

"Salesforce-supported Virtual Internship Program (VIP)"

"Project Ready Program" (Smartinternz)

GrainPro-A CRM APPLICATION FOR WHOLESALE RICE MILL

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GrainPro-CRM APPLICATION FOR WHOLESALE RICE MILL

1. Project Overview (ABSTRACT)

The Rice Mill CRM Application is a tailored Salesforce-based solution developed to streamline operations within a rice mill factory. This application automates and optimizes the daily management of rice production, sales tracking, and customer engagement, addressing the unique requirements of a wholesale rice mill. By leveraging Customer Relationship Management (CRM) functionalities, the system provides a centralized platform for monitoring production volumes, recording sales, and managing inventory.

Key features include daily tracking of rice production by type, automated sales reporting, real-time inventory management, and daily report delivery to factory owners for strategic decision-making. The application integrates seamlessly with existing workflows, offering user-friendly interfaces and customizable reports to enhance operational visibility and efficiency. With role-based access, the system ensures secure handling of sensitive data, while predictive insights support proactive planning in response to market demands.

The Rice Mill CRM Application aims to empower rice mill factory owners and managers by delivering actionable insights and facilitating efficient, data-driven operations.

INDEX PAGE

Topics	Page No
1.Salesforce	
■ Creating Developer Account	5
■ Account Activation	5
2.Object Creation	
■ Create Supplier Object	6
■ Create Rice Mill Object	7
■ Create Consumer Object	8
■ Create Rice Details Object	9
3.Tabs	
■ Creating a Custom Tab	10 - 11
4.The Lightning App	
■ Create a Lightning App	12 - 13
5.Fields & Relationship	
■ Creating the number field in rice details object	14
■ Creating Junction Object	15 - 16
■ Creating a Master-Detail Relationship	17
■ Creating the Roll-up Summary	18 - 19
■ Creating Fields in rice mill Object	20 - 22
■ Creating Fields in consumer Objects	23 - 26
■ Creating Cross Object Formula Field in consumer Object	26 - 27
■ Creating the validation rule	28 - 30

INDEX PAGE

Topics	Page No
6.Page Layouts	
■ creating the page layout	31
7.Profiles	
■ Owner Profile	32
■ Employer Profile	33
■ Worker Profile	34
8.Role & Hierarchy	
■ Creating Owner & Employee Role	35
9.Users	
■ Create User	36 - 38
10. Permission Sets	
■ Creating OWD Setting	39
11.Report & Dashboards	
■ Create Report &Sharing Report To Owner	40 - 41
■ Create a Report Folder	41
■ Create Dashboard	42 - 43
12.Apex	
■ Creating an Apex Class(Consumer Record)	44
■ Creating An Apex Trigger	45
13.Conclusion	46

INTRODUCTION

TASK-1

Creating Salesforce Developer Org and Account Activation

Creating Salesforce Developer Org

1. Visit Salesforce Developer Site:

- Go to the [Salesforce Developer website](#).
- Click on "Sign Up" or "Sin Up for Free".

2. Fill Out the Registration Form:

- Enter your details such as name, company, email, role, and country.
- Choose a unique username (it must be in the form of an email address, but does not have to be a real email).

3. Activate the Account:

- Salesforce will send a confirmation email to the provided email address.
- Open the email and click on the confirmation link to activate your account.

4. Set Up Your Password:

- After clicking the confirmation link, you will be prompted to set up a password and a security question.
- Complete the setup and click "Save".

5. Login to Developer Org:

- Go back to the Salesforce Developer website and log in using your username and password.

Account Activation

1. Login to Salesforce:

- Use your credentials to log in to the Salesforce Developer Org.

TASK-2

Object Creation -Create Supplier Object

To create a Supplier object in Salesforce, follow these steps:

Navigate to Setup Page:

- Click on the gear icon.
- Click on Setup.

Create a Custom Object:

- From the setup page, click on Object Manager.
- Click on Create.
- Click on Custom Object.

Define the Custom Object:

- Enter the Label Name: **Supplier**.
- Enter the Plural Label Name: **Suppliers**.
- Enter the Record Name Label and Format:
 - Record Name: **Supplier Name**
 - Data Type: **Text**

Set Additional Options:

- Click on Allow Reports.
- Click on Track Field History.
- Click on Allow Search.

Save the Custom Object:

- Click on Save

The screenshot shows the Salesforce Object Manager interface. The top navigation bar includes 'Setup', 'Home', and 'Object Manager'. The main header says 'SETUP > OBJECT MANAGER supplier'. On the left, a sidebar lists various object settings like 'Fields & Relationships', 'Page Layouts', etc. The main 'Details' tab is selected, showing fields for 'Description', 'API Name' (set to 'supplier__c'), 'Custom' (unchecked), 'Singular Label' (set to 'supplier'), and 'Plural Label' (set to 'suppliers'). To the right, under 'Edit', there are checkboxes for 'Enable Reports' (checked), 'Track Activities' (unchecked), 'Track Field History' (checked), 'Deployment Status' (set to 'Deployed'), and 'Help Settings' (set to 'Standard salesforce.com Help Window').

TASK-2

Object Creation -Create Rice Mill Object

To create a Supplier object in Salesforce, follow these steps:

Navigate to Setup Page:

- Click on the gear icon.
- Click on Setup.

Create a Custom Object:

- From the setup page, click on Object Manager.
- Click on Create.
- Click on Custom Object.

Define the Custom Object:

- Enter the Label Name: **Rice Mill**.
- Enter the Plural Label Name: **Rice Mill**.
- Enter the Record Name Label and Format:
 - Record Name: blank
 - Data Type: **Auto Number**
 - Display Format: **rice-{000}**
 - Starting Number: **1**

Set Additional Options:

- Click on Allow Reports.
- Click on Track Field History.
- Click on Allow Search.

Click on Save

The screenshot shows the Salesforce Object Manager interface. The top navigation bar includes 'Setup', 'Home', and 'Object Manager'. The main title is 'SETUP > OBJECT MANAGER' followed by the object name 'rice mill'. On the left, a sidebar lists various configuration options: Fields & Relationships, Page Layouts, Lightning Record Pages, Buttons, Links, and Actions, Compact Layouts, Field Sets, Object Limits, Record Types, Related Lookup Filters, Search Layouts, List View Button Layout, Restriction Rules, and Scoping Rules. The main content area is titled 'Details' and contains the following fields:

- Description: A text input field.
- API Name: 'rice_mill__c'
- Custom: A checkbox checked with the label '✓'.
- Singular Label: 'rice mill'
- Plural Label: 'rice mills'
- Enable Reports: A checkbox checked with the label '✓'.
- Track Activities: A checkbox checked with the label '✓'.
- Track Field History: A checkbox checked with the label '✓'.
- Deployment Status: 'Deployed'
- Help Settings: 'Standard salesforce.com Help Window'

At the bottom right of the details panel are 'Edit' and 'Delete' buttons. The bottom of the page has a footer with the number '7'.

TASK-2

Object Creation -Create Consumer Object

To create a Supplier object in Salesforce, follow these steps:

Navigate to Setup Page:

- Click on the gear icon.
- Click on Setup.

Create a Custom Object:

- From the setup page, click on Object Manager.
- Click on Create.
- Click on Custom Object.

Define the Custom Object:

- Enter the Label Name: **Consumer**.
- Enter the Plural Label Name: **Consumers**.
- Enter the Record Name Label and Format:
 - Record Name: blank
 - Data Type: **Auto Number**
 - Display Format: **Consumers-{000}**
 - Starting Number: **1**

Set Additional Options:

- Click on Allow Reports.
- Click on Track Field History.
- Click on Allow Search.

Click on Save

The screenshot shows the Salesforce Object Manager interface. The top navigation bar includes 'Setup', 'Home', and 'Object Manager'. The main title is 'SETUP > OBJECT MANAGER consumer'. On the left, a sidebar lists various object settings like 'Fields & Relationships', 'Page Layouts', etc. The main 'Details' tab is selected, showing fields for API Name ('consumer__c'), Singular Label ('consumer'), and Plural Label ('consumers'). On the right, additional settings include 'Enable Reports' (checked), 'Track Activities', 'Track Field History' (checked), 'Deployment Status' ('Deployed'), and 'Help Settings' ('Standard salesforce.com Help Window').

TASK-2

Object Creation -Create Rice Details Object

To create a Supplier object in Salesforce, follow these steps:

Navigate to Setup Page:

- Click on the gear icon.
- Click on Setup.

Create a Custom Object:

- From the setup page, click on Object Manager.
- Click on Create.
- Click on Custom Object.

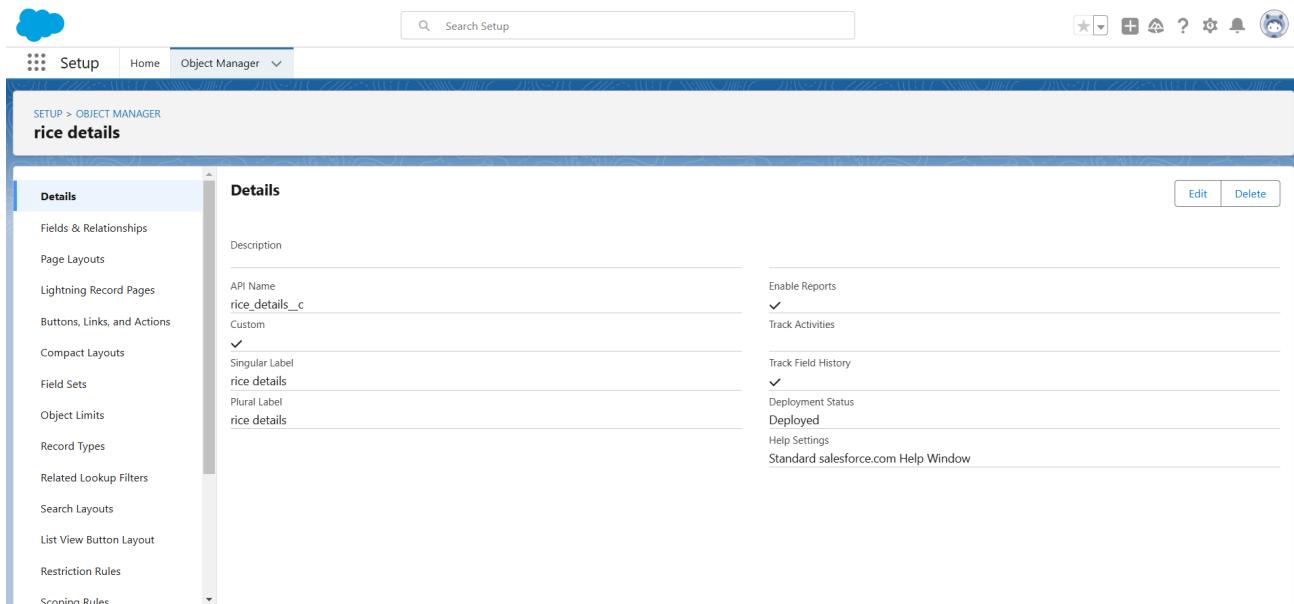
Define the Custom Object:

- Enter the Label Name: **Rice Details**.
- Enter the Plural Label Name: **Rice Details**.
- Enter the Record Name Label and Format:
 - Record Name: blank
 - Data Type: **Auto Number**
 - Display Format: **rice-{000}**
 - Starting Number: **1**

Set Additional Options:

- Click on Allow Reports.
- Click on Track Field History.
- Click on Allow Search.

Click on Save



TASK-3

Creating a Custom Tab (Supplier)

To create a Tab for the Supplier object, follow these steps:

Navigate to Setup Page:

- Go to the setup page.
- Type "Tabs" in the Quick Find bar.
- Click on Tabs.

Create a New Custom Object Tab:

- Click on **New** under the Custom Object Tabs section.

Select Object and Tab Style:

- Select the Supplier object.
- Choose the tab style.
- Click on Next.

Add to Profiles Page:

- Keep it as default.
- Click on Next.

Add to Custom App :

- Uncheck the Include Tab checkbox .

Append Tab to Users Existing Personal Customizations:

- Ensure that the Append tab to users 'existing personal customizations option is checked.

Save the Custom Tab:

click **save**

create tabs for the remaining objects (**RiceMill**, **Consumer**, **RiceDetails**), follow the same steps as mentioned above

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.
- Top Navigation:** Shows "Setup" as the active tab, followed by "Home" and "Object Manager".
- Left Sidebar:** Contains a search bar with the query "tabs", a "User Interface" section with "Rename Tabs and Labels" and "Tabs" (which is selected), and a note: "Didn't find what you're looking for? Try using Global Search."
- Main Content Area:**
 - 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" showing the following data:

Action	Label	Tab Style	Description
Edit Del	consumers	Box	
Edit Del	Providers	Bank	
Edit Del	Resources	Castle	
Edit Del	rice details	Bottle	
Edit Del	rice mills	Box	
Edit Del	suppliers	Box	
 - Section Header:** "Web Tabs" with a note: "No Web Tabs have been defined".
 - Section Header:** "Visualforce Tabs" with a note: "No Visualforce Tabs have been defined".

TASK-4

Create a Lightning App(GrainPro)

- The Lightning App An app is a collection of items that work together to serve a particular function. In Lightning Experience, Lightning apps give your users access to sets of objects, tabs, and other items all in one convenient bundle in the navigation bar. Lightning apps let you brand your apps with a custom color and logo. You can even include a utility bar and Lightning page tabs in your Lightning app. Members of your organization can work more efficiently by easily switching between apps.

To create a Lightning app page, follow these steps:

Navigate to App Manager:

- Go to the setup page.
- Search for “App Manager” in the Quick Find bar.
- Select “App Manager”.
- Click on New Lightning App.

Fill in App Details:

- Enter the app name as Grain pro.
- Click Next.

App Options Page:

- Keep the settings as default.
- Click Next.

Utility Items Page:

- Keep the settings as default.
- Click Next.

Utility Items Page:

- Keep the settings as default.
- Click Next.

Upload a Photo:

- Upload a photo that is related to your app.

Add Navigation Items:

- Select the items (Supplier, Rice Mill, Consumer, Rice Details) from the search bar.
- Move the selected items using the arrow button.
- Click Next.

Add User Profiles:

- Search for profiles (System Administrator) in the search bar.
- Click on the arrow button to add the profile

click save and finesh

	supplier Name ↑
1	sairaju

TASK-5

Creating the Number Field in Rice Details Object

To create a number field in the Rice Details object, follow these steps:

Navigate to Object Manager:

- Go to the setup page.
- Click on Object Manager .

Edit the Rice Details Object:

- From the dropdown, click Edit for the Rice Details object.

Create a New Field:

- Click on Fields & Relationships.
- Click on New

Select Data Type:

- Select Number as the data type.
- Click Next.

Define Field Properties:

- Enter the Field Label as Rice Distributed.
- Set the length to 5.

The screenshot shows the Salesforce Object Manager interface. The top navigation bar includes a cloud icon, a search bar labeled 'Search Setup', and various navigation icons. The main menu bar has 'Setup' selected, followed by 'Home' and 'Object Manager'. The left sidebar lists various setup categories like Page Layouts, Lightning Record Pages, Buttons, etc. The main content area shows the 'rice details' object's custom fields. A new field named 'rice distributed' is being edited. The 'Custom Field Definition Detail' section shows the following details:

Field Information		Object Name	Object Name
Field Label	rice distributed	rice details	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			

Below the field information, it shows 'Created By: shyam_B, 24/10/2024, 11:15 am' and 'Modified By: shyam_B, 24/10/2024, 11:15 am'. The 'General Options' section includes checkboxes for Required, Unique, External ID, AI Prediction, and Default Value.

Creating 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: Rice Details with Supplier Rice Mill

To create a Junction Object:

Navigate to Object Manager:

- Go to the setup page.
- Click on Object Manager.
- From the dropdown, click Edit for the Rice Details object .

Create a New Field:

- Click on Fields & Relationships.
- Click on New.

Select Data Type:

- Select Master-Detail Relationship as the data type.
- Click Next.

Relate to Supplier Object:

- Select the related object Supplier.
- Click Next.

Define Field Properties:

- Give the Field Label as Supplier Name.
- Click Next.
- Click Next again.
- Click Save & New.

Repeat Steps for Rice Mill Object:

- Follow the same steps from 1 to 3.
- Select the related object Rice Mill.
- Click Next.

Define Field Properties for Rice Mill:

- Give the Field Label as RiceMill1(one).
- Click Next.

- Click Next again.
- Click Save.

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

Object Manager: rice details

Custom Field Definition Detail for 'rice mill' (rice_mill)

Field Information:

Field Label	rice mill	Object Name	rice_details
Field Name	rice_mill	Data Type	Master-Detail
API Name	rice_mill_c		
Description			
Help Text			
Data Owner			
Field Usage			
Data Sensitivity Level			
Compliance Categorization			

Master-Detail Options:

Related To	rice mill	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"/>		

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

Object Manager: rice details

Custom Field Definition Detail for 'supplier Name' (supplier)

Field Information:

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			

Master-Detail Options:

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"/>		

Creating a Master-Detail Relationship

A master-detail relationship is a type of relationship between two objects where the master object controls certain behaviors and settings of the detail object. Here are a few use cases that demonstrate the use of master-detail relationships.

Creating Master-Detail Relationship between Consumer Rice Mill Object

To create a Master-Detail relationship :

Navigate to Object Manager:

- Go to the setup page.
- Click on Object Manager.
- From the dropdown, click Edit for the Consumer object.

Create a New Field:

- Click on Fields & Relationships.
- Click on New.

Select Data Type:

- Select Master-Detail Relationship as the data type.
- Click Next.

Relate to Rice Mill Object:

- Select the related object Rice Mill.
- Click Next.

Define Field Properties:

- Give the Field Label as Rice Mill Name.
- Click Next.
- Click Next again.
- Click Save

The screenshot shows the Salesforce Object Manager interface for the 'consumer' object. On the left, a sidebar lists various setup options like Page Layouts, Lightning Record Pages, and Buttons, Links, and Actions. The main area displays a custom field named 'rice mill name' under the 'Fields & Relationships' tab. The 'Field Information' section shows the field label as 'rice mill name', field name as 'rice_mill_name', API name as 'rice_mill_name_c', and data type as 'Master-Detail'. The 'Master-Detail Options' section shows the related object as 'rice mill' and the child relationship name as 'consumers'. A note indicates that sharing setting is 'ReadWrite: Allows users with at least Read/Write access to the Master record to create, edit, or delete related Detail records.'

Creating the Roll-up Summary

A roll-up summary field is a field that summarizes data from a child object to a parent object that shares a master-detail relationship. Roll-up summary fields can use the COUNT, SUM, MIN, and MAX functions. For example, you could use a roll-up summary field to display the total value (amount of rice supplied) from rice details on a related supplier.

Creating the Roll-up Summary Field on Supplier Rice Mill Objects To create a Roll-up Summary field:

Navigate to Object Manager:

- Go to the setup page.
- Click on Object Manager.
- Type the object name Supplier in the search bar.
- Click on the object.

Create a New Field:

- Click on Fields & Relationships.
- Click on New.

Select Data Type:

- Select the data type as Roll-up Summary.
- Click Next

Define Field Properties for Supplier:

- Give the Field Label as Sum of Rice Distributed. The Field Name will be auto-generated.
- Click Next.

Configure Roll-up Summary for Supplier:

- Select the summarized object as Rice Details.
- Select the roll-up type as SUM.
- Select the field to aggregate as Rice Distributed.
- Click Next.
- Click Next again.
- Click Save

Repeat Steps for Rice Mill Object:

- Follow the same steps from 1 to 3 for the Rice Mill object.
- Give the Field Label as Rice Distributed to Shops. The Field Name will be auto-generated.
- Click Next.

Configure Roll-up Summary for Rice Mill:

- Select the summarized object as Rice Details.
- Select the roll-up type as SUM.
- Select the field to aggregate as Rice Distributed.
- Click Next.

- Click Next again.
- Click Save

supplier Custom Field
sum of rice distributed

[Back to supplier](#)

Custom Field Definition Detail

[Edit](#) [Set Field-Level Security](#) [View Field Accessibility](#) [Where is this used?](#)

Field Information

Field Label	sum of rice distributed	Object Name	supplier
Field Name	sum_of_rice_distributed		
API Name	sum_of_rice_distributed_c		
Description			
Help Text			
Data Owner			
Field Usage			
Data Sensitivity Level			
Compliance Categorization			
Created By	shyam_B, 24/10/2024, 12:47 pm	Modified By	shyam_B, 24/10/2024, 12:47 pm

Roll-Up Summary Options

Data Type	Roll-Up Summary	Summary Type	SUM
Summarized Object	rice_details		
Field to Aggregate	rice_details:rice_distributed		
Filter Criteria			

rice mill Custom Field
rice distributed to shops

[Back to rice mill](#)

Custom Field Definition Detail

[Edit](#) [Set Field-Level Security](#) [View Field Accessibility](#) [Where is this used?](#)

Field Information

Field Label	rice distributed to shops	Object Name	rice mill
Field Name	rice_distributed_to_shops		
API Name	rice_distributed_to_shops_c		
Description			
Help Text			
Data Owner			
Field Usage			
Data Sensitivity Level			
Compliance Categorization			
Created By	shyam_B, 24/10/2024, 12:49 pm	Modified By	shyam_B, 24/10/2024, 12:49 pm

Roll-Up Summary Options

Data Type	Roll-Up Summary	Summary Type	SUM
Summarized Object	rice_details		
Field to Aggregate	rice_details:rice_distributed		
Filter Criteria			

Additional Steps for Consumer Object Create the Field:

Create the field Rice Taken by Shops in Kgs using the number datatype in the Consumer object.

Repeat Steps for Rice Mill Object:

- Follow the same steps from 1 to 3 for the Rice Mill object.
- Give the Field Label as Rice Taken. The Field Name will be auto-generated.
- Click Next.

Configure Roll-up Summary for Rice Mill(Consumer):

- Select the summarized object as **Consumer**.
- Select the roll-up type as **SUM**.
- Select the field to aggregate as **Rice Taken in Shops**
- Click **Next**.
- Click **Next** again.
- Click **Save**.

The screenshot shows the Salesforce Setup interface for creating a custom field. The top navigation bar includes a blue cloud icon, a search bar, and various setup tools. The main area shows the path **SETUP > OBJECT MANAGER** and the object being edited is **rice mill**. On the left, a sidebar lists various setup categories like Page Layouts, Lightning Record Pages, etc. The main content area has a title **rice mill Custom Field** and a sub-section **rice taken**. A link **Back to rice mill** is present. The **Fields & Relationships** tab is selected. In the center, there's a **Custom Field Definition Detail** section with tabs for **Edit**, **Set Field-Level Security**, **View Field Accessibility**, and **Where is this used?**. Below this, the **Field Information** section displays details such as Field Label: **rice taken**, Field Name: **rice_taken**, API Name: **rice_taken_c**, and Object Name: **rice mill**. Other sections include **Help Text**, **Data Owner**, **Field Usage**, **Data Sensitivity Level**, **Compliance Categorization**, and a timestamp for **Created By** (**shyam_B**) and **Modified By** (**shyam_B**). At the bottom, the **Roll-Up Summary Options** section shows Data Type: **Roll-Up Summary**, Summary Type: **SUM**, Summarized Object: **consumer**, Field to Aggregate: **consumer:rice taken by shops**, and Filter Criteria. A **Help for this Page** link is also visible.

Creating Fields in Objects Creating the number field in the Rice Details object.

Navigate to Setup:

- Go to the setup page.
- Click on "Object Manager" from the top navigation menu.

Edit Rice Details Object:

- In Object Manager, find and select "Rice Details" from the list of objects.
- Click on "Fields& Relationships."

Create New Field:

- Click on the "New" button to create a new field.

Select Data Type:

- Choose "Number" as the data type for the field.
- Click "Next."

Define Field Properties:

- Enter "Supplier Name" as the Field Label.
- Set the length to "5" (assuming this refers to the precision or size of the number).
- Field Name will be automatically populated based on the label.

Proceed with Creation:

- Click "Next" to proceed through any additional screens.
- Review the field details and click "Save" to create the new field.

The screenshot shows the Salesforce Object Manager interface. The left sidebar lists various setup options like Page Layouts, Lightning Record Pages, Buttons, etc. The main area shows the 'rice details' object's custom fields. A new field, 'supplier Name', has been created and is displayed in the 'Fields & Relationships' section. The 'Field Information' panel shows the field label 'supplier Name', field name 'supplier', API name 'supplier__c', and master-detail data type. The 'Master-Detail Options' panel shows it is related to 'supplier' with a read/write sharing setting. The 'Lookup Filter' section is at the bottom.

Creating Fields in Rice Mill Objects

Navigate to Setup:

- Go to the setup page.
- Click on "Object Manager" from the top navigation menu.

Edit Rice Mills Object:

- In Object Manager, find and select "Rice Mills" from the list of objects.
- Click on "**Fields & Relationships**"

Create New Field:

- Click on the "**New**" button to create a new field.

Select Data Type:

- Choose "**Number**" as the data type for the field.
- Click "**Next**."
- Given the Field Label as "Rice Price/kg" and length as **5**

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 navigation menu shows "Setup" as the active tab, followed by "Home" and "Object Manager". The main content area displays the "rice mill" object details. On the left, a sidebar lists various customization options like Page Layouts, Lightning Record Pages, Buttons, Links, and Actions, among others. The main panel shows the "rice mill Custom Field" named "rice price/kg". The "Custom Field Definition Detail" section includes tabs for "Edit", "Set Field-Level Security", "View Field Accessibility", and "Where is this used?". The "Field Information" table provides details such as Field Label ("rice price/kg"), Field Name ("rice_price_kg"), API Name ("rice_price_kg_c"), Object Name ("rice mill"), Data Type ("Number"), and a description. The "General Options" section includes checkboxes for Required, Unique, External ID, AI Prediction, and Default Value. At the bottom right of the main panel, there is a "Help for this Page" link.

Creating Fields in Consumer Objects

Navigate to Setup:

- Go to the setup page.
- Click on "Object Manager" from the top navigation menu.

Edit Consumer Object:

- In Object Manager, find and select "Consumer" from the list of objects.
- Click on "Fields & Relationships".

Create New Field For First Name:

The screenshot shows the Salesforce Setup interface. The top navigation bar includes a cloud icon, 'Setup', 'Home', and 'Object Manager'. The main title is 'SETUP > OBJECT MANAGER consumer'. On the left, a sidebar lists various setup categories like Page Layouts, Lightning Record Pages, and Field Sets. The current tab is 'Fields & Relationships'. The main content area displays a 'consumer Custom Field' named 'First name'. The 'Field Information' section shows the following details:

- Field Label: First name
- Field Name: First_name
- API Name: First_name__c
- Description: (empty)
- Help Text: (empty)
- Data Owner: (empty)
- Field Usage: (empty)
- Data Sensitivity Level: (empty)
- Compliance Categorization: (empty)

Below this, the 'Custom Field Definition Detail' section includes buttons for 'Edit', 'Set Field-Level Security', 'View Field Accessibility', and 'Where is this used?'. The 'General Options' section includes checkboxes for Required, Unique, Case Sensitive, External ID, and Default Value. The 'Validation Rules' section is empty. The right side of the screen shows the 'consumer' object name and 'Text' data type. At the bottom, it shows 'Created By: shyam_B 24/10/2024, 1:44 pm' and 'Modified By: shyam_B 24/10/2024, 1:44 pm'. A 'Help for this Page' link is also present.

Create New Field For Last Name:

The screenshot shows the Salesforce Setup interface, identical to the previous one but for a different field. The main title is 'SETUP > OBJECT MANAGER consumer'. The 'Fields & Relationships' tab is selected. The main content area displays a 'consumer Custom Field' named 'Last name'. The 'Field Information' section shows the following details:

- Field Label: Last name
- Field Name: Last_name
- API Name: Last_name__c
- Description: (empty)
- Help Text: (empty)
- Data Owner: (empty)
- Field Usage: (empty)
- Data Sensitivity Level: (empty)
- Compliance Categorization: (empty)

Below this, the 'Custom Field Definition Detail' section includes buttons for 'Edit', 'Set Field-Level Security', 'View Field Accessibility', and 'Where is this used?'. The 'General Options' section includes checkboxes for Required, Unique, Case Sensitive, External ID, and Default Value. The 'Validation Rules' section is empty. The right side of the screen shows the 'consumer' object name and 'Text' data type. At the bottom, it shows 'Created By: shyam_B 24/10/2024, 1:45 pm' and 'Modified By: shyam_B 24/10/2024, 1:45 pm'. A 'Help for this Page' link is also present.

Create New Field For Email:

The screenshot shows the Salesforce Object Manager interface. The top navigation bar includes a blue cloud icon, 'Setup', 'Home', and 'Object Manager'. A search bar says 'Search Setup' and various global buttons are on the right. The main area shows 'SETUP > OBJECT MANAGER consumer'. On the left, a sidebar lists options like 'Details', 'Fields & Relationships' (which is selected), 'Page Layouts', etc. The main panel displays 'consumer Custom Field email' with a 'Back to consumer' link. It shows a 'Custom Field Definition Detail' section with tabs for 'Edit', 'Set Field-Level Security', 'View Field Accessibility', and 'Where is this used?'. Under 'Field Information', the 'Field Label' is 'email', 'Field Name' is 'email', 'API Name' is 'email__c', 'Object Name' is 'consumer', and 'Data Type' is 'Email'. Other sections include 'Validation Rules', 'General Options' (with 'Required' checked), and 'Created By' and 'Modified By' fields both set to 'shyam_B 24/10/2024, 1:49 pm'.

Create New Field For Rice taken by shops:

This screenshot is similar to the previous one but shows a different custom field. The main panel displays 'consumer Custom Field rice taken by shops' with a 'Back to consumer' link. The 'Field Information' section shows 'Field Label' as 'rice taken by shops', 'Field Name' as 'rice_taken_by_shops', 'API Name' as 'rice_taken_by_shops_c', 'Object Name' as 'consumer', and 'Data Type' as 'Number'. The 'General Options' section has 'Required' unchecked. Both 'Created By' and 'Modified By' fields are set to 'shyam_B 24/10/2024, 1:17 pm'.

Create New Field For Rice Type:

The screenshot shows the Salesforce Object Manager interface. The left sidebar lists various setup options like Page Layouts, Lightning Record Pages, and Fields & Relationships. The main area displays the 'consumer' object's custom fields. A new field named 'Rice type' has been created, defined as a Picklist type with the API name 'Rice_type__c'. The field label is 'Rice type' and it is required. The object name is 'consumer' and the data type is 'Picklist'. The field was created by 'shyam_B' on 24/10/2024, 2:00 pm.

Create New Field For Phone number:

The screenshot shows the Salesforce Object Manager interface. Similar to the previous example, a new custom field 'Phone number' is being created for the 'consumer' object. This field is of type 'Phone' with the API name 'Phone_number__c'. It is also required. The object name is 'consumer' and the data type is 'Phone'. The field was created by 'shyam_B' on 24/10/2024, 1:46 pm.

Create New Field For Mode of Payment:

The screenshot shows the Salesforce Object Manager interface. The left sidebar is titled 'Fields & Relationships'. The main area displays a 'Custom Field Definition Detail' for a field named 'Mode of payment'. The 'Field Information' section shows the field label 'Mode of payment', field name 'Mode_of_payment', and API name 'Mode_of_payment__c'. The 'General Options' section indicates it is not required and has a default value of '1'. The 'Picklist Options' section shows a checked checkbox for 'Restrict picklist to the values defined in the value set'. The right side of the screen shows standard Salesforce navigation and status icons.

Creating 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.

- Go to setup → click on Object Manager → type object name (consumer) in the search bar Click on Fields &Relationships → click on New.
- Select Data type as “Formula” and click Next.
- Give Field Label and Field Name as “Amount Paid” and select formula return type as “Number” Formula : **rice_taken_by_shops__c * rice_mill_name__r.rice_price_kg__c**

The screenshot shows the Salesforce Object Manager interface. The left sidebar is titled 'Fields & Relationships'. The main area displays a 'Custom Field Definition Detail' for a field named 'Amount Paid'. The 'Field Information' section shows the field label 'Amount Paid', field name 'Amount_Paid', and API name 'Amount_Paid__c'. The 'Formula Options' section shows the formula `rice_taken_by_shops__c * rice_mill_name__r.rice_price_kg__c`. The right side of the screen shows standard Salesforce navigation and status icons.

- Give Field Label and Field Name as “ **AmountPaid**” and select formula return type as “Number” and Next.
- Go to setup → click on Object Manager → type object name (consumer) in the search bar
- Click on **Fields & Relationships** → click on **New**.
- Select Data type as “Formula”,click Next.
- Give Field Label and Field Name as “Consumer Name” and select formula return type as “**TEXT**” click **Next**.
- Insert field formula should be: **First_Name__c+”+Last_Name__c**,Check For syntax.

Setup > OBJECT MANAGER
consumer

Consumer Name

Custom Field Definition Detail

Field Label	Consumer Name	Object Name	consumer
Field Name	Consumer_Name		
API Name	Consumer_Name_c		
Description			
Help Text			
Data Owner			
Field Usage			
Data Sensitivity Level			
Compliance Categorization			
Created By	shyam_B, 24/10/2024, 4:04 pm	Modified By	shyam_B, 24/10/2024, 4:04 pm

Formula Options

Data Type	Formula
First_Name__c+' + Last_Name__c	

Creating the Validation Rule

Improve the quality of your data using validation rules. Validation rules verify that the data a user enters in a record meets the standards you specify 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

- Go to the setup page → click on Object Manager → from the dropdown click edit for the consumer object.
- Click on Validation Rules → click **New**.
- Enter the Rule Name as **“Phone number or email blank rule”**.
- Enter the Description as **“Phone number and email should not be blank”**.
- enter the formula as: **OR(IS L NK(phone_number_c),IS L NK(email_c))**.
- **Check** the syntax.
- Under the Error Message , Write **“Please fill in your Phone Number”**.
- **Save** Validation rule

The screenshot shows the Salesforce Object Manager interface. The top navigation bar includes a blue cloud icon, a search bar with the placeholder "Search Setup", and various global buttons like star, plus, question mark, and notifications. The main header displays "SETUP > OBJECT MANAGER" and the object name "consumer". On the left, a sidebar lists various object settings: 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 pane is titled "consumer Validation Rule" and shows the "Validation Rule Detail" for the "Phonenumberoremailblankrule". The details include:

- Rule Name:** Phonenumberoremailblankrule
- Error Condition Formula:** OR(ISBLANK(Phone_number_c), ISBLANK(email_c))
- Error Message:** please fill in your phone number
- Description:** phone number and email number should not be blank
- Created By:** shyam B, 24/10/2024, 4:09 pm
- Modified By:** shyam B, 24/10/2024, 4:09 pm
- Active:** checked
- Error Location:** Top of Page

At the bottom of the right pane are "Edit" and "Clone" buttons. A "Help for this Page" link is located in the top right corner of the main content area.

Overall Supplier Fields

The screenshot shows the Salesforce Setup interface for the 'supplier' object. The left sidebar lists various configuration options like Page Layouts, Lightning Record Pages, Buttons, Links, and Actions, etc. The main content area is titled 'Fields & Relationships' and displays six items, sorted by Field Label. The table columns are FIELD LABEL, FIELD NAME, DATA TYPE, CONTROLLING FIELD, and INDEXED.

FIELD LABEL	FIELD NAME	DATA TYPE	CONTROLLING FIELD	INDEXED
Created By	CreatedBy	Lookup(User)		
Last Modified By	LastModifiedBy	Lookup(User)		
Owner	OwnerId	Lookup(User,Group)		✓
sum_of_rice_distributed	sum_of_rice_distributed_c	Roll-Up Summary (SUM rice details)		▼
supplier Name	supplier_Name__c	Number(5, 0)		▼
supplier Name	Name	Text(80)		✓

Overall Rice Mill Fields

The screenshot shows the Salesforce Setup interface for the 'rice mill' object. The left sidebar lists various configuration options like Page Layouts, Lightning Record Pages, Buttons, Links, and Actions, etc. The main content area is titled 'Fields & Relationships' and displays seven items, sorted by Field Label. The table columns are FIELD LABEL, FIELD NAME, DATA TYPE, CONTROLLING FIELD, and INDEXED.

FIELD LABEL	FIELD NAME	DATA TYPE	CONTROLLING FIELD	INDEXED
Created By	CreatedBy	Lookup(User)		
Last Modified By	LastModifiedBy	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)		▼

Overall Rice Details Fields

The screenshot shows the Salesforce Setup interface with the path **SETUP > OBJECT MANAGER**. The current object is **rice details**. On the left, there is a sidebar with various setup categories like Details, Page Layouts, Lightning Record Pages, etc. The main area is titled **Fields & Relationships** and displays 7 items, sorted by Field Label. The table has columns for FIELD LABEL, FIELD NAME, DATA TYPE, CONTROLLING FIELD, and INDEXED.

FIELD LABEL	FIELD NAME	DATA TYPE	CONTROLLING FIELD	INDEXED
Created By	CreatedById	Lookup(User)		
Last Modified By	LastModifiedById	Lookup(User)		
rice details Name	Name	Auto Number		✓
rice distributed	rice_distributed_c	Number(5, 0)		
rice mill	rice_mill_c	Master-Detail(rice mill)		✓
supplier ID	supplier_ID_c	Number(5, 0)		
supplier Name	supplier_c	Master-Detail(supplier)		✓

Overall Consumer Fields

The screenshot shows the Salesforce Setup interface with the path **SETUP > OBJECT MANAGER**. The current object is **consumer**. On the left, there is a sidebar with various setup categories like Details, Page Layouts, Lightning Record Pages, etc. The main area is titled **Fields & Relationships** and displays 14 items, sorted by Field Label. The table has columns for FIELD LABEL, FIELD NAME, DATA TYPE, CONTROLLING FIELD, and INDEXED.

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	CreatedById	Lookup(User)		
email	email_c	Email		
First name	First_name_c	Text(20)		
Last Modified By	LastModifiedById	Lookup(User)		
Last name	Last_name_c	Text(20)		
Mode of payment	Mode_of_payment_c	Picklist		
Phone number	Phone_number_c	Phone		
rice mill name	rice_mill_name_c	Master-Detail(rice mill)		✓
rice taken by shops	rice_taken_by_shops_c	Number(5, 0)		
rice taken by shops in kgs	rice_taken_by_shops_in_kgs_c	Number(5, 0)		
Rice type	Rice_type_c	Picklist		

TASK-6

Page Layouts

Page Layout in Salesforce allows us to customize the design and organize detail and edit pages of records in Salesforce. Page layouts can be used to control the appearance of fields, related lists, and custom links on standard and custom objects' detail and edit pages.

Creating the Page Layout

- Go to Setup → Click on Object Manager → Search for the object (consumer) → From the drop down select the object and click on it.
- Click on Page Layout → Click on **New**.
- Select the existing page layout, and give the page layout name as “consumer layout”, and click **Save**.
- Drag and drop the section field to Consumer Details and create the section.
- Enter the section name as “Personal Details”, → click **Ok**.
- Now drag the fields to this section that are mentioned: First Name , Last Name , Consumer Name , etc.

Follow the same process for another two sections as shown above. They are:

- Section: " Rice Details" Fields: **Rice Taken by Shop, Rice Type**
- Section: "Receipt Details"Fields: **Mode of Payment, Amount Paid**
- Click **Save**

The screenshot shows the Salesforce Setup interface for creating a new page layout. The left sidebar has tabs for Details, Fields & Relationships, Page Layouts (which is 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, Scoping Rules, Object Access, Triggers, Flow Triggers, and Validation Rules. The main workspace shows the 'consumer Detail' section with three sections: 'Receipt details', 'rice details', and 'Personal details'. Each section contains various fields like Mode of payment, Amount Paid, consumer Name, Phone number, etc. Buttons at the top of the page layout editor include Save, Quick Save, Preview As..., Cancel, Undo, Redo, and Layout Properties.

TASK-7

Profiles

A profile is a group/collection of settings and permissions that define what a user can do in Salesforce. Profiles control object permissions, field permissions, user permissions, tab settings, app settings, Apex class access, Visualforce page access, page layouts, record types, login hours, and login IP ranges. You can define profiles by the user's job function. For example, System Administrator, Developer, Sales Representative.

Owner Profile To create a new profile:

- Go to Setup → type "Profiles" in the quick find box → click on **Profiles** → clone the desired profile(**Standard User**) → enter profile name (**Owner**) → **Save**.
- Scroll down to Custom Object Permissions and give access permissions for consumers, **rice details ,rice mill, and suppliers objects as mentioned in the below diagram**.
- Give access and **save it**

The screenshot shows the Salesforce Setup interface with the 'Profiles' page open. The top navigation bar includes 'Setup', 'Home', 'Object Manager', and a search bar. On the left, there's a sidebar with 'Users' and 'Profiles' selected. The main content area displays the 'Profile Detail' for the 'Owner' profile, which has been cloned from 'Standard User'. The 'Name' is 'owner'. Under 'Custom Profile', there's a checked checkbox. The 'Page Layouts' section lists various standard object layouts like Global, Email Application, Home Page Layout, Account, and Account Brand, each with their respective global or object-specific layouts and assignment links. At the bottom, there are 'Edit', 'Clone', 'Delete', and 'View Users' buttons.

The screenshot shows the Salesforce Setup interface with the 'Profiles' page selected. The left sidebar shows 'Users' and 'Profiles'. The main area displays 'Custom Object Permissions' and 'Platform Event Permissions' for different profiles. The 'Custom Object Permissions' section includes tables for AppLogs, consumers, Providers, Resources, rice details, rice mills, and suppliers, showing access levels for Read, Create, Edit, Delete, View All, and Modify All. The 'Platform Event Permissions' section shows permissions for AppLogEvents. The 'Session Settings' and 'Password Policies' sections are also visible.

Employer Profile To create a new profile:

- Go to Setup → type "Profiles" in the quick find box → click on Profiles → clone the desired profile(**Standard Platform User**) → enter profile name (**Employer**) → **Save**.
- While still on the profile page, click **Edit**.
- Select the Custom App settings as default for the rice mill.
- Scroll down to Custom Object Permissions and give access permissions for **consumer ,rice details ,rice mill, and suppliers** objects as mentioned in the below diagram.
- Click **Save**.

The screenshot shows the Salesforce Setup interface with the 'Profiles' page selected. The left sidebar shows 'Users' and 'Profiles'. The main area displays 'Custom Object Permissions' and 'Platform Event Permissions' for different profiles. The 'Custom Object Permissions' section includes tables for AppLogs, consumers, Providers, Resources, rice details, rice mills, and suppliers, showing access levels for Read, Create, Edit, Delete, View All, and Modify All. The 'Platform Event Permissions' section shows permissions for AppLogEvents. The 'Session Settings' and 'Password Policies' sections are also visible.

Workers Profile To create a new profile:

- Go to Setup → type "Profiles" in the quick find box → click on Profiles → clone the desired profile(**Standard Platform User**) → enter profile name (**Workers**) → Save.
- While still on the profile page, click **Edit**.
- Select the Custom App settings as default for the rice mill.
- Scroll down to Custom Object Permissions and give access permissions for **consumer ,rice details ,rice mill ,and suppliers** objects as mentioned in the below diagram.
- Click **Save**.

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

- Search Bar:** Search Setup
- Header:** Setup (selected), Home, Object Manager
- Left Navigation:** Users, Profiles (selected)
- Middle Content:**
 - Profiles:** SETUP Profiles
 - Custom Object Permissions:** Shows permissions for various objects:

Object	Basic Access						Data Administration					
	Read	Create	Edit	Delete	View All	Modify All	Read	Create	Edit	Delete	View All	Modify All
AppLogs	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
consumers	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>				
Providers	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Resources	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
rice details	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
rice mills	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>				
suppliers	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
 - Platform Event Permissions:** Shows permissions for AppLogEvents:

Object	Basic Access		Basic Access	
	Read	Create	Read	Create
AppLogEvents	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
 - Session Settings:** Session Times Out After: 2 hours of inactivity
Separate Experience Cloud site and Salesforce login authentication for employees.
Relax login IP restrictions
Skip employee device activation during Experience Cloud site login
Allow OAuth for employees
 - Password Policies:** (partially visible)

TASK-8

Role & Role Hierarchy

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

Creating Owner Role Creating Owner Role:

- Go to **Quick Find** → search for Roles → click on **Set Up Roles**.
- Click on Expand All and click on Add Role under whom this role works.
- Give Label as “**Owner**” and Role Name gets auto-populated.
- Then click on **Save**.
- Click and **save it**.

Creating Employer Roles Creating Another Two Roles Under Manager:

- Go to Quick Find → search for Roles → click on **Set Up Roles**.
- Click the plus on **CEO** role, and click Add Role under **Owner**.
- Give Label as “**Employer**” and Role Name gets auto-populated.
- Then click on **Save**.

Repeat the same steps for another role.

- Click the plus on CEO role, and click the plus on Owner, and click Add Role under Employer.
- Give Label as “**Worker**” and Role Name gets auto-populated.
- Then click on Save.

The screenshot shows the Salesforce Setup interface with the 'Roles' page open. The page title is 'Creating the Role Hierarchy'. The left sidebar shows navigation paths like 'Setup', 'Home', 'Object Manager', and sections for 'Users', 'Feature Settings', 'Sales', 'Service', and 'Case Teams'. The main content area displays a tree view of roles under 'Malta Raddy University'. The hierarchy is as follows:

- Owner** (Root node)
 - GEO** (under Owner)
 - CEO** (under GEO)
 - COO** (under CEO)
 - owner** (under CEO)
 - employer** (under owner)
 - worker** (under employer)
 - SVP_Customer Service & Support**
 - SVP_Human Resources**
 - SVP_Sales & Marketing**
 - SFAdmin**

Each role node has 'Edit | Del | Assign' buttons next to it. A 'Help for this Page' link is visible in the top right corner.

TASK-9

Users

A user is anyone who logs in to Salesforce. Users are employees at your company, such as sales reps, managers ,and IT specialists, who need access to the company's records. Every user in Salesforce has a user account. The user account identifies the user, and the user account settings determine what features and records the user can access.

Create User

Go to Setup → type "Users" in the quick find box → select Users → click New User.

Fill in the fields:

- First Name: **shyam**
- Last Name: **raju**
- Alias: **sraju**
- Email ID: **rajshyam66406@gmail.com**
- Nickname: **shyam**
- Role: **Owner**
- User License: **Salesforce**
- Profile: **Owner**
- **Save it**

User
shyam raju

User Detail

Name	shyam raju	Role	owner
Alias	sraju	User License	Salesforce
Email	rajshyam66406@gmail.com [Verify]	Profile	owner
Username	rajshyam66406@gmail.com	Active	✓
Nickname	shyam	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)	Mobile Push Registrations	View
Locale	English (India)	Data.com User Type	View
Language	English	Accessibility Mode (Classic Only)	<input type="checkbox"/> <input checked="" type="checkbox"/>
Delegated Approver		Debug Mode	<input type="checkbox"/> <input checked="" type="checkbox"/>
Manager		High-Contrast Palette on Charts	<input type="checkbox"/> <input checked="" type="checkbox"/>
Receive Approval Request Emails	Only if I am an approver	Load Lightning Pages While Scrolling	<input checked="" type="checkbox"/>
Federation ID		Salesforce CRM Content User	<input checked="" type="checkbox"/>
App Registration: One-Time Password Authenticator		Receive Salesforce CRM Content Email Alerts	<input checked="" type="checkbox"/>
App Registration: Salesforce Authenticator		Receive Salesforce CRM Content Alerts as Daily	<input checked="" type="checkbox"/>
Security Key (2FA or WebAuthn)			

Creating Another User

Go to Setup → type "Users" in the quick find box → select Users → click New User.

Fill in the fields:

- First Name: **ram**
- Last Name: **ram**
- Alias: **rram**
- Email ID: **2111cs010304@mallareddyuniversity.ac.in**
- Nickname: **ram**
- Role: **Employer**
- User License: **Salesforce Platform**
- Profile: **Standard Platform User**

Save it

The screenshot shows the Salesforce Setup interface. The left sidebar is collapsed, and the main area displays the 'Users' page under the 'SETUP' tab. A search bar at the top right contains the text 'Search Setup'. Below the search bar are several icons: a star, a plus sign, a question mark, a gear, a bell, and a user profile icon. The main content area shows a user record for 'User ram ram'. The 'User Detail' section includes fields for Name (ram ram), Alias (ram), Email (2111cs010304@mallareddyuniversity.ac.in), Username (2111cs010304@mallareddyuniversity.ac.in), Nickname (ram), Role (employer), User License (Salesforce Platform), Profile (Standard Platform User), Active (checked), Marketing User (unchecked), Offline User (unchecked), Knowledge User (unchecked), Flow User (unchecked), Service Cloud User (unchecked), Site.com Contributor User (unchecked), Site.com Publisher User (unchecked), WDC User (unchecked), Mobile Push Registrations (View), Data.com User Type (View), Accessibility Mode (Classic Only) (unchecked), Debug Mode (unchecked), High-Contrast Palette on Charts (unchecked), Load Lightning Pages While Scrolling (checked), Salesforce CRM Content User (checked), Receive Salesforce CRM Content Email Alerts (checked), and Receive Salesforce CRM Content Alert as Daily (checked). Navigation links at the bottom of the page include 'Home', 'Object Manager', 'Logout', and 'Help'.

Creating Another User

Go to Setup → type "Users" in the quick find box → select Users → click New User.

Fill in the fields:

- First Name: **ragu raj**
- Last Name: **raj**
- Alias: **rraj**
- Email ID: **2111cs010304@mallareddyuniversity.ac.in**
- Nickname: **bhupati**
- Role: **worker**
- User License: **Salesforce Platform**
- Profile: **Standard Platform User**

Save it

The screenshot shows the Salesforce Setup interface with the 'Users' tab selected. A new user record is being created with the following details:

User Detail	Value	Role	Profile
Name	ragu raj	worker	Salesforce Platform
Alias	raj		Standard Platform User
Email	2111cs010304@mallareddyuniversity.ac.in [Verify]		
Username	shyam@raju.com	Active	<input checked="" type="checkbox"/>
Nickname	bhupati	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 Registration	<input checked="" type="checkbox"/>
Delegated Approver		Data.com User Type	<input checked="" type="checkbox"/>
Manager		Accessibility Mode (Classic Only)	<input type="checkbox"/>
Receive Approval Request Emails	Only if I am an approver	Debug Mode	<input checked="" type="checkbox"/>
Federation ID		High-Contrast Palette on Charts	<input type="checkbox"/>
App Registration: One-Time Password Authenticator		Load Lightning Pages While Scrolling	<input checked="" type="checkbox"/>
App Registration: Salesforce Authenticator		Salesforce CRM Content User	<input checked="" type="checkbox"/>
Security Key (U2F or WebAuthn)		Receive Salesforce CRM Content Email Alerts	<input checked="" type="checkbox"/>

TASK-10

Permission Sets

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

Creating OWD Setting

- Go to Setup → type “Sharing Settings” in quick search → Click **Edit**.
- Scroll down, change the default internal access to “Public Read-Only” for Rice Mill and Supplier objects.
- Click **Save**.

By setting the Organization-Wide Defaults (OWD) to "Public Read-Only," every profile has its own access according to their profile. In our case, roles are created and assigned so that the owner can see employer and worker records, and the employer can see worker records.

The screenshot shows the Salesforce Sharing Settings page. The left sidebar has a search bar with 'sharing' and a 'Sharing Settings' link under the 'Security' section. The main area has a header 'Sharing Settings' with a 'SETUP' button. Below it is a table of sharing rules:

Object	Internal Access	External Access	Controlled By
Work Step Template	Private	Private	✓
Work Type	Private	Private	✓
Work Type Group	Public Read/Write	Private	✓
Applog	Public Read/Write	Private	✓
consumer	Controlled by Parent	Controlled by Parent	
Provider	Public Read/Write	Private	✓
Resource	Public Read/Write	Private	✓
rice details	Controlled by Parent	Controlled by Parent	
rice mill	Public Read Only	Private	✓
supplier	Public Read Only	Private	✓

Below the table are sections for 'User Visibility Settings' and 'Other Settings'. The URL at the bottom is 'mallaraddyuniversity6-dev-ed.develop.lightning.force.com/lightning/setup/_/home'.

TASK-10

Reports

Reports give you access to your Salesforce data. You can examine your Salesforce data in almost infinite combinations, display it in easy-to-understand formats, and share the resulting insights with others. Before building, reading, and sharing reports, review these reporting basics. Salesforce.com provides a powerful suite of analytic tools to help you organize, view, and analyze your data.

Create Report

- Go to the app → click on the **Reports tab**.
- Click **New Report**.
- Select for Report Type, search for “**Rice Mill with Consumers**”, click on it, and click **Start Report**.

The outline pane is opened already, select the fields that are mentioned below in the Column section:

- **Consumer Name**
- **Rice Type**
- **Rice Price/kg**
- **Mode of Payment**
- **Amount Paid**

Remove the unnecessary fields.

Select the field that is mentioned below in the Group Rows section:

- Rice Taken by Shops
- Click **Save and Run**.
- Save the report as “**Range of Amount per Day**”.
- **Save it**

Report Name	Description	Folder	Created By	Created On	Subscribed
range of amount per day	estimated rice per day	shyam B	24/10/2024, 5:36 pm	✓	
Lead conversion rate	What percentage of leads have been converted?	Channel Sales	Automated Process	14/8/2024, 5:32 pm	

Report(Range of amount per day)

The screenshot shows a software application window with a title bar and various menu options. The main area displays a report titled "range of amount per day" with a sub-section header "Report: rice mills with consumers". The report table has columns for consumer name, rice type, price/kg, mode of payment, and amount paid. The data is grouped by consumer and includes subtotals for each consumer and a grand total at the bottom.

	consumer: consumer Name	Rice type	rice price/kg	Mode of payment	Amount Paid
1 (2)	consumers-002	normal rice	80	Cash	60.00
	consumers-009	normal rice	120	Cash	120.00
Subtotal				200	200.00
2 (3)	consumers-003	normal rice	80	Net banking	160.00
	consumers-004	basmati	120	UPI	240.00
	consumers-007	basmati	80	UPI	160.00
Subtotal				200	560.00
3 (2)	consumers-005	normal rice	80	UPI	240.00
	consumers-010	basmati	80	Cash	240.00
Subtotal				80	480.00
4 (1)	consumers-006	basmati	120	Credit card	480.00
Subtotal				120	480.00
5 (1)	consumers-008	basmati	120	UPI	600.00
Subtotal				120	600.00
7 (1)	consumers-001	basmati	120	UPI	840.00
Subtotal				120	840.00
10 (1)	consumers-011	basmati	120	Cash	1,200.00
Grandtotal				400	4,000.00

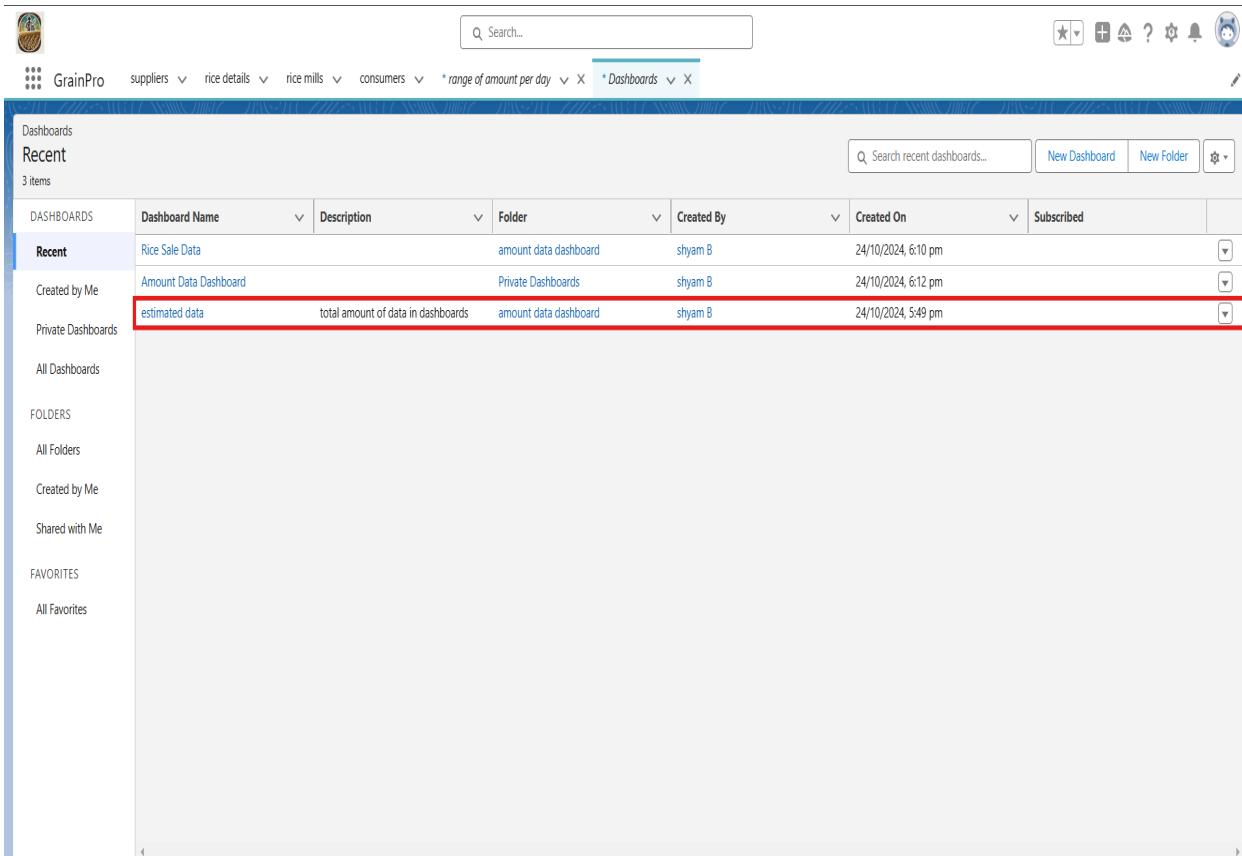
TASK-11

Dashboards

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

Create Dashboard Folder Steps to Create a Dashboard Folder:

- Click on the **App Launcher** and search for "Dashboard".
- Click on the **Dashboard** tab.
- Click **New Folder**.
- Give the Folder Label as "**Amount Data Dashboard**".
- Folder Unique Name will be auto-populated.
- Click **Save**



The screenshot shows the GrainPro application interface. At the top, there is a navigation bar with icons for search, favorite, and notifications. Below the navigation bar, the header includes the brand name "GrainPro" and a breadcrumb trail: suppliers > rice details > rice mills > consumers > range of amount per day > Dashboards. A search bar is located at the top right of the header.

The main content area displays a table titled "Dashboards" under the "Recent" tab. The table has columns: Dashboard Name, Description, Folder, Created By, and Created On. There are three items listed:

DASHBOARDS	Dashboard Name	Description	Folder	Created By	Created On	Subscribed
Recent	Rice Sale Data		amount data dashboard	shyam B	24/10/2024, 6:10 pm	
Created by Me	Amount Data Dashboard		Private Dashboards	shyam B	24/10/2024, 6:12 pm	
Private Dashboards	estimated data	total amount of data in dashboards	amount data dashboard	shyam B	24/10/2024, 5:49 pm	

On the left side, there is a sidebar with categories: DASHBOARDS (Recent, Created by Me, Private Dashboards), FOLDERS (All Folders), and FAVORITES (All Favorites). The "Recent" tab is currently selected.

Create Dashboard

- Go to the App → click on the Dashboards tab.

Give a Name and select the folder that was created, and click Create.

- Select **Add Component**.
- Select a Report and click **Select**.

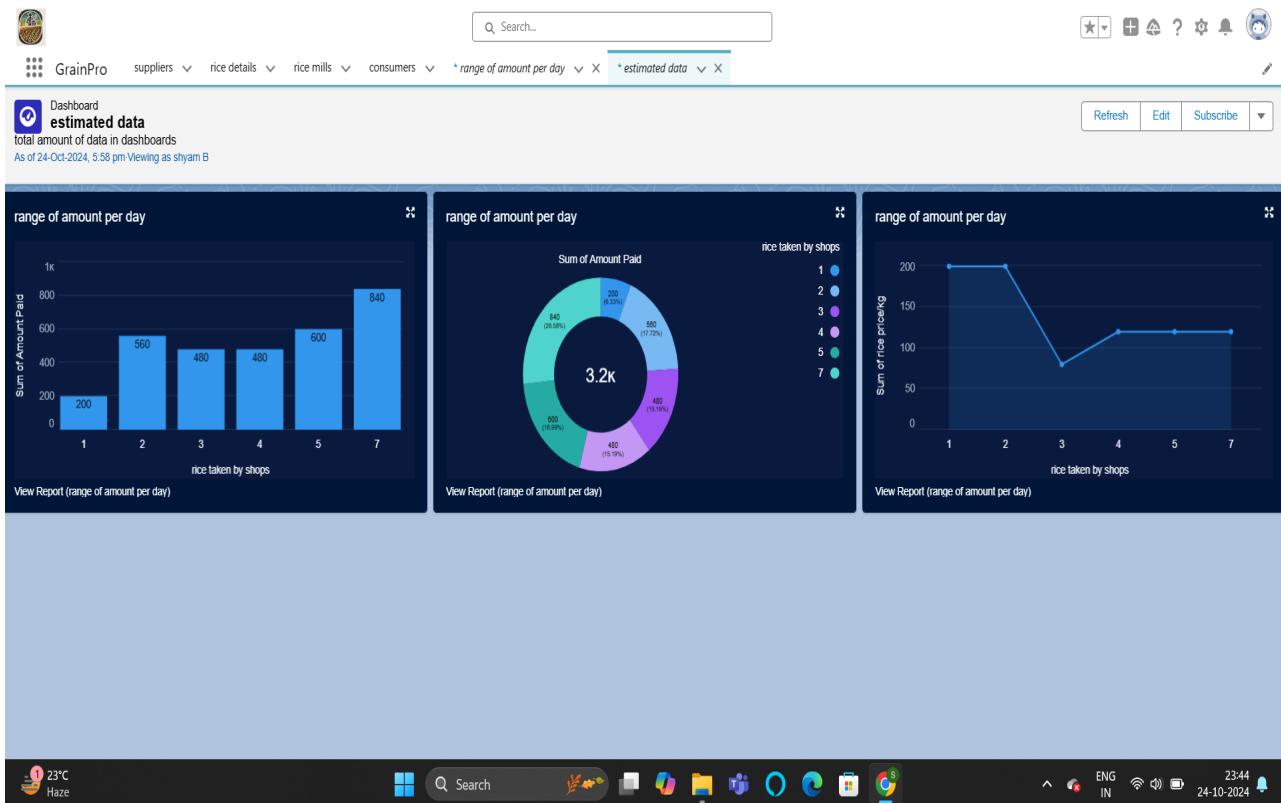
First Component Details:

- Display as: **Vertical Bar Chart**
- X-axis: **Rice Taken by Shops**
- Y-axis: **Sum of Amount**
- Y-axis Range: **Automatic**
- Sort by: **Rice Taken by Shops**
- Component Theme: **Dark**

Second Component Details:

- Select **Add Component** with the same steps as above.
- Display as: **Donut Chart**
- Sort by: **Sum of Amount**
- Title: **Range of Amount per Day**
- Component Theme: **Dark**

You can add more graphs if you need



TASK-12

Apex Class and Apex Triggers

Creating an Apex Class(ConsumerRecord)

- Login to the Salesforce account and navigate to the gear account in the top right corner.
- Then we can see the Developer console. Click on the developer console and you will navigate to a new console window.
- Then you can see many tools in the Toolbar of the new console window. Click on File, New and Apex Class.
- Enter the name of the class(ConsumerRecord) to create a new class file.

Code Snippet :

```
class ConsumerRecord {  
    public static void sendEmailNotification (List<consumer__c> con){  
        for(consumer__c c:con)  
        {  
            Messaging.SingleEmailMessage email = new Messaging.SingleEmailMessage();  
            email.setToAddresses( new List<String>{c.email__c});  
            email.setSubject('Welcome to our company');  
            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'+  
                "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'  
                +'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'+  
                'Thankyou for buying '+ " "+'Here are some of the products that are  
brought by the customers who similarly bought products like this'+'\n\n');  
            Messaging.sendEmail(new List<Messaging.SingleEmailMessage>{email});  
  
        }  
    }  
}
```

Creating an Apex Trigger

- While still in the trailhead account, navigate to the gear icon in the top right corner.
- Click on developer console and you will be navigated to a new console window.
- Click on the File menu in the toolbar, and click on new? Trigger.
- Enter the trigger name and the object to be triggered.

Trigger code:

```
trigger consumerTrigger on consumer__c (After insert) {  
    if(trigger.isAfter && trigger.isInsert) {  
        ConsumerRecord.sendEmailNotification(trigger.new);  
    }  
}
```

The screenshot shows the Salesforce Developer Console interface. At the top, there's a navigation bar with links like File, Edit, Debug, Test, Workspace, Help, and a Go To button. Below the navigation bar, there are tabs for ConsumerRecord.apxc and consumerTrigger.apxt. A dropdown menu shows 'Code Coverage: None' and 'API Version: 62'. The main area contains the Apex trigger code. Below the code, there's a 'Logs' tab selected, which displays a table of log entries. The table has columns for User, Application, Operation, Time, Status, Read, and Size. Six log entries are listed, all from user 'shyam B' and operation 'ApexTestHandler' at different times on 10/27/2024. The status is 'Success' for all, and the size varies between 490 bytes and 11.71 KB. A 'Filter' input field is at the bottom of the logs table.

User	Application	Operation	Time	Status	Read	Size
shyam B	Unknown	ApexTestHandler	10/27/2024, 3:05:55 PM	Success	Unread	490 bytes
shyam B	Unknown	ApexTestHandler	10/27/2024, 3:05:54 PM	Success	Unread	5.13 KB
shyam B	Unknown	ApexTestHandler	10/27/2024, 3:05:53 PM	Success	Unread	2.19 KB
shyam B	Unknown	ApexTestHandler	10/27/2024, 3:05:53 PM	Success	Unread	969 bytes
shyam B	Unknown	ApexTestHandler	10/27/2024, 3:05:52 PM	Success	Unread	25.91 KB
shyam B	Unknown	ApexTestHandler	10/27/2024, 3:05:52 PM	Success	Unread	11.71 KB

This screenshot is similar to the one above, showing the Developer Console interface. It features the same navigation bar, tabs, and log table. The main difference is the trigger code itself. In this version, the code is more concise, using a single-line assignment for the trigger condition and removing the unnecessary brace after the if statement. The log table shows the same six successful log entries from user 'shyam B'.

```
trigger consumerTrigger on consumer__c (After insert) {  
    if(trigger.isAfter && trigger.isInsert) {  
        ConsumerRecord.sendEmailNotification(trigger.new);  
    }  
}
```

CONCLUSION

The **GrainPro Rice Mill CRM Application** successfully provides a comprehensive, user-friendly solution that addresses the unique operational and management needs of a wholesale rice mill. By centralizing daily production data, tracking sales activities, and automating report generation, the system enhances transparency, accuracy, and efficiency across key functions. This CRM application empowers factory owners and managers with timely, actionable insights, enabling informed decision-making and strategic planning based on real-time data.

With its intuitive interface, robust analytics, and secure data management, the Rice Mill CRM Application stands as a valuable tool for improving operational workflow, optimizing inventory control, and strengthening customer relationships. This project marks a significant step forward in modernizing rice mill operations, fostering scalability, and supporting long-term business growth in a competitive industry.

THANK YOU

