



# **A CRM APPLICATION FOR WHOLESALE RICE MILL**

## **Report**

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## **Abstract**

The Rice Mill CRM Application is a comprehensive solution designed for daily management of rice production and sales inventory at rice mill factories. By leveraging Salesforce CRM, the application aims to enhance customer experiences, optimize store operations, and boost overall efficiency. It features detailed reporting and dashboards for daily sales and revenue analytics, helping owners make informed decisions. The application includes roll-up summary fields that aggregate data from child to parent objects, and cross-object formula fields to calculate total payable amounts based on rice quantity and price per kilogram. Validation rules ensure data accuracy, while permission sets and roles manage access control, allowing owners to view all employee records and employers to access only worker records. To effectively develop and use this application, users will need a Salesforce Developer account, knowledge of Salesforce admin concepts, and reliable internet connectivity. Through this project, users will gain experience with object relationships, formula fields, validation rules, page layouts, roll-up summary fields, and creating insightful reports and dashboards. The application is specifically tailored to meet the needs of rice mill factories, offering a user-friendly and efficient tool for managing operations and making data-driven decisions.

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# Intoduction

The Rice Mill CRM Application is a tailored solution designed to enhance the management and efficiency of wholesale rice mills by leveraging Salesforce's powerful CRM capabilities. This comprehensive application streamlines the process of tracking daily rice production, sales, and inventory, providing detailed reports and analytics to factory owners. It features robust reporting and dashboard tools that offer insights into daily sales volumes, revenue, popular products, and customer trends, helping owners make data-driven decisions. Key functionalities include rollup summary fields that aggregate data from related records, cross-object formula fields for accurate financial calculations, and validation rules to ensure data accuracy. Permission sets and roles are configured to control data access, allowing owners to view all records while employers see only relevant worker records. To develop and utilize this application effectively, users need a Salesforce Developer account, a solid understanding of Salesforce admin concepts, two web browsers, and reliable internet connectivity. Through this project, users will gain hands-on experience with Salesforce object management, formula fields, validation rules, page layouts, and reporting, providing a practical and feature-rich solution tailored to the needs of a rice mill factory.

# 1.Salesforce

- **Creating DeveloperAccount** : Created a developer org in salesforce platform by filling relevant details.
- **Account Activation** : Then I've got the mail, verifiedmy account and set up a password.

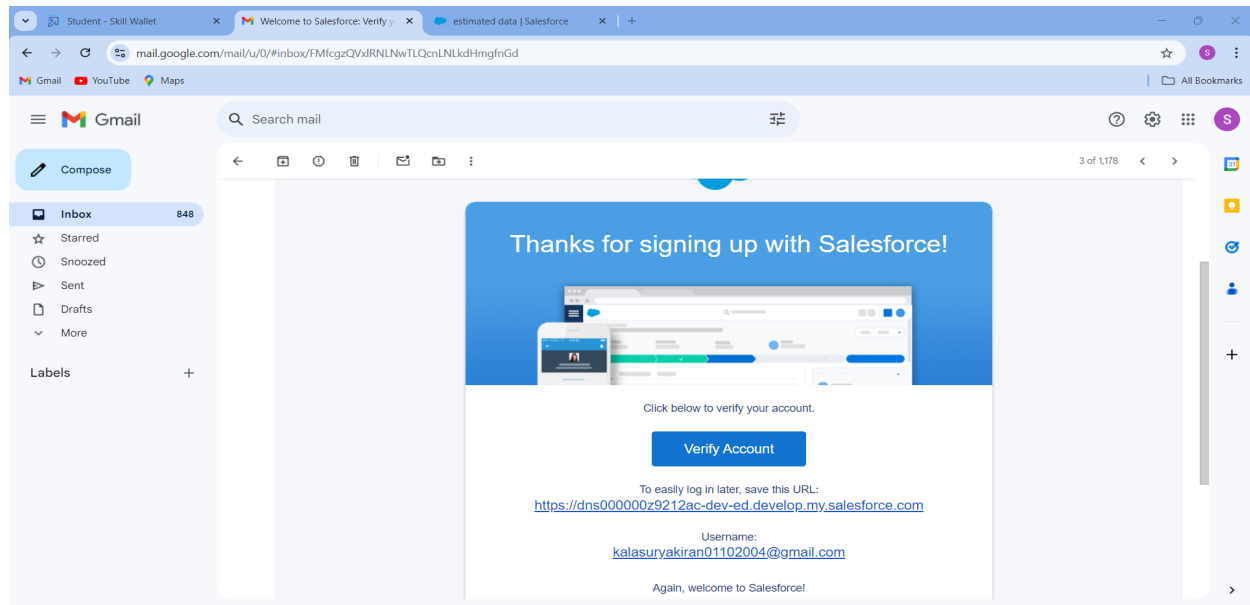


FIG 1.1 Verification Mail

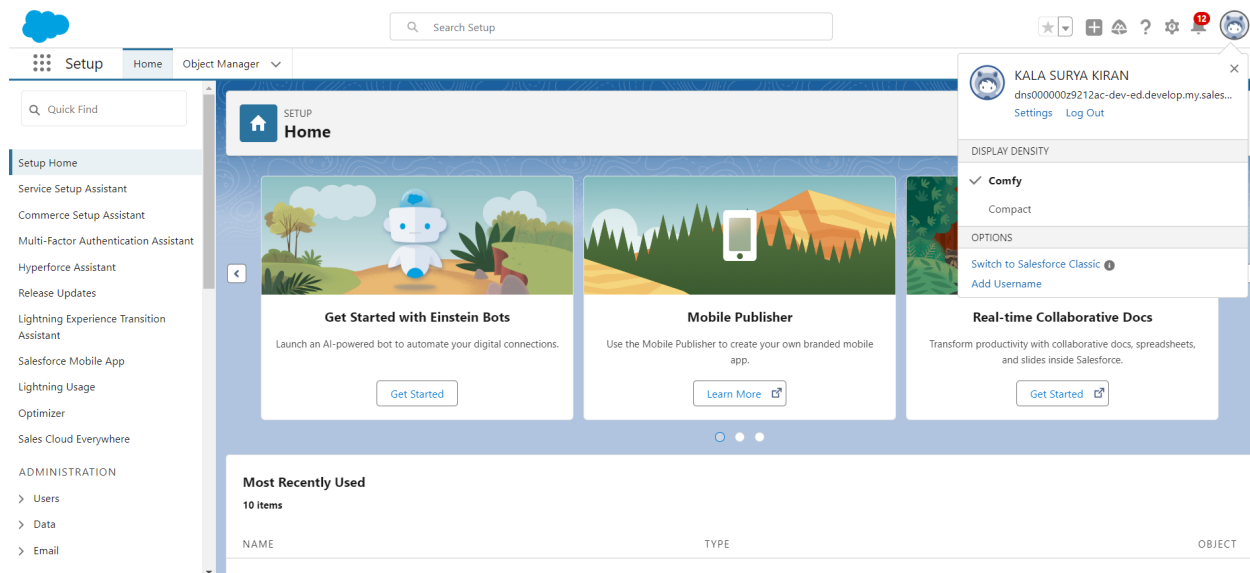


FIG 1.2 Account

## 2.Object

**Supplier Object:** Represents entities that provide raw materials or products. Includes fields for supplier name, sum of the distributed.

**Rice Mill Object:** Represents rice processing units. Includes fields for mill name, rice distributed by shops, rice price/kg and rice taken.

**Consumer Object:** Represents customers or clients purchasing rice. Includes fields for consumer name, contact details, and purchase history,picklist,etc.

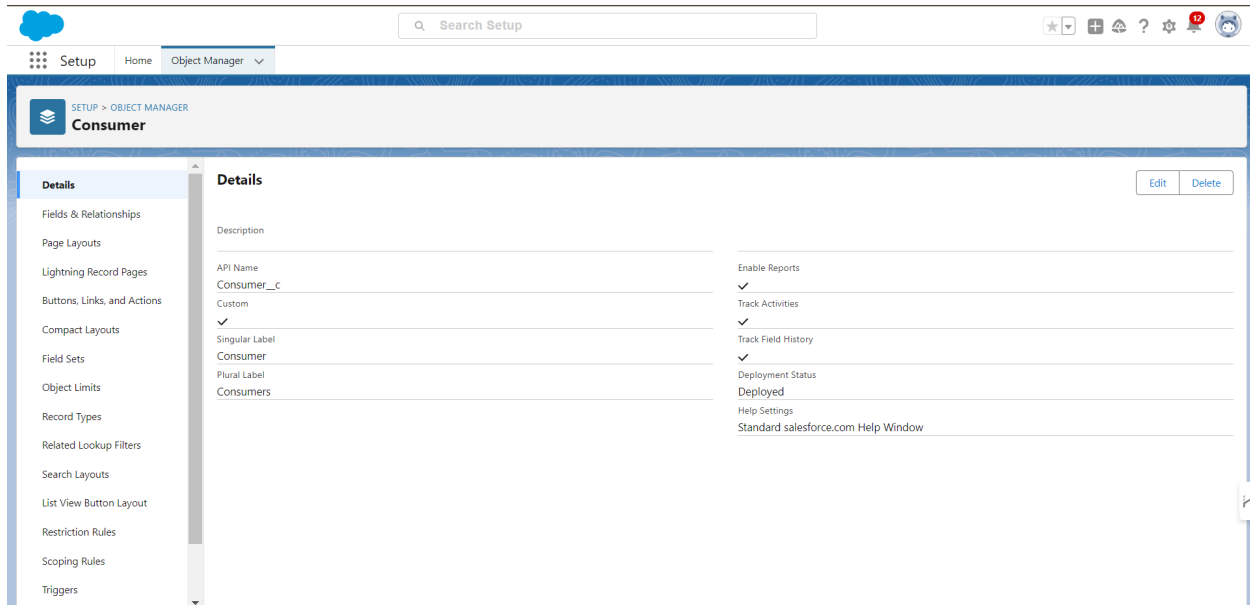
**Rice Details Object:** Represents specific details about rice products. Includes fields for rice type, grade, and price.

The screenshot shows the Salesforce Setup interface for creating a new object. The top navigation bar includes the Salesforce logo, a search bar labeled "Search Setup", and several utility icons. Below the navigation bar, the "Setup" menu is open, showing "Home" and "Object Manager". The "Object Manager" page is displayed, with the "Supplier" object selected. The left sidebar contains a list of configuration options: 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, List View Button Layout, Restriction Rules, and Scoping Rules. The main content area is titled "Details" and includes fields for Description, API Name (Supplier\_\_c), Custom (checked), Singular Label (Supplier), Plural Label (Suppliers), and a list of checkboxes for Enable Reports, Track Activities, Track Field History, and Deployment Status (Deployed). A "Help Settings" link and a "Standard salesforce.com Help Window" link are also present.

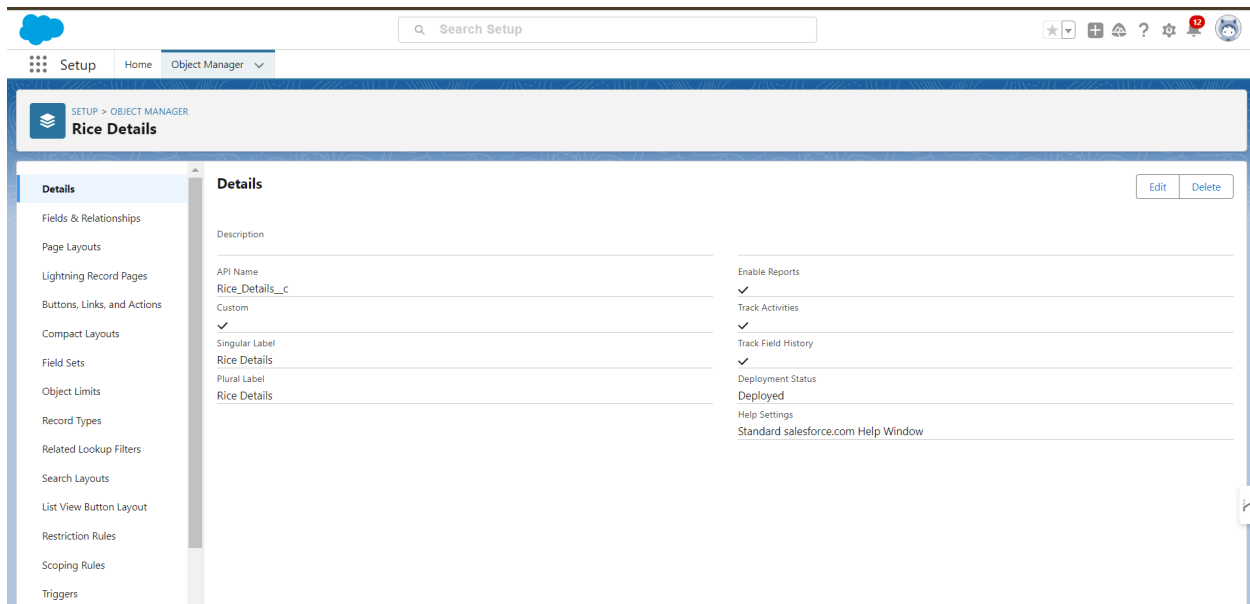
FIG 2.1 : Create Supplier Object

The screenshot shows the Salesforce Setup interface for creating a new object. The top navigation bar includes the Salesforce logo, a search bar labeled "Search Setup", and several utility icons. Below the navigation bar, the "Setup" menu is open, showing "Home" and "Object Manager". The "Object Manager" page is displayed, with the "Rice Mill" object selected. The left sidebar contains a list of configuration options: 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, List View Button Layout, Restriction Rules, and Triggers. The main content area is titled "Details" and includes fields for Description, API Name (Rice\_Mill\_\_c), Custom (checked), Singular Label (Rice Mill), Plural Label (Rice Mills), and a list of checkboxes for Enable Reports, Track Activities, Track Field History, and Deployment Status (Deployed). A "Help Settings" link and a "Standard salesforce.com Help Window" link are also present.

FIG 2.2 : Create Rice Mill Object



**FIG 2.3 : Create Consumer Object**



**FIG 2.4 : Create Rice Detailed Object**



## 3. Tabs

**-Creating a Custom Tab :**Select the Tabs option in Quick find box and create new tab named Assignment.

**-Creation of remaining Tabs:** Same a consumer tab creation remaining should be followed.

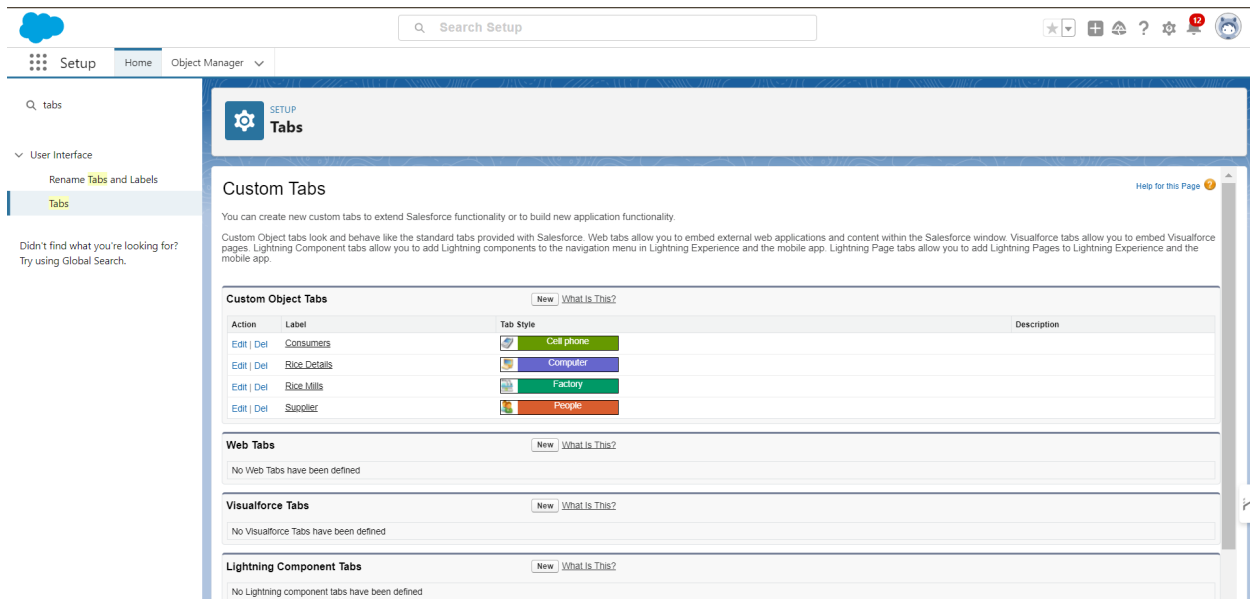


FIG 3.1 :Custom Tabs

## 4. The Lightning App

**- Create a Lightning App :** Again in quick find box go to app manager and create new lightning app with the name of project and some further details.

- Navigation Items
- User profiles
- Utility items

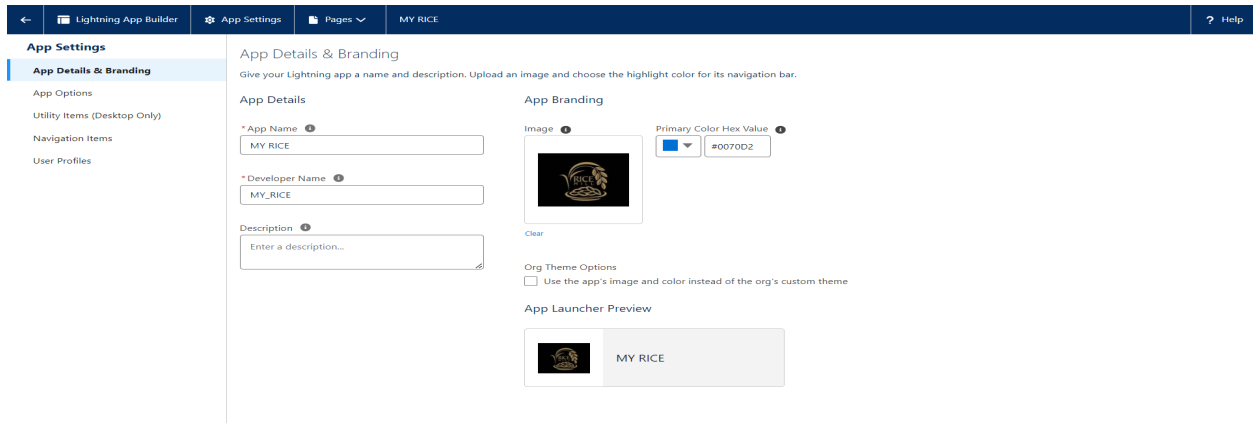


FIG 4.1 :Creation of Ligthing App

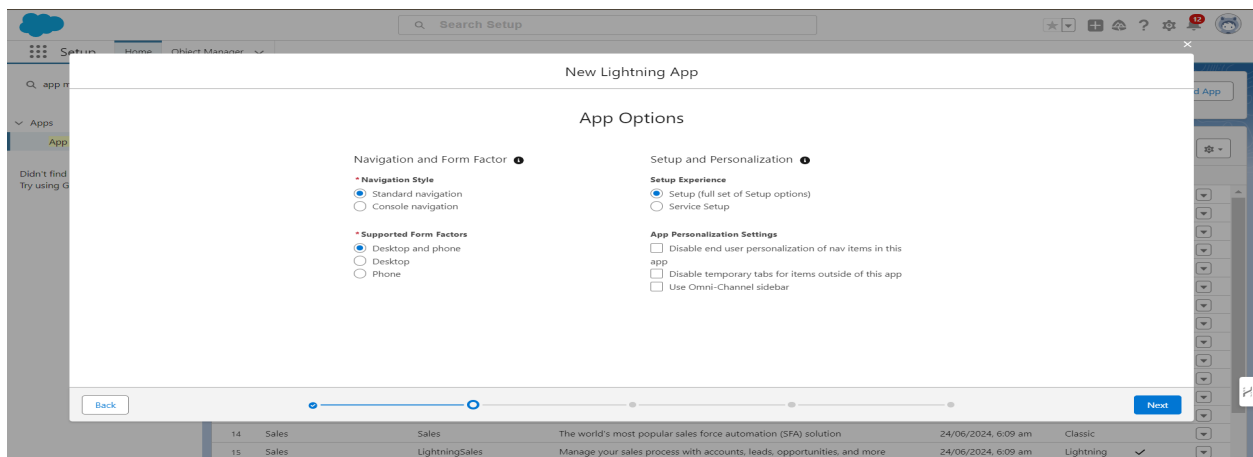


FIG4.2 : Default options for Lighting App

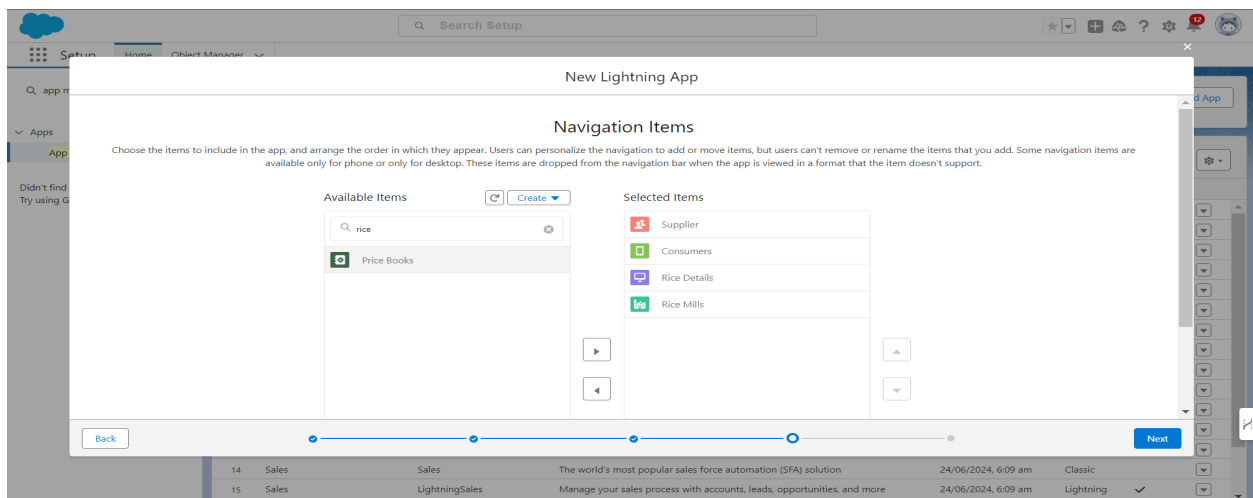


FIG 4.3 : Navigation Items for Lighting App

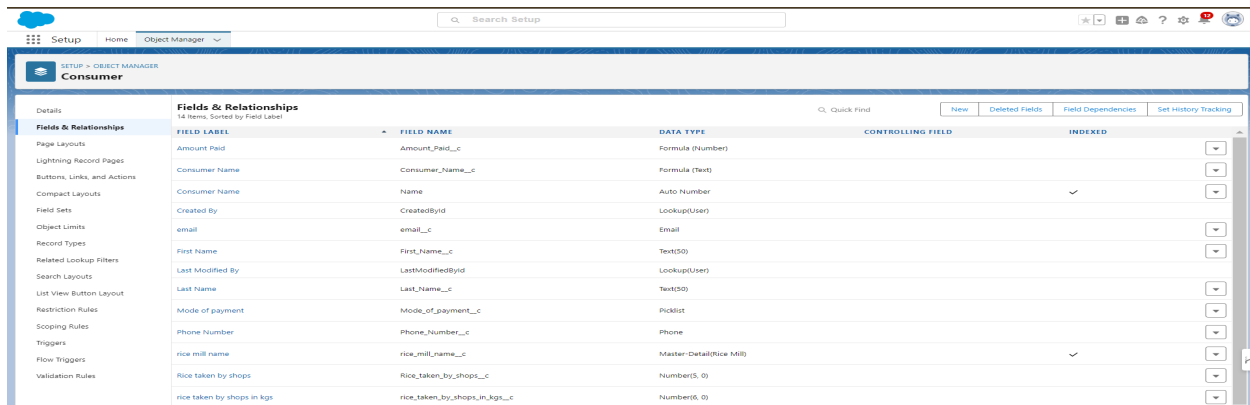
# 5.Fields

Fields represent the data stored in the columns of a relational database. It can also hold any valuable information that you require for a specific object. Hence, the overall searching, deletion, and editing of the records become simpler and quicker.

## Types of Fields

**1. Standard Fields:** Predefined fields that perform standard tasks and cannot be deleted if they are required fields. Common standard fields include Created By, Owner, Last Modified, and fields created during object creation.

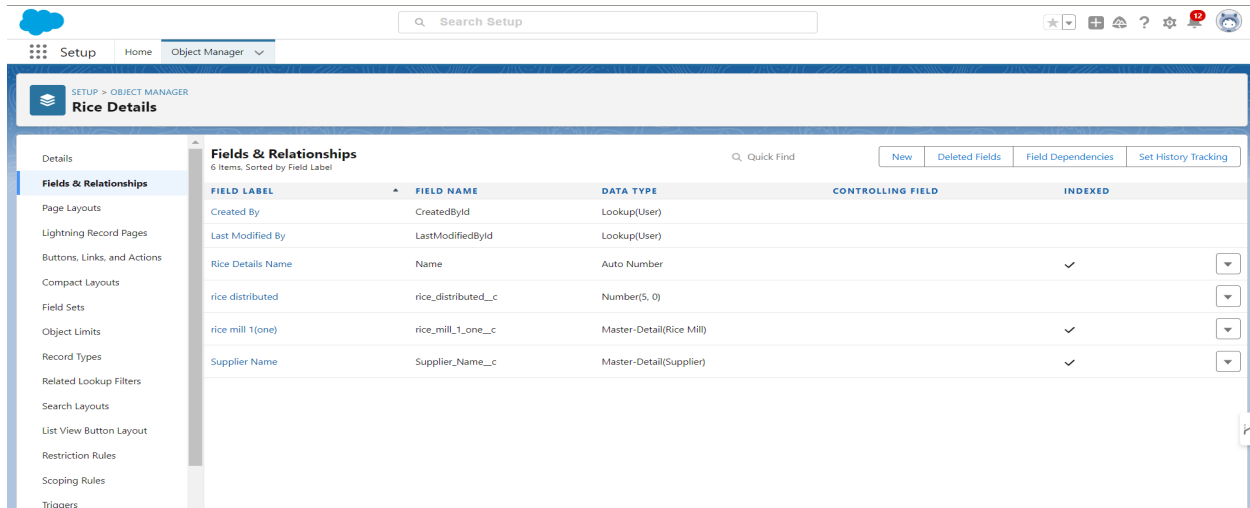
**2. Custom Fields:** Flexible fields that users can add, remove, or modify according to specific needs. These fields are optional and can be customized by each organization or company based on their requirements.



The screenshot shows the 'Fields & Relationships' section for the 'Consumer' object. The table lists 14 fields, including standard fields like 'Created By' and 'Last Modified By', and custom fields like 'Amount Paid' and 'Rice taken by shops in kgs'.

FIELD LABEL	FIELD NAME	DATA TYPE	CONTROLLING FIELD	INDEXED
Amount Paid	Amount_Paid__c	Formula (Number)		
Consumer Name	Consumer_Name__c	Formula (Text)		
Consumer Name	Name	Auto Number		✓
Created By	CreatedBy	Lookup(User)		
email	email__c	Email		
First Name	First_Name__c	Text(50)		
Last Modified By	LastModifiedBy	Lookup(User)		
Last Name	Last_Name__c	Text(50)		
Mode of payment	Mode_of_payment__c	Picklist		
Phone Number	Phone_Number__c	Phone		
rice mill name	rice_mill_name__c	Master-Detail(Rice Mill)		✓
Rice taken by shops	Rice_taken_by_shops__c	Number(5, 0)		
rice taken by shops in kgs	rice_taken_by_shops_in_kgs__c	Number(0, 0)		

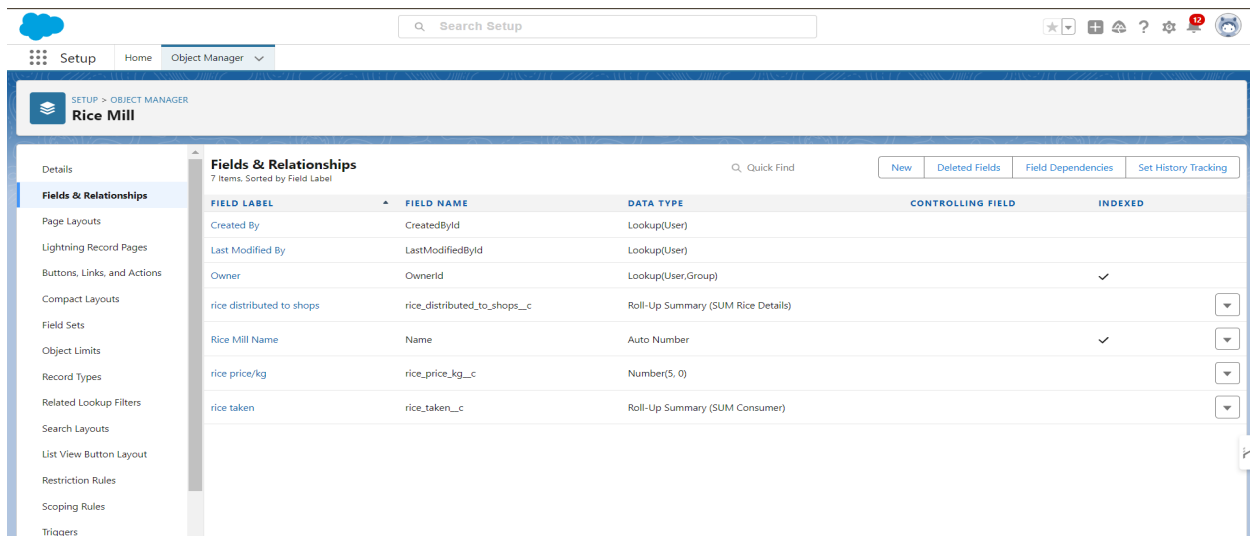
FIG 5.1 Fields of Consumer Object



The screenshot shows the 'Fields & Relationships' section for the 'Rice Details' object. The table lists 6 fields, including standard fields like 'Created By' and 'Last Modified By', and custom fields like 'Rice Details Name' and 'rice distributed'.

FIELD LABEL	FIELD NAME	DATA TYPE	CONTROLLING FIELD	INDEXED
Created By	CreatedBy	Lookup(User)		
Last Modified By	LastModifiedBy	Lookup(User)		
Rice Details Name	Name	Auto Number		✓
rice distributed	rice_distributed__c	Number(5, 0)		
rice mill 1(one)	rice_mill_1_one__c	Master-Detail(Rice Mill)		✓
Supplier Name	Supplier_Name__c	Master-Detail(Supplier)		✓

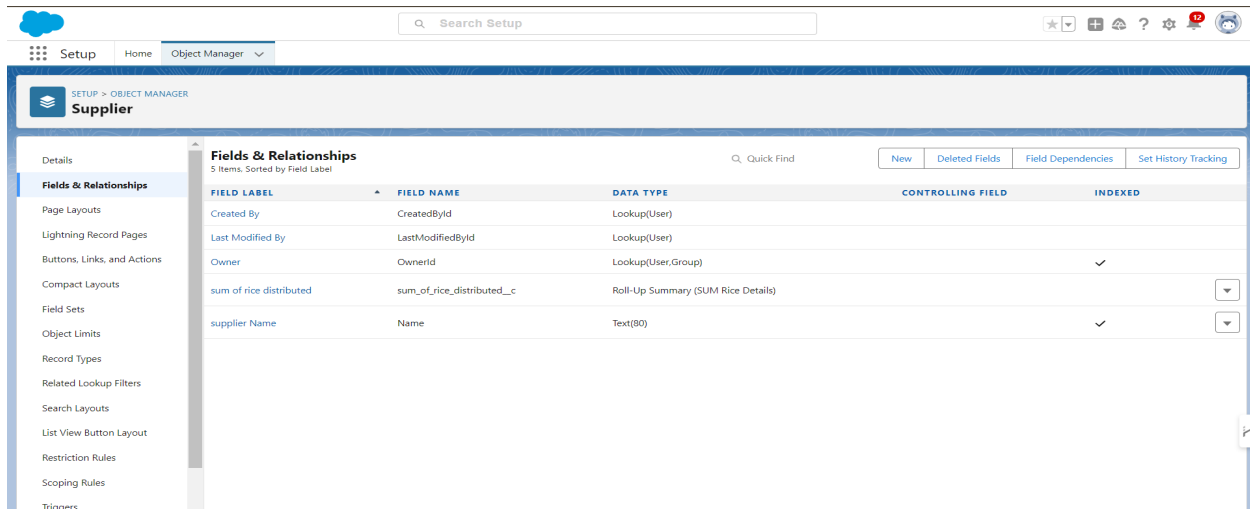
FIG 5.2 Fields of Rice Details Object



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, Search Layouts, List View Button Layout, Restriction Rules, Scoping Rules, and Triggers. The main content area is titled 'Fields & Relationships' and shows a table of fields for the 'Rice Mill' object. The table has columns for FIELD LABEL, FIELD NAME, DATA TYPE, CONTROLLING FIELD, and INDEXED. There are 7 items listed, sorted by Field Label. The fields include 'Created By', 'Last Modified By', 'Owner', 'rice distributed to shops', 'Rice Mill Name', 'rice price/kg', and 'rice taken'. The 'rice distributed to shops' and 'rice taken' fields are Roll-Up Summary fields. The 'Rice Mill Name' field is an Auto Number field.

FIELD LABEL	FIELD NAME	DATA TYPE	CONTROLLING FIELD	INDEXED
Created By	CreatedById	Lookup(User)		
Last Modified By	LastModifiedById	Lookup(User)		
Owner	OwnerId	Lookup(User,Group)		✓
rice distributed to shops	rice_distributed_to_shops__c	Roll-Up Summary (SUM Rice Details)		
Rice Mill Name	Name	Auto Number		✓
rice price/kg	rice_price_kg__c	Number(5, 0)		
rice taken	rice_taken__c	Roll-Up Summary (SUM Consumer)		

FIG 5.3 Fields of Rice Mill Object



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, Search Layouts, List View Button Layout, Restriction Rules, Scoping Rules, and Triggers. The main content area is titled 'Fields & Relationships' and shows a table of fields for the 'Supplier' object. The table has columns for FIELD LABEL, FIELD NAME, DATA TYPE, CONTROLLING FIELD, and INDEXED. There are 5 items listed, sorted by Field Label. The fields include 'Created By', 'Last Modified By', 'Owner', 'sum of rice distributed', and 'supplier Name'. The 'sum of rice distributed' field is a Roll-Up Summary field. The 'supplier Name' field is a Text field.

FIELD LABEL	FIELD NAME	DATA TYPE	CONTROLLING FIELD	INDEXED
Created By	CreatedById	Lookup(User)		
Last Modified By	LastModifiedById	Lookup(User)		
Owner	OwnerId	Lookup(User,Group)		✓
sum of rice distributed	sum_of_rice_distributed__c	Roll-Up Summary (SUM Rice Details)		
supplier Name	Name	Text(80)		✓

FIG 5.4 Fields of Supplier Object

## 6. 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.

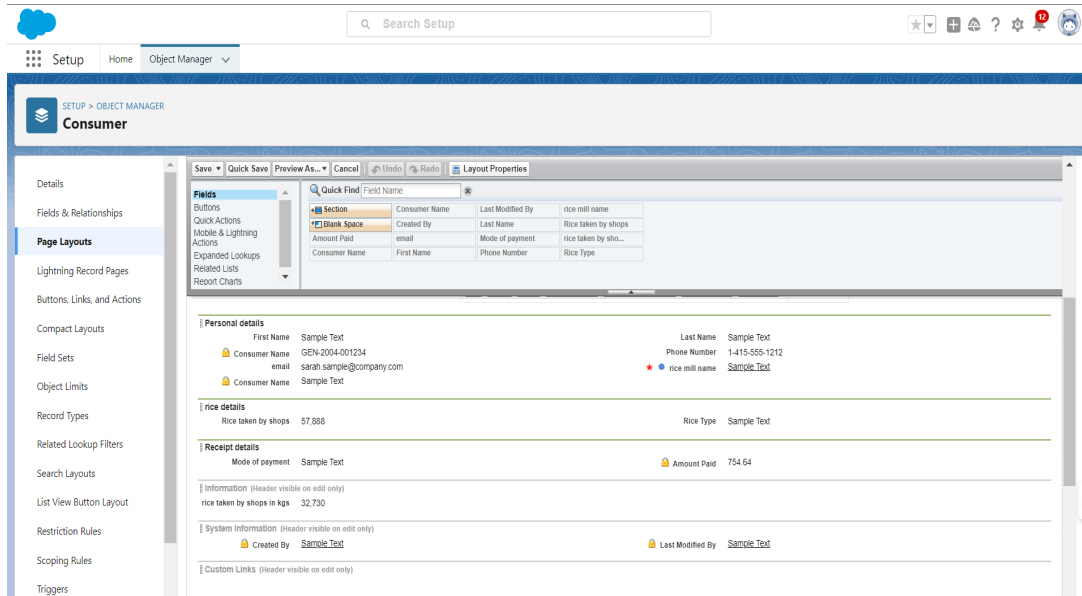


FIG 6.1 Creation Page Layout for Consumer Object

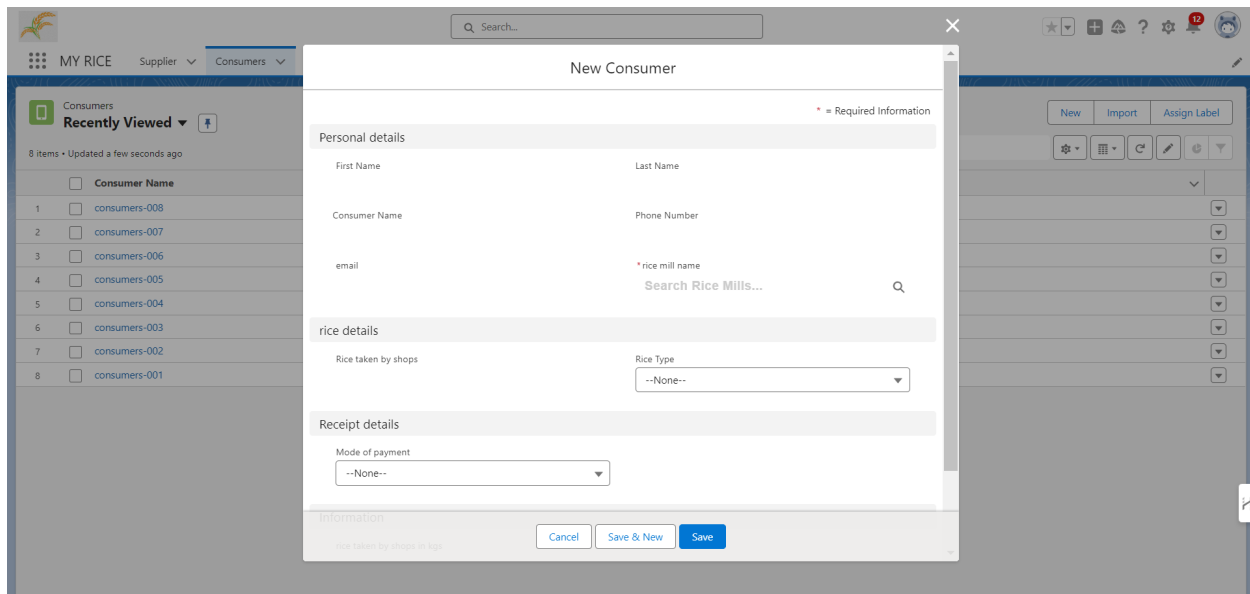


FIG 6.2 Page Layouts for Consumer Object

# 7.Profiles

In Salesforce, a profile is a collection of settings and permissions that define what users can do within the platform. Profiles control access to objects, fields, tabs, applications, Apex classes, Visualforce pages, page layouts, record types, login hours, and IP ranges. They help manage user access based on their job roles, ensuring they have the necessary permissions to perform their tasks effectively.

## Types of Profiles in Salesforce:

**1.Standard Profiles:**These are the predefined profiles provided by Salesforce. These profiles come with default permissions for standard objects and are tailored to common job roles like Contract Manager, Read Only, Marketing User, Solutions Manager, Standard User, and System Administrator. Standard profiles cannot be deleted, ensuring that essential roles and permissions remain intact within the system for consistent security and access control.

**2.Custom Profiles:**These are profiles created by users to meet the specific needs of their organization. These profiles can be fully customized and adjusted based on the requirements of different job functions, providing flexibility in managing user access. Custom profiles can be deleted if there are no users assigned to them, allowing organizations to tailor their security and access settings precisely.

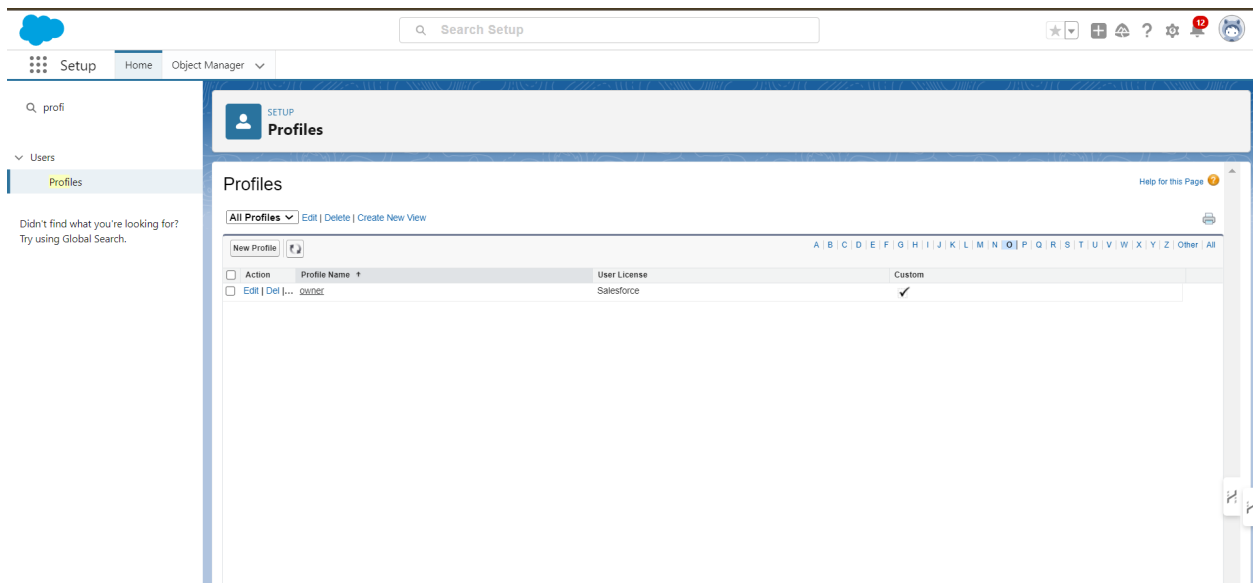


FIG 7.1 Owner Profile

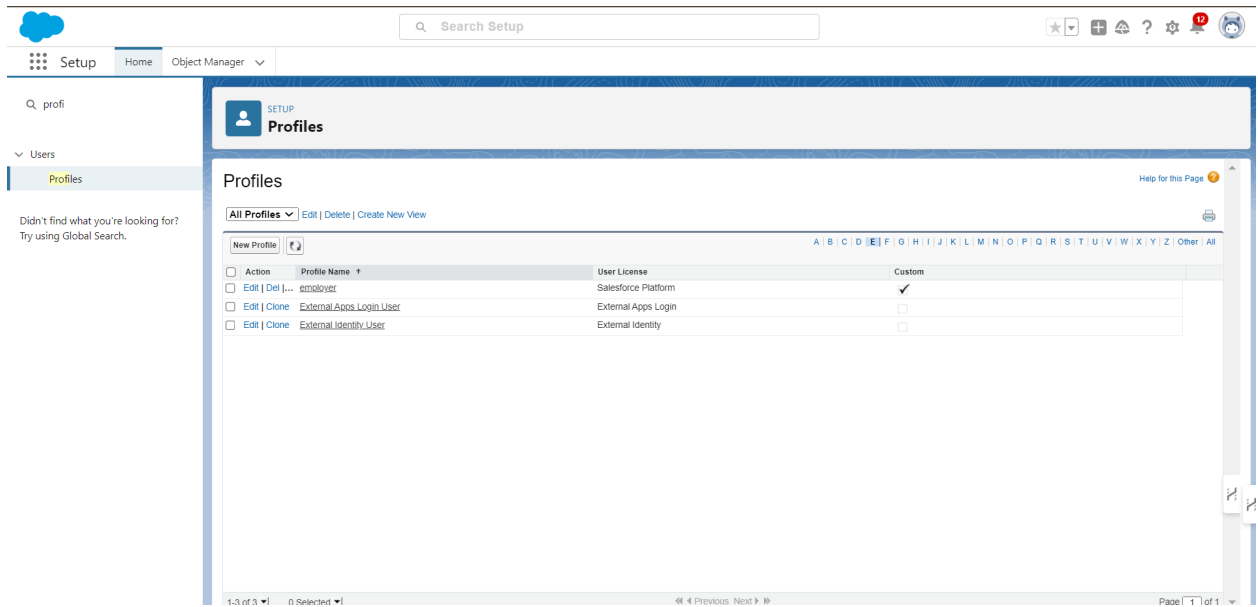


FIG 7.2 Employer Profile

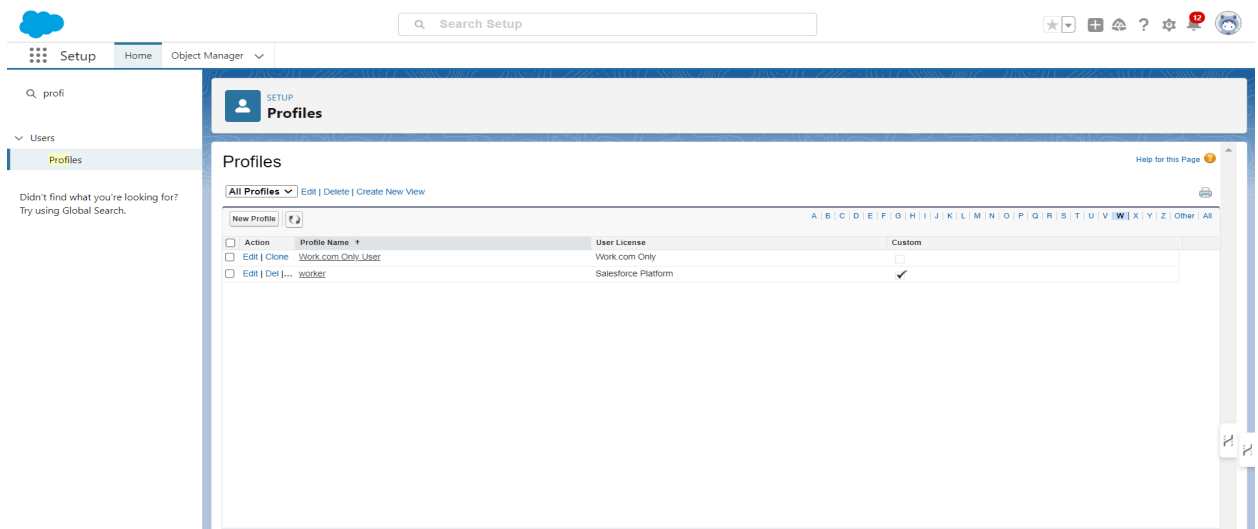


FIG 7.3 Worker Profile

## 8. Roles & 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.

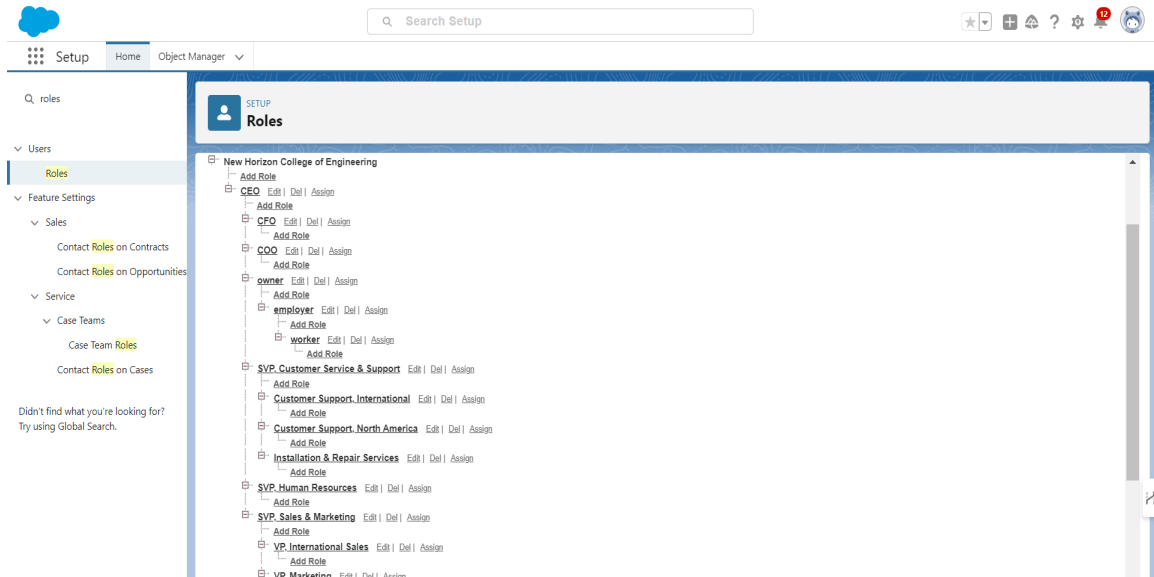


FIG 8.1 Roles & Role Hierarchy

## 9. 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.

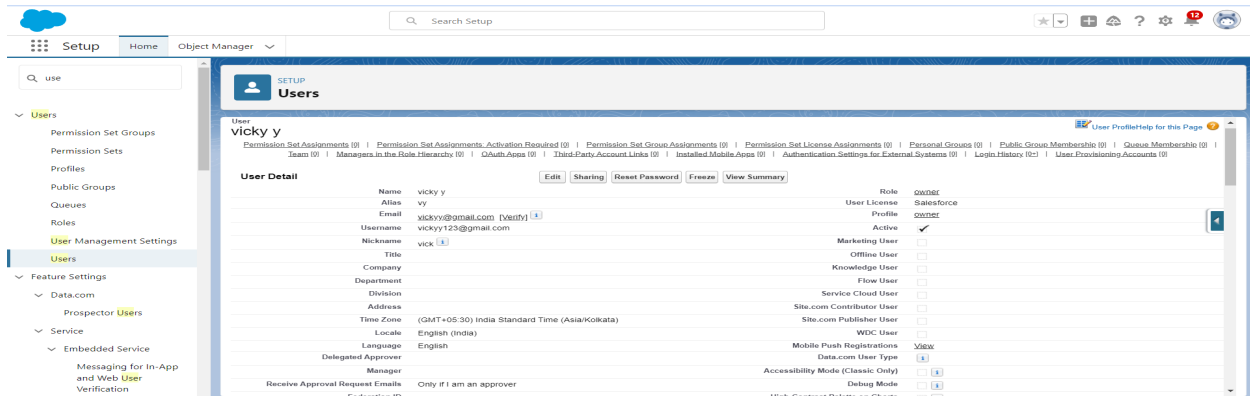


FIG 9.1 Owner Profile User



The screenshot displays the Salesforce Setup interface with the 'Users' section selected in the left-hand navigation menu. The main content area shows the user profile for 'ram ram'. The user's details are as follows:

User Detail		Role
Name	ram ram	Employee
Alias	ram	User License
Email	ram321@gmail.com [Verify]	Salesforce Platform
Username	ram321@gmail.com	Profile
Nickname	ram [i]	Standard Platform User
Title		Active
Company		<input checked="" type="checkbox"/>
Department		Marketing User
Division		<input type="checkbox"/>
Address		Offline User
Time Zone	(GMT+05:30) India Standard Time (Asia/Kolkata)	<input type="checkbox"/>
Locale	English (India)	Knowledge User
Language	English	<input type="checkbox"/>
Delegated Approver		Flow User
Manager		<input type="checkbox"/>
Receive Approval Request Emails	Only if I am an approver	Service Cloud User
		<input type="checkbox"/>
		Site.com Contributor User
		<input type="checkbox"/>
		Site.com Publisher User
		<input type="checkbox"/>
		WDC User
		<input type="checkbox"/>
		Mobile Push Registrations
		<input type="checkbox"/>
		Data.com User Type
		<input type="checkbox"/>
		Accessibility Mode (Classic Only)
		<input type="checkbox"/>
		Debug Mode
		<input type="checkbox"/>

FIG 9.2 Employer Profile User

The screenshot displays the Salesforce Setup interface with the 'Users' section selected in the left-hand navigation menu. The main content area shows the user profile for 'ragu raj'. The user's details are as follows:

User Detail		Role
Name	ragu raj	Worker
Alias	raj	User License
Email	raj231@gmail.com [Verify]	Salesforce Platform
Username	raj231@gmail.com	Profile
Nickname	raj [i]	Standard Platform User
Title		Active
Company		<input checked="" type="checkbox"/>
Department		Marketing User
Division		<input type="checkbox"/>
Address		Offline User
Time Zone	(GMT+05:30) India Standard Time (Asia/Kolkata)	<input type="checkbox"/>
Locale	English (India)	Knowledge User
Language	English	<input type="checkbox"/>
Delegated Approver		Flow User
Manager		<input type="checkbox"/>
Receive Approval Request Emails	Only if I am an approver	Service Cloud User
		<input type="checkbox"/>
		Site.com Contributor User
		<input type="checkbox"/>
		Site.com Publisher User
		<input type="checkbox"/>
		WDC User
		<input type="checkbox"/>
		Mobile Push Registrations
		<input type="checkbox"/>
		Data.com User Type
		<input type="checkbox"/>
		Accessibility Mode (Classic Only)
		<input type="checkbox"/>
		Debug Mode
		<input type="checkbox"/>

FIG 9.3 Worker Profile User

## 10. Permission Sets

A permission set is a collection of settings and permissions that give users access to various tools and functions. Permission sets extend users' functional access without changing their profiles and are the recommended way to manage your users' permissions.

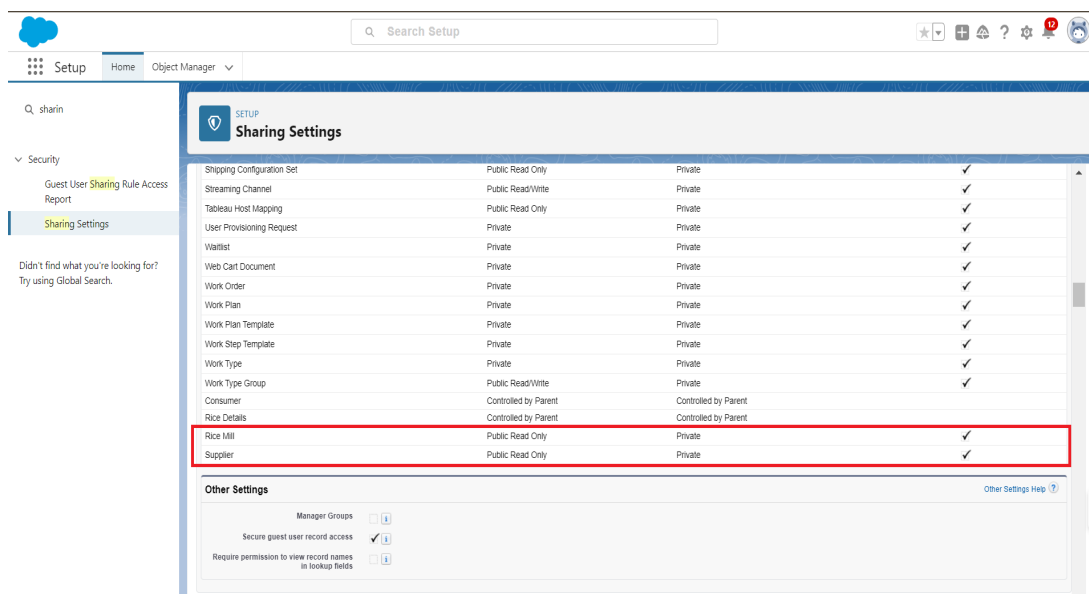


FIG 10.1 Permission Sets

## 11. 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.

Types of Reports in Salesforce

1. Tabular
2. Summary
3. Matrix
4. Joined Reports

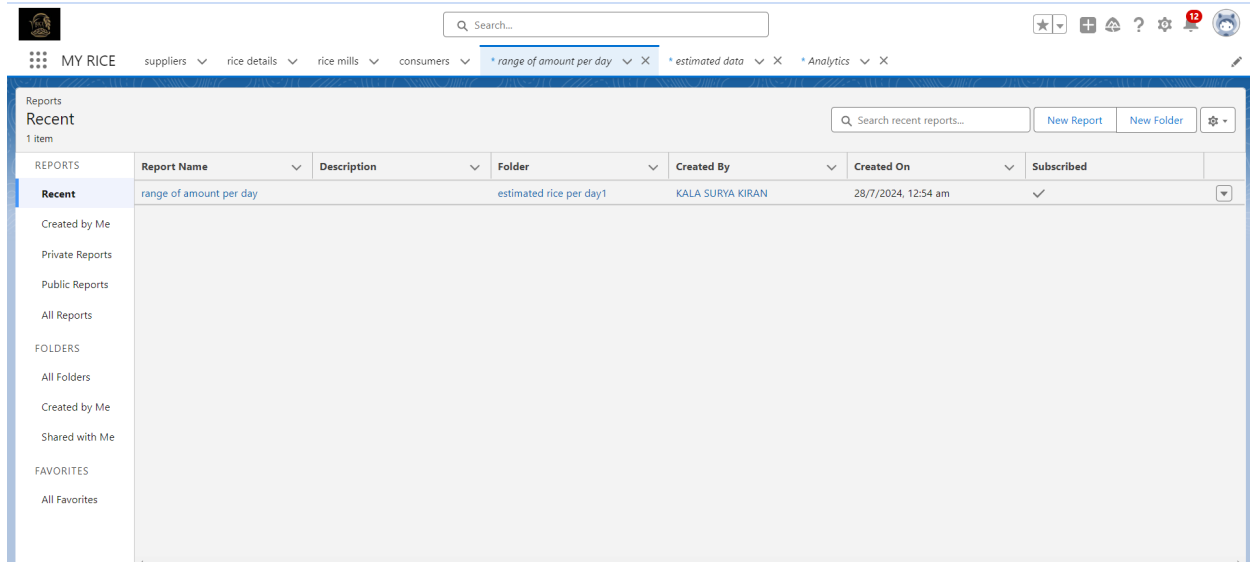


FIG 11.1 Creation of Report

The screenshot shows the 'Report Details' for the 'range of amount per day' report. The top navigation bar is the same as in FIG 11.1. Below the navigation bar, the report title is 'range of amount per day'. The table shows a list of records with columns: rice taken by shops, Consumer Name, rice type, rice price/kg, mode of payment, and Amount paid. The table is filtered by 'rice taken by shops' and shows 8 records. The summary at the top indicates 8 total records, 33 total rice price/kg, and a total amount paid of 31,100.00. The bottom of the table has a row count summary: Row Counts (checked), Detail Rows (checked), Subtotals (checked), and Grand Total (checked).

rice taken by shops	Consumer Name	rice type	rice price/kg	mode of payment	Amount paid
150 (2)	saleempanta	basmati	10	Cash	1,500.00
	mahesthv	basmati	10	Net banking	1,500.00
<b>Subtotal</b>			10		3,000.00
250 (1)	kumarjha	normal rice	12	Credit card	3,000.00
<b>Subtotal</b>			12		3,000.00
300 (1)	mahib	normal rice	11	UPI	3,300.00
<b>Subtotal</b>			11		3,300.00
350 (1)	rowanj	normal rice	12	UPI	4,200.00
<b>Subtotal</b>			12		4,200.00
400 (1)	arunjain	-	11	Net banking	4,400.00
<b>Subtotal</b>			11		4,400.00
600 (2)	nanik	basmati	10	Net banking	6,000.00
	anilkumar	normal rice	12	Net banking	7,200.00

Row Counts ☒ Detail Rows ☒ Subtotals ☒ Grand Total ☒

FIG 11.2 Report Details

# 12.Dashboards

Dashboards help you visually understand changing business conditions so you can make decisions based on the real-time data you've gathered with reports. Use dashboards to help users identify trends, sort out quantities, and measure the impact of their activities. Before building, reading, and sharing dashboards, review these dashboard basics.

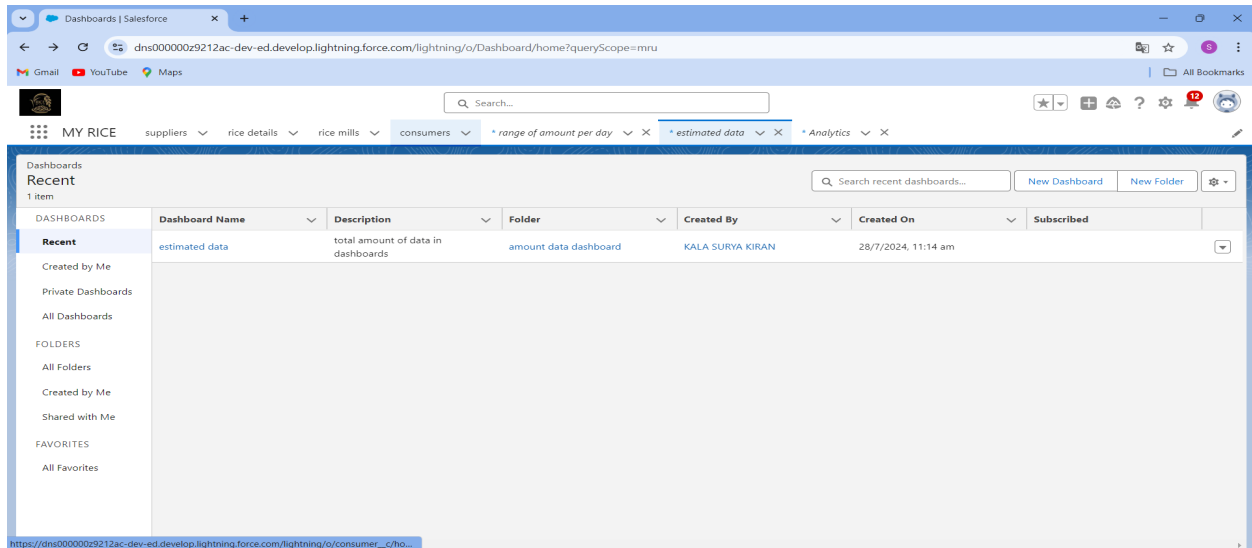


FIG 12.1 Creation of DashBoard

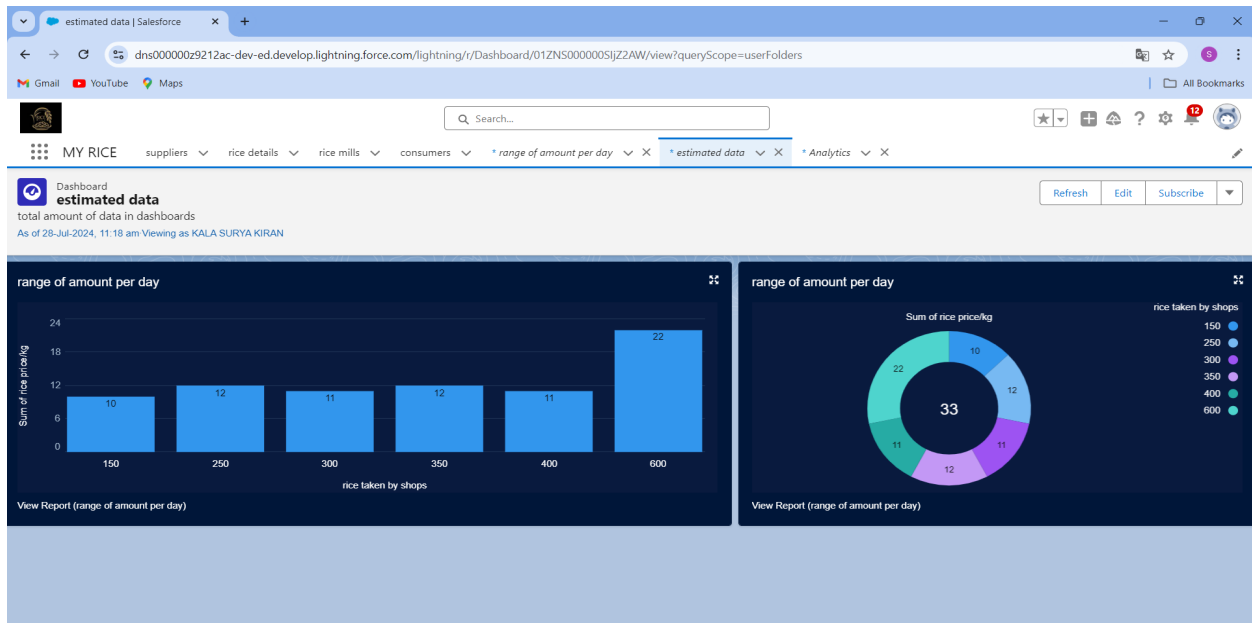


FIG 12.2 Output