

A CRM APPLICATION FOR WHOLESALE RICE MILL

Project Overview:

This project focuses on developing a CRM Application for a Wholesale Rice Mill, designed to address the daily reporting and operational challenges of rice production and sales. The primary goal is to streamline data collection and enhance customer experiences through Salesforce. By leveraging advanced CRM features like Reports, Dashboards, Roll-Up Summary Fields, Validation Rules, and Role Hierarchy, this project aims to optimize operational efficiency and improve data accuracy, supporting long-term business growth.

Objective:

1. Business Goals:

- Streamline daily reporting of rice production and sales.
- Improve resource allocation by identifying key trends.
- Enhance customer experience with accurate tracking and reporting.

2. Specific Outcomes:

- Automated daily reports for rice production, sales, and revenue.
- Role-based access for owners, employers, and workers.
- Integration of dashboards for visualizing sales trends.

Salesforce Key Features and Concepts Utilized

- **Reports and Dashboards:** Track daily rice sales, revenue, and customer data.
- **Roll-Up Summary Fields:** Calculate total rice distributed to suppliers and shops.
- **Cross-Object Formula Fields:** Compute values like total payments using related object fields.
- **Validation Rules:** Ensure mandatory fields like phone numbers and email addresses are filled.

- **Permission Sets:** Establish Organization-Wide Defaults (OWD) for tailored data access.
- **Roles and Profiles:** Hierarchical structure to assign specific access rights to users.
- **Lightning App Builder:** Custom app interfaces for the rice mill operations.

Detailed Steps to Solution Design

- **Data Models:**
 - Objects like Supplier, Consumer, Rice Mill, and Rice Details were created.
 - Junction Objects established many-to-many relationships between Suppliers and Rice Details.
- **User Interface Design:**
 - Lightning App with tabs for Supplier, Rice Mill, Consumer, and Rice Details.
 - Page layouts categorized fields into sections like Personal Details, Rice Details, and Receipt Details.
- **Business Logic:**
 - Validation rules ensure mandatory data fields are filled.
 - Roll-Up Summary Fields compute aggregate values across objects.

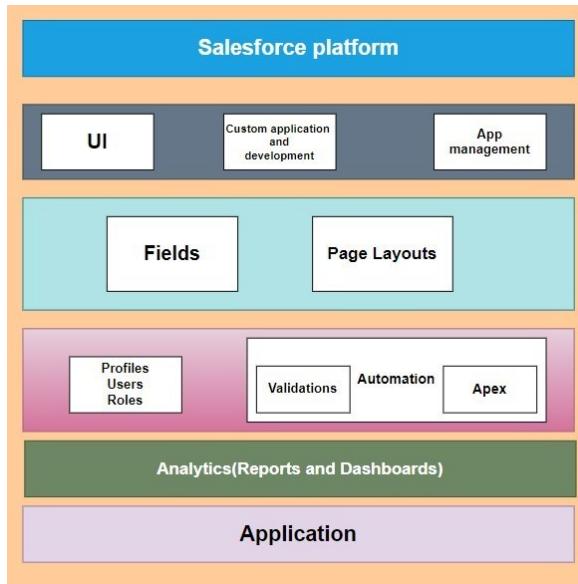
Testing and Validation

- **Unit Testing:**
 - Apex Triggers and Classes were validated for correctness and functionality.
 - Roll-Up Summary Fields and Validation Rules were tested thoroughly.
- **User Interface Testing:**
 - Lightning App navigation, Reports, and Dashboards were tested for usability and performance.

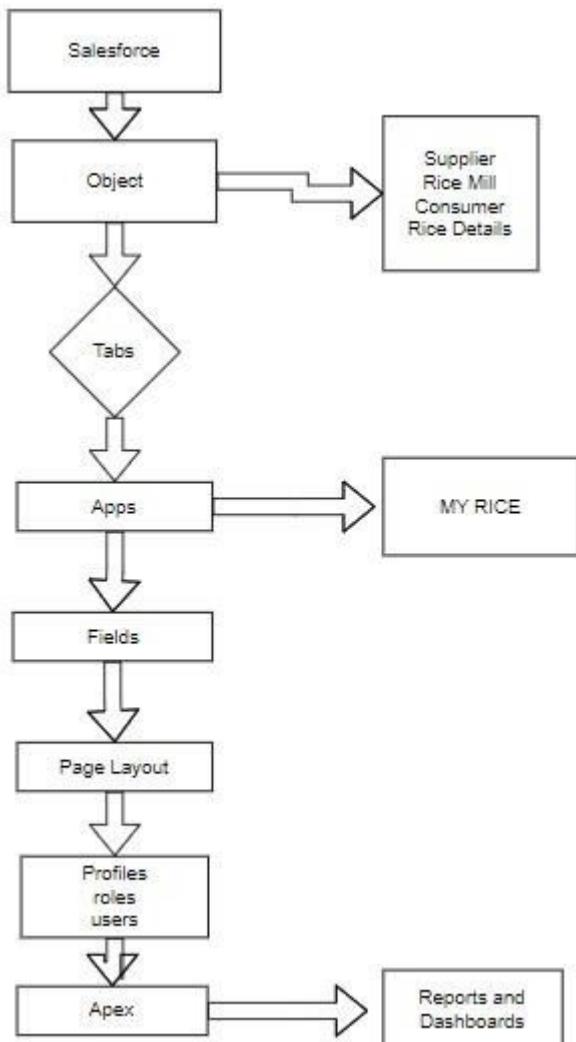
Key Scenarios Addressed by Salesforce in the Implementation Project

- **Daily Rice Sales Reporting:** Automated calculations of rice sold and revenue generated.
- **Role-Based Access:** Owners see all records, employers access worker data, and workers have restricted views.
- **Customer Data Accuracy:** Validation ensures all customer contact details are provided.

Architecture:



Flowchart:

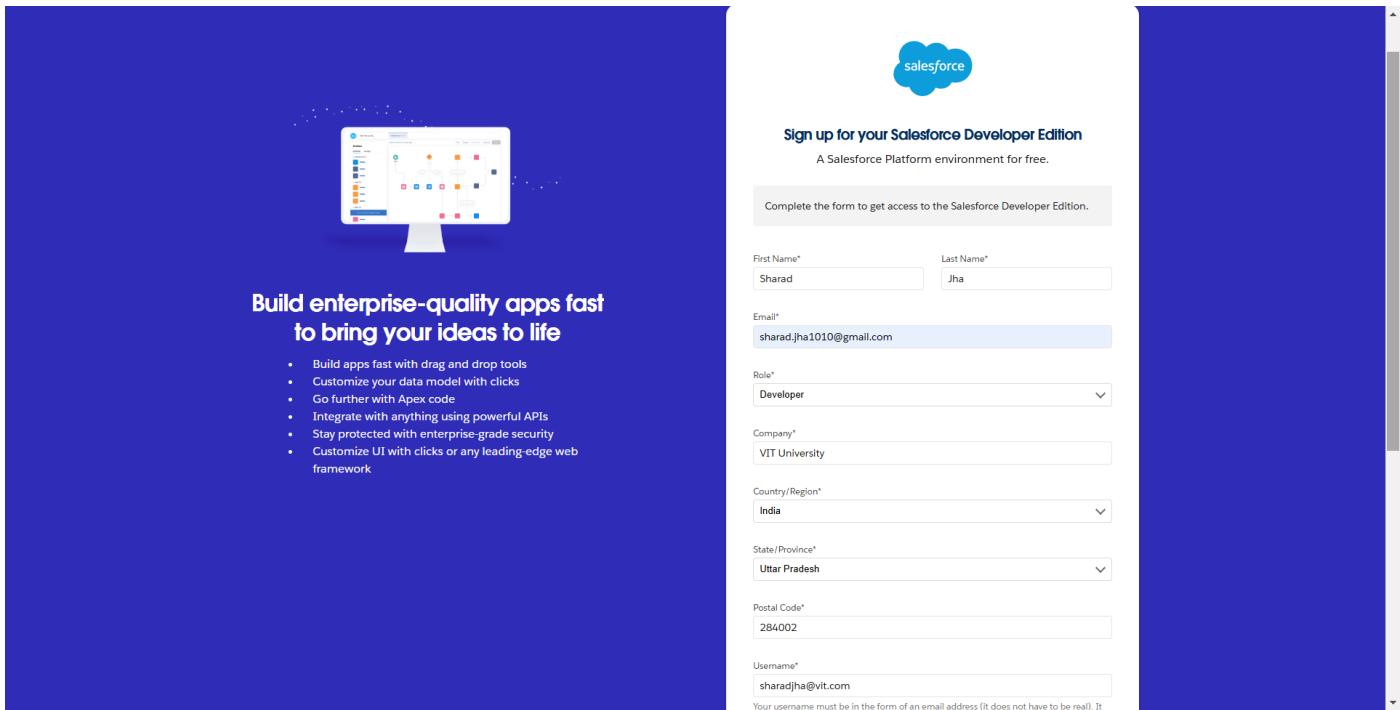


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Activity 1: Introduction to Salesforce

1.1. Creating Developer Account



- **First and Last Name:** Sharad Jha
- **Email:** sharad.jha1010@gmail.com
- **Role:** Developer
- **Company:** VIT University
- **Country:** India
- **Postal Code:** 284002
- **Username:** sharadjha@vit.com

1.2. Account Activation

1. Go to the inbox of the email that you used while signing up. Click on the verify account to activate your account. The email may take 5-10mins.
2. Click on Verify Account
3. Give a password and answer a security question and click on change password.
4. Then you will redirect to your salesforce setup page.

A screenshot of an email from Salesforce. The subject line is "Welcome to Salesforce: Verify your account". The recipient is "developer@salesforce.com <developer@salesforce.com> to me". The email body features the Salesforce logo at the top. Below it is a large blue box containing the text "Thanks for signing up with Salesforce!" and an illustration of a smartphone and laptop connected by a green arrow. A call-to-action button labeled "Verify Account" is centered below the illustration. Below the button, the text "Click below to verify your account." is displayed. At the bottom, there is a note about saving the URL for later logins and the user's saved username, "sharadjha@vit.com". The footer of the email says "Again, welcome to Salesforce!".

MY RICE supplier rice mills consumers rice details Reports Dashboards Sharad Jha

Sharad Jha

Share your awesomeness with the world.
(Or at least with your colleagues on Chatter.)

Details

Name	Manager
Sharad Jha	Company Name
Title	VIT University
Email	Phone
sharad.jha101@gmail.com	+91 8470934892
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About Me

Share your awesomeness with the world. (Or at least with your colleagues on Chatter.)

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Activity 2: Object

2.1. Create Supplier Object

To create an object:

1. From the setup page >> Click on Object Manager >> Click on Create >> Click on Custom Object.
 - i. Enter the label name >> supplier
 - ii. Plural label name >> supplier
 - iii. Enter Record Name Label and Format
 - o Record Name >> supplier Name
 - o Data Type >>Text
2. Click on Allow reports and Track Field History and allow search
3. Allow search >> Save.

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

- Header:** Search bar with "Search Setup".
- Top Navigation:** Icons for Home, Object Manager, and other setup options.
- Breadcrumbs:** SETUP > OBJECT MANAGER
- Object Name:** supplier
- Left Sidebar (Details):**
 - Fields & Relationships
 - Page Layouts
 - Lightning Record Pages
 - Buttons, Links, and Actions
 - Compact Layouts
 - Field Sets
 - Object Limits
 - Record Types
 - Related Lookup Filters
 - Search Layouts
 - List View Button Layout
 - Restriction Rules
 - Scoping Rules
- Right Panel (Details):**

Setting	Value
Description	
API Name	supplier_c
Custom	✓
Singular Label	supplier
Plural Label	supplier
Enable Reports	✓
Track Activities	
Track Field History	✓
Deployment Status	Deployed
Help Settings	Standard salesforce.com Help Window
- Bottom Right:** Edit and Delete buttons.

2.2. Create Rice Mill Object

To create an object:

1. From the setup page >> Click on Object Manager >> Click on Create >> Click on Custom Object.
 - i. Enter the label name >> rice mill
 - ii. Plural label name >> rice mills
 - iii. Enter Record Name Label and Format
 - o Record Name
 - o Data Type >> Auto Number

- Display Format >> rice-{000}
 - Starting number >> 1
2. Click on Allow reports and Track Field History, Allow Search and Save.

2.3. Create Consumer Object

Note: Follow the same steps as mentioned in Activity 2 for the and Receipt objects.

Use these display format for the consumer

- label name >> consumer
- Plural label name >> consumers
- Display Format >> consumers-{000}
- Starting number >> 1

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

- Object Manager:** consumer
- Details Tab:**
 - Description:** consumer
 - API Name:** consumer_c
 - Custom:** ✓
 - Singular Label:** consumer
 - Plural Label:** consumers
 - Enable Reports:** ✓
 - Track Activities:**
 - Track Field History:** ✓
 - Deployment Status:** Deployed
 - Help Settings:** Standard salesforce.com Help Window
- Left Sidebar:** Fields & Relationships, Page Layouts, Lightning Record Pages, Buttons, Links, and Actions, Compact Layouts, Field Sets, Object Limits, Record Types, Related Lookup Filters, Search Layouts, List View Button Layout, Restriction Rules, Scoping Rules.

2.4. Create Rice Details Object

Use these display format for the rice details

- label name >> rice details
- Plural label name >> rice details
- Display Format >> rice-{000}
- Starting Number >>1

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

- Object Manager:** rice details
- Details Tab:**
 - Description:** rice details
 - API Name:** rice_details_c
 - Custom:** ✓
 - Singular Label:** rice details
 - Plural Label:** rice details
 - Enable Reports:** ✓
 - Track Activities:**
 - Track Field History:** ✓
 - Deployment Status:** Deployed
 - Help Settings:** Standard salesforce.com Help Window
- Left Sidebar:** Fields & Relationships, Page Layouts, Lightning Record Pages, Buttons, Links, and Actions, Compact Layouts, Field Sets, Object Limits, Record Types, Related Lookup Filters, Search Layouts, List View Button Layout, Restriction Rules, Scoping Rules.

Activity 3: Tabs

3.1. Creating a Custom Tab

To create a Tab: (supplier)

1. Go to setup page >> type Tabs in Quick Find bar >> click on tabs >> New (under custom object tab)
2. Select Object (supplier) >> Select the tab style >> Next (Add to profiles page) keep it as default >> Next (Add to Custom App) uncheck the include tab .
3. Make sure that the Append tab to users' existing personal customizations is checked.
4. Click save.

The screenshot shows the Salesforce Setup interface with the 'Tabs' page selected. On the left, there's a sidebar with various links like Setup Home, Service Setup Assistant, Commerce Setup Assistant, etc. The main content area has a title 'Custom Object Tab supplier'. It displays a 'Custom Tab Definition Detail' table with the following data:

Custom Tab Definition Detail		Edit	Delete
Tab Label	supplier	Tab Style	
Object	supplier	Splash Page Custom Link	
Description			
Created By	Sharad Jha 18/12/2024, 10:46 pm	Modified By	Sharad Jha 18/12/2024, 10:47 pm

3.2. Creating Remaining Tabs

1. Now create the Tabs for the remaining Objects, they are “rice mill, consumer, rice details”.
2. Follow the same steps as mentioned in Activity 3.1 .

The screenshot shows the Salesforce Setup interface with the 'Tabs' page selected. A custom object tab named 'rice details' has been created. The tab definition details are as follows:

Custom Tab Definition Detail
Tab Label: rice details
Object: rice_details
Description:
Created By: Sharad Jha, 18/12/2024, 10:52 pm
Modified By: Sharad Jha, 18/12/2024, 10:52 pm

The tab style is set to 'Pencil'.

The screenshot shows the Salesforce Setup interface with the 'Tabs' page selected. A custom object tab named 'consumers' has been created. The tab definition details are as follows:

Custom Tab Definition Detail
Tab Label: consumers
Object: consumer
Description:
Created By: Sharad Jha, 18/12/2024, 10:51 pm
Modified By: Sharad Jha, 18/12/2024, 10:51 pm

The tab style is set to 'People'.

The screenshot shows the Salesforce Setup interface with the 'Tabs' page selected. A custom tab named 'rice mills' is listed under 'Custom Object Tab'. The tab definition details show the following information:

Custom Tab Definition Detail	Edit	Delete
Tab Label: rice mills		
Object: rice_mill		
Description:		
Created By: Sharad Jha, 18/12/2024, 10:50 pm		
Modified By: Sharad Jha, 18/12/2024, 10:50 pm		

The 'Tab Style' is set to 'Truck'.

The screenshot shows the Salesforce Setup interface with the 'Tabs' page selected. The 'Custom Tabs' section displays the following table of custom object tabs:

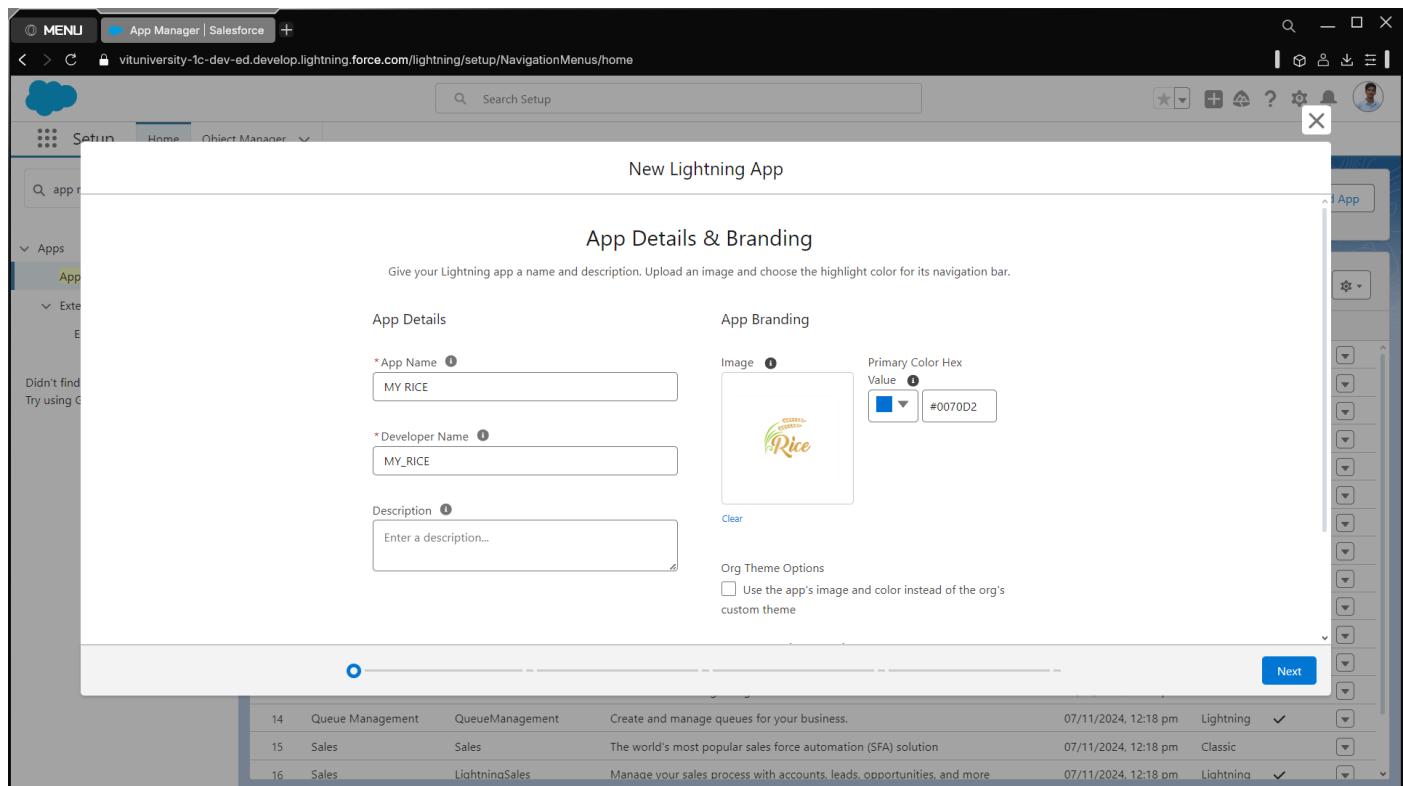
Action	Label	Tab Style	Description
Edit Del	consumers	People	
Edit Del	rice_details	Pencil	
Edit Del	rice_mills	Truck	
Edit Del	supplier	Box	

Below this, there are sections for 'Web Tabs', 'Visualforce Tabs', and 'Lightning Component Tabs', each indicating that no tabs have been defined.

Activity 4: The Lightning App

To create a lightning app page:

1. Go to setup page >> search “app manager” in quick find >> select “app manager” >> click on New lightning App.
2. Fill the app name in app details as MY RICE >> Next >> (App option page) keep it as default >> Next >> (Utility Items) keep it as default >> Next.
3. Upload a photo that is related to your app.
4. To add Navigation Item:
 - Select the items (supplier, rice mill, consumer, Rice details) from the search bar and move it using the arrow button >> Next.
5. To Add User Profiles:
 - Search profiles (System administrator) in the search bar >> click on the arrow button >> save & finish.



The screenshot shows the 'New Lightning App' configuration interface. In the 'Available Items' list, a search bar shows 'rice d'. In the 'Selected Items' list, four items are listed: 'supplier', 'rice mills', 'consumers', and 'rice details'. A progress bar at the bottom indicates the configuration is 50% complete.

The screenshot shows the 'User Profiles' configuration interface. In the 'Available Profiles' list, profiles like 'Analytics Cloud Integration User', 'Analytics Cloud Security User', and 'Authenticated Website' are listed. In the 'Selected Profiles' list, 'System Administrator' is selected. A progress bar at the bottom indicates the configuration is 100% complete.

Activity 5: Fields

5.1. Creating The Number Field In Rice Details Object

Creating the number field in rice details object

1. Go to the setup page >> click on object manager >> From drop down click edit for rice details object
2. Click on fields & relationship >> click on New.
3. Select Data type as “Number” and click Next.
4. Given the Field Label as “rice distributed” and length as “5”.
5. Field Name will be auto populated, and click on Next- Next >> Save.

The screenshot shows the Salesforce Setup interface under the Object Manager section. A custom field named 'rice distributed' is being created for the 'rice details' object. The field is defined as a Number type with a length of 5. The 'Field Label' is set to 'rice distributed'. Other settings like 'Required' and 'Unique' are disabled. The 'Object Name' is 'rice details' and the 'Data Type' is 'Number'. The field was created by Sharad Jha on 27/12/2024, 5:53 pm.

5.2. 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 as rice details with supplier & rice mill

To create junction object

1. Go to the setup page >> click on object manager >> From drop down click edit for rice details object
2. Click on fields & relationship - click on New.
3. Select “Master-Detail relationship” as data type and click Next.

4. Select the related object " supplier " and click next.
5. Give Field Label as "supplier Name" and click Next.
6. Next > Next > Save & New.
7. Follow the same steps from 1 to 3.
8. Select the related object " rice mill " and click Next.
9. Give Field Label as "rice mill 1(one)" and click Next.
10. Next > Next > Save.

rice details Custom Field
supplier Name

Custom Field Definition Detail

Field Information	Object Name: rice details Data Type: Master-Detail
Field Label: supplier Name	Field Name: supplier_Name
API Name: supplier_Name__c	Description:
Help Text:	Data Owner:
Field Usage:	Created By: Sharad Jha , 27/12/2024, 5:55 pm
Data Sensitivity Level:	Modified By: Sharad Jha , 27/12/2024, 5:55 pm
Compliance Categorization:	

Master-Detail Options

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

Lookup Filter
No lookup filters defined.

Validation Rules

rice details Custom Field
rice mill 1(one)

Custom Field Definition Detail

Field Information	Object Name: rice details Data Type: Master-Detail
Field Label: rice mill 1(one)	Field Name: rice_mill_1_one
API Name: rice_mill_1_one__c	Description:
Help Text:	Data Owner:
Field Usage:	Created By: Sharad Jha , 27/12/2024, 5:57 pm
Data Sensitivity Level:	Modified By: Sharad Jha , 27/12/2024, 5:57 pm
Compliance Categorization:	

Master-Detail Options

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

Lookup Filter
No lookup filters defined.

Validation Rules

5.3. Creating a Master-Detail Relationship

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

1. Go to the setup page >> click on object manager >> From drop down click edit for consumer object.
2. Click on fields & relationship >> click on New.
3. Select “Master-Detail relationship” as data type and click Next.
4. Select the related object “rice mill”.
5. Give Field Label as “rice mill name” and click Next.
6. Next >> Next >> Save.

5.4. Creating the Roll-Up Summary

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

1. Go to setup >> click on Object Manager >> type object name(supplier) in search bar >> click on the object.
2. Now click on “Fields & Relationships” >> New
3. Select the data type as “Rollup summary”, and click Next.
4. Give the Field label as “ sum of rice distributed ”, Field Name will be Auto generated, and click Next.
5. Select the summarized object as “ rice details ”.
6. Select the Rollup type as “sum”.
7. Select the field to aggregate as “ rice distributed ”, and click Next >>Next >>Save.

The screenshot shows the Salesforce Object Manager interface. The top navigation bar includes 'Setup', 'Home', 'Object Manager', and other standard icons. The main content area is titled 'SETUP > OBJECT MANAGER' and shows the 'supplier' object. On the left, a sidebar lists various configuration options like 'Details', 'Fields & Relationships' (which is selected), and 'Page Layouts'. The main panel displays the 'Custom Field Definition Detail' for a custom field named 'sum of rice distributed'. The 'Field Information' section shows the field label 'sum of rice distributed', field name 'sum_of_rice_distributed', API name 'sum_of_rice_distributed_c', and object name 'supplier'. The 'Roll-Up Summary Options' section shows the data type as 'Roll-Up Summary', summarized object as 'rice_details', field to aggregate as 'rice_details: rice distributed', and summary type as 'SUM'. The 'Created By' and 'Modified By' fields both show 'Sharad Jha, 27/12/2024, 6:00 pm'.

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

rice mill Custom Field
Rice distributed to shops

Custom Field Definition Detail

Field Information		Object Name	
Field Label	rice distributed to shops	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	Sharad Jha, 27/12/2024, 6:04 pm	Modified By	Sharad Jha, 27/12/2024, 6:04 pm

Roll-Up Summary Options

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

13. Follow the same steps for the rice mill Object from 1 to 3
14. Give the Field label as " rice taken ", Field Name will be Auto generated, and click Next.
15. Select the summarized object as " consumer".
16. Select the Rollup type as "sum".
17. Select the field to aggregate as " rice taken in shops ", and click Next > Next > Save.

rice mill Custom Field
Rice taken

Custom Field Definition Detail

Field Information		Object Name	
Field Label	rice taken	rice mill	
Field Name	rice_taken		
API Name	rice_taken_c		
Description			
Help Text			
Data Owner			
Field Usage			
Data Sensitivity Level			
Compliance Categorization			
Created By	Sharad Jha, 27/12/2024, 6:06 pm	Modified By	Sharad Jha, 27/12/2024, 6:06 pm

Roll-Up Summary Options

Data Type	Roll-Up Summary	Summary Type
Summarized Object	consumer	SUM
Field to Aggregate	consumer_rice_taken_by_shops_in_kgs	
Filter Criteria		

5.5. Creating Fields in Consumer Objects

The screenshot shows the Salesforce Setup interface for creating a custom field. The object being modified is 'consumer'. The field being created is named 'First name'.

Field Information:

- 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)
- Created By: Sharad.Jha, 27/12/2024, 6:12 pm
- Object Name: consumer
- Data Type: Text
- Modified By: Sharad.Jha, 27/12/2024, 6:12 pm

General Options:

- Required:
- Unique:
- Case Sensitive:
- External ID:
- Default Value: (empty)

Text Options:

- Length: 50

Validation Rules: No validation rules defined.

Field Name: First Name

The screenshot shows the Salesforce Setup interface for creating a custom field. The object being modified is 'consumer'. The field being created is named 'Last name'.

Field Information:

- 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)
- Created By: Sharad.Jha, 27/12/2024, 6:12 pm
- Object Name: consumer
- Data Type: Text
- Modified By: Sharad.Jha, 27/12/2024, 6:12 pm

General Options:

- Required:
- Unique:
- Case Sensitive:
- External ID:
- Default Value: (empty)

Text Options:

- Length: 50

Validation Rules: No validation rules defined.

Field Name: Last Name

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

- Object Manager:** consumer
- Custom Field Name:** Phone number
- Field Label:** Phone number
- Field Name:** Phone_number
- API Name:** Phone_number__c
- Description:** (empty)
- Help Text:** (empty)
- Data Owner:** (empty)
- Field Usage:** (empty)
- Data Sensitivity Level:** (empty)
- Compliance Categorization:** (empty)
- Created By:** Sharad Jha, 27/12/2024, 6:13 pm
- Modified By:** Sharad Jha, 27/12/2024, 6:13 pm
- Object Name:** consumer
- Data Type:** Phone
- General Options:**
 - Required:
 - Default Value: (empty)
- Validation Rules:** No validation rules defined.

Field Name: Phone Number

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

- Object Manager:** consumer
- Custom Field Name:** email
- Field Label:** email
- Field Name:** email
- API Name:** email__c
- Description:** (empty)
- Help Text:** (empty)
- Data Owner:** (empty)
- Field Usage:** (empty)
- Data Sensitivity Level:** (empty)
- Compliance Categorization:** (empty)
- Created By:** Sharad Jha, 27/12/2024, 6:13 pm
- Modified By:** Sharad Jha, 27/12/2024, 6:13 pm
- Object Name:** consumer
- Data Type:** Email
- General Options:**
 - Required:
 - Unique:
 - External ID:
 - Default Value: (empty)
- Validation Rules:** No validation rules defined.

Field Name: Email

The screenshot shows the Salesforce Setup interface with the 'Object Manager' selected. A custom field named 'Rice taken by shops' has been created under the 'consumer' object. The field is of type Number and has a length of 5. It was created by Sharad Jha on December 27, 2024, at 6:14 pm.

Field Information	Value
Field Label	Rice taken by shops
Field Name	Rice_taken_by_shops
API Name	Rice_taken_by_shops_c
Description	
Help Text	
Data Owner	
Field Usage	
Data Sensitivity Level	
Compliance Categorization	
Created By	Sharad Jha, 27/12/2024, 6:14 pm
Modified By	Sharad Jha, 27/12/2024, 6:14 pm

Field Name: Rice Taken By Shops

The screenshot shows the Salesforce Setup interface with the 'Object Manager' selected. A picklist field named 'Rice type' has been created under the 'consumer' object. The field is of type Picklist and has two values: 'basmati' and 'normal rice'. It was created by Sharad Jha on December 27, 2024, at 6:17 pm.

Field Information	Value
Field Label	Rice type
Field Name	Rice_type
API Name	Rice_type_c
Description	
Help Text	
Data Owner	
Field Usage	
Data Sensitivity Level	
Compliance Categorization	
Created By	Sharad Jha, 27/12/2024, 6:17 pm
Modified By	Sharad Jha, 27/12/2024, 6:17 pm

Field Name: Rice Type

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 Field Sets. The main content area displays the 'Mode of payment' custom field definition. The 'Field Information' section includes details such as Field Label ('Mode of payment'), Field Name ('Mode_of_payment'), API Name ('Mode_of_payment_c'), Description ('Help Text'), Data Owner ('Field Usage'), Data Sensitivity Level ('Sharad_Jha, 27/12/2024, 6:16 pm'), and Compliance Categorization. The 'General Options' section shows 'Required' is unchecked and 'Default Value' is set to 'None'. Under 'Picklist Options', it says 'Restrict picklist to the values defined in the value set' is checked, and 'Controlling Field' is set to '[New]'. A note at the bottom indicates 'Picklist Values Used'.

This screenshot shows the 'Values' section for the 'Mode of payment' custom field. It includes a table with columns for Action, Values, API Name, Default, Chart Colors, and Modified By. The table contains five rows with values: Credit card, Debit card, Net banking, UPI, and Cash. Each row has edit, delete, and deactivate options. A note at the bottom states 'No Inactive Values values defined.'

Action	Values	API Name	Default	Chart Colors	Modified By
<input type="checkbox"/> Edit Del Deactivate	Credit card	Credit card	<input type="checkbox"/>	Assigned dynamically	Sharad_Jha, 27/12/2024, 6:16 pm
<input type="checkbox"/> Edit Del Deactivate	Debit card	Debit card	<input type="checkbox"/>	Assigned dynamically	Sharad_Jha, 27/12/2024, 6:16 pm
<input type="checkbox"/> Edit Del Deactivate	Net banking	Net banking	<input type="checkbox"/>	Assigned dynamically	Sharad_Jha, 27/12/2024, 6:16 pm
<input type="checkbox"/> Edit Del Deactivate	UPI	UPI	<input type="checkbox"/>	Assigned dynamically	Sharad_Jha, 27/12/2024, 6:16 pm
<input type="checkbox"/> Edit Del Deactivate	Cash	Cash	<input type="checkbox"/>	Assigned dynamically	Sharad_Jha, 27/12/2024, 6:16 pm

Field Name: Mode Of Payment

5.6. Creating Cross Object Formula Field in Consumer Object

1. Go to setup >> click on Object Manager >> type object name(consumer) in search bar >> click on the object.
2. Click on fields & relationship >> click on New.
3. Select Data type as "Formula" and click Next.
4. Give Field Label and Field Name as "Amount Paid " and select formula return type as "Number" and click next.
5. Insert fields formula should be :
`rice_taken_by_shops__c * rice_mill_name__r.rice_price_kg__c`
6. Under Advanced Formula write down the formula and click "Check Syntax" and Save.

Creating the Formula field in consumer Object

1. Go to setup >> click on Object Manager >> type object name(consumer) in search bar >> click on the object.
2. Click on fields & relationship >> click on New.
3. Select Data type as "Formula" and click Next.
4. Give Field Label and Field Name as "Consumer Name" and select formula return type as "TEXT" and click next.
5. Insert field formula should be : First_Name__c + '' + Last_Name__c
6. click "Check Syntax" and Save.

consumer

Custom Field
Amount Paid

Custom Field Definition Detail

Field Information		Object Name	
Field Label	Amount Paid	consumer	
Field Name	Amount_Paid		
API Name	Amount_Paid__c		
Description			
Help Text			
Data Owner			
Field Usage			
Data Sensitivity Level			
Compliance Categorization			
Created By	Sharad Jha, 27/12/2024, 6:32 pm	Modified By	Sharad Jha, 27/12/2024, 6:32 pm

Formula Options

Data Type	Formula
Formula	Rice_taken_by_shops__c * rice_mill_name__r.rice_price_kg__c
Decimal Places	2

Field Name: Amount Paid

Field Name: Consumer Name

5.7. 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

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

The screenshot shows the Salesforce Object Manager interface. At the top, there is a navigation bar with icons for Home, Object Manager, and Setup. A search bar labeled "Search Setup" is located at the top center. On the right side of the header are various global buttons and user profile icons.

The main content area is titled "Object Manager" and displays a "Validation Rule Detail" page for a "consumer Validation Rule". The page includes the following details:

Validation Rule Detail	
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	Sharad Jha, 27/12/2024, 6:35 pm
Active	<input checked="" type="checkbox"/>
Error Location	Top of Page
Modified By	Sharad Jha, 27/12/2024, 6:35 pm

At the bottom of the page, there are "Edit" and "Clone" buttons.

Activity 6: Page Layouts

6.1. Creating the Page Layout

To Create a Page layout:

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

The screenshot shows the Salesforce Object Manager interface for the 'consumer' object. The left sidebar lists various setup options: 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, and Object Access. The main content area displays the 'consumer Detail' page layout with three sections: 'Receipt details', 'rice details', and 'Personal details'. Each section contains specific fields and their values. At the top of the page layout, there are standard buttons (Save, Quick Save, Preview As..., Cancel, Undo, Redo) and layout properties. Below the buttons, there are standard and custom buttons.

Activity 7: Profiles

7.1. Owner Profile

To create a new profile:

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

The screenshot shows the Salesforce Setup interface with the 'Profiles' page open. The profile 'owner' is selected. The page includes sections for 'Profile Detail' (Name: owner, User License: Salesforce, Description: null, Created By: Sharad Jha, Modified By: Sharad Jha), 'Page Layouts' (Standard Object Layouts for various objects like Account, Opportunity, Case, etc.), and 'Custom Object Permissions' (which is partially visible at the bottom). The URL in the browser is vituniiversity-1c-dev-ed.lightning.force.com/lightning/setup/EnhancedProfiles/page?address=%2F00eQy00000A88dI.

7.2. Employer Profile

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

The screenshot shows the Salesforce Setup interface with the 'Profiles' tab selected. The profile 'employer' is displayed, which is a copy of the 'Standard Platform User' profile. The 'Profile Detail' section shows the profile name, user license (Salesforce Platform), and creation date (28/12/2024, 8:37 pm). The 'Custom Profile' checkbox is checked. The 'Page Layouts' section shows various standard object layouts mapped to custom layouts, such as 'Global Layout' for 'Email Application' and 'Home Page Layout'. The 'Custom Object Permissions' section is visible at the bottom.

7.3. Worker Profile

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

The screenshot shows the Salesforce Setup interface with the 'Profiles' tab selected. The profile 'worker' is displayed, which is a copy of the 'Standard Platform User' profile. The 'Profile Detail' section shows the profile name, user license (Salesforce Platform), and creation date (28/12/2024, 8:40 pm). The 'Custom Profile' checkbox is checked. The 'Page Layouts' section shows various standard object layouts mapped to custom layouts, such as 'Global Layout' for 'Email Application' and 'Home Page Layout'. The 'Custom Object Permissions' section is visible at the bottom.

Activity 8: Role & Role Hierarchy

8.1. Creating Owner Role

Creating owner Role:

1. Go to quick find >> Search for Roles >> click on set up roles.
2. Go to quick find >> Search for Roles >> click on set up roles.
3. Click on Expand All and click on add role under whom this role works.
4. Give Label as “owner” and Role name gets auto populated. Then click on Save.
5. Click and save it.

The screenshot shows the Salesforce Setup interface for creating a new role. The left sidebar lists various setup categories like Service Setup Assistant, Commerce Setup Assistant, and Lightning Experience Transition Assistant. The main content area is titled 'Roles' and shows a single role named 'owner'. The 'Role Detail' section provides details such as 'Label: owner', 'This role reports to: CEO', 'Modified By: Sharad Jha', and access levels for Opportunity and Case. Below this, the 'Users in owner Role' section indicates 'No records to display'.

Owner Role

8.2. Creating Employer Roles

Creating another two roles under manager

1. Go to quick find >> Search for Roles >> click on set up roles.
2. Click plus on CEO role, and click add role under owner.
3. Give Label as “employer” and Role name gets auto populated. Then click on Save.
4. Repeat the same steps, for another role.
5. Click plus on CEO role, and click plus on owner, and click add role under employer.
6. Give Label as “worker” and Role name gets auto populated. Then click on Save.

The screenshot shows the Salesforce Setup Roles page for the 'employer' role. The left sidebar includes links for Setup Home, Service Setup Assistant, Commerce Setup Assistant, Hyperforce Assistant, Release Updates, Lightning Experience Transition Assistant, Salesforce Mobile App, Lightning Usage, Optimizer, Sales Cloud Everywhere, Administration (Users, Data, Email), and Platform Tools (Subscription Management, Apps, Feature Settings). The main content area displays the 'Role Detail' for the 'employer' role, which reports to 'owner'. It was modified by Sharad Jha on 28/12/2024 at 8:54 pm. Opportunity Access and Case Access are listed under 'Users in employer Role'.

Role Detail	Label	Role Name
This role reports to	employer owner	Role Name as displayed on reports
Modified By	Sharad Jha, 28/12/2024, 8:54 pm	Sharing Groups
Opportunity Access	Users in this role can edit all opportunities associated with accounts that they own, regardless of who owns the opportunities	Role, Role and Internal Subordinates
Case Access	Users in this role can edit all cases associated with accounts that they own, regardless of who owns the cases	

Help for this Page [?](#)

Users in employer Role [Assign Users to Role](#) [New User](#) [Users in employer Role Help](#) [?](#)

No records to display

Employer Role

The screenshot shows the Salesforce Setup Roles page for the 'worker' role. The left sidebar includes links for Setup Home, Service Setup Assistant, Commerce Setup Assistant, Hyperforce Assistant, Release Updates, Lightning Experience Transition Assistant, Salesforce Mobile App, Lightning Usage, Optimizer, Sales Cloud Everywhere, Administration (Users, Permission Set Groups, Permission Sets, Profiles, Public Groups, Queues, Roles), and a JavaScript footer. The main content area displays the 'Role Detail' for the 'worker' role, which reports to 'employer'. It was modified by Sharad Jha on 28/12/2024 at 8:54 pm. Opportunity Access and Case Access are listed under 'Users in worker Role'.

Role Detail	Label	Role Name
This role reports to	worker employer	Role Name as displayed on reports
Modified By	Sharad Jha, 28/12/2024, 8:54 pm	Sharing Groups
Opportunity Access	Users in this role can edit all opportunities associated with accounts that they own, regardless of who owns the opportunities	Role, Role and Internal Subordinates
Case Access	Users in this role can edit all cases associated with accounts that they own, regardless of who owns the cases	

Help for this Page [?](#)

Users in worker Role [Assign Users to Role](#) [New User](#) [Users in worker Role Help](#) [?](#)

No records to display

Worker Role

Activity 9: Users

9.1. Create User

1. Go to setup >> type users in quick find box >> select users >> click New user.
2. Fill in the fields
3. First Name : vicky
4. Last Name : y
5. Alias : Give a Alias Name
6. Email id : Give your Personal Email id
7. Username : Username should be in this form: text@text.text
8. Nick Name : Give a Nickname
9. Role : owner
10. User license : Salesforce
11. Profiles : owner.
12. Save it.

User
vicky y

Name: vicky y
Alias: vy
Email: sharad.jha1010@gmail.com [Verify]
Username: sharad.jha1010@456gmail.com
Nickname: Vick
Title:
Company:
Department:
Division:
Address:
Time Zone: (GMT+05:30) India Standard Time (Asia/Kolkata)
Locale: English (India)
Language: English
Delegated Approver:
Manager:
Receive Approval Request Emails: Only if I am an approver
Federation ID:
App Registration: One-Time Password Authenticator:
App Registration: Salesforce Authentication:

Role	owner
User License	Salesforce
Profile	owner
Active	<input checked="" type="checkbox"/>
Marketing User	<input type="checkbox"/>
Offline User	<input type="checkbox"/>
Knowledge User	<input type="checkbox"/>
Flow User	<input type="checkbox"/>
Service Cloud User	<input type="checkbox"/>
Site.com Contributor User	<input type="checkbox"/>
Site.com Publisher User	<input type="checkbox"/>
WDC User	<input type="checkbox"/>
Mobile Push Registrations	<input type="checkbox"/> View
Data.com User Type	<input type="checkbox"/> View
Accessibility Mode (Classic Only)	<input type="checkbox"/> View
Debug Mode	<input type="checkbox"/> View
High-Contrast Palette on Charts	<input type="checkbox"/> View
Load Lightning Pages While Scrolling	<input checked="" type="checkbox"/> View
Salesforce CRM Content User	<input checked="" type="checkbox"/> View

9.2. Create Another User

1. Go to setup >> type users in quick find box >> select users >> click New user.
2. Fill in the fields
3. First Name : ram
4. Last Name : ram

5. Alias : Give a Alias Name
6. Email id : Give your Personal Email id
7. Username : Username should be in this form: text@text.text
8. Nick Name : Give a Nickname
9. Role : employer
10. User license : Salesforce platform
11. Profiles : standard platform user.

9.3. Create Another User

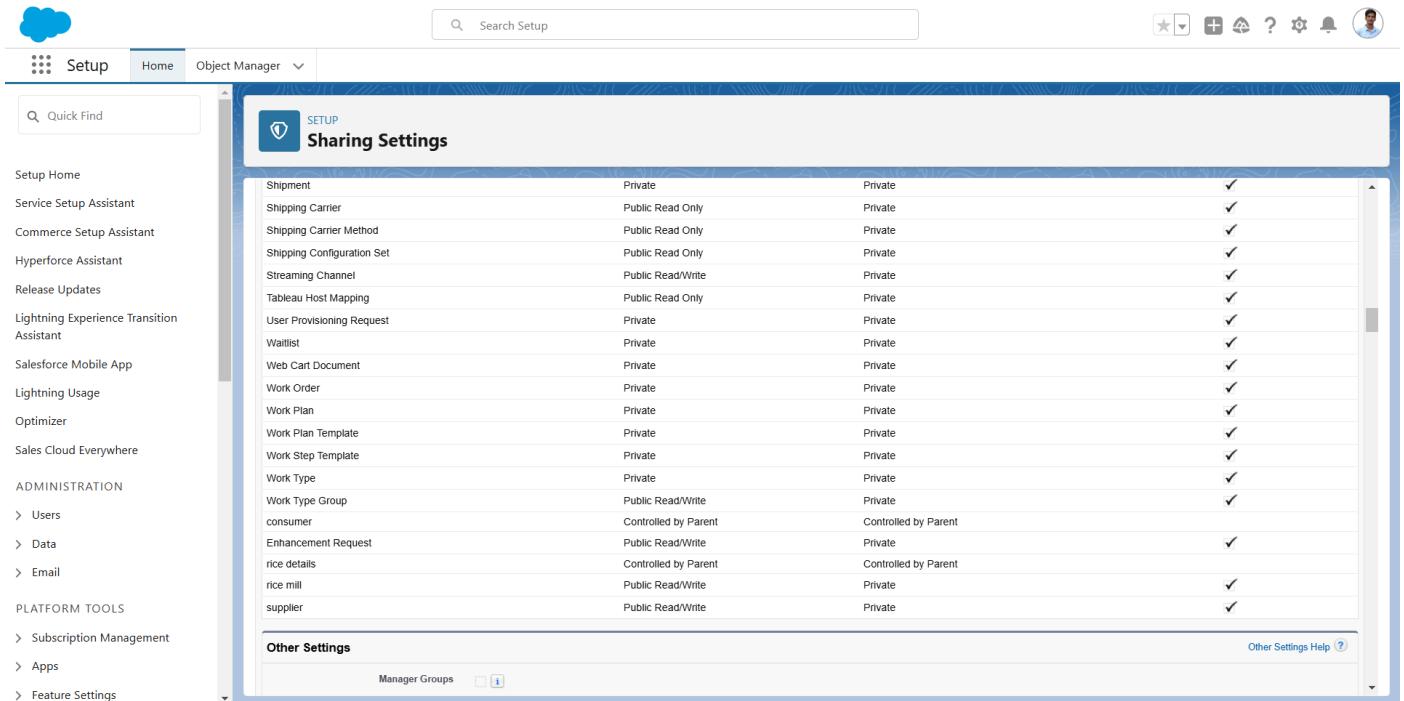
1. Go to setup >> type users in quick find box >> select users >> click New user.
2. Fill in the fields -
3. First Name: ragu
4. Last Name: raj
5. Alias: Give a Alias Name
6. Email id: Give your Personal Email id
7. Username: Username should be in this form: text@text.text
8. Nick Name: Give a Nickname
9. Role: worker
10. User license: Salesforce platform
11. Profiles: standard platform user.

The screenshot shows the Salesforce Setup interface with the 'Users' tab selected. On the left, there's a sidebar with various setup categories like Setup Home, Service Setup Assistant, and Release Updates. The main area displays the 'User Detail' page for a user named 'ragu raj'. The user's name is listed at the top, along with their alias 'raj' and email 'sharad.jha1010@gmail.com'. The 'Role' is set to 'worker' and 'User License' is 'Salesforce Platform'. The 'Active' checkbox is checked. The 'Nickname' is 'ragraj'. Under 'Department', the 'Division' and 'Address' fields are empty. In the 'Time Zone' section, it shows '(GMT+05:30) India Standard Time (Asia/Kolkata)'. The 'Locale' is 'English (India)' and the 'Language' is also 'English'. There are sections for 'Delegated Approver' and 'Manager', both of which have 'Only if I am an approver' selected. The 'Federation ID' field is empty. Under 'App Registration', there are two sections: 'One-Time Password Authenticator' and 'Salesforce'. The 'Mobile Push Registrations' section has a 'View' button. Other settings include 'Accessibility Mode (Classic Only)', 'Debug Mode', 'High-Contrast Palette on Charts', 'Load Lightning Pages While Scrolling' (which is checked), and 'Salesforce CRM Content User' (which is checked). The top right of the page has a 'User Profile' link and a help icon.

Activity 10: Permission Sets

10.1. Creating OWD Setting

1. Go to setup >> type “sharing settings ” in quick search >> Click edit.
2. Scroll down, change the default internal access to “ public read-only” for rice mill and supplier object.
3. Click save.
4. Extra information, By these every profile has their own access, according to their profile.
5. But in our case we created roles and given the roles in such a way that the owner can see employer and worker records , and the employer can see the worker records.



The screenshot shows the Salesforce Sharing Settings page. The left sidebar includes links for Setup Home, Service Setup Assistant, Commerce Setup Assistant, Hyperforce Assistant, Release Updates, Lightning Experience Transition Assistant, Salesforce Mobile App, Lightning Usage, Optimizer, Sales Cloud Everywhere, Administration (with sub-links for Users, Data, Email), and Platform Tools (with sub-links for Subscription Management, Apps, and Feature Settings). The main content area is titled "Sharing Settings" and lists various objects with their sharing permissions. The objects listed include Shipment, Shipping Carrier, Shipping Carrier Method, Shipping Configuration Set, Streaming Channel, Tableau Host Mapping, User Provisioning Request, Walllist, Web Cart Document, Work Order, Work Plan, Work Plan Template, Work Step Template, Work Type, Work Type Group, consumer, Enhancement Request, rice details, rice mill, and supplier. The permissions columns show values like Private, Public Read Only, Public Read/Write, and Controlled by Parent, along with checkmarks indicating specific settings. At the bottom of the page, there is an "Other Settings" section with a "Manager Groups" button.

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

Activity 11: Report

11.1. Create Report

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

Report: rice mills with consumers
range of amount per day

Total Records	Total rice price/kg	Total Amount Paid			
2	110	4,900.00			
<input type="checkbox"/> Rice taken by shops ▼ Rice type ▼ rice price/kg ▼ Mode of payment ▼ Amount Paid ▼ consumer: consumer Name ↑					
50 (1)	basmati	50	UPI	2,500.00	consumers-001
Subtotal		50		2,500.00	
40 (1)	normal rice	60	Cash	2,400.00	consumers-002
Subtotal		60		2,400.00	
Total (2)		110		4,900.00	

Row Counts Detail Rows Subtotals Grand Total

11.2. Sharing Report to Owner

1. Click edit drop down and select subscribe option
2. After selecting the run report as a “another person” select your personal account or whom you want to send that mail to. Click save.

11.3. Create A Report Folder

1. Click on the app launcher and search for reports.
2. Double click on the report, “reports tab” will be auto populated in the navigation bar.
3. Click on the report tab, click on the new folder.
4. Give the Folder label as “estimated rice per day”, Folder unique name will be auto populated.
5. Click save.

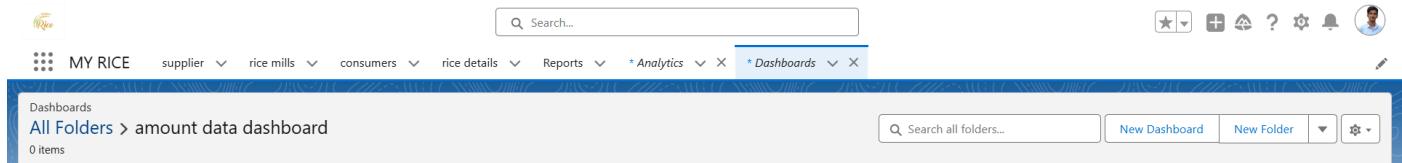
1. Navigate to app launcher and click reports on that.
2. Click all reports.
3. Select the range of amount per day drop down in that click move.
4. Select estimated rice per day folder and select folder.

REPORTS	Report Name	Description	Folder	Created By	Created On	Subscribed
Recent	Program Overview by User	Analyze how different users are progressing towards a program and its outcome.	Enablement Dashboard Reports Summer '24	Automated Process	7/11/2024, 12:18 pm	
Created by Me	range of amount per day	What flows run, what's the status of each interview, and how long do users take to complete the screens?	estimated rice per day	Sharad Jha	28/12/2024, 9:21 pm	<input checked="" type="checkbox"/>
Private Reports	Sample Flow Report: Screen Flows	Which flows run, what's the status of each interview, and how long do users take to complete the screens?	Public Reports	Automated Process	7/11/2024, 12:18 pm	
Public Reports	Sample Report: Orchestration Run Logs	What orchestration run logs were created and what happened in their associated orchestration runs?	Public Reports	Automated Process	7/11/2024, 12:18 pm	
All Reports	Sample Report: Orchestration Runs	What orchestration runs have been created and what's the current status of each run?	Public Reports	Automated Process	7/11/2024, 12:18 pm	
FOLDERS	Sample Report: Orchestration Stage Runs	What orchestration stage runs have been created and what's the current status of each run?	Public Reports	Automated Process	7/11/2024, 12:18 pm	
All Folders	Sample Report: Orchestration Step Runs	What orchestration step runs have been created and what's the current status of each run?	Public Reports	Automated Process	7/11/2024, 12:18 pm	
Created by Me	Sample Report: Orchestration Work Items	What orchestration work items were created and what's the current status of each work item?	Public Reports	Automated Process	7/11/2024, 12:18 pm	
Shared with Me						
FAVORITES						
All Favorites						

Activity 12: Dashboards

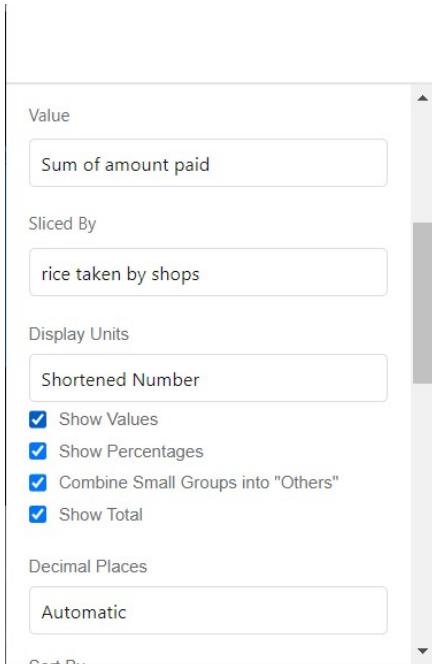
12.1. Create Dashboard Folder

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

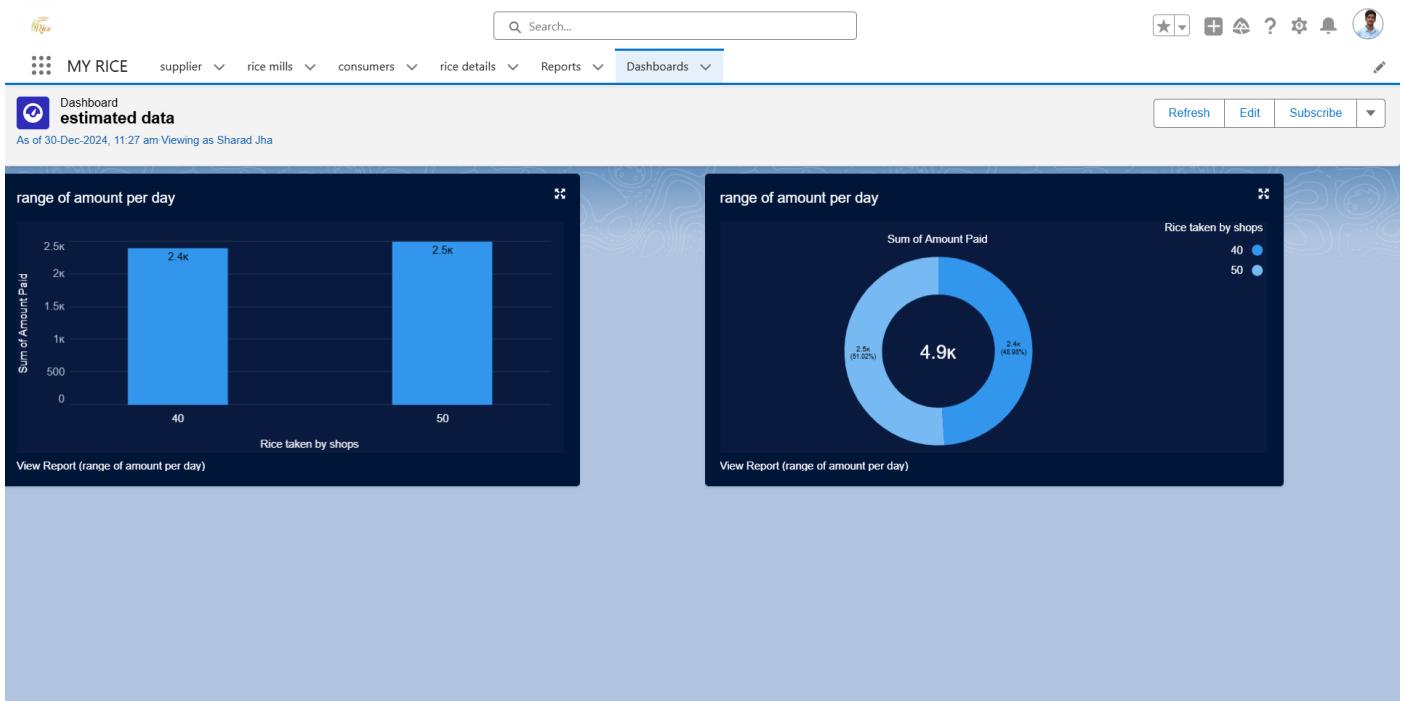


12.2. Create Dashboard

1. Go to the app >> click on the Dashboards tabs.
2. Give a Name and select the folder that was created, and click on create.
3. Select add component.
4. Select a Report and click on select.
 - 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.
5. Add the component
6. Again select add component with above same steps
 - display as >> donut chart
 - sort by >> sum of amount
 - title >> range of amount per day
 - component theme >> dark



7. Click add.
8. Click save and done.



Activity 13: APEX

13.1. Creating an Apex Class (ConsumerRecord)

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

Code Snippet:

```
public 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});

        }
    }
}
```

13.2. 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 in Google Chrome. The URL is vituniversity-1c-dev-ed.develop.my.salesforce.com/_ui/common/apex/debug/ApexCSIPage. The tab bar shows 'ConsumerRecord.apex' and 'consumerTrigger.apex'. The code editor displays the ConsumerRecord class with its static void sendEmailNotification method. The method iterates over a list of consumer__c records, creates a Messaging.SingleEmailMessage for each, sets the recipient email to c.email__c, and sets the subject to 'Welcome to our company'. The plain text body of the email contains a welcome message and a product recommendation. Finally, it sends the email using Messaging.sendEmail.

```
public 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
            'We are proud to associate with valuable customers like you and we look forward to collaborating with you by provi
            +'So why taking a step back, take a leap of faith and shop with us more, while we provide with the valuable produc
            'Thankyou for buying +' +'Here are some of the products that are brought by the customers who similarly bought
            Messaging.sendEmail(new List<Messaging.SingleEmailMessage>{email});
        }
    }
}
```

The screenshot shows the Salesforce Developer Console in Google Chrome. The URL is vituniversity-1c-dev-ed.develop.my.salesforce.com/_ui/common/apex/debug/ApexCSIPage. The tab bar shows 'ConsumerRecord.apex' and 'consumerTrigger.apex'. The code editor displays the trigger consumerTrigger on consumer__c (After insert) block. It checks if the trigger is after and insert, and if so, calls the sendEmailNotification method on the ConsumerRecord class with the trigger.new parameter.

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