ACRM APPLICATION FOR WHOLESALE RICE MILL

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1.Project Overview:

The Rice Mill CRM covering isa comp solution for managingand Make simplerrice production and sales tracking. It enables daily reporting on rice quantity, type, and sales, which is then pass to the owners. This CRM purchasecustomer kinship Controlto enhance customerbattle, streamline actions, and improve Performance in the rice mill factory. The project aims to deliver a user-friendly coating that meets the specific functional needs of a rice mill.

2.Objectives :

Business Goals:

The Rice Mill CRM App will automate daily production and revenue reporting, providing owners with clear insights into functional performance. It will also implement customercalculus to place buying trends and popular rice assortment, enabling targeted marketing and better customer agreement. in addition, the coating will streamline resource allotment by forecasting demand and canvassing sales patterns. This will help the business optimize stock list control and Quickly allocate resources. **Specific Outcomes**: The Rice Mill CRM App will automate daily production and revenue reporting, track customer buying trends, and optimizeresource allotment based on demand forecasts and sales patterns. This will provide clear insights, enhancing functional Performance.

3.Salesforce Key Features and Concepts Utilized:

1.Reportingand Dashboards:

- **Daily Salesand Production Reports:**The system generates detailed reports showing the amount of rice produced and sold each day

- **Revenue Reports**: Providesinsights into daily revenue brought forth.

- **Customer Data Review**: Tracks popular rice types and most frequentbuyers.

- **Resource dispersion**: Helps owners understand data for betterresource allotment and future planning.

2.Rollup Summary Field:

- **Purpose**: sum up data from a child objectto a parent object that shares a master-detail kinship.

Functions: Can use COUNT, SUM, Minimum, and Maximum functions.

Cross-Object Formula Field:

- **Purpose**: mention fields from another objectin Salesforce.
- **Function**: Calculates the total amountpayable by procreate the number of rice units taken by the price per kg.

Proof Rules:

- **Purpose**: Ensures data unity by confirminguser inputs.
- **Is BlankFormula**: Verifies if a fieldis blank and displays an error messageif the rule returns a value of "True."

Permission Sets:

- **Wide Defaults(OWD)**: Defines the baseline levelof access for the most restricted user.

- **Roles and Access**:

- **CompanyOwner**: Can view records of employers and workers.

- **Employer**: Can view recordsof workers.

4. Detailed Stepsto Solution Design:

action 1: <u>Creating Programmer Accountand Account Initiation Steps</u>

- On the sign up form,enter the following details.

- Click on sign me up after filling these.

- First name & Last name

- Email
- Role : Developer

- Company : CollegeName

- Country : India

- Postal Code : pin code

- Username : should be a combination of your name and company.

- This need not be an actual email id, you can give anythingin the format.
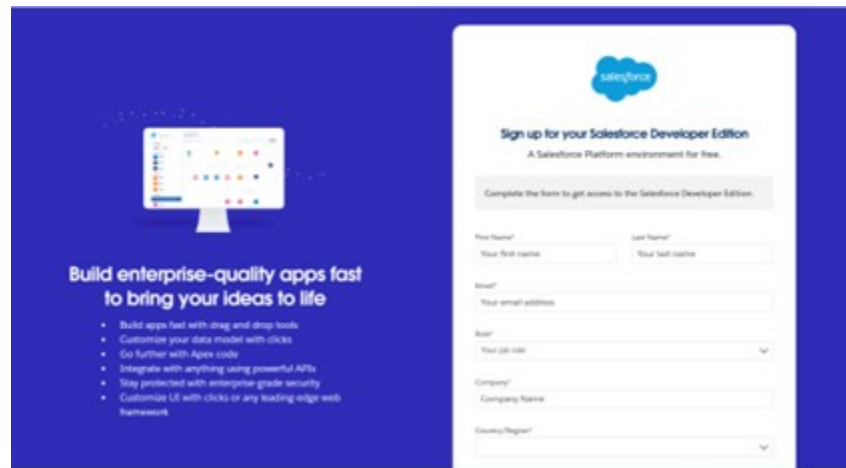
ACTIVATION :

Go to the inbox of the email that you used whilesigning up. Clickon the verify account toactivate your account. The email may take 5-10mins
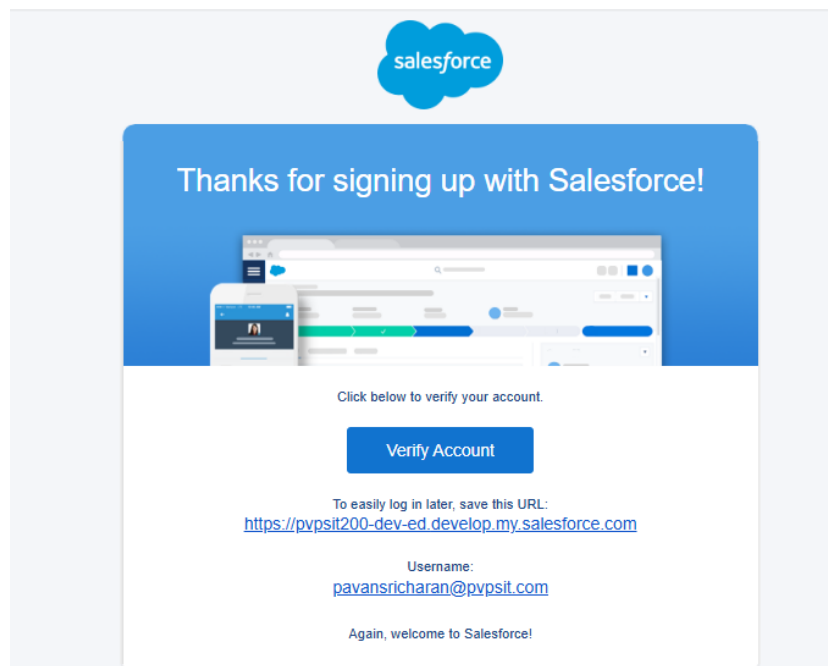
Activity 2: Objects

Salesforce objectsare of two types:

1. **Standard Objects**:Standard objects are the kind of objectsthat are providedby

salesforce.com such as users,contracts, reports, dashboards, etc.

2. **Custom Objects**: Custom objects are those objects that are created by users. They supply information that is unique and essentialto their organization, are the heart of any application, and provide a structure for data.

Steps:

Create Supplier Object

- From the setup page >> Click on Object Manager>> Click on Create>>Click on Custom Object.
- Enter the label name>>supplier
- Plural label name>>supplier

- Enter Record Name Label and Format

- Record Name >> supplierName

- Data Type>>Text

- Click on Allow reportsand Track Field History and allow search

- Allow search >> Save.

Create Rice mill Object

- From the setup page >> Click on ObjectManager>>Click on Create >> Clickon Custom Object.

- Enter the label name>>rice mill

- Plural label name>> rice mills

- Enter Record Name Label and Format

- Record Name >>

- Data Type >> Auto Number

- Display Format >> rice-{000}

- Starting number >> 1

- Click on Allow reports and Track Field History, Allow Search and Save
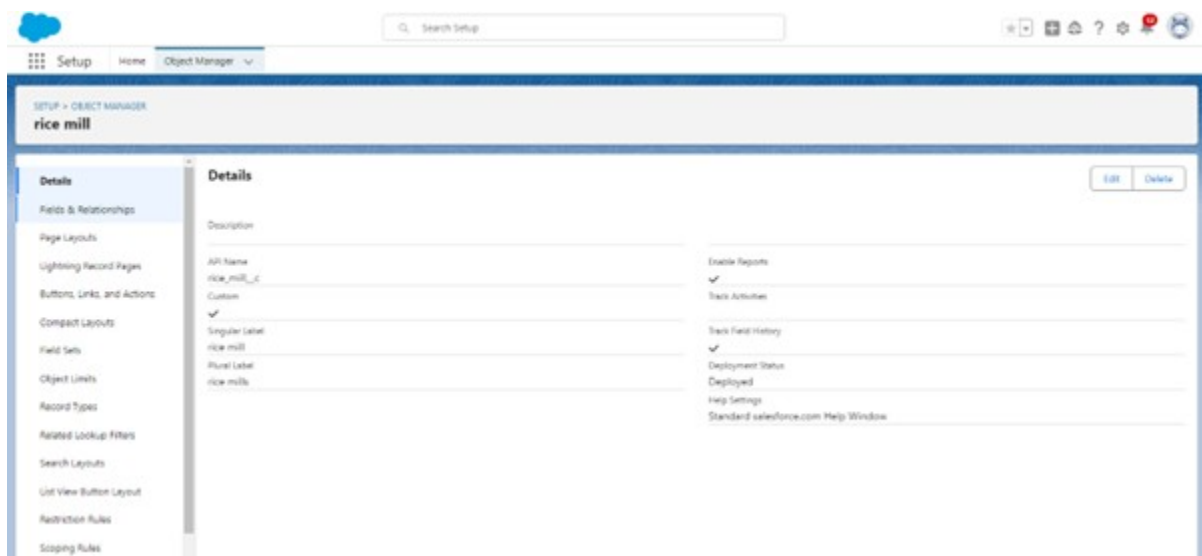
Create consumer Objects
- Use these display format for theconsumer
- label name >> consumer
- Plural label name >>consumers
- Display Format >> consumers-{000}
- Starting number >> 1

**Create rice details Objects**

- Use these display format for the rice details

- label name >> rice details

- Plural label name >> rice details

- Display Format >> rice-{000}
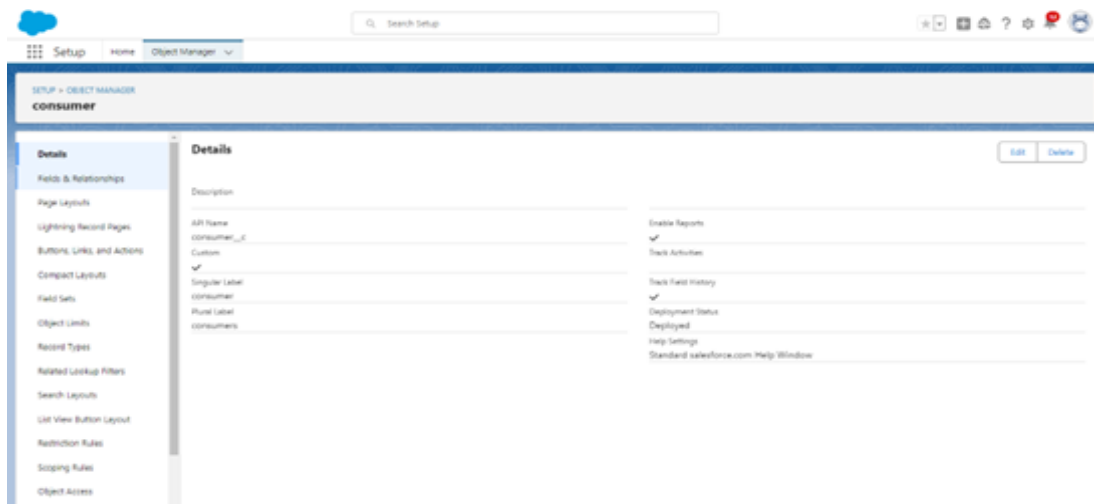
- Starting Number >>1

Create rice details Objects

- Use these display format for the rice details
- label name >> rice details
- Plural label name >> rice details
- Display Format >> rice-{000}
- Starting Number >>1
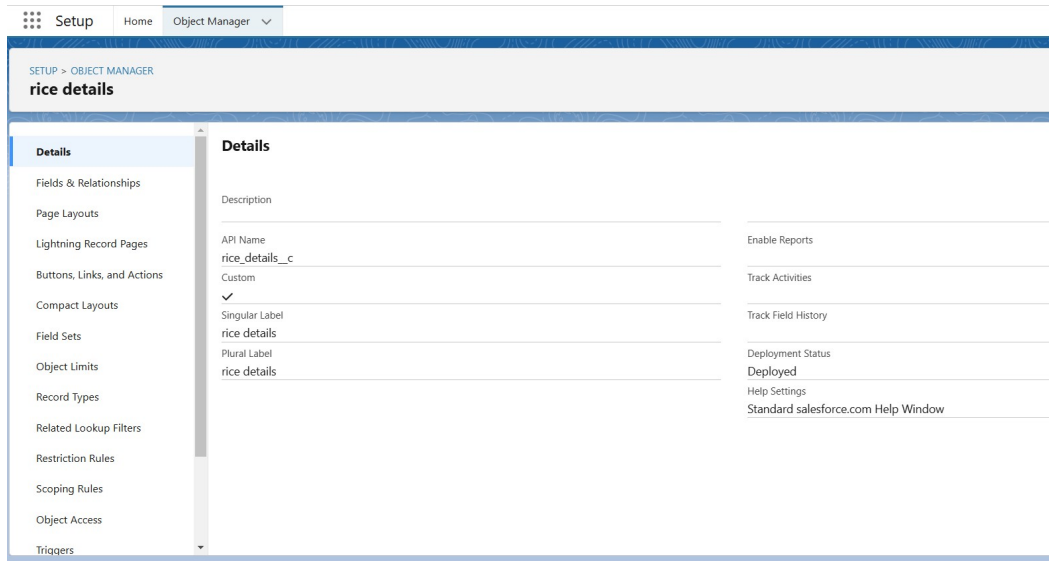
Activity 3: Tabs

Creating a CustomTab

- To create a Tab:(supplier)

- Go to setup page >> type Tabs in Quick Find bar >>click on tabs >> New (under custom object tab)

- Select Object(supplier) >>Select the tab style >>Next (Add to profiles page) keep it as default

  >> Next (Add to CustomApp) uncheck the include tab .

- Make sure that the Append tab to users'existing personal customizations is checked.

- Click save.
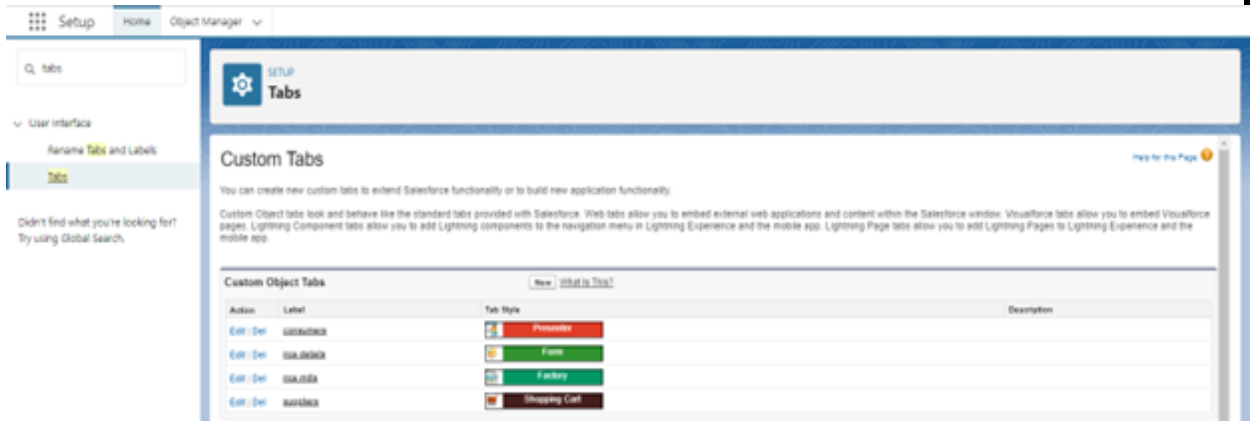
Activity 4: The Lightning App

Create a Lightning App

- Goto setup page >> search"app manager" in quick find >> select"app manager" >>click on New lightning App
- Fill the app name in app details as MY RICE >> Next >> (App option page) keep it asdefault >> Next >> (Utility Items) keep it as default >> Next.
- Upload a photothat is related to your app.

- To add Navigation Item:

- Select the items (supplier, rice mill, consumer, Rice details) from the searchbar andmove it using the arrow button >> Next.
- To Add User Profiles:

- Search profiles (System administrator) in the search bar >>click on the arrow button >>save & finish.
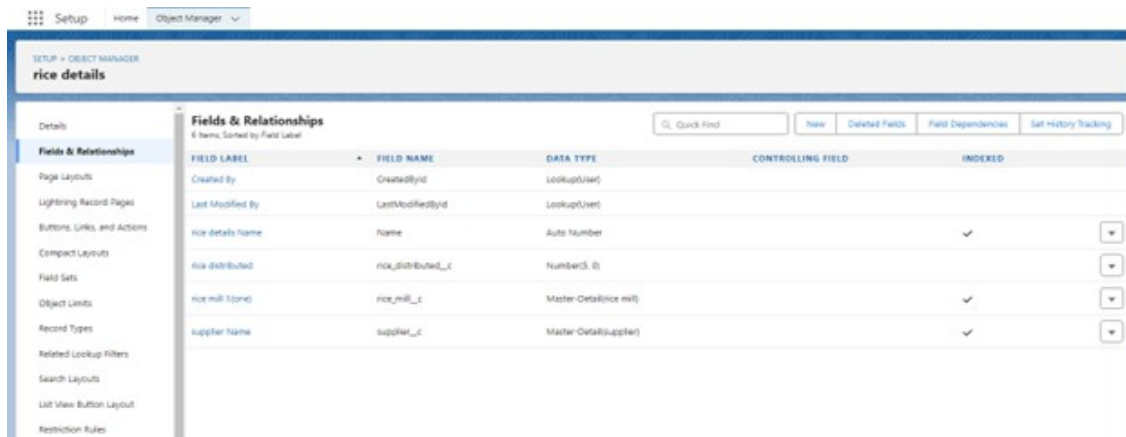
Activity 5: Fields

Creating the number field in rice details object

- Goto the setup page >> click on object manager >> From drop down click edit for ricedetails object
- Click on fields & relationship >> click on New.

- Select Data type as "Number" and click Next.

- Given the Field Label as "rice distributed " and lengthas " 5 ".

- Field Name will beauto populated, and click on Next- Next >> Save.

CreatingJunction Object

Creating junction object as rice details with supplier & rice mill

- Goto the setup page >> click on object manager >> From drop down click edit for ricedetails   object
- Click on fields & relationship - click on New.
- Select "Master-Detail relationship" as data type and click Next.
- Select the relatedobject "supplier" and click next.
- Give Field Label as "supplier Name" and click Next
- Next >> Next >> Save & New.
- Follow the same steps from 1 to 3.

- Select the related object "rice mill" and click Next.
- Give Field Label as "rice mill 1(one)" and click Next.
- Next >> Next >> Save.

<u>Creating a Master-Detail Relationship</u>

- Goto the setup page >>click on object manager >>From drop down click edit forconsumer object.
- Click on fields & relationship >> click on New.

- Select "Master-Detail relationship" as data type and click Next.

- Select the relatedobject "rice mill".

- Give Field Label as "rice mill name" and click Next.

- Next >> Next >> Save

Creating theRoll-up Summary

- Goto setup >>click on Object Manager >> type object name (supplier) in searchbar >>click on the object.
- Now click on "Fields & Relationships" >> New
- Select the data type as "Rollup summary", and click Next.
- Give the Field label as "sum of rice distributed", FieldName will be Auto generated, andclick Next.
- Select the summarized object as "rice details".
- Select the Rollup type as "sum".
- Select the fieldto aggregate as "rice distributed", and click Next >>Next >>Save

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

- Give the Field labelas "rice distributed to shops", Field Name will be Auto generated,and click Next.
- Select the summarized object as "rice details".

- Select the Rollup type as "sum".

- Select the fieldto aggregate as "rice distributed", and click Next >> Next >> Save.

- Note: create the field as " rice takenby shops in kgs" using number datatype inconsumer object
- Follow the same steps for the rice mill Object from 1 to 3

- Give the Field label as "rice taken", Field Name will be Auto generated, and click Next.

- Select the summarized object as "consumer".

- Select the Rollup type as "sum".

- Select the fieldto aggregate as "rice taken in shops", and click Next >> Next >> Save.

Creating the validation rule

- Goto the setup page >>click on object manager>> From drop down click edit forconsumer object.
- Click on the validation rule >> click New.

- Enter the Rule name as "Phonenumberoremailblankrule ".

- Enter the description as "phone number and email number should not be blank".

- Enter the formula as "OR(ISBLANK(phone_number_c) , ISBLANK(email_ c))"and check the syntax.
- Under the error message writeas "please fill in your phone number."

- Select error location "top of page".

- Save the validation rule.

PAGE LAYOUTS

- Go to Setup >>Click on Object Manager >>Search for the object (consumer) >>Fromdrop down select the object and click on it.
- Click on Page layout >>Click on New.

- Select the existing page layout, and give the pagelayout name as "consumer layout", andclick 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 sectionthat mentioned , they are
- First name, last name , consumer name , phone number, email, rice mill name.
- Follow the same process for another two sections as shown above , they are
- One section is " rice details " , drag the fields that are
- Rice taken by shop,rice type.
- Another section is "Receipt details ", and drag the fields that are
- Mode of payment, Amount paid.

- Then, Click save.
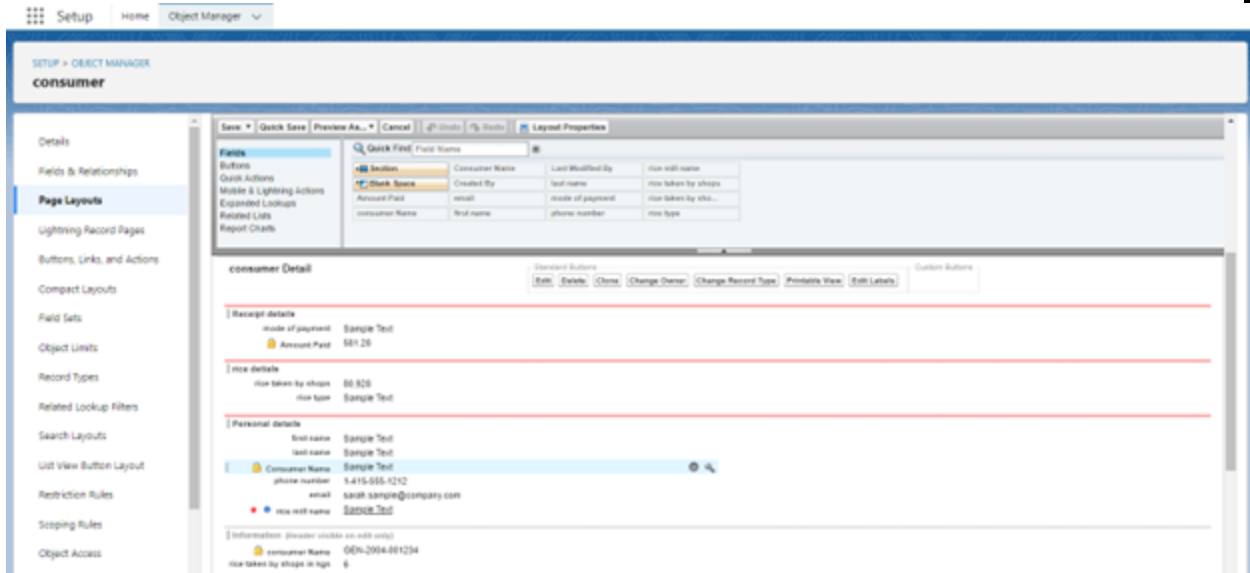
PROFILES

A profile is a group/collection of settings and permissions that define what a user can do insalesforce. Profile controls"Object permissions, Field permissions, User permissions, Tab settings, App settings, Apex class access, Visualforce page access, Page layouts, Record Types, Login hours & Login IP ranges. You can define profiles by the user's job function. For example System Administrator, Developer, Sales Representative.

Owner Profile:

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

Employer Profile

- Goto setup >>type profiles in quick find box >>click on profiles >>clone the desiredprofile (Standard Platform User)>> enter profile name (employer) >> Save.
- While still on the profile page, then click Edit.
- Select the Custom App settings as default for the rice mill.

Scroll down to Custom ObjectPermissions and Give access permissions for consumer, ricedetails , rice mill and suppliers objectsas mentioned in the below diagram.

Worker Profile

- Go to setup >>type profiles in quick find box >> click on profiles >>clone the desiredprofile (Standard Platform User)>> enter profile name (worker) >> Save.

- While still on the profile page, then click Edit.

- Select the Custom App settings as default for the rice mill.

- Scroll down to Custom ObjectPermissions and Give access permissions for consumer, ricedetails , ricemill and suppliers objects as mentioned in the below.

Role & Role

- Go to quick find >> Searchfor Roles >>click on set up roles.

- Go to quick find >> Searchfor 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.

Creating employerroles

- Go to quick find >>Search for Roles >>click on set up roles.
- Click plus on CEO role, and clickadd role underowner.

- Give Label as "employer" and Role name gets auto populated. Then click on Save.

- Repeat the same steps, for another role.

- Click plus on CEO role, and clickplus on owner, and clickadd role under employer.

- Give Label as "worker"and Role name gets auto populated. Then click on Save.
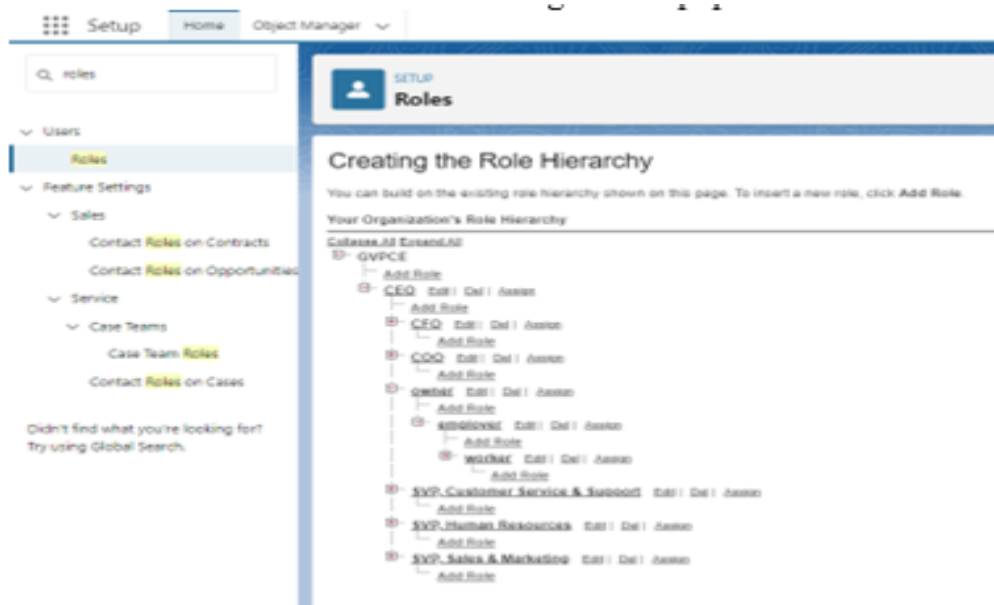
Report

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 on startreport.

- Their outlinepane is opened already, select the fields that are mentioned belowin thecolumn section.

- 1.consumer name

- 2.rice type

- 3.rice price/kg

- 4.mode of payments

- 5.amount paid

- Remove the unnecessary fields.

- Select the fields that are mentioned below in the GROUP ROWS section.

- Rice taken by shops

- 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
12	3,053	4,35,282.00

Rice taken by shops ↑	consumer: consumer Name	Rice type	rice price/kg	Mode of payment	Amount Paid
25 (1)	consumers-001	1.basmati	900	Debit card	22,500.00
Subtotal			900		22,500.00
36 (1)	consumers-006	2.normal rice	490	Cash	17,640.00
Subtotal			490		17,640.00
39 (1)	consumers-012	2.normal rice	660	Credit card	25,740.00
Subtotal			660		25,740.00
46 (1)	consumers-003	1.basmati	250	Cash	11,500.00
Subtotal			250		11,500.00
59 (1)	consumers-005	2.normal rice	250	Net banking	14,750.00
Subtotal			250		14,750.00
62 (1)	consumers-007	1.basmati	753	Debit card	46,686.00
Subtotal			753		46,686.00
66 (1)	consumers-004	1.basmati	660	Credit card	43,560.00
Subtotal			660		43,560.00
72 (1)	consumers-011	2.normal rice	753	Debit card	54,216.00
Subtotal			753		54,216.00
76 (1)	consumers-008	1.basmati	490	Credit card	37,240.00

Total Records	Total rice price/kg	Total Amount Paid
12	3,053	4,35,282.00

5.Testing and Validation:

Creating an Apex Class(ConsumerRecord):

- Login to the Salesforce account and navigateto the gear account in the top right corner.

- Then we can see the Developer console. Click on the developer console and you willnavigateto 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 nameof 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 discountsor even
product offers too.' + '\n'
                        +'So why takinga step back, take a leap of faith and shop with us
more, while we provide with the valuableproducts and offers'+'\n'+'\n'+'\n'+
                        'Thankyou for buying '+ '' +'Here are some of the productsthat are
broughtby 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 trailheadaccount, 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.
Syntax For creating trigger :

The syntax for creating trigger is :

Trigger [triggername] on [objectname](Before/After event){

//Trigger Logic

}

Code Snippet :

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

6.KeyScenarios Addressed by Salesforce in the Implementation Project.

- **Sales ProcessAutomation**: Salesforce can automate sales workflows, reducing manual tasks.
- **Customer Support**: Salesforce can provide tools to managecustomer service casesand track resolutions.
- **Data Analytics and Reporting**: Salesforce can generate detailed reports for business insights.

DASHBOARDS:

Resource Management: Salesforce can help allocateresource
efficiently based on business needs.

7.Conclusion:

In this project, Salesforce streamlined operational processes by enabling automated data calculations, real-time reporting, and secure access control. Custom widgets provided visual insights into rice sales, production, and revenue, enhancing decision-making.Validation rules ensured data accuracy, while role-based access protected sensitive information. Rollup summaries and formulas reduced manual effort in calculations. Overall, Salesforce optimized business operations, contributing to improved productivity and planning