

A CRM APPLICATION FOR WHOLESALE RICE MILL

INTRODUCTION

Salesforce

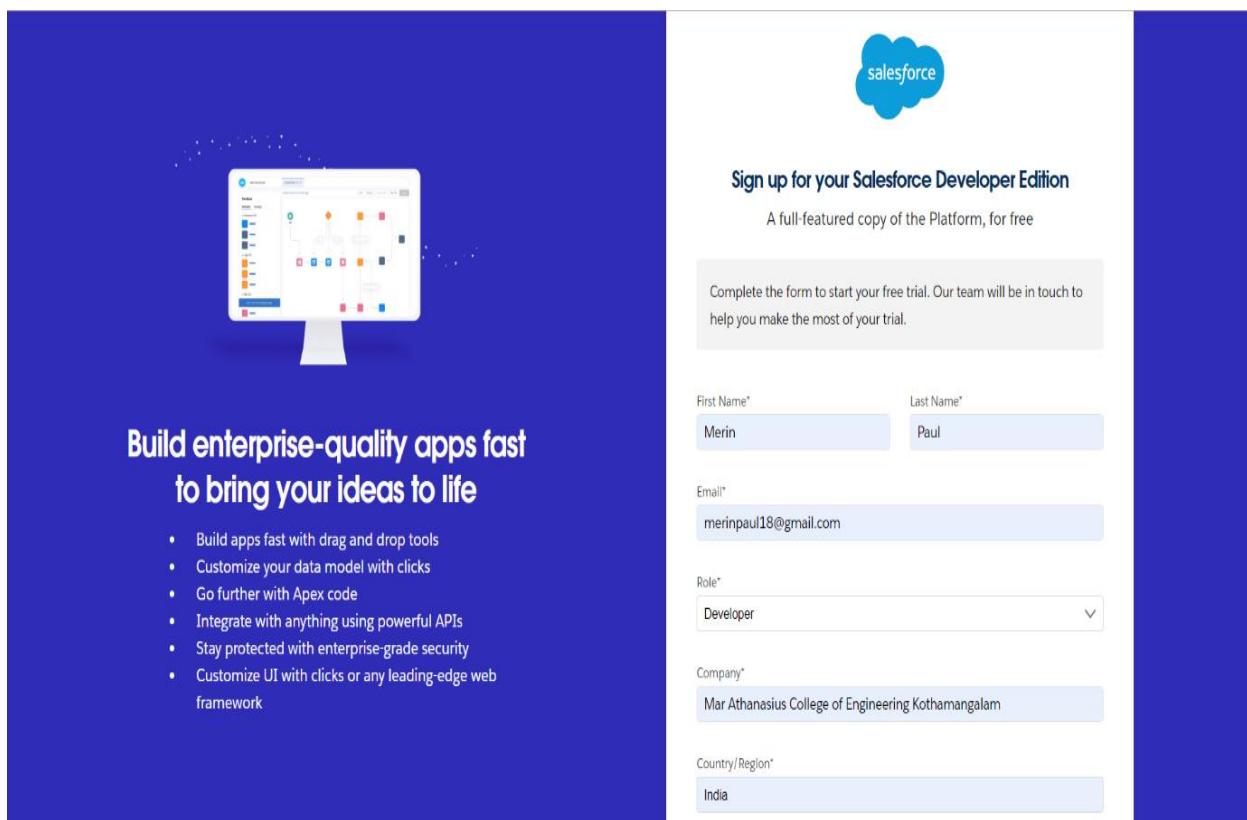
Salesforce is a cloud-based customer relationship management (CRM) platform that helps businesses manage and streamline their sales, marketing, customer service, and other operations. It offers a wide range of services and products designed to improve relationships with customers and drive growth. Salesforce is known for its flexibility, scalability, and integration capabilities, making it a popular choice for businesses of all sizes across various industries. It also provides tools for analytics, community building, and application development through its AppExchange marketplace.

The Rice Mill CRM Application is a comprehensive solution designed to streamline and simplify how much rice per day, how many were sold that rice and which type of rice all reports send to owners daily wise. It leverages the power of customer relationship management (CRM) to enhance customer experiences, optimize store operations, and improve overall efficiency in the rice mill factory. This project aims to develop a user-friendly and feature-rich application that addresses the specific needs of a rice mill factory.

Creating developer account

Steps for creating a developer org in salesforce.

1. Go to <https://developer.salesforce.com/signup>
2. On the sign-up form, enter the details.

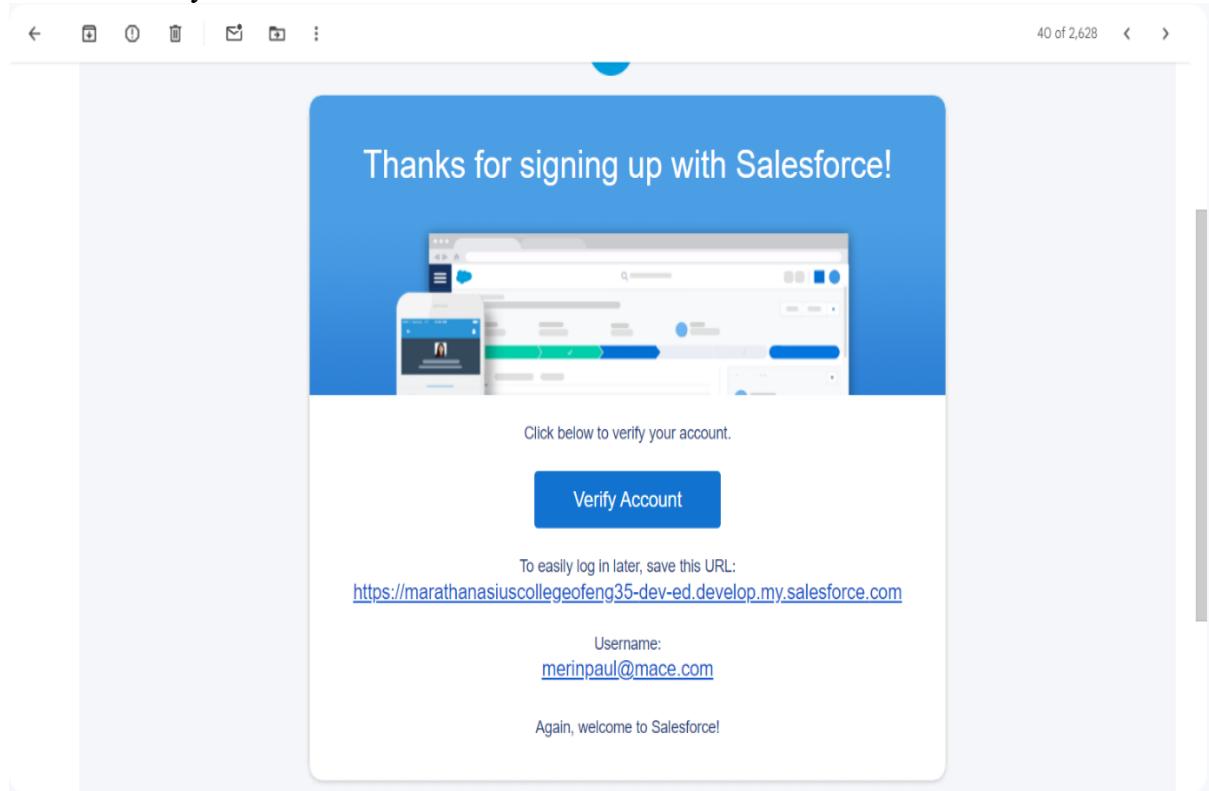


The image shows a screenshot of the Salesforce Developer Edition sign-up page. The page has a blue header with the Salesforce logo and the text "Sign up for your Salesforce Developer Edition". Below the header, there is a message: "A full-featured copy of the Platform, for free". A call-to-action button says "Complete the form to start your free trial. Our team will be in touch to help you make the most of your trial.". The form itself has fields for "First Name*" (Merin), "Last Name*" (Paul), "Email*", "Role*" (Developer), "Company*", and "Country/Region*" (India). To the left of the form, there is a sidebar with the heading "Build enterprise-quality apps fast to bring your ideas to life" and a list of features: "Build apps fast with drag and drop tools", "Customize your data model with clicks", "Go further with Apex code", "Integrate with anything using powerful APIs", "Stay protected with enterprise-grade security", and "Customize UI with clicks or any leading-edge web framework".

3. Click on sign me up after filling these.

Account activation

1. Go to the inbox of the email that was used while signing up. Click on the verify account to activate the account.
2. Click on Verify Account



3. Give a password and answer a security question and click on change password.
4. Then it will be redirected to the salesforce setup page.

A screenshot of the Salesforce Setup Home page. The top navigation bar includes "Setup", "Home", and "Object Manager". On the left, there's a sidebar with links like "Setup Home", "Service Setup Assistant", and "Lightning Experience Transition Assistant". The main content area features three cards: "Get Started with Einstein Bots", "Mobile Publisher", and "Real-time Collaborative Docs". Below these cards is a section titled "Most Recently Used" with a table showing 10 items, the first of which is "ragu raj" (User). The bottom of the page has a footer with links for "ADMINISTRATION", "PLATFORM TOOLS", and "Help & Support".

OBJECT

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

Salesforce objects are of two types:

- Standard Objects:** Standard objects are the kind of objects that are provided by salesforce.com such as users, contracts, reports, dashboards, etc.
- Custom Objects:** Custom objects are those objects that are created by users. They supply information that is unique and essential to their organization.

Steps for creating custom objects:

- From the setup page → Click on Object Manager → Click on Create → Click on Custom Object.
- On Custom object defining page:
- Enter the label name, plural label name, click on Allow reports, Allow search.
- Click on Save.

Four custom objects have been created: Supplier, Rice Mill, Consumer, and Rice Details.

The screenshot shows the Salesforce Object Manager interface. At the top, there's a navigation bar with icons for Home, Object Manager, and Setup. A search bar labeled "Search Setup" is also at the top. Below the navigation, the title "Object Manager" is displayed with a "SETUP" icon. A message "50+ Items. Sorted by Last Modified" is shown. The main area is a table listing objects:

LABEL	API NAME	TYPE	DESCRIPTION	LAST MODIFIED	DEPLOYED
rice details	rice_details_c	Custom Object		26/06/2024	✓
consumer	consumer_c	Custom Object		26/06/2024	✓
rice mill	rice_mill_c	Custom Object		26/06/2024	✓
supplier	supplier_c	Custom Object		26/06/2024	✓
Work Type Group Member	WorkTypeGroupMember	Standard Object			
Work Type Group	WorkTypeGroup	Standard Object			
Work Type	WorkType	Standard Object			
Work Step Template	WorkStepTemplate	Standard Object			
Work Step	WorkStep	Standard Object			
Work Plan Template Entry	WorkPlanTemplateEntry	Standard Object			

Supplier Object

Steps to create supplier 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
 - Record Name → supplier Name
 - Data Type → Text
2. Click on Allow reports and Track Field History and allow search
3. Allow search → **Save**.

The screenshot shows the Salesforce Object Manager interface. At the top, there's a breadcrumb trail: SETUP > OBJECT MANAGER. Below it, the word "supplier" is displayed next to a blue icon. On the left, a sidebar lists various configuration tabs: 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 area is titled "Details" and contains the following fields:

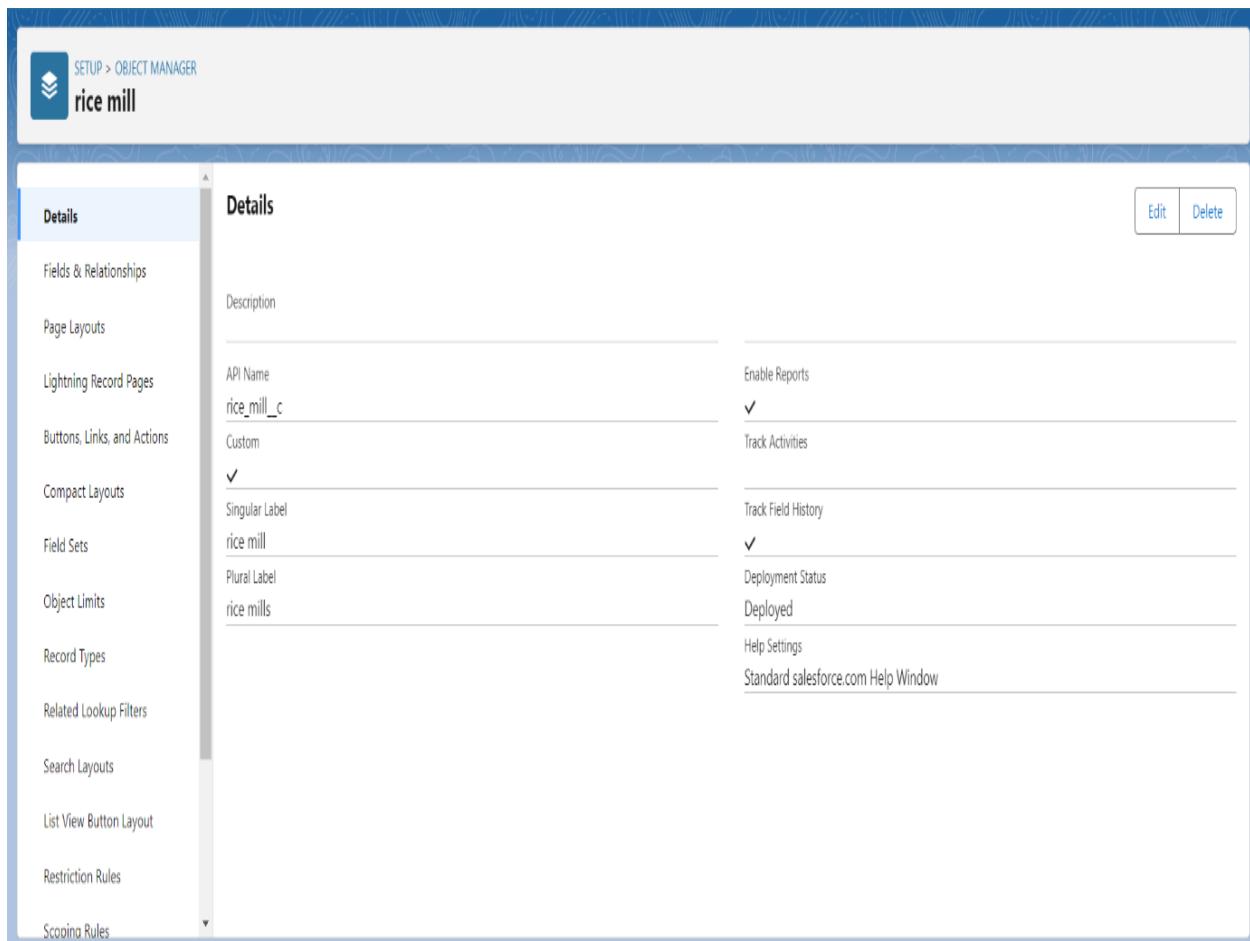
Description	<input type="text"/>
API Name	<input type="text" value="supplier_c"/>
Custom	<input checked="" type="checkbox"/>
Singular Label	<input type="text" value="supplier"/>
Plural Label	<input type="text" value="suppliers"/>
Enable Reports	<input checked="" type="checkbox"/>
Track Activities	<input type="checkbox"/>
Track Field History	<input checked="" type="checkbox"/>
Deployment Status	<input type="text" value="Deployed"/>
Help Settings	<input type="text" value="Standard salesforce.com Help Window"/>

At the bottom right of the main area, there are "Edit" and "Delete" buttons.

Rice mill Object

Steps to create rice mill object:

1. From the setup page → Click on Object Manager → Click on Create → Click on Custom Object.
 - 1) Enter the label name → rice mill
 - 2) Plural label name → rice mills
 - 3) Enter Record Name Label and Format
 - Record Name →
 - Data Type → Auto Number
 - Display Format → rice-{000}
 - Starting number → 1
2. Click on Allow reports and Track Field History, Allow Search.
3. Allow search → **Save**.



Consumer object

Steps to create consumer object:

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

label name → **consumer**

Plural label name → **consumers**

Display Format → **consumers-{000}**

Starting number → 1

2. Click on Allow reports and Track Field History, Allow Search.

3. Allow search → **Save**.

The screenshot shows the 'Details' tab of the 'consumer' object in the Salesforce Object Manager. The left sidebar lists various configuration tabs: 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 pane displays the following details:

Description	
API Name	consumer_c
Custom	✓
Singular Label	consumer
Plural Label	consumers
Enable Reports	✓
Track Activities	
Track Field History	✓
Deployment Status	Deployed
Help Settings	Standard salesforce.com Help Window

At the top right of the main pane are 'Edit' and 'Delete' buttons.

Rice Detail Object

Steps to create rice detail object:

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

label name → rice details

Plural label name → rice details

Display Format → rice-{000}

Starting number → 1

2. Click on Allow reports and Track Field History, Allow Search.

3. Allow search → **Save**.

The screenshot shows the Salesforce Object Manager interface. At the top, it says "SETUP > OBJECT MANAGER" and the object name is "rice details". On the left, there's a sidebar with various tabs: Details (which is selected), 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 area is titled "Details" and contains the following configuration fields:

Description	
API Name	rice_details_c
Custom	✓
Singular Label	rice details
Plural Label	rice details
Enable Reports	✓
Track Activities	
Track Field History	✓
Deployment Status	Deployed
Help Settings	Standard salesforce.com Help Window

At the bottom right of the main area, there are "Edit" and "Delete" buttons.

TABS

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

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

Steps for creating custom tabs:

1. Go to setup page → type Tabs in Quick Find bar → click on tabs → New (under custom object tab)
2. Select Object → 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 the Append tab to users' existing personal customizations is checked.
4. Click save.

The screenshot shows the Salesforce Setup interface with the following details:

- Header:** Includes the Salesforce logo, a search bar labeled "Search Setup", and various navigation icons.
- Left Navigation Bar:** Shows "Setup" as the active tab, followed by "Home" and "Object Manager". Below these are sections for "User Interface", "Rename Tabs and Labels", and "Tabs" (which is also highlighted).
- Search Bar:** A search bar with the placeholder "tabs".
- Page Content:**
 - Section Header:** "Custom Tabs" with a "Help for this Page" link.
 - Description:** "You can create new custom tabs to extend Salesforce functionality or to build new application functionality."
 - Table:** "Custom Object Tabs" table showing four rows:

Action	Label	Tab Style	Description
Edit Del	consumers	People	
Edit Del	rice details	Books	
Edit Del	rice mills	Shopping Cart	
Edit Del	suppliers	Ticket	
 - Section Header:** "Web Tabs" with a "New" button and "What Is This?" link. It displays the message: "No Web Tabs have been defined".
 - Section Header:** "Visualforce Tabs" with a "New" button and "What Is This?" link. It displays the message: "No Visualforce Tabs have been defined".

Four custom tabs were created for the four objects Supplier, Rice mill, Consumer and Rice details

Consumers Tab

The screenshot shows the Salesforce Setup interface with the 'Tabs' page selected. The left sidebar includes 'Setup', 'Home', 'Object Manager', and a search bar. Under 'User Interface', 'Tabs' is selected. A message at the top says 'Didn't find what you're looking for? Try using Global Search.' The main content area displays a 'Custom Object Tab' for 'consumers'. The tab definition details are as follows:

Custom Tab Definition Detail	
Tab Label	consumers
Object	consumer
Description	
Created By	Merin Paul, 26/06/2024, 1:11 pm
Modified By	Merin Paul, 26/06/2024, 1:11 pm

Buttons for 'Edit' and 'Delete' are located above the table. The 'Tab Style' is set to 'People' (indicated by a blue bar). A link 'Splash Page Custom Link' is also present.

Rice details tab

The screenshot shows the Salesforce Setup interface with the 'Tabs' page selected. The left sidebar includes 'Setup', 'Home', 'Object Manager', and a search bar. Under 'User Interface', 'Tabs' is selected. A message at the top says 'Didn't find what you're looking for? Try using Global Search.' The main content area displays a 'Custom Object Tab' for 'rice details'. The tab definition details are as follows:

Custom Tab Definition Detail	
Tab Label	rice details
Object	rice_details
Description	
Created By	Merin Paul, 26/06/2024, 1:12 pm
Modified By	Merin Paul, 26/06/2024, 1:12 pm

Buttons for 'Edit' and 'Delete' are located above the table. The 'Tab Style' is set to 'Books' (indicated by a purple bar). A link 'Splash Page Custom Link' is also present.

Rice mill tab

The screenshot shows the Salesforce Setup interface with the 'Tabs' page selected under 'User Interface'. A new custom object tab named 'rice mills' has been created for the 'rice mill' object. The tab style is set to 'Shopping Cart'. The 'Custom Tab Definition Detail' table shows the following information:

Tab Label	rice mills	Object	rice mill	Tab Style	Shopping Cart
Description				Splash Page Custom Link	
Created By	Merin Paul	26/06/2024, 1:12 pm		Modified By	Merin Paul
					26/06/2024, 1:12 pm

Supplier tab

The screenshot shows the Salesforce Setup interface with the 'Tabs' page selected under 'User Interface'. A new custom object tab named 'suppliers' has been created for the 'supplier' object. The tab style is set to 'Ticket'. The 'Custom Tab Definition Detail' table shows the following information:

Tab Label	suppliers	Object	supplier	Tab Style	Ticket
Description				Splash Page Custom Link	
Created By	Merin Paul	26/06/2024, 1:10 pm		Modified By	Merin Paul
					26/06/2024, 1:10 pm

THE LIGHTNING APP

An app is a collection of items that work together to serve a particular function. In Lightning Experience, Lightning apps give users access to sets of objects, tabs, and other items all in one convenient bundle in the navigation bar. Lightning apps lets to brand the apps with a custom colour and logo. Can even include a utility bar and Lightning page tabs in the Lightning app. Members of an org can work more efficiently by easily switching between apps.

The lightning app MY RICE with objects supplier, rice mill, consumer and Rice details is created, which Streamlines the Daily Rice Production and Sales Reporting, Enhancing Efficiency and Customer Experiences.

Steps 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.
2. Fill the app name in app details as MY RICE →Next → (App option page) keep it as default → Next → (Utility Items) keep it as default → Next.
3. Upload a photo that is related to the app.
4. To Add Navigation Items:
Select the items (supplier, rice mill, consumer, Rice details) from the search bar and move it using the arrow button → Next.
5. To Add User Profiles:
Search profiles (System administrator) in the search bar → click on the arrow button → save & finish.

The screenshot shows the Lightning App Builder interface. At the top, there's a navigation bar with icons for back, Lightning App Builder, App Settings, Pages, and MY RICE, along with a Help link. The main area is divided into two columns under 'App Settings'. The left column, titled 'App Details & Branding', contains sections for 'App Options', 'Utility Items (Desktop Only)', 'Navigation Items', and 'User Profiles'. The right column, titled 'App Details & Branding', includes fields for 'App Name' (set to 'MY RICE'), 'Developer Name' (set to 'MY_RICE'), 'Image' (a small icon of a wheat stalk), 'Primary Color Hex Value' (#0070D2), and a 'Description' field with placeholder text 'Enter a description...'. Below these are 'Org Theme Options' (unchecked) and 'App Launcher Preview' showing the app's branding.

FIELDS

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

Types of Fields

1. Standard Fields
2. Custom Fields

Standard Fields:

Standard Fields are the predefined fields in Salesforce that perform a standard task. These are fields that will be found commonly in every Salesforce application

Custom Fields:

On the other side of the coin, Custom Fields are highly flexible, and users can change them according to requirements. Moreover, each organizer or company can use them if necessary.

Creating the rice distributed field in rice details object

1. Go to the setup page → click on object manager → From drop down click edit for rice 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 “rice distributed” and length as “5”.
5. Field Name will be auto populated, and click on Next→ Next → Save.

The screenshot shows the Salesforce Setup interface with the following details:

- Header:** Search bar with "Search Setup".
- Navigation:** Top navigation bar with "Setup", "Home", and "Object Manager".
- Breadcrumbs:** "SETUP > OBJECT MANAGER" and "rice details".
- Left Sidebar:** A vertical sidebar with links: Details, Fields & Relationships (selected), Page Layouts, Lightning Record Pages, Buttons, Links, and Actions, Compact Layouts, Field Sets, Object Limits, and Record Types.
- Central Content:**
 - Section Header:** "rice details Custom Field" and "rice distributed".
 - Buttons:** "Edit", "Set Field-Level Security", "View Field Accessibility", and "Where is this used?".
 - Validation Rules:** A link to validation rules.
 - Field Information:** A table showing field details:

Field Label	rice distributed	Object Name	rice_details
Field Name	rice_distributed	Data Type	Number
API Name	rice_distributed_c		
Description			
Help Text			
Data Owner			
Field Usage			
Data Sensitivity Level			
Compliance Categorization			
 - Timestamps:** "Created By" and "Modified By" both show "Merin Paul, 26/06/2024, 1:34 pm".

Junction object

A Junction object is a custom object that serves as a bridge between two related objects in a many-to-many relationship. It allows you to create a relationship between records of two different objects by creating a many-to-many relationship model.

Creating junction object as rice details with supplier and rice mill

1. Go to the setup page → click on object manager → From drop down click edit for rice 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.

The screenshot shows the Salesforce Object Manager interface. The top navigation bar includes a blue cloud icon, a search bar labeled "Search Setup", and various global buttons. Below the bar, the main menu has "Setup" selected, followed by "Home" and "Object Manager". The title bar of the main window reads "SETUP > OBJECT MANAGER" and "rice details".

The left sidebar contains a list of options: Details, Fields & Relationships (which is selected), 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, and Restriction Rules.

The main content area displays the "Custom Field Definition Detail" for the "supplier Name" field. The "Field Information" section shows the following details:

Field Label	supplier Name	Object Name	rice_details
Field Name	supplier	Data Type	Master-Detail
API Name	supplier_c		
Description			
Help Text			
Data Owner			
Field Usage			
Data Sensitivity Level			
Compliance Categorization			

Below this, the "Master-Detail Options" section shows:

Related To	supplier	Child Relationship Name	rice_details
Related List Label	rice details		
Sharing Setting	ReadWrite: Allows users with at least Read/Write access to the Master record to create, edit, or delete related Detail records.		
Reparentable Master Detail	<input type="checkbox"/>		

7. Follow the same steps from 1 to 3.
8. Select the related object “rice mill” and click Next.
9. Give Field Label as “rice mill 1(one)” and click Next.
10. Next → Next → Save.

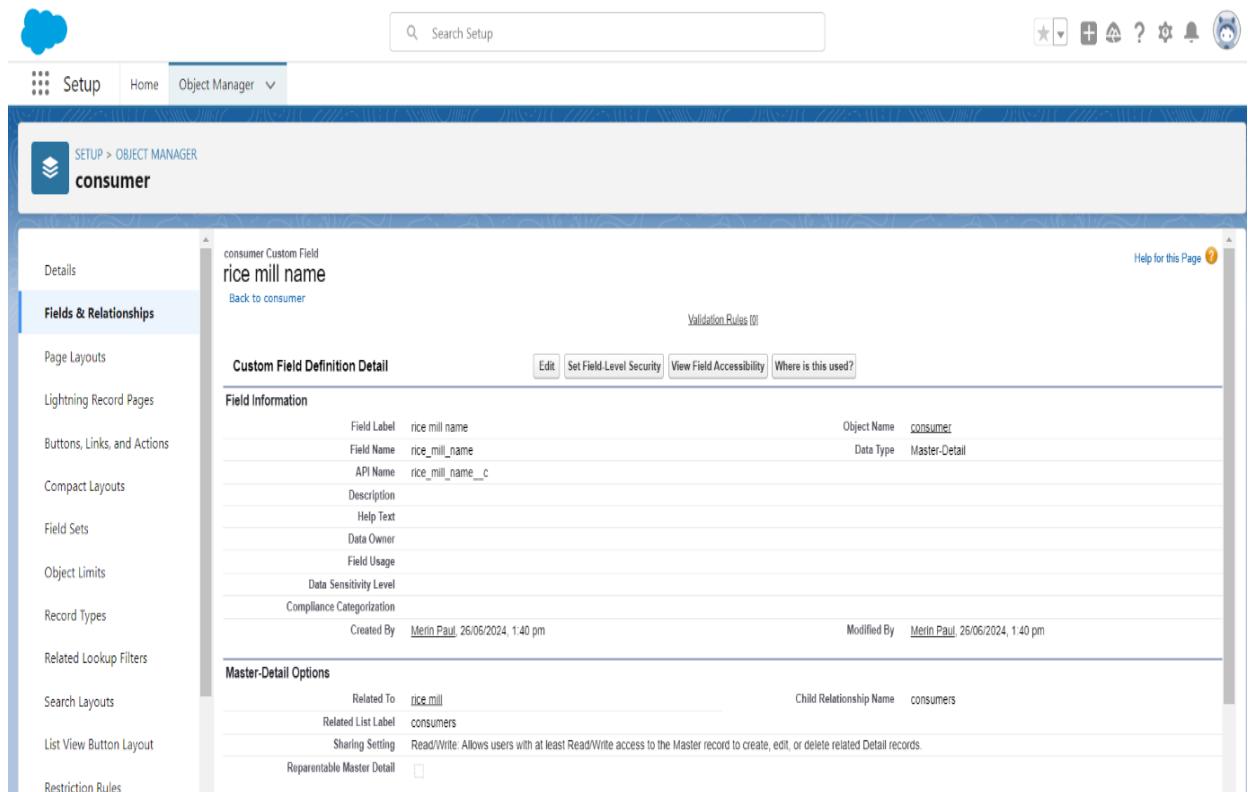
The screenshot shows the Salesforce Setup interface. The top navigation bar includes 'Setup', 'Home', and 'Object Manager'. The main content area is titled 'rice details' under 'SETUP > OBJECT MANAGER'. On the left, a sidebar lists various setup categories like 'Details', 'Fields & Relationships', 'Page Layouts', etc. The 'Fields & Relationships' category is currently selected. In the main pane, a custom field 'rice mill 1(one)' is being edited. The 'Field Information' section shows the field label 'rice mill 1(one)', field name 'rice_mill', API name 'rice_mill_c', and object name 'rice_details'. The 'Data Type' is listed as 'Master-Detail'. Other sections include 'Master-Detail Options' where 'Related To' is set to 'rice mill' and 'Child Relationship Name' is 'rice_details'.

Master-Detail relationship

Master-detail relationship is a type of relationship between two objects where the master object controls certain behaviours and settings of the detail object.

Creating Master-Detail Relationship between consumer and rice mill Object

1. Go to the setup page → click on object manager → From drop down click edit for consumer 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 “rice mill”.
5. Give Field Label as “rice mill name” and click Next.
6. Next → Next → Save.



Rollup summary field

A rollup summary field is a field that summarizes data from a child object to a parent object that shares a master-detail relationship. Rollup summary fields can use the COUNT, SUM, MIN, and MAX functions.

Creating the Roll-up summary field on supplier and rice mill Object

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 rice distributed”, Field Name will be Auto generated, and click Next.
5. Select the summarized object as “rice details”.
6. Select the Rollup type as “sum”.
7. Select the field to aggregate as “rice distributed”, and click Next → Next → Save.

The screenshot shows the Salesforce Setup interface with the 'Object Manager' tab selected. Under the 'supplier' object, the 'Fields & Relationships' section is active. A new custom field named 'sum of rice distributed' is being created. The 'Field Information' section includes the field label 'sum of rice distributed', field name 'sum_of_rice_distributed', API name 'sum_of_rice_distributed_c', and object name 'supplier'. The 'Roll-Up Summary Options' section shows the data type as 'Roll-Up Summary', summarized object as 'rice details', and summary type as 'SUM'.

8. Follow the same steps for the rice mill Object from 1 to 3
9. Give the Field label as “rice distributed to shops”, Field Name will be Auto generated, and click Next.
10. Select the summarized object as “rice details”.
11. Select the Rollup type as “sum”.
12. Select the field to aggregate as “rice distributed”, and click Next → Next → Save.

The screenshot shows the Salesforce Setup interface with the 'Object Manager' tab selected. Under the 'rice mill' object, the 'Fields & Relationships' section is active. A new custom field named 'rice distributed to shops' is being created. The 'Field Information' section includes the field label 'rice distributed to shops', field name 'rice_distributed_to_shops', API name 'rice_distributed_to_shops_c', and object name 'rice mill'. The 'Roll-Up Summary Options' section shows the data type as 'Roll-Up Summary', summarized object as 'rice details', and summary type as 'SUM'.

13. create the field as “rice taken by shops in kgs” using number datatype in consumer object

The screenshot shows the Salesforce Setup interface under the Object Manager for the 'consumer' object. A custom field named 'rice taken by shops in kgs' has been created. The field information includes:

- Field Label: rice taken by shops in kgs
- Field Name: rice_taken_by_shops_in_kgs
- API Name: rice_taken_by_shops_in_kgs_c
- Description: (empty)
- Help Text: (empty)
- Data Owner: (empty)
- Field Usage: (empty)
- Data Sensitivity Level: (empty)
- Compliance Categorization: (empty)
- Object Name: consumer
- Data Type: Number

Created By: Merlin Paul, 26/06/2024, 1:48 pm | Modified By: Merlin Paul, 26/06/2024, 2:49 pm

14. Follow the same steps for the rice mill Object from 1 to 3

15. Give the Field label as “rice taken”, Field Name will be Auto generated, and click Next.

16. Select the summarized object as “consumer”.

17. Select the Rollup type as “sum”.

18. Select the field to aggregate as “rice taken in shops”, and click Next → Next → Save.

The screenshot shows the Salesforce Setup interface under the Object Manager for the 'rice mill' object. A custom field named 'rice taken' has been created. The field information includes:

- Field Label: rice taken
- Field Name: rice_taken
- API Name: rice_taken_c
- Description: (empty)
- Help Text: (empty)
- Data Owner: (empty)
- Field Usage: (empty)
- Data Sensitivity Level: (empty)
- Compliance Categorization: (empty)
- Object Name: rice mill

Created By: Merlin Paul, 26/06/2024, 1:49 pm | Modified By: Merlin Paul, 26/06/2024, 2:49 pm

Roll-Up Summary Options

Data Type	Roll-Up Summary	Summary Type	SUM
Summarized Object	consumer		
Field to Aggregate	consumer.rice_taken_by_shops_in_kgs		
Filter Criteria	(empty)		

Creating the supplier name field in rice details object

1. Go to the setup page → click on object manager → From drop down click edit for rice 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 “supplier name” and length as “5”.
5. Field Name will be auto populated, and click on Next→ Next → Save.

The screenshot shows the Salesforce Setup interface with the 'Object Manager' selected. Under the 'rice details' object, a new custom field 'supplier Name' is being created. The 'Field Information' section shows the following details:

Field Label	Field Name	Object Name	Data Type
supplier Name	supplier	rice_details	Master-Detail

Other field settings include API Name 'supplier__c', Description, Help Text, Data Owner, Field Usage, Data Sensitivity Level, and Compliance Categorization. The field was created by Merin Paul on 26/06/2024, 1:36 pm, and modified by the same user at the same time.

Creating rice price/kg field in rice mill Object

1. Select Data type as “Number” and click Next.
2. Given the Field Label as “rice price/kg” and length as “5”.

The screenshot shows the Salesforce Setup interface with the 'Object Manager' selected. Under the 'rice mill' object, a new custom field 'rice price/kg' is being created. The 'Field Information' section shows the following details:

Field Label	Field Name	Object Name	Data Type
rice price/kg	rice_price_kg	rice_mill	Number

Other field settings include API Name 'rice_price_kg__c', Description, Help Text, Data Owner, Field Usage, Data Sensitivity Level, and Compliance Categorization. The field was created by Merin Paul on 26/06/2024, 2:40 pm, and modified by the same user at the same time.

Creating fields in consumer object

1. First name and Last name fields with text data type.

The screenshot shows the Salesforce Setup interface. The top navigation bar includes a blue cloud icon, a search bar labeled "Search Setup", and various global buttons. Below the navigation is a secondary header with "SETUP > OBJECT MANAGER" and "consumer". On the left, a sidebar lists options like Details, Fields & Relationships (which is selected), Page Layouts, Lightning Record Pages, Buttons, Links, and Actions, Compact Layouts, Field Sets, Object Limits, and Record Types. The main content area displays a "consumer Custom Field" named "First name". It shows the "Custom Field Definition Detail" with tabs for Edit, Set Field-Level Security, View Field Accessibility, and Where is this used? The "Field Information" section contains the following details:

Field Label	First name	Object Name	consumer
Field Name	First_name	Data Type	Text
API Name	First_name_c		
Description			
Help Text			
Data Owner			
Field Usage			
Data Sensitivity Level			
Compliance Categorization			

At the bottom, it shows "Created By" Merin Paul, "Created Date" 26/06/2024, 2:46 pm, and "Modified By" Merin Paul, "Modified Date" 26/06/2024, 2:46 pm.

2. Phone number field with phone data type.

The screenshot shows the Salesforce Setup interface, similar to the previous one but for a different field. The top navigation bar, secondary header, and sidebar are identical. The main content area displays a "consumer Custom Field" named "Phone number". It shows the "Custom Field Definition Detail" with tabs for Edit, Set Field-Level Security, View Field Accessibility, and Where is this used? The "Field Information" section contains the following details:

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			

At the bottom, it shows "Created By" Merin Paul, "Created Date" 26/06/2024, 2:47 pm, and "Modified By" Merin Paul, "Modified Date" 26/06/2024, 2:47 pm.

3. Email field with email data type.

The screenshot shows the Salesforce Setup interface for creating a custom field. The top navigation bar includes 'Setup', 'Home', and 'Object Manager'. The search bar says 'Search Setup'. The main area shows 'SETUP > OBJECT MANAGER consumer'. On the left, a sidebar lists options like 'Details', 'Fields & Relationships' (which is selected), 'Page Layouts', 'Lightning Record Pages', 'Buttons, Links, and Actions', 'Compact Layouts', 'Field Sets', 'Object Limits', and 'Record Types'. The right pane displays the 'consumer Custom Field Email' details. The 'Field Information' section shows the following data:

Field Label	Email	Object Name	consumer
Field Name	Email	Data Type	Email
API Name	Email_c		
Description			
Help Text			
Data Owner			
Field Usage			
Data Sensitivity Level			
Compliance Categorization			

Below this, it shows 'Created By' and 'Modified By' both listed as 'Merin Paul, 26/06/2024, 2:48 pm'.

4. Rice taken by shops field with number data type.

The screenshot shows the Salesforce Setup interface for creating a custom field. The top navigation bar includes 'Setup', 'Home', and 'Object Manager'. The search bar says 'Search Setup'. The main area shows 'SETUP > OBJECT MANAGER consumer'. On the left, a sidebar lists options like 'Details', 'Fields & Relationships' (selected), 'Page Layouts', 'Lightning Record Pages', 'Buttons, Links, and Actions', 'Compact Layouts', 'Field Sets', 'Object Limits', and 'Record Types'. The right pane displays the 'consumer Custom Field Rice taken by shops' details. The 'Field Information' section shows the following data:

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			

Below this, it shows 'Created By' and 'Modified By' both listed as 'Merin Paul, 26/06/2024, 2:50 pm'.

5. Rice type field with picklist data type.

Picklist values: -

- Basmati
- normal rice

The screenshot shows the Salesforce Object Manager interface. At the top, there's a search bar and various navigation icons. Below the header, it says "Object Manager" and "Edit consumer Custom Field". The main area is titled "Rice types" and shows "Step 2. Enter the details". The "Field Label" is set to "Rice types". A table lists two picklist values: "Basmati" and "Normal rice", both assigned dynamically by Merin Paul. Below the table, there are fields for "Field Name" (set to "Rice_types"), "Description", and "Help Text".

Action	Values	API Name	Default	Chart Colors	Modified By
<input type="checkbox"/> Edit Del	Basmati	Basmati	<input type="checkbox"/>	Assigned dynamically	Merin Paul, 26/08/2024, 2:52 pm
<input type="checkbox"/> Edit Del	Normal rice	Normal rice	<input type="checkbox"/>	Assigned dynamically	Merin Paul, 26/08/2024, 2:52 pm

6. Mode of payment field with picklist data type.

Picklist values: -

- Credit card
- Debit card
- Net banking
- UPI
- Cash

The screenshot shows the Salesforce Object Manager interface. At the top, there's a search bar and various navigation icons. Below the header, it says "Object Manager" and "Edit consumer Custom Field". The main area is titled "Mode of payment" and shows "Step 2. Enter the details". The "Field Label" is set to "Mode of payment". A table lists five picklist values: "Credit card", "Debit card", "Net banking", "UPI", and "Cash", all assigned dynamically by Merin Paul. Below the table, there are fields for "Field Name" (set to "Mode_of_payment"), "Description", and "Help Text".

Action	Values	API Name	Default	Chart Colors	Modified By
<input type="checkbox"/> Edit Del	Credit card	Credit card	<input type="checkbox"/>	Assigned dynamically	Merin Paul, 26/08/2024, 2:53 pm
<input type="checkbox"/> Edit Del	Debit card	Debit card	<input type="checkbox"/>	Assigned dynamically	Merin Paul, 26/08/2024, 2:53 pm
<input type="checkbox"/> Edit Del	Net banking	Net banking	<input type="checkbox"/>	Assigned dynamically	Merin Paul, 26/08/2024, 2:53 pm
<input type="checkbox"/> Edit Del	UPI	UPI	<input type="checkbox"/>	Assigned dynamically	Merin Paul, 26/08/2024, 2:53 pm
<input type="checkbox"/> Edit Del	Cash	Cash	<input type="checkbox"/>	Assigned dynamically	Merin Paul, 26/08/2024, 2:53 pm

Supplier Fields and Relationships

The fields and relationships involved in the object supplier is shown.

The screenshot shows the Salesforce Object Manager interface for the 'supplier' object. The left sidebar lists various setup options like Page Layouts, Lightning Record Pages, and Field Sets. The main area displays the 'Fields & Relationships' section with the following data:

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)		✓

Rice Mill Fields and Relationships

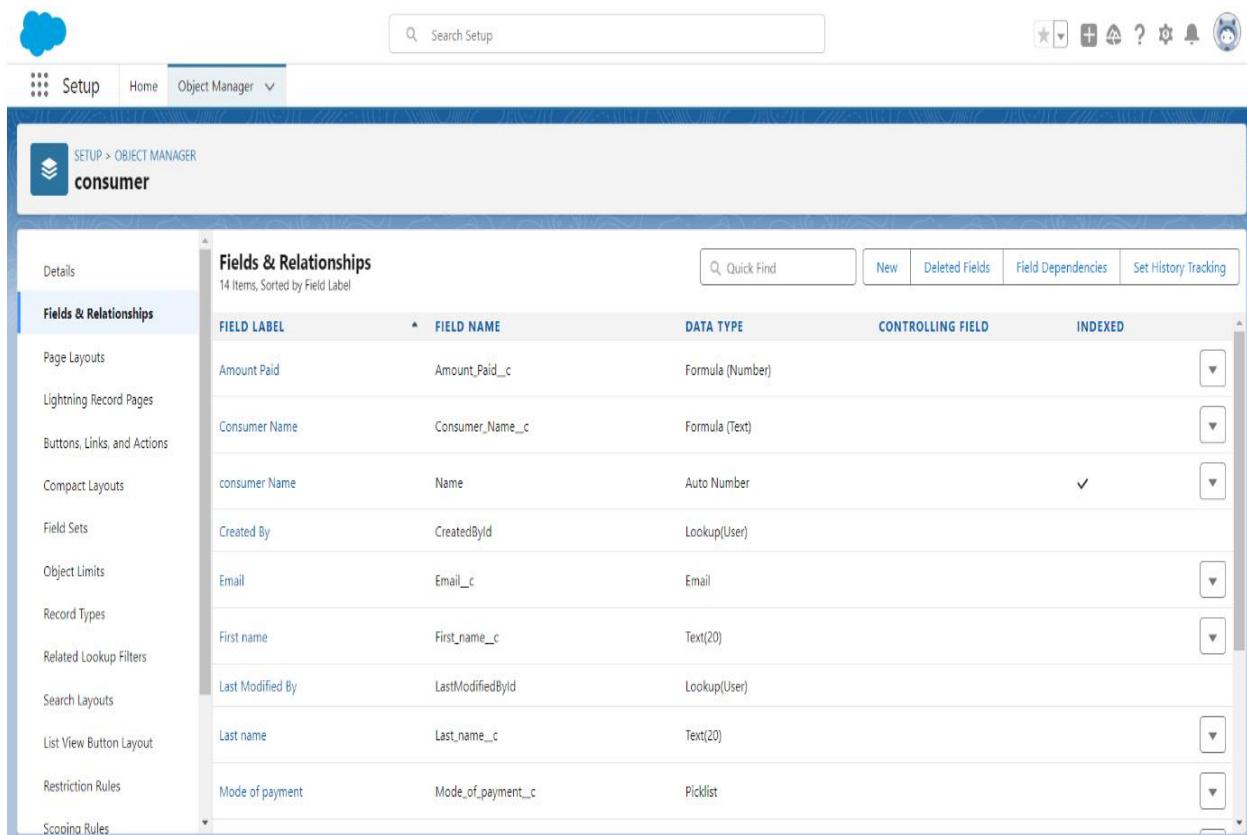
The fields and relationships involved in the object rice mill is shown.

The screenshot shows the Salesforce Object Manager interface for the 'rice mill' object. The left sidebar lists various setup options. The main area displays the 'Fields & Relationships' section with the following data:

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)		▼

Consumer Fields and Relationships

The fields and relationships involved in the object consumer is shown.

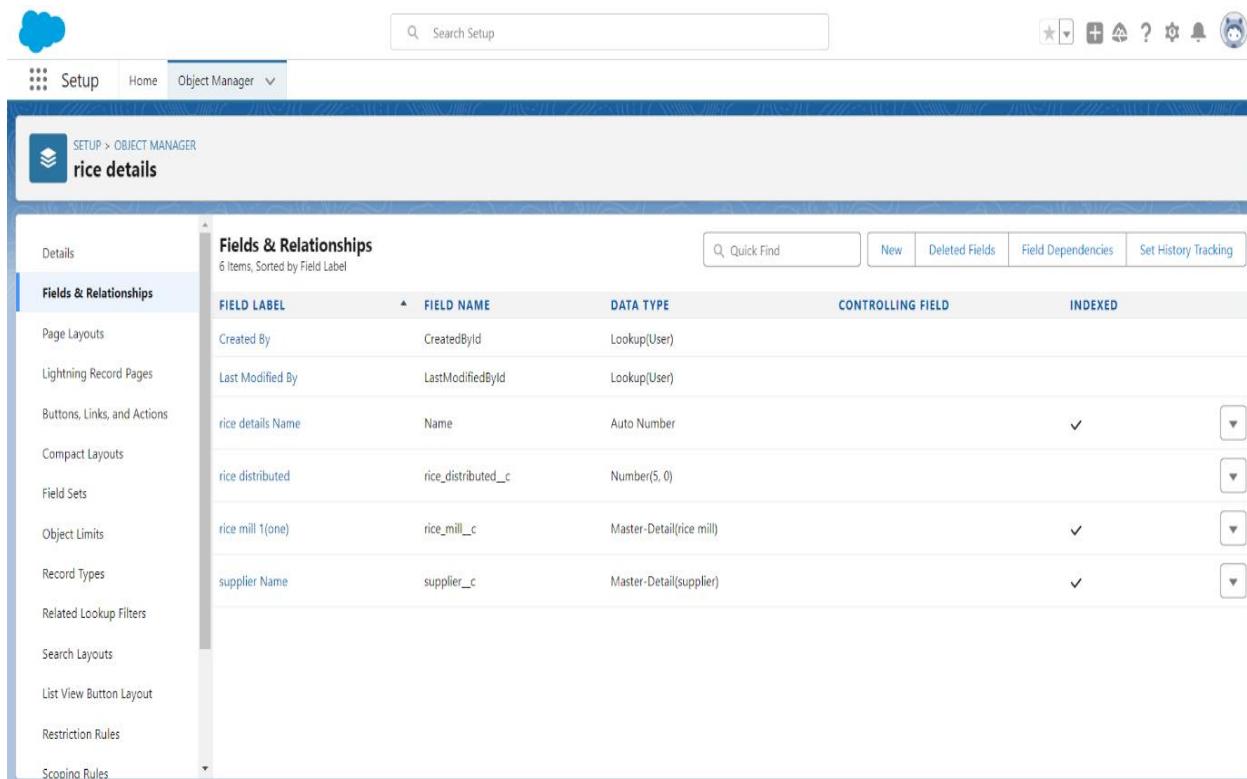


The screenshot shows the Salesforce Object Manager for the 'consumer' object. The left sidebar lists various setup options like Page Layouts, Lightning Record Pages, Buttons, Links, and Actions, etc. The main area is titled 'Fields & Relationships' and displays 14 items, sorted by Field Label. The table columns are FIELD LABEL, FIELD NAME, DATA TYPE, CONTROLLING FIELD, and INDEXED. The data includes:

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(20)		
Last Modified By	LastModifiedBy	Lookup(User)		
Last name	Last_name__c	Text(20)		
Mode of payment	Mode_of_payment__c	Picklist		

Rice Details Fields and Relationships

The fields and relationships involved in the object rice details is shown.

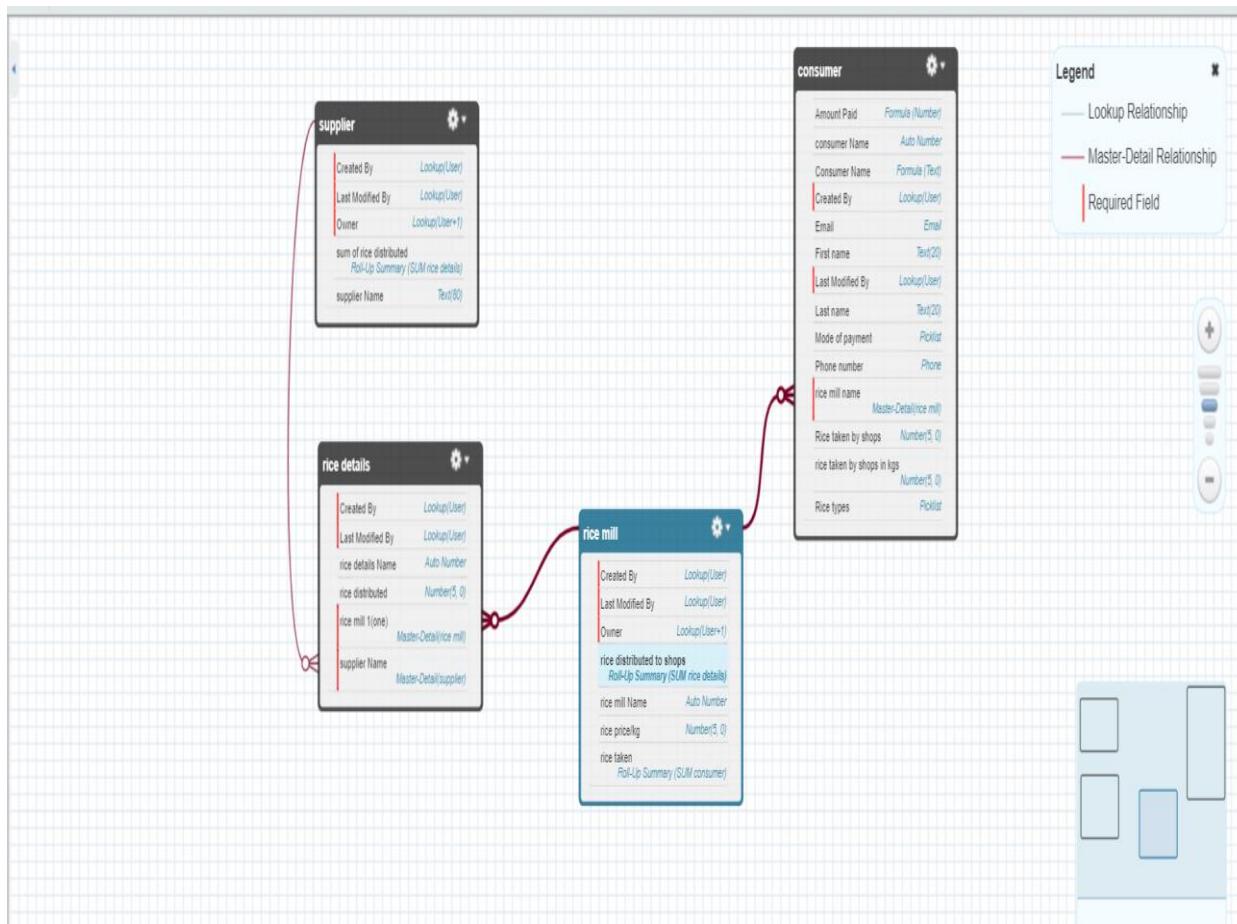


The screenshot shows the Salesforce Object Manager for the 'rice details' object. The left sidebar lists various setup options like Page Layouts, Lightning Record Pages, Buttons, Links, and Actions, etc. The main area is titled 'Fields & Relationships' and displays 6 items, sorted by Field Label. The table columns are FIELD LABEL, FIELD NAME, DATA TYPE, CONTROLLING FIELD, and INDEXED. The data includes:

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 *(one)	rice_mill__c	Master-Detail(rice mill)		✓
supplier Name	supplier_c	Master-Detail(supplier)		✓

Schema Builder MY RICE

The fields in each object and the relationship between these objects in the MY RICE application is depicted using schema builder



Cross Object Formula Field in Consumer Object

A cross-object formula field is a formula field that references fields from another object in Salesforce. This type of formula allows users to calculate and display data from multiple objects on a single record.

Two cross object formula fields are created in consumer object Amount paid and Consumer name.

Creating Cross Object Formula Field in consumer Object

1. Go to setup → click on Object Manager → type object name(consumer) 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:
rice_taken_by_shops__c * rice_mill_name__r.rice_price_kg__c
6. Under Advanced Formula write down the formula and click “Check Syntax” and Save.

Creating the Formula field in consumer Object

1. Go to setup → click on Object Manager → type object name(consumer) 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 “Consumer Name” and select formula return type as “TEXT” and click next.
5. Insert field formula should be : First_Name__c + '' + Last_Name__c
6. click “Check Syntax” and Save.

Creating The Validation Rule

Improve the quality of the data using validation rules. Validation rules verify that the data a user enters in a record meets the standards that specified before the user can save the record. A validation rule can contain a formula or expression that evaluates the data in one or more fields and returns a value of “True” or “False”. Validation rules also include an error message to display to the user when the rule returns a value of “True” due to an invalid value.

Creating the validation rule for phone number field in consumer object

1. Go to the setup page → click on object manager → From drop down click edit for consumer object.
2. Click on the validation rule → click New.
3. Enter the Rule name as “Phonenumberoremailblankrule”.
4. Enter the description as “phone number and email number should not be blank”.
5. Enter the formula as “OR(ISBLANK(phone_number_c) , ISBLANK(email_c))” and check the syntax.
6. Under the error message write as” please fill in your phone number.”
7. Select error location “top of page”.
8. Save the validation rule.

The screenshot shows the Salesforce Setup interface. The top navigation bar includes a blue cloud icon, a search bar labeled "Search Setup", and various global buttons. Below the bar, the main menu has tabs for "Setup", "Home", and "Object Manager". The "Object Manager" tab is selected and has a dropdown arrow. The left sidebar lists various 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 right panel displays the "Validation Rule Detail" for the "consumer Validation Rule". The rule is named "Phonenumberoremailblankrule", is active, and has the formula "OR(ISBLANK(Phone_number_c), ISBLANK(Email_c))". The error message is "please fill in your phone number.", the description is "phone number and email number should not be blank", and it was created by "Merin Paul" on "26/06/2024, 3:03 pm". There are "Edit" and "Clone" buttons at the top right of the detail panel.

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.

To Create a Page layout:

1. Go to Setup → Click on Object Manager → Search for the object (consumer) → 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 “consumer layout”, and click save.
4. Drag and drop the section field to consumer details and create the section.
5. Enter the section name as “Personal details”, → click Ok.
6. Now drag the fields to this section that mentioned, they are
 - First name, last name, consumer name, phone number, email, rice mill name.
7. Follow the same process for another two sections as shown above, they are
8. One section is “rice details”, drag the fields that are
 - Rice taken by shop, rice type.
9. Another section is “Receipt details”, and drag the fields that are
 - Mode of payment, Amount paid.
10. Then, Click save.

The screenshot shows the Salesforce Setup interface with the following details:

- Header:** Includes a cloud icon, a search bar labeled "Search Setup", and various navigation icons.
- Breadcrumbs:** SETUP > OBJECT MANAGER > consumer
- Left Navigation Bar:** Lists various setup categories: Details, Fields & Relationships, Page Layouts (selected), 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.
- Page Layout Configuration Area:**
 - Fields Tab:** Shows a table of fields categorized by section:

Section	Consumer Name	Last Modified By	Rice mill name
Section	Consumer Name	Last Modified By	Rice mill name
Blank Space	Created By	Last name	Rice taken by shops
consumer Name	Email	Mode of payment	rice taken by sho...
	First name	Phone number	Rice types
 - Layout Properties:** Buttons for Save, Quick Save, Preview As..., Cancel, Undo, Redo, and Layout Properties.
 - Section Headers:** consumer Detail, rice details, Receipt details.
 - Field Data:** Various fields like First name, Last name, Consumer Name, Phone number, Email, etc., with their respective values and descriptions.
 - Action Bar:** Standard Buttons (Edit, Delete, Clone, Change Owner, Change Record Type, Printable View, Edit Labels) and Custom Buttons.

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. Can define profiles by the user's job function.

Three profiles are created Owner, Employer and Worker

Owner Profile

Owner profile permissions and access for the objects are given.

To create a new owner profile:

1. Go to setup → type profiles in quick find box → click on profiles → clone the desired profile (Standard User) → enter profile name (owner) → Save.
2. Scroll down to Custom Object Permissions and Give access permissions for consumers, rice details, rice mill and suppliers objects.
3. Give access and save it.

The screenshot shows the Salesforce Setup interface with the following details:

- Setup Bar:** Includes icons for Home, Object Manager, and a search bar labeled "Search Setup".
- Left Navigation:** Shows "Users" and "Profiles" under the "Users" category, with "Profiles" highlighted.
- Message:** "Didn't find what you're looking for? Try using Global Search."
- Profiles Page:**
 - Object Permissions:** A grid showing permissions for various objects. For example, "Labels" has checkmarks in the "Read", "Create", "Edit", and "Delete" columns, while "Web Store Inventory Sources" has empty boxes.
 - Custom Object Permissions:** A section titled "Custom Object Permissions" with two tables:

	Basic Access						Data Administration					
	Read	Create	Edit	Delete	View All	Modify All	Read	Create	Edit	Delete	View All	Modify All
consumers	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
rice details	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓

	Basic Access						Data Administration					
	Read	Create	Edit	Delete	View All	Modify All	Read	Create	Edit	Delete	View All	Modify All
rice mills	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
suppliers	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
 - Session Settings:** Shows "Session Times Out After" set to "2 hours of inactivity" and "Session Security Level Required at Login" set to "None".
 - Password Policies:** Shows password expiration rules: "User passwords expire in 90 days", "Enforce password history 3 passwords remembered", "Minimum password length 8", "Password complexity requirement Must include alpha and numeric characters", and "Password question requirement Cannot contain password".

Employer Profile

Employer profile permissions and access for the objects are given.

To create a new employer profile:

1. Go to setup → type profiles in quick find box → click on profiles → clone the desired profile (Standard Platform User) → enter profile name (employer) → Save.
2. While still on the profile page, then click Edit.
3. Select the Custom App settings as default for the rice mill.
4. Scroll down to Custom Object Permissions and Give access permissions for consumer, rice details, rice mill and suppliers objects.
5. And click save.

The screenshot shows the Salesforce Setup interface for managing Profiles. The top navigation bar includes a search bar labeled "Search Setup" and various icons for navigation and configuration. The main content area is titled "Profiles". On the left, there's a sidebar with a "Setup" icon, "Home", "Object Manager", and a search bar. Below that, under "Users", the "Profiles" tab is selected. A message says "Didn't find what you're looking for? Try using Global Search." The main content area displays a grid of object permissions for various profiles. At the bottom, sections for "Custom Object Permissions" and "Session Settings" are visible.

Custom Object Permissions

	Basic Access						Data Administration					
	Read	Create	Edit	Delete	View All	Modify All	Read	Create	Edit	Delete	View All	Modify All
consumers	✓	□	□	□	□	□	✓	□	□	□	□	□
rice details	✓	□	□	□	□	□	✓	□	✓	□	□	□
rice mills	✓	□	□	□	□	□	✓	□	□	□	□	□
suppliers	✓	□	✓	□	□	□	✓	□	□	□	□	□

Session Settings

Session Times Out After: 2 hours of inactivity

Session Security Level Required at Login

Password Policies

User passwords expire in: 90 days

Enforce password history: 3 passwords remembered

javascript:srcUp(%27%2F00ed.000003YARR%3Fsdtp%3Dp1%27)

Worker Profile

Worker profile permissions and access for the objects are given.

To create a new worker profile:

1. Go to setup → type profiles in quick find box → click on profiles → clone the desired profile (Standard Platform User) → enter profile name (worker) → Save.
2. While still on the profile page, then click Edit.
3. Select the Custom App settings as default for the rice mill.
4. Scroll down to Custom Object Permissions and Give access permissions for consumer, rice details, rice mill and suppliers objects.
5. And click save.

The screenshot shows the Salesforce Setup interface with the following details:

- Communication Subscription Timings:** A grid showing checkmarks for various objects like Communication, Subscriptions, and Timings.
- Party Consents:** A grid showing checkmarks for Push Topics, Sellers, Streaming Channels, and User External Credentials.
- Custom Object Permissions:** A section with two tables:
 - Basic Access:** For consumers, rice details, rice mills, and suppliers. Checkmarks are present in the Read, Create, and Edit columns for most objects.
 - Data Administration:** For View All and Modify All columns, checkmarks are present for consumers, rice details, and rice mills.
- Session Settings:** Session Times Out After is set to 2 hours of inactivity.
- Password Policies:** A table showing policy settings:

User passwords expire in	90 days
Enforce password history	3 passwords remembered
Minimum password length	8
Password complexity requirement	Must include alpha and numeric characters
Password question requirement	Cannot contain password
Maximum invalid login attempts	10
Lockout effective period	15 minutes
Secret answer for password	[checkbox]

ROLE AND 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 the Salesforce organization can have to data. Simply, it describes what a user could see within the Salesforce organization.

Creating owner 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 “owner” and Role name gets auto populated. Then click on Save.

The screenshot shows the Salesforce Setup Roles page. On the left, there's a sidebar with navigation links like 'Setup', 'Home', 'Object Manager', and sections for 'Users' (with 'Roles' selected), 'Feature Settings', 'Sales' (with 'Contact Roles on Contracts' and 'Contact Roles on Opportunities'), 'Service' (with 'Case Teams' and 'Case Team Roles'), and 'Cases' (with 'Contact Roles on Cases'). A note at the bottom says 'Didn't find what you're looking for? Try using Global Search.' The main content area is titled 'Creating the Role Hierarchy'. It shows a tree view of roles under 'Your Organization's Role Hierarchy'. The hierarchy includes 'Mar Athanasius College of Engineering Kothamangalam' (with 'Add Role' option), 'CEO' (with 'Edit | Del | Assign' options and 'Add Role' option), 'CFO' (with 'Edit | Del | Assign' options and 'Add Role' option), 'COO' (with 'Edit | Del | Assign' options and 'Add Role' option), 'owner' (with 'Edit | Del | Assign' options and 'Add Role' option), 'SVP.Customer Service & Support' (with 'Edit | Del | Assign' options and 'Add Role' option), 'SVP.Human Resources' (with 'Edit | Del | Assign' options and 'Add Role' option), and 'SVP.Sales & Marketing' (with 'Edit | Del | Assign' options and 'Add Role' option). There are also 'Show in tree view' and 'Help for this Page' buttons.

Creating employer role

1. Go to quick find → Search for Roles → click on set up roles.
2. Click plus on CEO role, and click add role under owner.
3. Give Label as “employer” and Role name gets auto populated. Then click on Save.

This screenshot is identical to the one above, showing the 'Creating the Role Hierarchy' page in the Salesforce Setup Roles section. The difference is that the 'owner' node now has a child node labeled 'employer' under its 'Add Role' option, indicating that a new role has been successfully created and added to the hierarchy.

Creating worker role

1. Go to quick find → Search for Roles → click on set up roles.
2. Click plus on CEO role, and click plus on owner, and click add role under employer.
3. Give Label as “worker” and Role name gets auto populated. Then click on Save.

The screenshot shows the Salesforce Setup interface for creating a Role Hierarchy. The top navigation bar includes a blue cloud icon, a search bar labeled "Search Setup", and various global buttons. The main menu bar has "Setup" selected, followed by "Home" and "Object Manager". On the left, a sidebar menu under "Users" has "Roles" selected. The main content area is titled "Creating the Role Hierarchy" and contains a sub-header "Your Organization's Role Hierarchy". It shows a hierarchical tree structure starting with "Mar Athanasius College of Engineering Kothamangalam". Under this root node, several roles are listed with edit, delete, and assign options: "CEO", "CFO", "COO", "owner", "employer", "worker", "SVP, Customer Service & Support", "SVP, Human Resources", and "SVP, Sales & Marketing". Each role node has an "Add Role" link below it. A "Show in tree view" button is located at the top right of the hierarchy tree. A message at the bottom left says "Didn't find what you're looking for? Try using Global Search."

USERS

A user is anyone who logs in to Salesforce. Users are employees in the company, 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.

Three users are created and given access to them.

User 1

1. Go to setup → type users in quick find box → select users → click New user.
2. Fill in the fields

First Name : vicky
Last Name : y
Alias : vy
Email id : merinpaul18@gmail.com
Username : vi@vy.com
Nick Name : vyvicky
Role : owner
User license : Salesforce
Profiles : owner.

3. Save it.

User 1 vicky has got the owner role.

The screenshot shows the Salesforce Setup interface. The top navigation bar includes the Salesforce logo, a search bar labeled 'Search Setup', and various global buttons. The main menu on the left is expanded under 'Users', showing options like 'Permission Set Groups', 'Permission Sets', 'Profiles', 'Public Groups', 'Queues', 'Roles', 'User Management Settings', and 'Feature Settings'. The 'Users' option is currently selected. The central content area displays the 'User Detail' for a user named 'vicky y'. The 'User Detail' section contains the following information:

User Detail	
Name	vicky y
Role	owner
Alias	vy
User License	Salesforce
Email	merinpaul18@gmail.com (Verify)
Profile	owner
Username	vi@vy.com
Active	<input checked="" type="checkbox"/>
Nickname	vyvicky
Title	
Offline User	<input type="checkbox"/>
Company	
Knowledge User	<input type="checkbox"/>
Department	
Flow User	<input type="checkbox"/>
Division	
Service Cloud User	<input type="checkbox"/>
Address	
Site.com Contributor User	<input type="checkbox"/>
Time Zone	(GMT+05:30) India Standard Time (Asia/Kolkata)
Site.com Publisher User	<input type="checkbox"/>
Locale	English (India)
WDC User	<input type="checkbox"/>
Language	English
Mobile Push Registrations	View
Delegated Approver	
Data.com User Type	View
Manager	
Accessibility Mode (Classic Only)	<input type="checkbox"/>
Receive Approval Request Emails	Only if I am an approver
Debug Mode	<input type="checkbox"/>
Federation ID	
High-Contrast Palette on Charts	<input type="checkbox"/>
App Registration: One-Time Password	View
Load Lightning Pages While Scrolling	<input checked="" type="checkbox"/>

User 2

1. Go to setup → type users in quick find box → select users → click New user.
2. Fill in the fields

First Name : ram
Last Name : ram
Alias : r ram
Email id : merinpaul18@gmail.com
Username : rram@rr.com
Nick Name : rram
Role : employer
User license : Salesforce platform
Profiles : standard platform user.

3. Save it.

User 2 ram has got the employer role.

The screenshot shows the Salesforce Setup interface. The top navigation bar includes a blue cloud icon, a search bar labeled 'Search Setup', and various global buttons. The main menu bar has 'Setup' selected, along with 'Home' and 'Object Manager'. On the left, a sidebar menu is open under the 'Users' section, listing options like 'Permission Set Groups', 'Permission Sets', 'Profiles', 'Public Groups', 'Queues', 'Roles', 'User Management Settings', and 'Feature Settings'. Below this, there's a 'Data.com' section and a 'Prospector' section. A note at the bottom says 'Didn't find what you're looking for? Try using Global Search.' The central content area displays the 'User' details for 'User ram ram'. The 'User Detail' section shows the following information:

User Detail		Edit Sharing Reset Password Freeze View Summary	
Name	ram ram	Role	employer
Alias	rram	User License	Salesforce Platform
Email	merinpaul18@gmail.com [Verify]	Profile	Standard Platform User
Username	rram@rr.com	Active	<input checked="" type="checkbox"/>
Nickname	rram	Marketing User	<input type="checkbox"/>
Title		Offline User	<input type="checkbox"/>
Company		Knowledge User	<input type="checkbox"/>
Department		Flow User	<input type="checkbox"/>
Division		Service Cloud User	<input type="checkbox"/>
Address		Site.com Contributor User	<input type="checkbox"/>
Time Zone	(GMT+05:30) India Standard Time (Asia/Kolkata)	Site.com Publisher User	<input type="checkbox"/>
Locale	English (India)	WDC User	<input type="checkbox"/>
Language	English	Mobile Push Registrations	View
Delegated Approver		Data.com User Type	i
Manager		Accessibility Mode (Classic Only)	<input type="checkbox"/> i
Receive Approval Request Emails	Only if I am an approver	Debug Mode	<input type="checkbox"/> i
Federation ID		High-Contrast Palette on Charts	<input type="checkbox"/> i

At the bottom of the page, there is a red footer bar with the URL 'javascript:srcUp(%27%2F005dL000003nAU%3Fnoredirect%3D1%26isUserEntityOverride%3D1%26isItp%3Dp1%27);'.

User 3

1. Go to setup → type users in quick find box → select users → click New user.
2. Fill in the fields

First Name : ragu
Last Name : raj
Alias : rraj
Email id : merinpaul18@gmail.com
Username : ragur@rraj.com
Nick Name : ragur
Role : worker
User license : Salesforce platform
Profiles : standard platform user.

3. Save it.

User 3 ragu has got the worker role.

The screenshot shows the Salesforce Setup interface. The top navigation bar includes a blue cloud icon, a search bar labeled 'Search Setup', and various global buttons. The main menu bar has 'Setup' selected, along with 'Home' and 'Object Manager'. On the left, a sidebar menu is open under the 'Users' section, showing options like 'Permission Set Groups', 'Permission Sets', 'Profiles', 'Public Groups', 'Queues', 'Roles', and 'User Management Settings'. Below this, 'Feature Settings' and 'Data.com' are listed, followed by a 'Prospector' section with a 'Users' button. A note at the bottom says 'Didn't find what you're looking for? Try using Global Search.' The central content area displays a 'User Detail' page for a user named 'ragu raj'. The page header includes a 'User Profile' link and a help icon. The 'User Detail' section contains a table with the following data:

User Detail	
Name	ragu raj
Role	worker
Alias	rraj
User License	Salesforce Platform
Email	merinpaul18@gmail.com [Verify]
Profile	Standard Platform User
Username	ragur@rraj.com
Active	<input checked="" type="checkbox"/>
Nickname	ragur
Title	<input type="checkbox"/>
Company	<input type="checkbox"/>
Department	<input type="checkbox"/>
Division	<input type="checkbox"/>
Address	<input type="checkbox"/>
Time Zone	(GMT+05:30) India Standard Time (Asia/Kolkata)
Site.com Contributor User	<input type="checkbox"/>
Locale	English (India)
Site.com Publisher User	<input type="checkbox"/>
Language	English
WDC User	<input type="checkbox"/>
Mobile Push Registrations	<input type="checkbox"/> View
Delegated Approver	<input type="checkbox"/>
Data.com User Type	<input type="checkbox"/>
Manager	<input type="checkbox"/>
Accessibility Mode (Classic Only)	<input type="checkbox"/>
Receive Approval Request Emails	Only if I am an approver
Debug Mode	<input type="checkbox"/>
Federation ID	<input type="checkbox"/>
High Contrast Palette on Charts	<input type="checkbox"/>

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.

OWD settings for rice mill and supplier object has changed to public read only.

Steps for creating 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 rice mill and supplier object.
3. Click save.

The screenshot shows the Salesforce Sharing Settings page. At the top, there's a search bar labeled "Search Setup" and a toolbar with icons for star, plus, question mark, and notifications. Below the toolbar, the navigation bar includes "Setup", "Home", and "Object Manager". On the left, a sidebar has a search bar with "sharing" typed in, followed by sections for "Security" (with "Guest User Sharing Rule Access" and "Report" items), "Sharing Settings" (which is selected and highlighted in blue), and a note about global search. The main content area is titled "Sharing Settings" and contains a table of objects and their sharing rules. The table has columns for Object Name, Internal Access, External Access, and a checkbox column. Most objects have "Public Read Only" in the Internal Access column and a checked box in the checkbox column. The "rice mill" and "supplier" objects both have "Public Read Only" in the Internal Access column and an unchecked box in the checkbox column, indicating they have been modified. The table also includes rows for "consumer", "rice details", and "Work Plan Template". At the bottom of the page, there's a "Manager Groups" section and a "Other Settings Help" link.

Object	Internal Access	External Access	
Shipping Carrier	Public Read Only	Private	✓
Shipping Carrier Method	Public Read Only	Private	✓
Shipping Configuration Set	Public Read Only	Private	✓
Streaming Channel	Public Read/Write	Private	✓
Tableau Host Mapping	Public Read Only	Private	✓
User Provisioning Request	Private	Private	✓
Waitlist	Private	Private	✓
Web Cart Document	Private	Private	✓
Work Order	Private	Private	✓
Work Plan	Private	Private	✓
Work Plan Template	Private	Private	✓
Work Step Template	Private	Private	✓
Work Type	Private	Private	✓
Work Type Group	Public Read/Write	Private	✓
consumer	Controlled by Parent	Controlled by Parent	
rice details	Controlled by Parent	Controlled by Parent	
rice mill	Public Read Only	Private	✓
supplier	Public Read Only	Private	✓

REPORTS

Reports give the access to the Salesforce data. Can examine the 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.

In Salesforce.com it is easy to generate reports in different styles. And can create reports in a very short time and also schedule the reports. Salesforce provides a powerful suit of analytic tools to help to organize, view and analyze the data.

Steps for creating reports:

1. Go to the app → click on the reports tab
2. Click New Report.
3. select for report type, search for “rice mill with consumers” click on it. And click on start report.
4. In outline pane is opened, select the fields:
 - 1.consumer name
 - 2.rice type
 - 3.rice price/kg
 - 4.mode of payments
 - 5.amount paid
5. Remove the unnecessary fields.
6. Select the fields that are mentioned below in the GROUP ROWS section.
 - a. Rice taken by shops.
7. Click save and run and save the report as “range of amount per day” and save it.

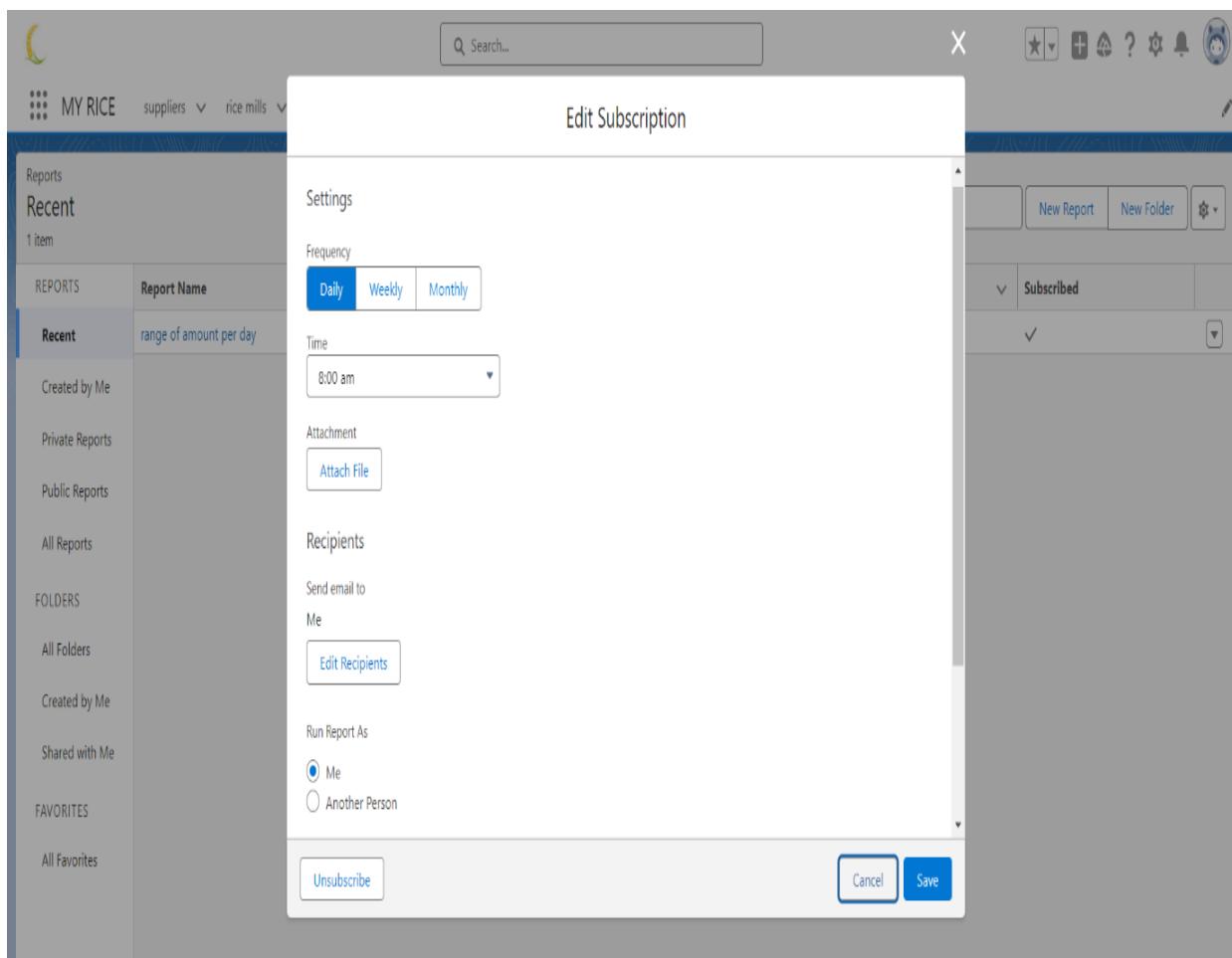
The screenshot shows a Salesforce report interface. At the top, there's a navigation bar with links for 'suppliers', 'rice mills', 'consumers', 'rice details', 'Reports' (which is currently selected), and 'Dashboards'. Below the navigation is a search bar and a toolbar with various icons. The main area displays a report titled 'Report: rice mills with consumers range of amount per day'. The report summary shows 'Total Records: 10', 'Total rice price/kg: 214', and 'Total Amount Paid: 4,407.00'. The data is presented in a table with the following columns: 'Rice taken by shops', 'consumer: consumer Name', 'Rice types', 'rice price/kg', 'Mode of payment', and 'Amount Paid'. The table contains 15 rows of data, grouped by consumer. Subtotals are shown for each consumer group. At the bottom of the report, there are checkboxes for 'Row Counts', 'Detail Rows', 'Subtotals', and 'Grand Total'.

Rice taken by shops	consumer: consumer Name	Rice types	rice price/kg	Mode of payment	Amount Paid
6 (1)	consumers-001	Basmati	57	Cash	342.00
Subtotal			57		342.00
7 (1)	consumers-008	Normal rice	38	Credit card	266.00
Subtotal			38		266.00
8 (3)	consumers-002	Normal rice	42	Debit card	336.00
	consumers-006	Basmati	32	Cash	256.00
	consumers-010	Basmati	45	UPI	360.00
Subtotal			119		952.00
10 (2)	consumers-004	Basmati	45	UPI	450.00
	consumers-007	Normal rice	57	Debit card	570.00
Subtotal			102		1,020.00
11 (1)	consumers-005	Basmati	57	Cash	627.00
Subtotal			57		627.00
15 (2)	consumers-003	Normal rice	38	UPI	570.00

In Salesforce, reports are crucial for providing insights and tracking key metrics related to sales, marketing, and service activities. They allow users to compile and analyse data from various sources within the platform, enabling informed decision-making and strategic planning. Reports can be customized to display specific information, such as sales performance, customer interactions, and pipeline status, through various formats like tables, charts, and dashboards. By leveraging Salesforce reports, organizations can identify trends, monitor progress towards goals, and uncover opportunities for improvement, ultimately enhancing overall business performance. Here a report with fields such as consumer name, rice type, rice price per kilogram, mode of payments, and amount paid is created which allows for the comprehensive tracking and analysis of rice sales transactions. This report can be customized to show detailed information about each transaction, including which consumers purchased specific rice types, the price they paid per kilogram, the total amount paid, and their chosen payment methods. By organizing this data in a structured report, businesses can identify purchasing patterns, assess payment preferences, and evaluate revenue generated from different rice types. This insight aids in strategic planning, inventory management, and optimizing sales processes.

Sharing report to owner

1. Click edit drop down and select subscribe option
2. After selecting the run report as a “another person” select the account for whom it wants to send that mail to.
3. Click save.



create a report folder

1. Click on the app launcher and search for reports.
2. Double click on the report, “reports tab” will be auto populated in the navigation bar.
3. Click on the report tab, click on the new folder.
4. Give the Folder label as “estimated rice per day”, Folder unique name will be auto populated.
5. Click save.
6. navigate to app launcher and click reports on that.
7. click all reports.
8. Select the range of amount per day drop down in that click move.
9. Select estimated rice per day folder and select folder.

The screenshot shows the 'MY RICE' application interface. At the top, there is a navigation bar with icons for search, favorite, add, help, notifications, and user profile. Below the navigation bar, the main menu includes 'MY RICE' (with a gear icon), 'suppliers', 'rice mills', 'consumers', 'rice details', 'Reports' (which is currently selected and highlighted in blue), and 'Dashboards'. On the left side, there is a sidebar with sections for 'Reports' (Recent, Created by Me, Private Reports, Public Reports, All Reports), 'Folders' (All Folders, Created by Me, Shared with Me), and 'Favorites' (All Favorites). The main content area displays a table titled 'Recent' with columns: REPORTS, Report Name, Description, Folder, Created By, Created On, and Subscribed. There is one item listed: 'range of amount per day' under 'Report Name', 'estimated rice per day' under 'Folder', 'Merin Paul' under 'Created By', and '26/6/2024, 9:15 pm' under 'Created On'. A search bar at the top right of the content area allows searching for recent reports, and buttons for 'New Report' and 'New Folder' are also present.

REPORTS	Report Name	Description	Folder	Created By	Created On	Subscribed
Recent	range of amount per day		estimated rice per day	Merin Paul	26/6/2024, 9:15 pm	✓

DASHBOARDS

Dashboards helps to visually understand changing business conditions so it can help in making decisions based on the real-time data that have 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.

Steps to create Dashboard Folder:

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

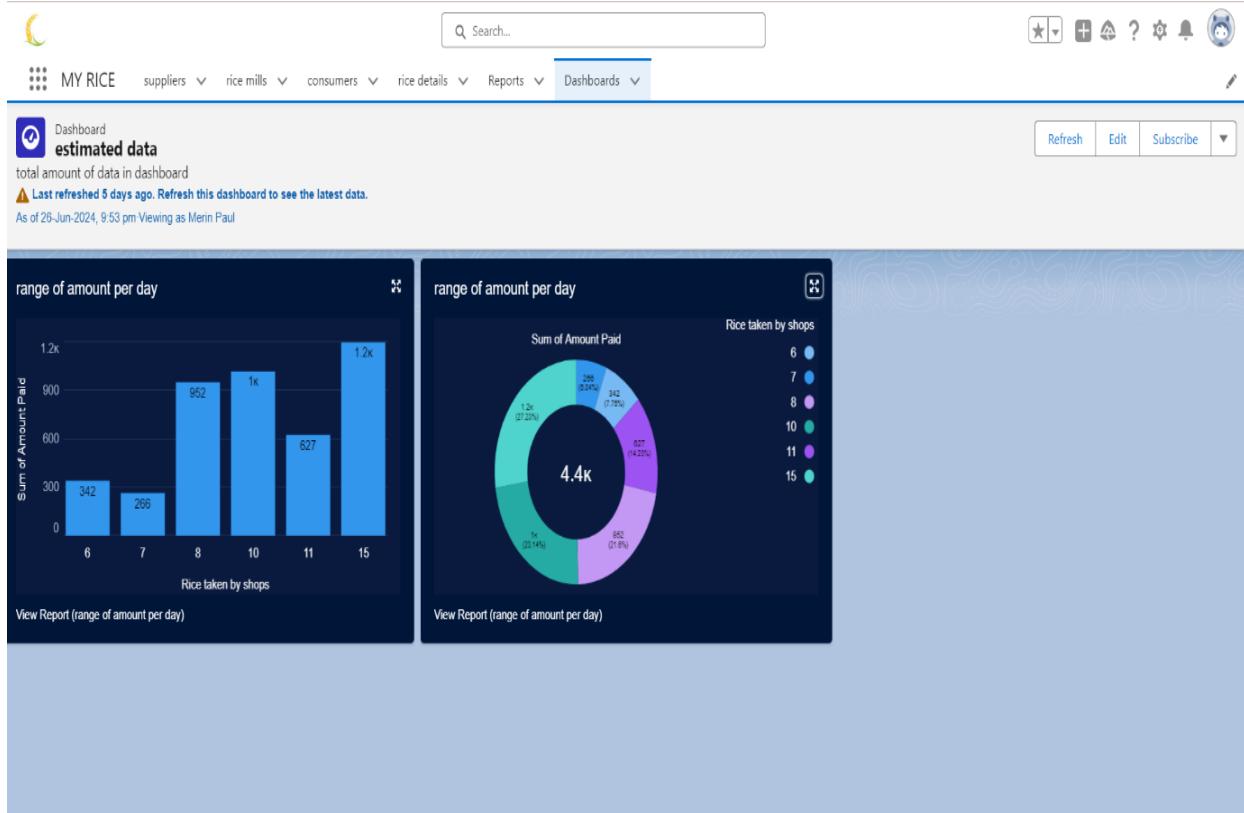
The screenshot shows a user interface for managing dashboards. At the top, there's a navigation bar with a logo, a search bar labeled 'Search...', and several icons. Below the navigation bar, a secondary header shows 'MY RICE' with dropdown menus for 'suppliers', 'rice mills', 'consumers', 'rice details', 'Reports', and 'Dashboards'. The 'Dashboards' menu is currently selected. The main content area is titled 'Dashboards' and shows a list of dashboards under the heading 'All Folders > amount data dashboard'. There is one item listed: 'Recent' with the name 'estimated data', description 'total amount of data in dashboard', folder 'amount data dashboard', created by 'Merin Paul', and created on '26/6/2024, 9:33 pm'. On the left side, there's a sidebar with sections for 'DASHBOARDS' (links to 'Created by Me', 'Private Dashboards', and 'All Dashboards'), 'FOLDERS' (selected 'All Folders' with links to 'Created by Me', 'Shared with Me'), and 'FAVORITES' (link to 'All Favorites').

Steps to create Dashboard:

1. Go to the app → click on the Dashboards tabs.
2. Give a Name and select the folder that was created, and click on create.
3. Select Widget → Chart or Table.
4. Select a Report and click on select.
5. Fill in details.
 1. Display as- vertical bar chart
 2. X-axis - rice taken by shops
 3. Y-axis- sum of amount

4. Y-axis range - automatic
5. Sort by - rice taken by shops
6. Component theme - dark.

6. Add the component
7. Again, select widget with above same steps
 - 1.display as donut chart
 - 2.sort by - sum of amount
 - 3.title-range of amount per day
 - 4.component theme dark
8. Click add.
9. Click save and done.



In Salesforce, dashboards are powerful tools that provide a visual representation of key business metrics and performance indicators. They aggregate data from multiple reports, presenting it in an easily digestible format through charts, graphs, and tables. Dashboards enable users to monitor real-time data, track progress towards goals, and make data-driven decisions quickly. By customizing dashboards to display relevant metrics, different teams can focus on their specific objectives, such as sales targets, customer service efficiency, or marketing campaign performance. Ultimately, dashboards enhance visibility and accountability across the organization, facilitating better strategic planning and execution.

Here dashboard is used to display the amount of rice taken by shops using a vertical bar chart. This involves configuring the X-axis to represent the shops, while the Y-axis displays the sum of the amount of rice taken. The Y-axis range will be set to automatic, ensuring it adjusts dynamically based on the data. Additionally, the chart will be sorted by the amount of rice taken by each shop, making it easy to compare and analyse the data at a glance. This setup provides a clear visual representation of rice distribution among shops, aiding in efficient monitoring and decision-making.