Fields & Relationships', 'Page Layouts', 'Lightning Record Pages', 'Buttons, Links, and Actions', 'Compact Layouts', 'Field Sets', 'Object Limits', 'Record Types', 'Related Lookup Filters', and 'Search Layouts'. The main content area is titled 'consumer Custom Field' and 'First name'. It includes a 'Back to consumer' link and a 'Validation Rules (0)' link. Below this is the 'Custom Field Definition Detail' section with tabs for 'Edit', 'Set Field-Level Security', 'View Field Accessibility', and 'Where is this used?'. The 'Field Information' table lists the field details:

Field Label	Field Name	Source Name
First Name	First_name	First_name
API Name	First_name__c	Data Type
Description		Text
Help Text		
Data Owner		
Field Usage		
Data Sensitivity Level		
Compliance Categorization		
Created By	DATA_IMPORT 10/04/2024 8:52 am	Modified By
		DATA_IMPORT 10/04/2024 8:52 am

The 'General Options' section shows the field is 'Required' and 'Visible'.

Last name

The screenshot shows the Salesforce Setup interface for the 'consumer' object, specifically for the 'Last name' field. The layout is identical to the 'First name' field definition, with the same sidebar and main content area. The 'Field Information' table lists the field details:

Field Label	Field Name	Source Name
Last name	Last_name	Last_name
API Name	Last_name__c	Data Type
Description		Text
Help Text		
Data Owner		
Field Usage		
Data Sensitivity Level		
Compliance Categorization		
Created By	DATA_IMPORT 10/04/2024 8:52 am	Modified By
		DATA_IMPORT 10/04/2024 8:52 am

The 'General Options' section shows the field is 'Required' and 'Visible'.

Phone Number

Email

The screenshot shows the Salesforce Setup interface for the 'consumer' object. The left sidebar contains a navigation menu with options like 'Details', 'Fields & Relationships', 'Page Layouts', 'Lightning Record Pages', 'Buttons, Links, and Actions', 'Compact Layouts', 'Field Sets', 'Object Limits', 'Record Types', 'Related Lookup Filters', and 'Search Layouts'. The main content area is titled 'Phone number' and includes a 'Custom Field Definition Detail' section. This section contains a table with field information and a 'General Options' section.

Field Label	Phone number	Object Name	consumer
Field Name	Phone_number	Data Type	Phone
API Name	Phone_number__c		
Description			
Help Text			
Data Owner			
Field Usage			
Data Sensitivity Level			
Compliance Categorization			
Created By	System Administrator	Modified By	System Administrator

General Options: Required ☐ Default Value

Rice taken by shops

The screenshot shows the Salesforce Setup interface for the 'consumer' object. The left sidebar contains a navigation menu with options like 'Details', 'Fields & Relationships', 'Page Layouts', 'Lightning Record Pages', 'Buttons, Links, and Actions', 'Compact Layouts', 'Field Sets', 'Object Limits', 'Record Types', 'Related Lookup Filters', and 'Search Layouts'. The main content area is titled 'Rice taken by shops' and includes a 'Custom Field Definition Detail' section. This section contains a table with field information and a 'General Options' section.

Field Label	Rice taken by shops	Object Name	consumer
Field Name	Rice_taken_by_shops	Data Type	Number
API Name	Rice_taken_by_shops__c		
Description			
Help Text			
Data Owner			
Field Usage			
Data Sensitivity Level			
Compliance Categorization			
Created By	System Administrator	Modified By	System Administrator

General Options: Required ☐ Default Value

Rice type

Mode of payment

The screenshot shows the Salesforce Setup interface for the 'consumer' object. The left sidebar contains navigation links: Details, Fields & Relationships (selected), Page Layouts, Lightning Record Pages, Buttons, Links, and Actions, Compact Layouts, Field Sets, Object Limits, Record Types, Related Lookup Filters, and Search Layouts. The main content area is titled 'Mode of payment' and includes a 'Back to consumer' link. Below the title is a 'Custom Field Definition Detail' section with tabs for 'Edit', 'Set Field-Level Security', 'View Field Accessibility', and 'Where is this used?'. The 'Field Information' table lists the following details:

Field Label	Mode of payment	Object Name	Field Name	API Name	Description	Help Text	Data Owner	Field Usage	Data Sensitivity Level	Compliance Categorization	Created By	Created Date	Modified By	Modified Date
Field Name	Mode_of_payment	consumer	Mode_of_payment__c	Mode_of_payment__c							DATA.LOBBIS	20/06/2024 9:36 AM	DATA.LOBBIS	20/06/2024 9:36 AM

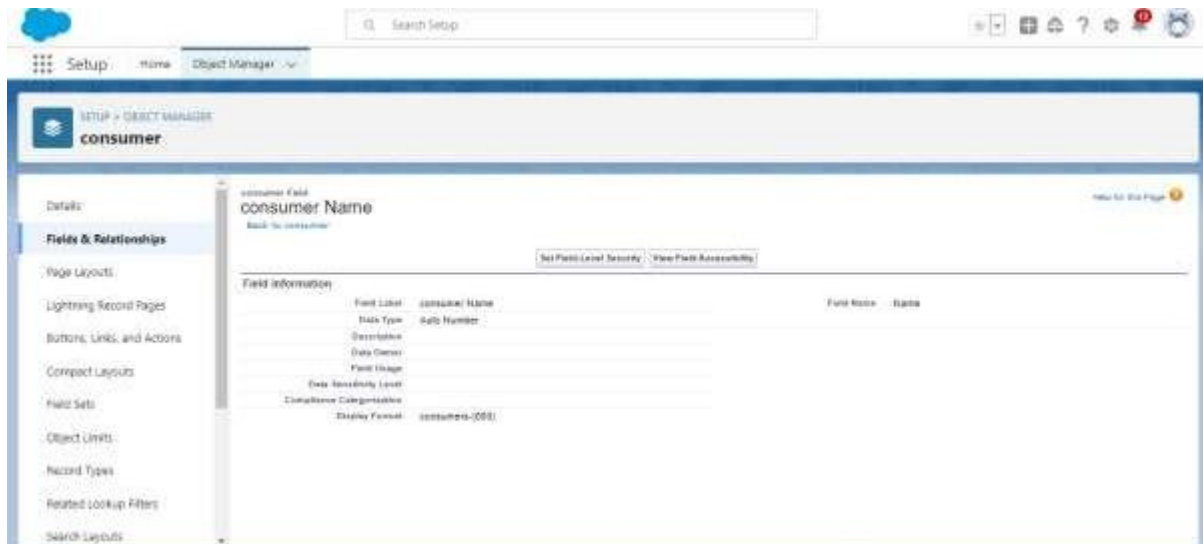
Below the table is the 'General Options' section, which includes a 'Required' checkbox and a 'Default Value' field.

Creating Cross Object Formula Field In Consumer Object

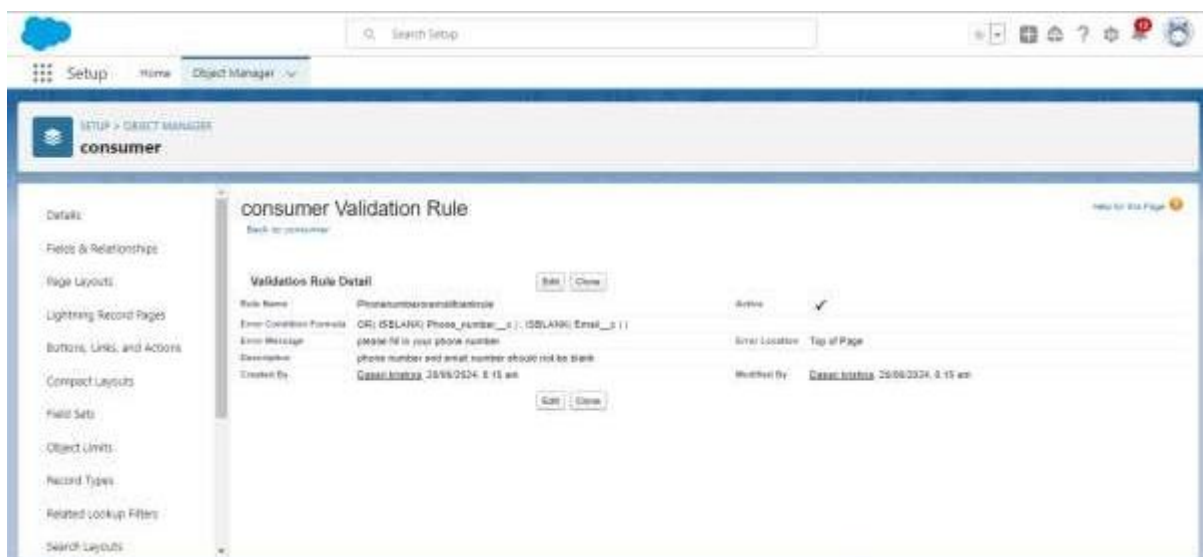
The screenshot shows the Salesforce Setup interface for the 'consumer' object, specifically the 'Amount Paid' custom formula field. The left sidebar is the same as the previous screenshot. The main content area is titled 'Amount Paid' and includes a 'Back to consumer' link. Below the title is a 'Custom Field Definition Detail' section with tabs for 'Edit', 'Set Field-Level Security', 'View Field Accessibility', and 'Where is this used?'. The 'Field Information' table lists the following details:

Field Label	Amount Paid	Object Name	Field Name	API Name	Description	Help Text	Data Owner	Field Usage	Data Sensitivity Level	Compliance Categorization	Created By	Created Date	Modified By	Modified Date
Field Name	Amount Paid	consumer	Amount_Paid__c	Amount_Paid__c							DATA.LOBBIS	20/06/2024 9:13 AM	DATA.LOBBIS	20/06/2024 9:13 AM

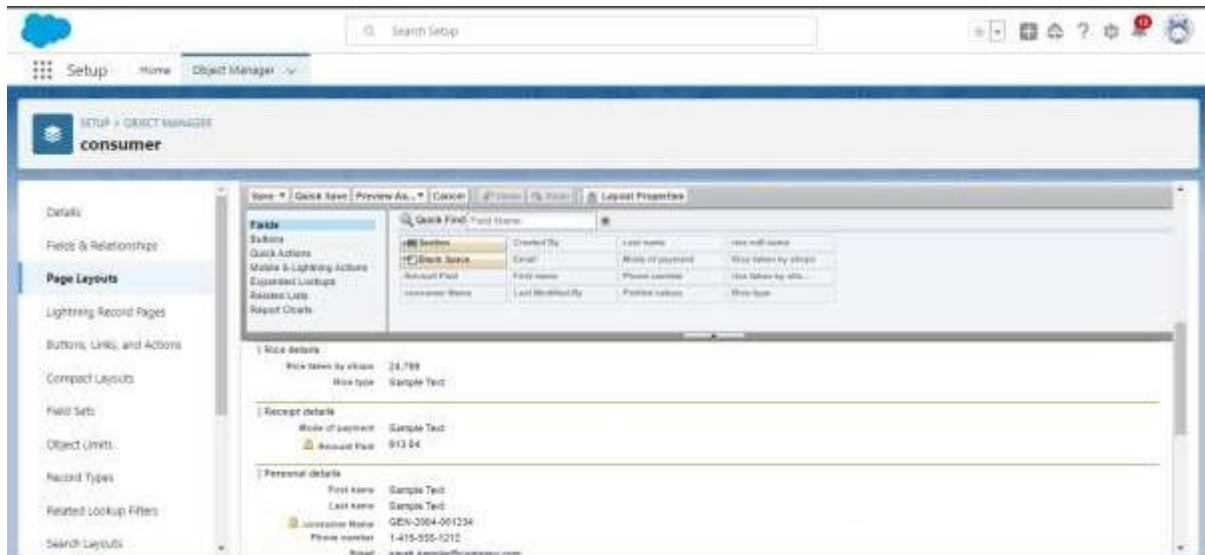
Below the table is the 'Formula Options' section, which includes a 'Data Type' dropdown set to 'Text', a 'Formula Suffix' dropdown set to '2', and a 'Formula' text area containing the formula: `Price_Later_By_Short__c * Price_By_Short__c + Price_By_Short__c * Price_By_Short__c`.



Creating the Validation Rule

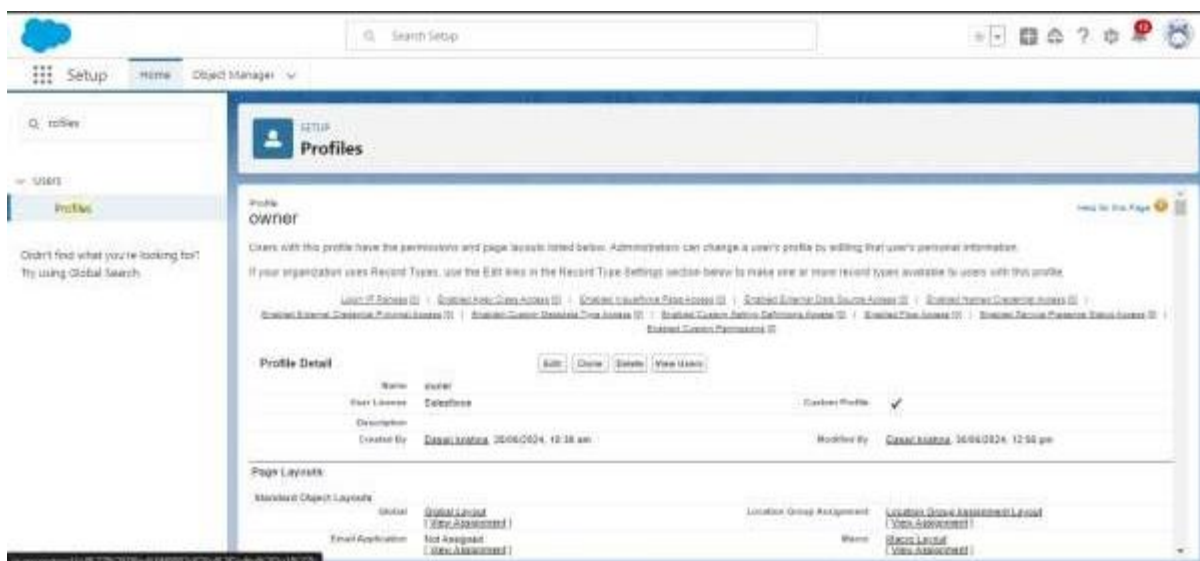


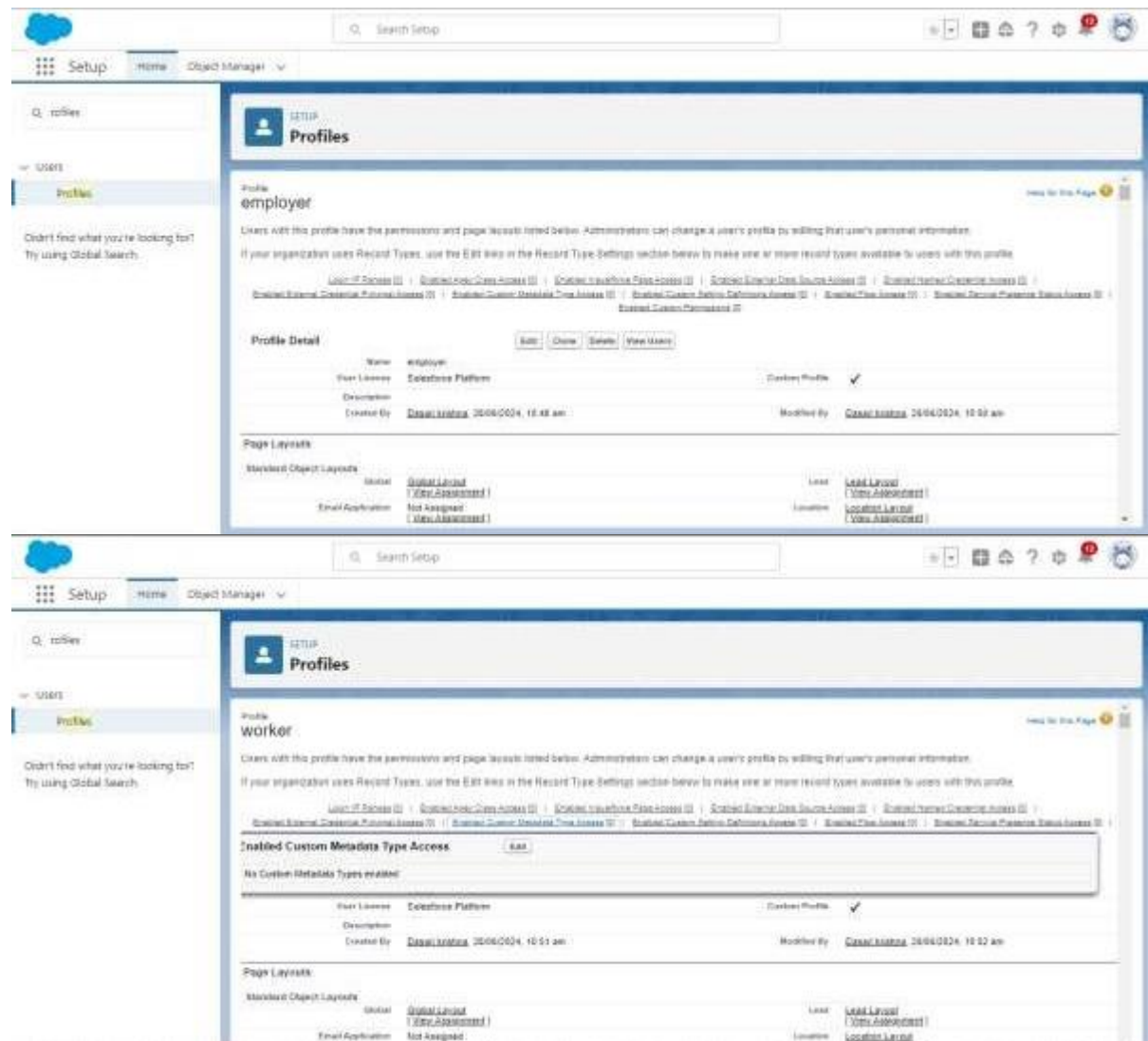
Creating the Page Layout



2. Profiles

Owner Profile





Creating Owner Role

Creating Employer Role



USERS

Create Users

Create another users

The screenshot shows the Salesforce Setup interface for a user named 'vicky y'. The left sidebar contains a navigation menu with options like 'Permission Set Groups', 'Permission Sets', 'Profiles', 'Public Groups', 'Queues', 'Roles', 'User Management Settings', 'Users', 'Feature Settings', 'Data.com', 'Prospector Users', 'Service', and 'Embedded Service'. The main content area is titled 'Users' and displays the details for the user 'vicky y'. The user's email is 'vicky.y@gmail.com' and their role is 'Standard Platform User'. The user is active and has a profile of 'Standard Platform User'.

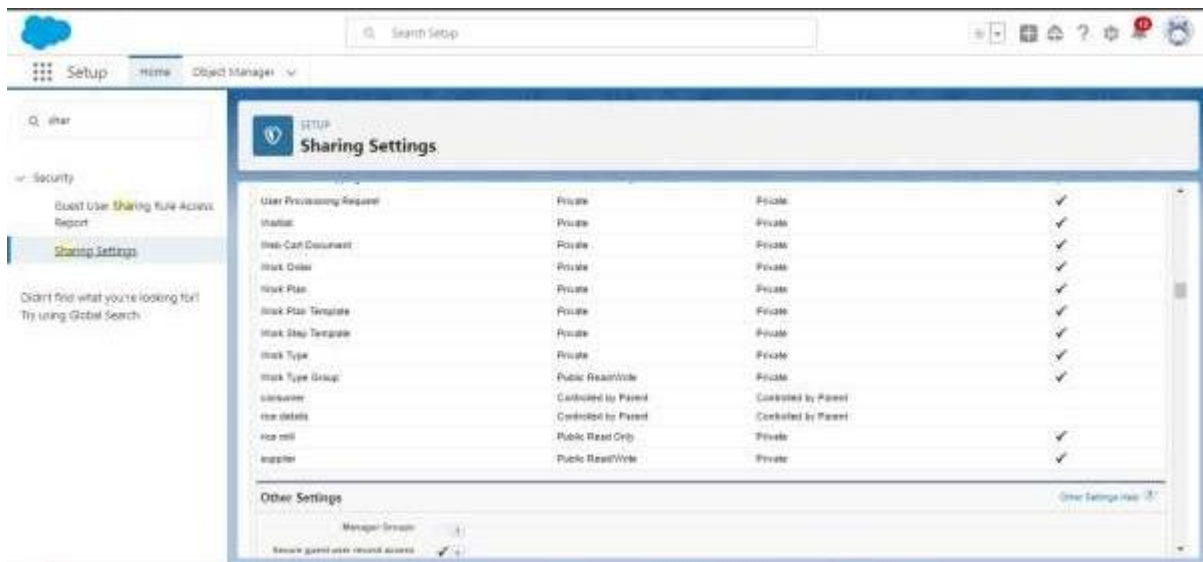
User Detail		Role
Name	vicky y	Standard Platform User
Alias	vy	Standard Platform User
Email	vicky.y@gmail.com	Standard Platform User
Username	vicky.y@gmail.com	Standard Platform User
Module	vy	Standard Platform User
Title		Standard Platform User
Company		Standard Platform User
Department		Standard Platform User
Division		Standard Platform User
Address		Standard Platform User
Time Zone	(GMT+05:30) India Standard Time (Asia/Kolkata)	Standard Platform User
Locale	English (India)	Standard Platform User

The screenshot shows the Salesforce Setup interface for a user named 'ram ram'. The left sidebar contains a navigation menu with options like 'Permission Set Groups', 'Permission Sets', 'Profiles', 'Public Groups', 'Queues', 'Roles', 'User Management Settings', 'Users', 'Feature Settings', 'Data.com', 'Prospector Users', 'Service', and 'Embedded Service'. The main content area is titled 'Users' and displays the details for the user 'ram ram'. The user's email is 'ram.ram@gmail.com' and their role is 'Standard Platform User'. The user is active and has a profile of 'Standard Platform User'.

User Detail		Role
Name	ram ram	Standard Platform User
Alias	rram	Standard Platform User
Email	ram.ram@gmail.com	Standard Platform User
Username	ram.ram@gmail.com	Standard Platform User
Module	rram	Standard Platform User
Title		Standard Platform User
Company		Standard Platform User
Department		Standard Platform User
Division		Standard Platform User
Address		Standard Platform User
Time Zone	(GMT+05:30) India Standard Time (Asia/Kolkata)	Standard Platform User
Locale	English (India)	Standard Platform User

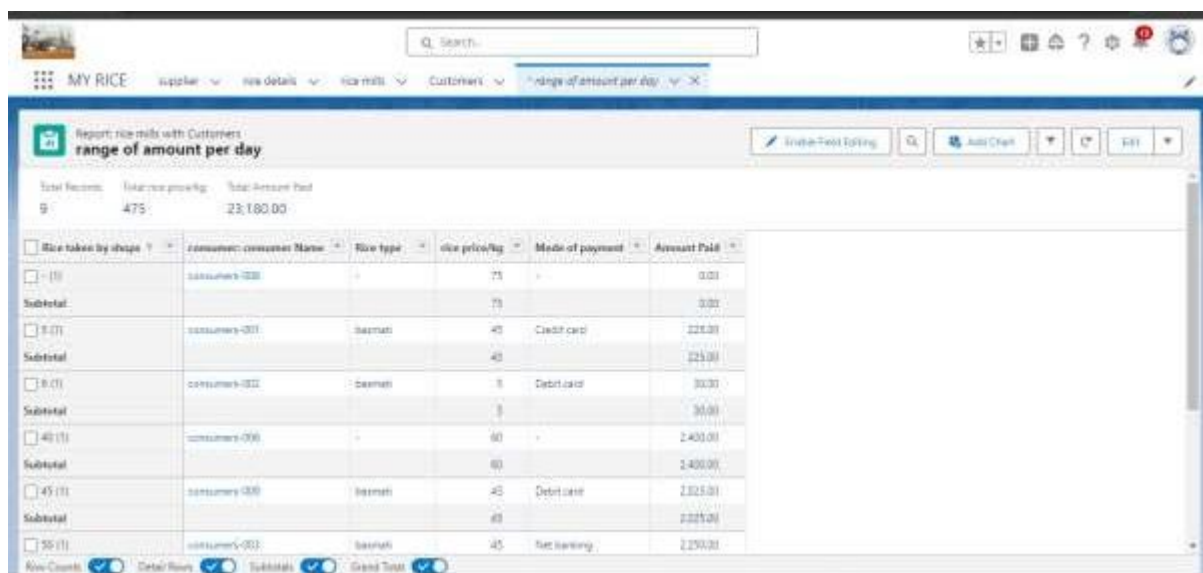
4. Permission Sets

Creating OWD settings



Reports

Create Report



11.DashBoards

