

Crm Application For Wholesale Rice Mill

1. Project Overview

The Rice Mill CRM Application is a comprehensive solution designed to streamline and optimize the daily operations of a rice mill factory. The primary objective is to track and report daily rice production, sales, and revenue while providing valuable insights to stakeholders. This project leverages Salesforce's capabilities, including custom objects, workflows, and dashboards, to enhance operational efficiency, improve customer satisfaction, and ensure data accuracy. Through this initiative, we aim to provide a centralized platform for managing and analyzing rice mill activities, empowering the organization to make data-driven decisions and achieve longterm growth.

Key aspects of the project include automated reporting, role-based access control, and data visualization, all tailored to the unique requirements of a wholesale rice mill.

2. Objectives Business Goals:

- Enhance operational transparency for the rice mill owner.
- Automate the generation of daily reports for production, sales, and revenue.
- Improve customer experience by providing personalized updates and insights. •

Provide role-based data access for improved security and accountability.

Specific Outcomes:

- Enable automated tracking of rice supply, sales, and revenue through custom reports and dashboards.
- Improve decision-making by providing detailed analytics on customer preferences and product performance.
- Streamline operational workflows using master-detail relationships, roll-up summary fields, and formula fields.
- Establish efficient communication channels with consumers through email notifications

3. Salesforce Key Features and Concepts Utilized

1. Custom Objects:

- **Supplier Object:** Manages supplier details, including total rice supplied.
- **Rice Mill Object:** Tracks daily operations, rice inventory, and pricing.
- **Consumer Object:** Stores customer information, rice purchases, and payment details.
- **Rice Details Object:** Captures granular data on rice types, quantities, and transactions.

1. Roll-Up Summary Fields:

- Summarize data such as total rice supplied to a mill or total rice taken by shops.

1. Cross-Object Formula Fields:

- Calculate total payment amounts (e.g., Rice Taken by Shops × Price per Kilogram).

1. Validation Rules:

- Ensure data integrity by validating fields such as phone numbers, email addresses, and mandatory entries.

1. Permission Sets and Role Hierarchy:

- Implement role-based access control:
 - Owners can access all data.
 - Employers can view worker records and related data.
 - Workers have restricted access to update daily transactions.

1. Reports and Dashboards:

- Generate daily summaries and visualize performance metrics, such as revenue trends and inventory levels, through bar and donut charts.

1. Apex Classes and Triggers:

- Automate email notifications to customers, enhancing communication and engagement.

4. Step-by-Step Implementation

Creating Developer Account:

1. Visit [Salesforce Developer Signup](#).
2. Fill in the required details: Name, Email, Role (Developer), Company, and Username (e.g., username@organization.com).
3. Verify the account through the email received and set up your password.

Objects:

Create Supplier Object:

- Navigate to Object Manager > Create > Custom Object.
- Label Name: Supplier; Plural Label: Suppliers.
- Enable "Allow Reports" and "Track Field History."
- Save the object.

SETUP > OBJECT MANAGER
supplier

Custom Object Definition Edit

Custom Object Information

The singular and plural labels are used in tabs, page layouts, and reports.
Be careful when changing the name or label as it may affect existing integrations and merge templates.

Label: supplier **Example:** Account

Plural Label: supplier **Example:** Accounts

Starts with vowel sound:

Object Name: supplier **Example:** Account

Description:

Context-Sensitive Help Setting:

- Open the standard Salesforce.com Help & Training window
- Open a window using a Visualforce page

Content Name:

Enter Record Name Label and Format:

The Record Name appears in page layouts, key lists, related lists, lookups, and search results. For example, the Record Name for Account is "Account Name" and for Case it is "Case Number". Note that the Record Name field is always called "Name" when referenced via the API.

Optional Features

- Allow Reports
- Allow Activities
- Track Field History
- Allow in Chatter Groups
- Enable Licensing [i](#)

Create Rice Mill Object:

- Label Name: Rice Mill; Plural Label: Rice Mills.
- Record Name: Auto Number (e.g., Rice-{000}); Starting Number: 1.
- Enable "Allow Reports" and "Track Field History."
- Save the object.

SETUP > OBJECT MANAGER

Custom Object Definition Edit

Custom Object Information

The singular and plural labels are used in tabs, page layouts, and reports.

Label: rice mill **Example:** Account

Plural Label: rice mills **Example:** Accounts

Starts with vowel sound:

Object Name: rice_mill **Example:** Account

Optional Features

- Allow Reports
- Allow Activities
- Track Field History
- Allow in Chatter Groups
- Enable Licensing [i](#)

Create Consumer Object:

- Label Name: Consumer; Plural Label: Consumers.

- Record Name: Auto Number (e.g., Consumers-{000}); Starting Number: 1.
- Save and enable search functionality.

The screenshot shows the 'Custom Object Definition Edit' page for a custom object named 'consumer'. The top navigation bar includes 'Edit Custom Object consumer' on the left and 'Help for this Page ?' on the right. The main section is titled 'Custom Object Information' with a note: 'The singular and plural labels are used in tabs, page layouts, and reports. Be careful when changing the name or label as it may affect existing integrations and merge templates.' It contains fields for 'Label' (consumer), 'Plural Label' (consumers), 'Example' (Account), and a checkbox for 'Starts with vowel sound'. Below this is a section for the 'Object Name' (consumer) and its 'Example' (Account). A large 'Description' text area is present. Under 'Context-Sensitive Help Setting', there are two radio buttons: 'Open the standard Salesforce.com Help & Training window' (selected) and 'Open a window using a Visualforce page'. The 'Content Name' dropdown is set to 'None'. The next section, 'Enter Record Name Label and Format', describes how the record name appears in various contexts. It shows the 'Record Name' (consumer Name), 'Data Type' (Auto Number), a warning about high volume inserts via API, and the 'Display Format' (consumers-{000}). The final section, 'Optional Features', includes checkboxes for 'Allow Reports' (checked), 'Allow Activities' (unchecked), 'Track Field History' (checked), 'Allow in Chatter Groups' (unchecked), and 'Enable Licensing' (unchecked).

Ceate Rice Details Object:

- Label Name: Rice Details; Plural Label: Rice Details.
- Record Name: Auto Number (e.g., Rice-{000}); Starting Number: 1.
- Save and enable search functionality.

rice details

Custom Object Definition Edit [Save](#) [Save & New](#) [Cancel](#)

Custom Object Information

The singular and plural labels are used in tabs, page layouts, and reports.
Be careful when changing the name or label as it may affect existing integrations and merge templates.

Label Example: Account
Plural Label Example: Accounts
Starts with vowel sound

The Object Name is used when referencing the object via the API.
Object Name Example: Account

Description

Context-Sensitive Help Setting Open the standard Salesforce.com Help & Training window
 Open a window using a Visualforce page

Content Name

Enter Record Name Label and Format

The Record Name appears in page layouts, key lists, related lists, lookups, and search results. For example, the Record Name for Account is "Account Name" and for Case it is "Case Number". Note that the Record Name field is always called "Name" when referenced via the API.

Record Name Example: Account Name
Data Type Warning: If you plan to insert a high volume of records in this object, via the API for example, use the Text data type.
Display Format Example: A-{0000} [What Is This?](#)

Optional Features

Allow Reports
 Allow Activities
 Track Field History
 Allow in Chatter Groups
 Enable Licensing [?](#)

Object Classification

When these settings are enabled, this object is classified as an Enterprise Application object. When these settings are disabled, this object is classified as a Light Application object. [Learn more](#).

Allow Sharing
 Allow Bulk API Access
 Allow Streaming API Access

Publication Status [What Is This?](#)

Tabs:

Creating a Custom Tab:

- Go to Setup > Tabs > New Custom Tab.
- Select the object (e.g., Supplier) and choose a tab style.
- Assign it to the appropriate profiles and save.

Edit Custom Object Tab
consumers

Fill in the fields below to define the custom tab.

Custom Tab Definition Edit

Custom Object Tab Information

Tab Label	consumers
Object	<u>consumer</u>
Tab Style	 People 

(Optional) Choose a Home Page Custom Link to show as a splash page the first time your users click on this tab.
Splash Page Custom Link

Enter a short description.

Description

Tab Style Selector

Hide styles which are used on other tabs

 Airplane	 Alarm clock	 Apple	 Balls
 Bank	 Bell	 Big top	 Boat
 Books	 Bottle	 Box[1]	 Bridge
 Building	 Building Block	 Caduceus	 Camera
 Can	 Car	 Castle	 CD/DVD

The Lightning App:

Create a Lightning App:

- Navigate to Setup > Search for 'App Manager' > New Lightning App.
- Enter app details (e.g., Name: My Rice CRM) and customize branding.
- Add navigation items: Supplier, Rice Mill, Consumer, and Rice Details.
- Save and assign profiles.

Lightning App Builder | App Settings | Pages | MY RICE

App Details & Branding

App Details & Branding

- App Options
- Utility Items (Desktop Only)
- Navigation Items
- User Profiles

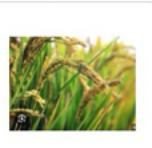
App Details

* App Name

* Developer Name

Description

App Branding

Image  Primary Color Hex Value

Use the app's image and color instead of the org's custom theme

App Launcher Preview



Lightning App Builder | App Settings | Pages | MY RICE

App Settings

Navigation Items

- App Details & Branding
- App Options
- Utility Items (Desktop Only)
- User Profiles

Available Items

Icon	Name
Accounts	Accounts
All Sites	All Sites
Alternative Payment Methods	Alternative Payment Methods
Analytics	Analytics
App Launcher	App Launcher
Appointment Categories	Appointment Categories
Appointment Invitations	Appointment Invitations
Approval Requests	Approval Requests

Selected Items

supplier
consumers
rice details
rice mills

User Profiles

Choose the user profiles that can access this app.

Available Profiles

Analytics Cloud Integration User
Analytics Cloud Security User

Selected Profiles

System Administrator
employer
worker

Fields:

Creating the Rice Distributed Field in Rice Details Object:

- Go to the setup page >> click on object manager >> From drop down click edit for rice details object
- Click on fields & relationship >> click on New.
- Field Name: Rice Distributed; Data Type: Number; Length: 5.
- Save the field.

Edit rice details Custom Field
rice distributed

Custom Field Definition Edit Change Field Type Save Cancel

Field Information

Field Label	rice distributed	Data Type	Number
Field Name	rice_distributed		
Description	rice_distributed		
Help Text	rice_distributed_to_shops		
Data Owner	User		
Field Usage	--None--		
Data Sensitivity Level	--None--		
Compliance Categorization	Available: PII, HIPAA, GDPR, PCI Chosen		

Reference a field from a Custom Metadata type record use: [@CUSTOMMETADATATYPE__NAME](#)

Number Options

Length	5
Decimal Places	0

Change Field Type Save Cancel

Creating Junction Object:

- Create relationships between Supplier and Rice Details, and Rice Mill and Rice Details using master-detail relationships.
- Go to the setup page >> click on object manager >> From drop down click edit for rice details object

Data Type	
<input type="radio"/> None Selected	Select one of the data types below.
<input type="radio"/> Auto Number	A system-generated sequence number that uses a display format you define. The number is automatically incremented for each new record.
<input type="radio"/> Formula	A read-only field that derives its value from a formula expression you define. The formula field is updated when any of the source fields change.
<input type="radio"/> Roll-Up Summary 	A read-only field that displays the sum, minimum, or maximum value of a field in a related list or the record count of all records listed in a related list.
<input checked="" type="radio"/> Lookup Relationship	Creates a relationship that links this object to another object. The relationship field allows users to click on a lookup icon to select a value from a popup list. The other object is the source of the values in the list.
<input checked="" type="radio"/> Master-Detail Relationship	Creates a special type of parent-child relationship between this object (the child, or "detail") and another object (the parent, or "master") where: <ul style="list-style-type: none"> The relationship field is required on all detail records. The ownership and sharing of a detail record are determined by the master record. When a user deletes the master record, all detail records are deleted.
Buyer New Relationship	
Step 2. Choose the related object	
Select the other object to which this object is related.	
Related To: <input style="border: 1px solid red; width: 150px; height: 20px; margin-bottom: 5px;" type="text" value="Supplier"/> Supplier 	
Help for this Page 	
Step 2 of 6 	
Previous Next Cancel	
 Previous Next Cancel	

Creating a Master-Detail Relationship:

- Example: Between Consumer and Rice Mill.
- Field Label: Rice Mill Name; Data Type: Master-Detail.
- Go to the setup page >> click on object manager >> From drop down click edit for consumer object.
- Click on fields & relationship >> click on New , Select “Master-Detail relationship” as data type and click Next.
- Select the related object “ rice mill”. Give Field Label as “rice mill name” and click Next. Next >> Next >> Save.

rice mill name

Have feedback on lookup filters? Comme

Custom Field Definition Edit Save Cancel

Field Information

Field Label	rice mill name	Data Type	Master-Detail
Field Name	rice_mill_name		
Description			
Help Text			
Data Owner	User		
Field Usage	—None—		
Data Sensitivity Level	None		

Master-Detail Options

Related To	rice mill	Child Relationship Name	consumers
Related List Label	consumers		
Sharing Setting	Select the minimum access level required on the Master record to create, edit, or delete related Detail records: <input type="radio"/> Read Only: Allows users with at least Read access to the Master record to create, edit, or delete related Detail records. <input checked="" type="radio"/> Read/Write: Allows users with at least Read/Write access to the Master record to create, edit, or delete related Detail records.		
Allow reparenting	<input type="checkbox"/> Child records can be reparented to other parent records after they are created		

Lookup Filter

Creating the Roll-Up Summary:

- Summarize fields like total rice distributed in Supplier and Consumer objects.
- Use SUM as the aggregation type.

Edit supplier Custom Field

sum of rice distributed

Custom Field Definition Edit Save Cancel

Field Information

Field Label	sum of rice distributed		
Field Name	sum_of_rice_distributed		
Description			
Help Text			
Data Owner	User		

Roll-Up Summary Options

Data Type	Roll-Up Summary
Calculation Options	<input checked="" type="radio"/> Automatic calculation (Recommended) <input type="radio"/> Force a mass recalculation of this field

Select Object to Summarize

Master Object	supplier
Summarized Object	rice details

Select Roll-Up Type

<input type="radio"/> COUNT <input checked="" type="radio"/> SUM <input type="radio"/> MIN <input type="radio"/> MAX	Field to Aggregate <input type="button" value="rice distributed ▾"/>
---	--

Filter Criteria

<input checked="" type="radio"/> All records should be included in the calculation <input type="radio"/> Only records meeting certain criteria should be included in the calculation

Creating Fields in Objects:

- Add fields like Price per Kilogram, Rice Type (Picklist), and Mode of Payment (Picklist) in respective objects. Go to the setup page >> click on object manager >> From drop down click edit for rice details object.
- Click on fields & relationship >> click on New.
- Select Data type as “master detail” and click Next.
- Given the Field Label as “ supplier name ” and length as “ 5

supplier Name

Have feedback on lookup filters? Comment or

Custom Field Definition Edit

Field Information

Field Label	<input type="text" value="supplier Name"/>	Data Type	Master-Detail
Field Name	<input type="text" value="supplier"/>		
Description	<input type="text"/>		
Help Text	<input type="text"/>		
Data Owner	User	<input type="text"/>	
Field Usage	--None--		
Data Sensitivity Level	--None--		

Compliance Categorization

Master-Detail Options

Related To	<input type="text" value="supplier"/>	Child Relationship Name	<input type="text" value="rice_details"/>
Related List Label	<input type="text" value="rice details"/>		
Sharing Setting	Select the minimum access level required on the Master record to create, edit, or delete related Detail records. <input type="radio"/> Read Only: Allows users with at least Read access to the Master record to create, edit, or delete related Detail records. <input checked="" type="radio"/> Read/Write: Allows users with at least Read/Write access to the Master record to create, edit, or delete related Detail records.		
Allow reparenting	<input type="checkbox"/> Child records can be reparented to other parent records after they are created		

Creating Cross-Object Formula Field in Consumer Object:

- Field Name: Amount Paid; Formula: Rice_Taken_by_Shops__c * Rice_Price_per_Kg__c.
- Save the formula

Field Information

Field Label	<input type="text" value="Amount Paid"/>	Re
Field Name	<input type="text" value="Amount_Paid"/>	
Description	<input type="text"/>	
Help Text	<input type="text"/>	

Enter your formula and click Check Syntax to check for errors. Click the Advanced Formula subtab to use additional fields, operators, and functions.

Example: [Fahrenheit = 1.8 * Celsius_c + 32](#) | [More Examples](#)

Simple Formula **Advanced Formula**

Amount Paid (Number) =

Insert Field **Insert Operator**

Functions

-- All Function Categories --

- ABS
- ACOS
- ADDMONTHS
- AND
- ASCII
- ASIN

Insert Selected Function

Creating the Validation Rule:

- Example: For phone number/email validation in Consumer object.
- Formula: OR(ISBLANK(Phone_Number__c), ISBLANK>Email__c)).
- Error Message: "Phone number or email cannot be blank."

Validation Rule Edit

Save | Save & New | Cancel

Rule Name: **Phonenumberoremailblankrule**

Active:

Description: phone number and email number should not be blank.

Error Condition Formula

Example: **Discount_Percent_c>0.30** More Examples...

Display an error if Discount is more than 30%

If this formula expression is true, display the text defined in the Error Message area

Insert Field | Insert Operator ▾

OR(ISBLANK(Phone_number__c), ISBLANK(email__c))

Functions

-- All Function Categories -- ▾

- ABS
- ACOS
- ADDMONTHS
- AND
- ASCII
- ASIN

Insert Selected Function

ABS(number)
Returns the absolute value of a number, a number without its sign

Help on this function

Error Message

Example: **Discount percent cannot exceed 30%**

This message will appear when Error Condition formula is true

Error Message: **please fill in your phone number.**

This error message can either appear at the top of the page or below a specific field on the page

Error Location: Top of Page Field [i](#)

Save | Save & New | Cancel

Page Layouts: Creating the Page Layout:

- Navigate to Object Manager > Select Object(consumer) > Page Layouts > New.
- Customize sections:
 - Personal Details: Name, Phone, Email.
 - Rice Details: Rice Type, Quantity.
 - Payment Details: Mode of Payment, Amount Paid.
- Save and assign the layout to profiles.

Create New Page Layout

As an option, you may select an existing layout to clone. If you create a page layout without cloning, your page layout will not include the standard sections.

Existing Page Layout: custom name
Page Layout Name: customer layout

Section Properties:

- Section Name:** personal details
- Display Section Header On:** Detail Page, Edit Page
- Layout:** 2-Column (selected)
- Tab-Key Order:** Left-Right (selected)

Layout Properties:

Fields	Consumer Name	Last Modified By	rice mill name
Buttons	Created By	Last name	Rice taken by shops
Quick Actions	email	Mode of payment	rice taken by sho...
Mobile & Lightning Actions	consumer Name	First name	Rice type
Expanded Lookups		Phone number	
Related Lists			
Report Charts			

consumer Detail:

Personal details:

- First name: Sample Text
- Last name: Sample Text
- Consumer Name: Sample Text
- Phone number: 1-415-555-1212
- email: sarah.sample@company.com
- * rice mill name: Sample Text

rice details:

- rice taken by shops in kgs: 85.037
- Rice type: Sample Text
- Rice taken by shops: 40,403

Proles: Owner Profile:

owner

Set the permissions and page layouts for this profile.

Profile Edit
[Save](#) [Save & New](#) [Cancel](#)

Name	<input type="text" value="owner"/>
User License	Salesforce
Description	<input type="text"/>
Custom Profile <input checked="" type="checkbox"/>	

SETUP

Profiles

Custom Object Permissions

	Basic Access						Data Administration					
	Read	Create	Edit	Delete	View All	Modify All	Read	Create	Edit	Delete	View All	Modify All
Assets	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>						
Asset Servicess	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>						
books	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>						
books	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>						
Brokers	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>						
consumers	<input checked="" type="checkbox"/>	<input type="checkbox"/>										
Employees	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>						
energy audits	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>						
item details	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>						
nick names	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>						
positions	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>						
Projects	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>						
ProjectTasks	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>						
Properties	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>						

- Clone Standard User profile and rename it as Owner.

- Grant full access to all objects and tabs

Employer Profile:

- Clone Standard Platform User profile and rename it as Employer.

- Restrict access to certain objects like Workers.

Worker Profile:

- Clone Standard Platform User profile and rename it as Worker.
- Allow limited access to update transactions only.

The screenshot shows the Odoo 'Profiles' setup screen. It displays two tables of access rights for different objects. The left table lists objects like Assets, Asset Services, books, Brokers, consumers, Employees, energy audits, item details, nick names, positions, and Projects. The right table lists objects like purchasers, reviews, rice details, rice mills, SolarBots, SolarBot Status, studs, students, super marts, suppliers, teachers, and tickets. Each table has columns for Basic Access (Read, Create, Edit, Delete) and Data Administration (View All, Modify All). Checkmarks indicate which actions are allowed for each object.

Object	Basic Access				Data Administration	
	Read	Create	Edit	Delete	View All	Modify All
Assets	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Asset Services	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
books	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
books	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Brokers	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
consumers	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Employees	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
energy audits	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
item details	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
nick names	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
positions	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Projects	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
purchasers	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
reviews	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
rice details	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
rice mills	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
SolarBots	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
SolarBot Status	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
studts	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
students	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
super marts	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
suppliers	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
teachers	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
tickets	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Role & Role Hierarchy: Creating Owner Role:

- Go to Setup > Roles > Set Up Roles.
 - Click on Add Role under CEO and Give Label as “owner” and Role name gets auto populated.
 - Role Label: Owner; Save the role
- Creating the Role Hierarchy**

You can build on the existing role hierarchy shown on this page. To insert a new role, click **Add Role**.

Your Organization's Role Hierarchy

[Collapse All](#) [Expand All](#)

└ VIT University Bhopal



Creating Employer Roles:

- Add a new role under Owner:
- Role Label: Employer; Save the role. Creating Worker Roles:
- Add a role under Employer:
- Role Label: Worker; Save the role.

Users: Create User:

- Go to Setup > Users > New User.

- Enter details (e.g., Name: Arshad Y; Role: Owner)

User List						
Action	Full Name	Alias	Username	Role	Active	Profile
<input type="checkbox"/> Edit	Bidi Bazz_Arshad	Diddy	arshad@techcure.com	owner	<input checked="" type="checkbox"/>	owner
<input type="checkbox"/> Edit	Chatter Expert	Chatter	chatty_00ddm00000g9tetua3.r1x3gwahrigs@chatter.salesforce.com		<input checked="" type="checkbox"/>	Chatter Free User
<input type="checkbox"/> Edit	Khan_Afraz	Afraz	afraz@techcure.com	employer	<input checked="" type="checkbox"/>	Standard Platform User
<input type="checkbox"/> Edit	Meer_Syed Maaz	SMeer	@vitbhopal.ac.in		<input checked="" type="checkbox"/>	System Administrator
<input type="checkbox"/> Edit	Sheik_Tofik	Tofik	tofic@techcure.com	worker	<input checked="" type="checkbox"/>	Standard Platform User
<input type="checkbox"/> Edit	User_Integration	integ	integration@00ddm00000g9tetua3.com		<input checked="" type="checkbox"/>	Analytics Cloud Integration User
<input type="checkbox"/> Edit	User_Security	sec	insightssecurity@00ddm00000g9tetua3.com		<input checked="" type="checkbox"/>	Analytics Cloud Security User

Create Another User:

- Repeat for Afraz (Role: Employer)

User Edit
Afraz Khan Help for this Page 

User Edit		Save	Save & New	Cancel
General Information				
First Name	Afraz	Role	Employer	
Last Name	Khan	User License	Salesforce Platform	
Alias	Afraz	Profile	Standard Platform User	
Email	afraz@techcure.com	Active	<input checked="" type="checkbox"/>	
Username	afraz@techcure.com	Marketing User	<input type="checkbox"/>	
Nickname	Afraz	Offline User	<input type="checkbox"/>	

Create Another User:

- Repeat for Tok (Role: Worker).

Tofik Sheik

User Edit Help for this Page 

User Edit		Save	Save & New	Cancel
General Information				
First Name	Tofik	Role	worker	
Last Name	Sheik	User License	Salesforce Platform	
Alias	Tofik	Profile	Standard Platform User	
Email	tofic@techcure.com	Active	<input checked="" type="checkbox"/>	
Username	tofic@techcure.com	Marketing User	<input type="checkbox"/>	
Nickname	TofikCure	Offline User	<input type="checkbox"/>	

Permission Sets: Creating OWD Setting:

- Go to Setup > type 'Sharing Settings' in Quik search box.
- Set default internal access to "Public Read Only" for Rice Mill and Supplier objects.

Work Plan Template	Private	Private	Private	Private	Private	Private
Work Step Template	Private	Private	Private	Private	Private	Private
Work Type	Private	Private	Private	Private	Private	Private
Work Type Group	Public Read/Write					
Rice Mill	Public Read Only					
Supplier	Public Read Only					
Other Settings	Public Read Only					

Manual User Record Sharing Manager Groups Secure guest user record Require permission to view record names in lookup fields

Reports:

Create Report:

- Go to Reports > New Report > Select "Rice Mills with Consumers".
- Add fields: Consumer Name, Rice Type, Mode of Payment, Amount Paid.
- Group rows by Rice Taken by Shops and save as "Range of Amount Per Day".

The screenshot illustrates the steps to create a new report in Salesforce:

- Setup Home:** The user is on the Setup page, indicated by the "Setup" tab being selected in the top navigation bar.
- Search:** A search bar at the top right contains the text "repo".
- Sharing Settings:** A modal window titled "Sharing Settings" is open, showing the sharing settings for the organization.
- New Report Button:** In the main content area, there is a "New Report" button.
- Select Report Type:** A modal window titled "Select a Report Type" shows the search results for "rice mills with".
- Report Type Details:** The "rice mills with consumers" report type is selected, showing its details: "Standard Report Type", "Start Report" button, and "Details" tab.
- Report Preview:** The "REPORT" section displays the preview of the "rice mills with consumers" report. It includes an "Outline" sidebar with "Groups" and "Columns" sections, and a main preview area showing 7 rows of data.

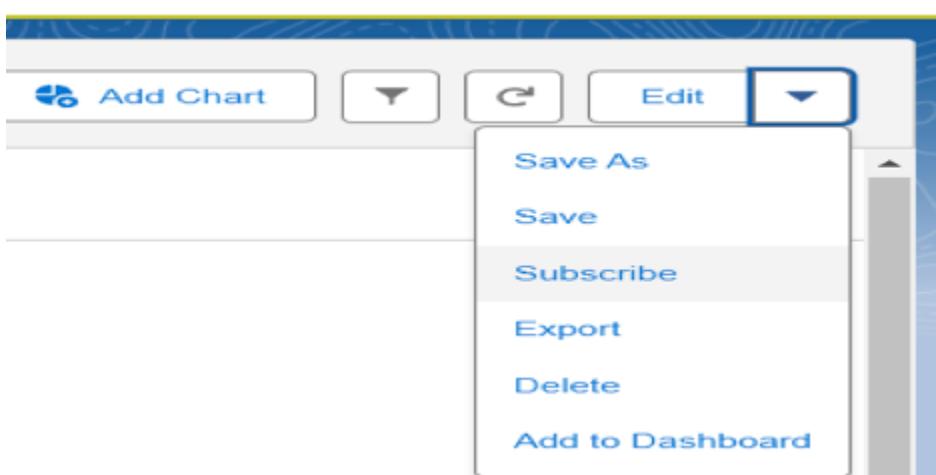
	rice mill: rice mill Name	consumer: consumer Name
1	rice-001	consumers-001
2	rice-002	consumers-005
3	rice-002	consumers-002
4	rice-001	consumers-003
5	rice-001	consumers-004
6	rice-001	consumers-006
7	rice-002	consumers-007

Report: rice mills with consumers
Copy of range of amount per day

Total Records	Total rice price/kg	Total Amount Paid			
7	68	2,249.00			
<input type="checkbox"/> Rice taken by shops ↑ ↓ <input type="button" value="Consumer Name"/> <input type="button" value="Rice type"/> <input type="button" value="rice price/kg"/> <input type="button" value="Mode of payment"/> <input type="button" value="Amount Paid"/>					
□ 10 (1)	Maaz Maafiya	1.basmati,	45	Net banking,	315.00
Subtotal			45		315.00
□ 11 (1)	Afraz Salauddin	2.normal rice	45	UPI,	225.00
Subtotal			45		225.00
□ 20 (1)	Sufiyan ali	1.basmati,	45	UPI,	495.00
Subtotal			45		495.00
□ 35 (1)	Hunain Meer	1.basmati,	23	Debit card,	207.00
Subtotal			23		207.00
□ 39 (1)	Arshad Qawalli	1.basmati,	23	Cash	46.00
Subtotal			23		46.00
□ 45 (1)	Tofik Sultan	2.normal rice	45	Net banking,	225.00
Subtotal			45		225.00
□ 52 (1)	Talha Phelwan	1.basmati,	23	Cash	736.00
Subtotal			23		736.00
<input checked="" type="checkbox"/> Row Counts <input checked="" type="checkbox"/> Detail Rows <input checked="" type="checkbox"/> Subtotals <input checked="" type="checkbox"/> Grand Total					

Sharing Report to Owner:

1. Go to the created report, click on the dropdown menu next to the report name.
2. Select Subscribe.
3. In the settings window, choose: Send report as another user (Owner's email). Set the frequency as Daily.
4. Click Save. The owner will receive a daily email with updated rice mill data.



Edit Subscription

Settings

Frequency

Daily Weekly Monthly

Time

8:00 am ▾

Attachment

Attach File

Recipients

Send email to

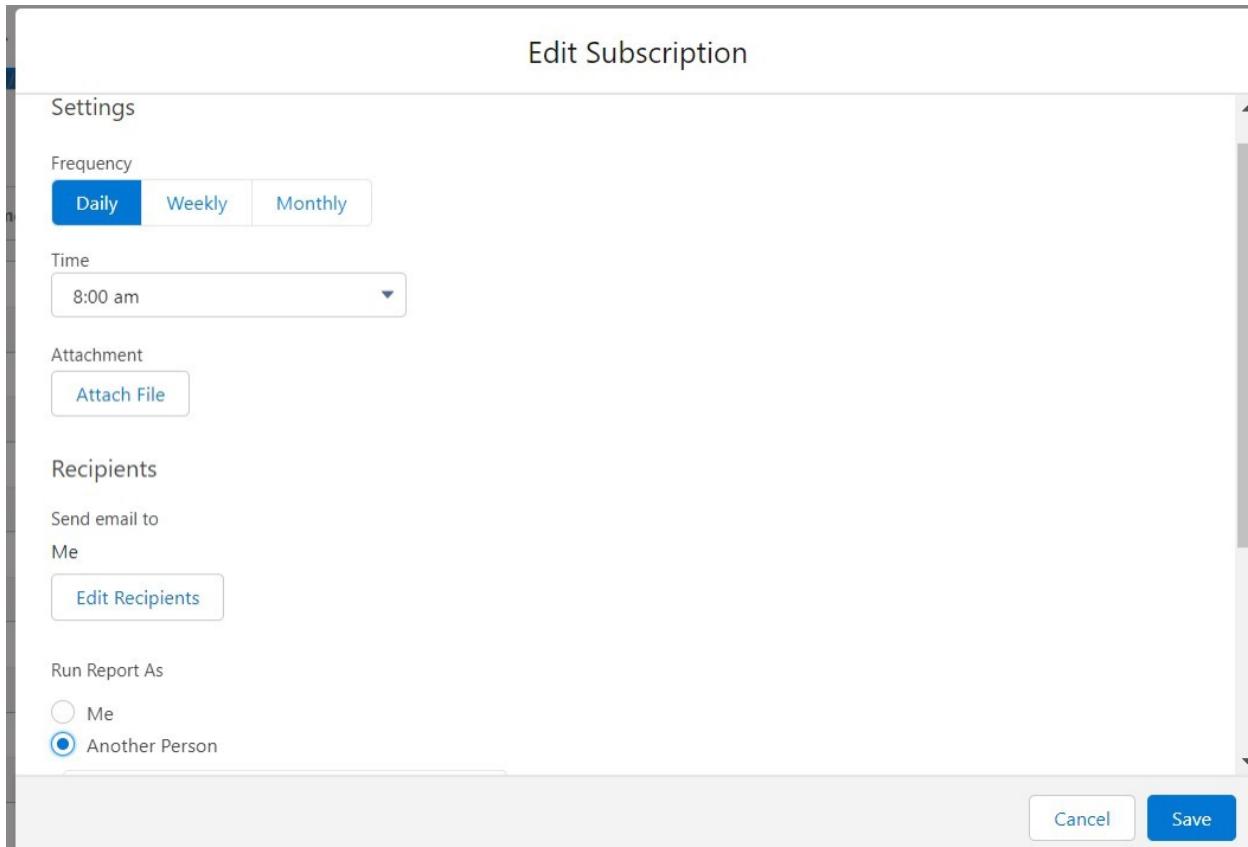
Me

Edit Recipients

Run Report As

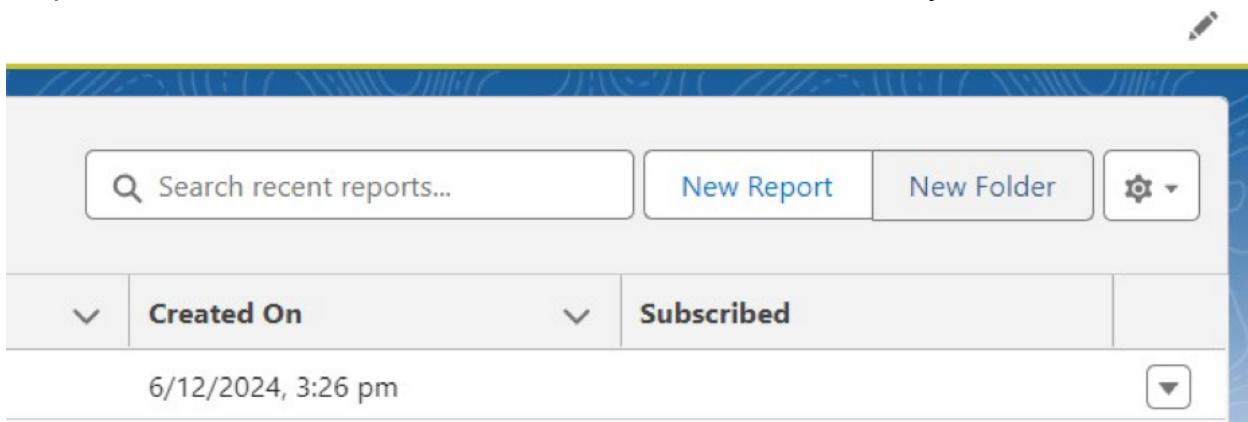
Me
 Another Person

Cancel Save



Create Report Folder:

1. Go to Reports from the App Launcher.
2. Click on New Folder.
3. Name the folder: "Estimated Rice Per Day."
4. Move the created report Range of Amount Per Day into this folder:
 - Select the report dropdown.
 - Choose Move > Select folder: Estimated Rice Per Day > Save.



Created On	Subscribed
6/12/2024, 3:26 pm	▼

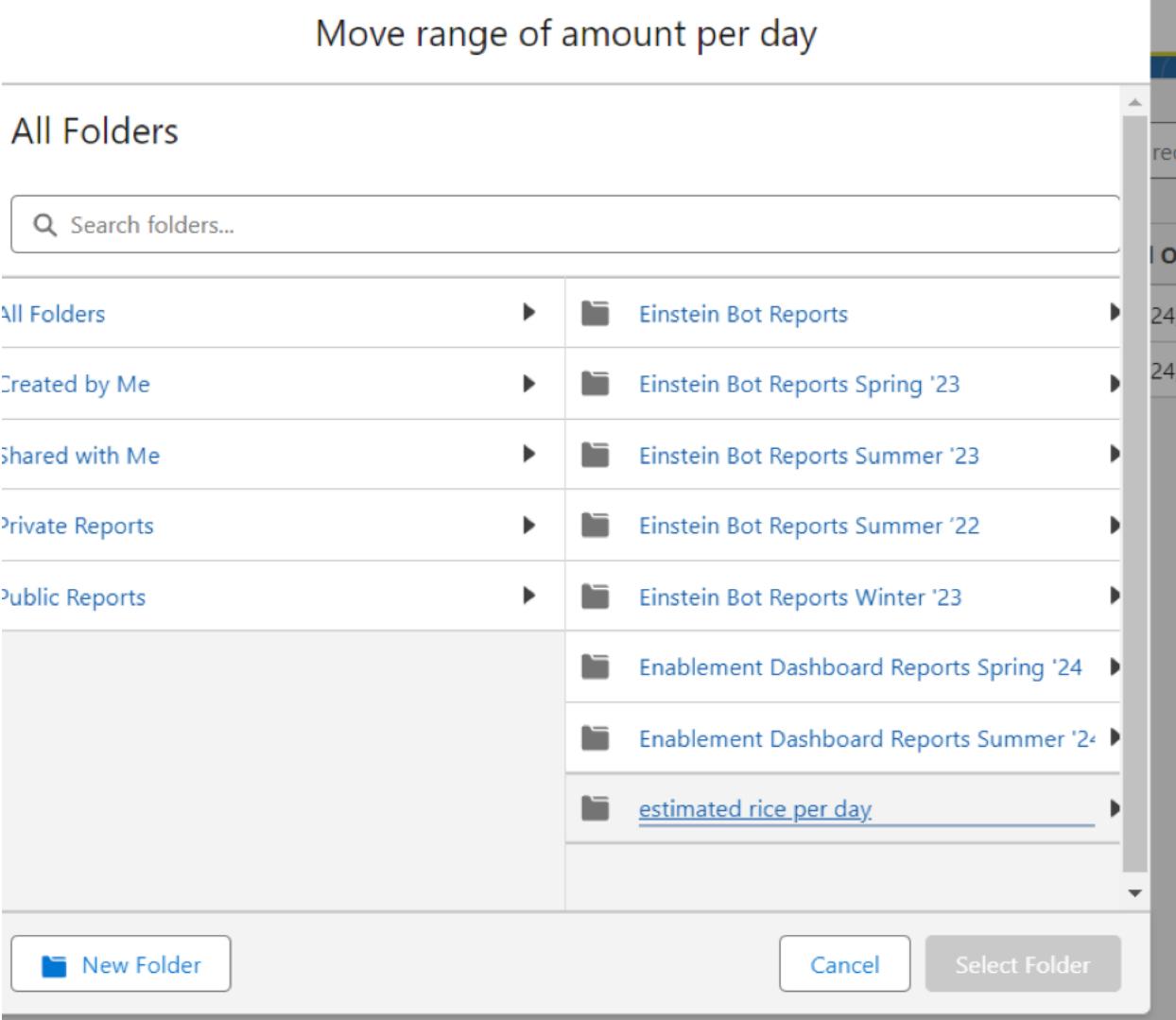
Move range of amount per day

All Folders

Search folders...

All Folders	▶	Einstein Bot Reports	▶
Created by Me	▶	Einstein Bot Reports Spring '23	▶
Shared with Me	▶	Einstein Bot Reports Summer '23	▶
Private Reports	▶	Einstein Bot Reports Summer '22	▶
Public Reports	▶	Einstein Bot Reports Winter '23	▶
		Enablement Dashboard Reports Spring '24	▶
		Enablement Dashboard Reports Summer '24	▶
		<u>estimated rice per day</u>	▶

New Folder Cancel Select Folder



Dashboards

1. Create Dashboard Folder:

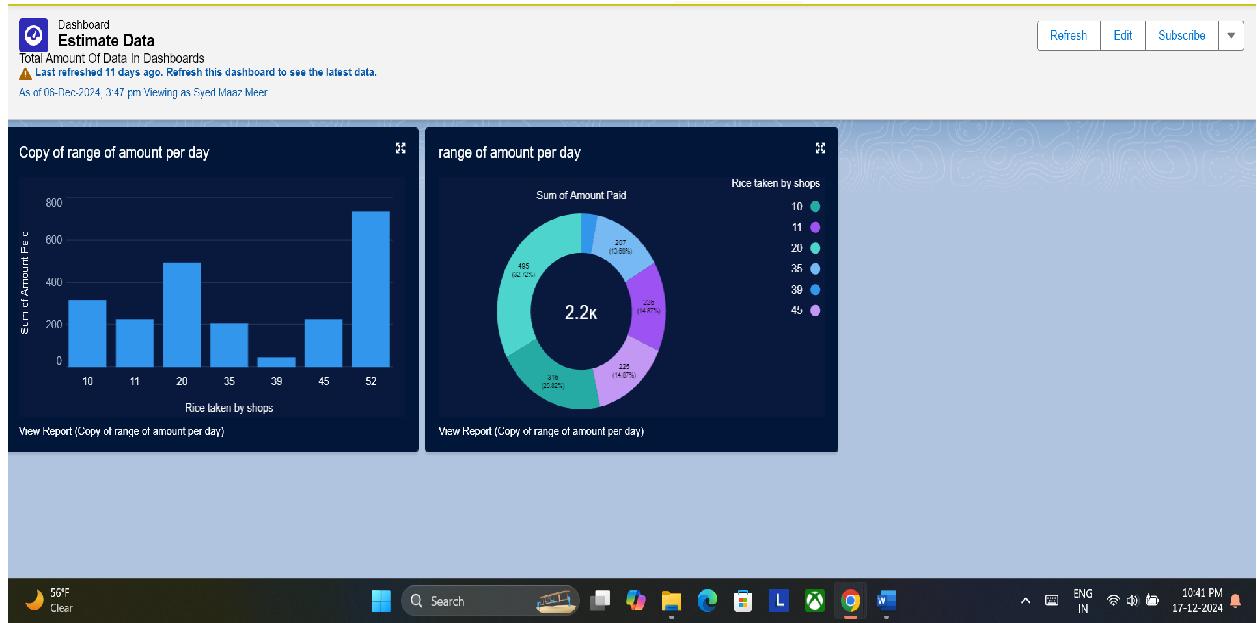
1. Navigate to Dashboards in the App Launcher.
2. Click New Folder, and name it Amount Data Dashboard.
3. Save the folder.

2. Create Dashboard:

1. Go to the Dashboards tab > New Dashboard.
2. Enter the name: "Rice Mill Summary" and save it in Amount Data Dashboard.
3. Add components:
 - Select Reports (e.g., "Range of Amount Per Day").
 - Component 1: Vertical Bar Chart:
 - X-axis: Rice Taken by Shops.
 - Y-axis: Sum of Amount.

- Component 2: Donut Chart:
- Sort by: Sum of Amount Paid.

4. Preview and click Save & Done.



APEX

1. Creating an Apex Class (ConsumerRecord):

1. Open Developer Console (Gear icon > Developer Console).
2. Go to File > New > Apex Class.
3. Add the following code:
4. Save the class.

```

1  class ConsumerRecord {
2      public static void sendEmailNotification (List<consumer__c>
con) {
3          for(consumer__c c:con)
4              {Messaging.SingleEmailMessage email = new
Messaging.SingleEmailMessage();
5  email.setToAddresses( new List<String>{c.email__c});
6  email.setSubject('Welcome to our company');
7  email.setPlainTextBody('Dear ' + ' '+ ',\n\nWelcome to MY
RICE!'+You have been seen as a valuable customer to us. Please
continue your journey with us, while we try to provide you with
good quality resources.'+'\n'+

```

```

8                                     "We are proud to
associate with valuable customers like you and we look forward to
collaborating with you by providing more and more exciting
discounts or even product offers too.' + '\n'
9                                     +'So why taking a step
back, take a leap of faith and shop with us more, while we provide
with the valuable products and offers+'\n'+'\n'+'\n'+
10                                'Thankyou for buying '+
'' +'Here are some of the products that are brought by the
customers who similarly bought products like this+'\n\n');
11                         Messaging.sendEmail(new
List<Messaging.SingleEmailMessage>{email});
12
13
14
15 }
16
17

```

2. Creating an Apex Trigger:

1. Go to Developer Console > File > New > Trigger.
2. Name the trigger: ConsumerTrigger. Set the object to Consumer__c.
3. Add the following code:
4. Save the trigger. This ensures an email is sent whenever a new Consumer record is created.

```

1 trigger ConsumerTrigger on Consumer__c (after insert)
2
3     {
4         if (Trigger.isAfter && Trigger.isInsert) {
5             ConsumerRecord.sendEmailNotification(Trigger.new);
6         }
7

```

5. Testing and Validation

Unit Testing:

- Apex classes and triggers were validated to ensure error-free email notifications.
- Roll-up summary and formula fields were tested for accurate calculations.

User Interface Testing:

- Verified functionality of page layouts, ensuring seamless navigation and usability.
- Ensured accurate rendering of reports and dashboards.

End-to-End Testing:

- Simulated daily workflows, including data entry, report generation, and dashboard updates, to validate system reliability.
- Tested role-based access controls to ensure proper data visibility and security.

6. Key Scenarios Addressed by Salesforce in the Implementation Project

1. Daily Reporting:

- Automating the generation of daily production, sales, and revenue reports for the owner.

1. Role-Based Data Access:

- Providing tailored access to data based on user roles (e.g., Owner, Employer, Worker).

1. Enhanced Customer Engagement:

- Sending email notifications to customers with details of their purchases and payments.

1. Data Integrity:

- Ensuring data consistency and reliability through validation rules and error handling.

1. Business Insights:

- Delivering actionable insights through reports and dashboards, enabling data-driven decisions.

7. Conclusion Summary of Achievements:

The Rice Mill CRM Application successfully automated and optimized the rice mill's operational processes. Key achievements include:

- Operational Efficiency:
 - Streamlined workflows and improved resource allocation through automated data management.

Data Visualization:

- Developed dynamic reports and dashboards to provide real-time insights into production, sales, and revenue.

● Enhanced Security:

- Implemented robust role-based access control, ensuring data confidentiality and integrity.

● Improved Customer Communication:

- Automated email notifications and integrated customer engagement tools.

● Scalability:

- Built a scalable and modular solution using Salesforce's flexible framework, ensuring adaptability for future enhancements.

The Rice Mill CRM Application exemplifies the transformative power of Salesforce to meet specific industry needs, driving operational excellence and enabling long-term success for the rice mill