

# A CRM APPLICATION FOR WHOLESALE RICE MILL

## Overview

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

## Features and Functionality

### Reporting and Dashboards

- Daily Sales and Production Reports: Generates detailed reports on how much rice is produced & sold each day.
- Revenue Reports: Provides insights into daily revenue generated.
- Customer Analytics: Tracks popular rice types and most frequent buyers.
- Resource Allocation: Helps owners understand data for better resource allocation and future planning.

### Rollup Summary Field

- Purpose: Summarizes data from a child object to a parent object that shares a master-detail relationship.
- Functions: Can use COUNT, SUM, MIN, and MAX functions.

### Cross-Object Formula Field

- Purpose: References fields from another object in Salesforce.
- Function: Calculates the total amount payable by multiplying the number of rice units taken by the price per kg.

### Validation Rules

- Purpose: Ensures data integrity by validating user inputs.
- Is Blank Formula: Verifies if a field is blank and displays an error message if the rule returns a value of "True".

### Permission Sets

- Organization Wide Defaults (OWD): Defines the baseline level of access for the most restricted user.

- Roles and Access:
  - Owner: Can view records of employers and workers.
  - Employer: Can view records of workers.

## Milestone 1 - Salesforce

### Introduction

Are you new to Salesforce? Not sure exactly what it is, or how to use it? Don't know where you should start on your learning journey? If you've answered yes to any of these questions, then you're in the right place. This module is for you.

Welcome to Salesforce! Salesforce is game-changing technology, with a host of productivity-boosting features, that will help you sell smarter and faster. As you work toward your badge for this module, we'll take you through these features and answer the question, "What is Salesforce, anyway?".

### What Is Salesforce?

Salesforce is your customer success platform, designed to help you sell, service, market, analyze, and connect with your customers. Salesforce has everything you need to run your business from anywhere. Using standard products and features, you can manage relationships with prospects and customers, collaborate and engage with employees and partners, and store your data securely in the cloud.

### Activity 1: Creating a Developer Account

To start using Salesforce, the first step is to create a developer org. Follow the steps below to create your Salesforce Developer Account:

#### Go to the Signup Page

- Navigate to the Salesforce Developer Signup page: [Salesforce Developer Signup](#)

#### Fill Out the Signup Form

- First Name :Maram
- Last Name : Gayathri
- Email : [gaya3maram66@gmail.com](mailto:gaya3maram66@gmail.com)
- Role : Developer
- Company : student
- Country : India
- state/province:Andhra Pradesh
- Postal Code : 521185
- Username : [maramgayathri@student.com](mailto:maramgayathri@student.com)

#### Submit the Form

- After filling in the details, click on the "Sign me up" button.

You have successfully created a Salesforce Developer Account. You will receive a confirmation email with further instructions to complete the setup

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**Sign up for your Salesforce Developer Edition**  
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Complete the form to get access to the Salesforce Developer Edition.

First Name\* Maram      Last Name\* Gayathri

Email\* gaya3maram66@gmail.com

Role\* Developer

Company\* student

Country/Region\* India

Activate Windows  
Go to Settings to activate Windows.

Country/Region\* India

State/Province\* Andhra Pradesh

Postal Code\* 521185

Username\* maramgayathri@student.com

Your username must be in the form of an email address (it does not have to be real). It must be unique and cannot be associated with another Salesforce login credential. [Read more about username recommendations.](#)

I agree to the [Main Services Agreement – Developer Services](#) and [Salesforce Program Agreement](#).

Yes, I would like to receive marketing communications regarding Salesforce products, services, and events. I can unsubscribe at any time.

By registering, you confirm that you agree to the processing of your personal data by Salesforce as described in the [Privacy Statement](#).

**Sign me Up**

Already have a Salesforce Developer Environment? [Activate Windows](#)  
Go to Settings to activate Windows.

[Log In](#)

## Activity 2: Account Activation

After creating your Salesforce Developer Account, you need to activate it. Follow these steps to activate your account:

### Check Your Email

- Go to the inbox of the email address you used while signing up. The verification email may take 5-10 minutes to arrive.

### Verify Your Account

- Open the email from Salesforce and click on the "Verify Account" link.

- On the verification page, create a password for your account.
  - Answer a security question for account recovery.
  - Click on "Change Password"

A new verification method was added to your Salesforce account

Inbox x

 noreply@salesforce.com <noreply@salesforce.com> Wed 1 Jan, 11:27 (1 day ago)    

to me ▾

The following identity verification method was recently added to your [maramgayathri@student.com](#) account:

Use verification codes from texts to +91 7659844896

If you didn't add this verification method, contact your Salesforce admin immediately to prevent unauthorized access to your account.

# Milestone 2 - Object

## What Is an Object?

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

## Types of Salesforce Objects

Salesforce objects are of two types:

- Standard Objects: Standard objects are provided by salesforce.com such as users, contracts, reports, dashboards, etc.
  - Custom Objects: Custom objects are created by users. They supply information that is unique and essential to their organization. They are the heart of any application and provide a structure for sharing data.

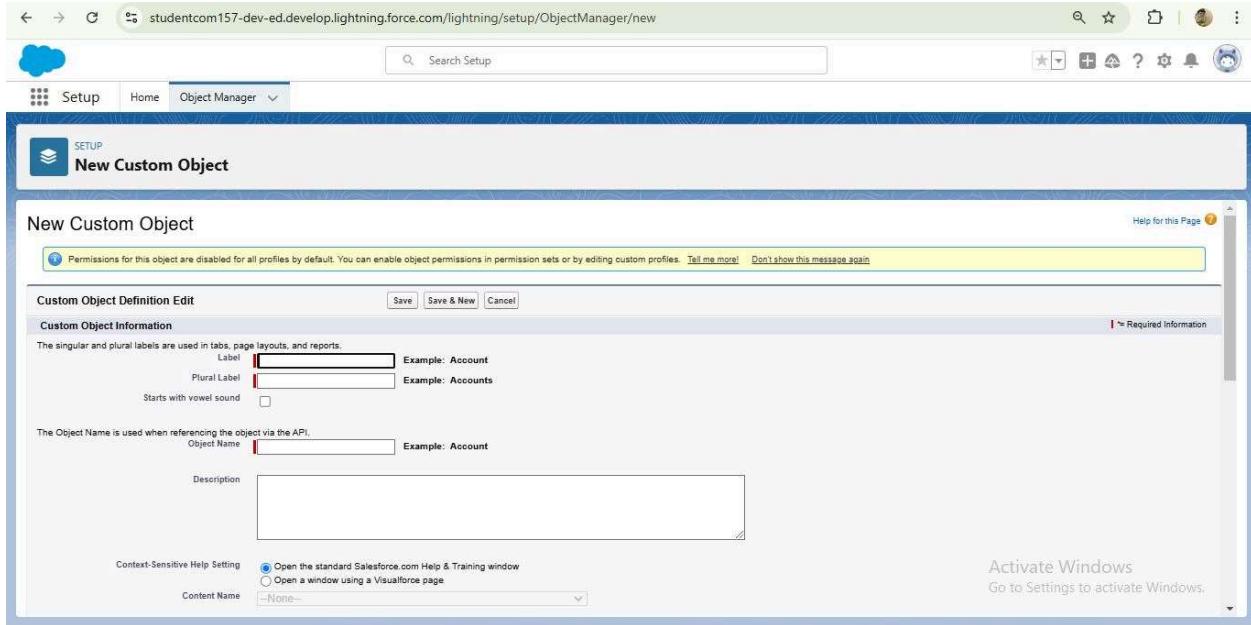
### To Navigate to Setup Page:

- Click on the gear icon
  - Click on Setup

## To Create an Object:

- From the setup page, click on Object Manager
  - Click on Create
  - Click on Custom Object
  - On the Custom Object defining page:

- Enter the Label Name and Plural Label Name
- Click on Allow Reports
- Click on Allow Search
- Click on Save



## Activity 1: 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 image contains two screenshots of the Salesforce Setup interface, both titled 'supplier' under 'SETUP > OBJECT MANAGER'.

**Screenshot 1: Details Screen**

This screen shows the 'Details' tab selected. It includes fields for API Name (supplier\_\_c), Singular Label (supplier), Plural Label (supplier), and various configuration options like Enable Reports, Track Activities, and Deployment Status (Deployed). A sidebar on the left lists other customization 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, and Restriction Rules.

**Screenshot 2: Edit Screen**

This screen shows the 'Edit Custom Object' dialog for the 'supplier' object. It displays the 'Custom Object Information' section with fields for Label (supplier), Plural Label (supplier), and Object Name (supplier). It also includes a 'Description' text area, 'Context-Sensitive Help Setting' (radio buttons for standard help or Visualforce page), and a 'Content Name' dropdown. A note at the top states: 'The singular and plural labels are used in tabs, page layouts, and reports. Be careful when changing the name or label as it may affect existing integrations and merge templates.'

### Activity 2: Create Rice Mill Object

To create a Rice Mill 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 Mills.
- Enter the Record Name Label and Format:
- Record Name: Leave it 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.

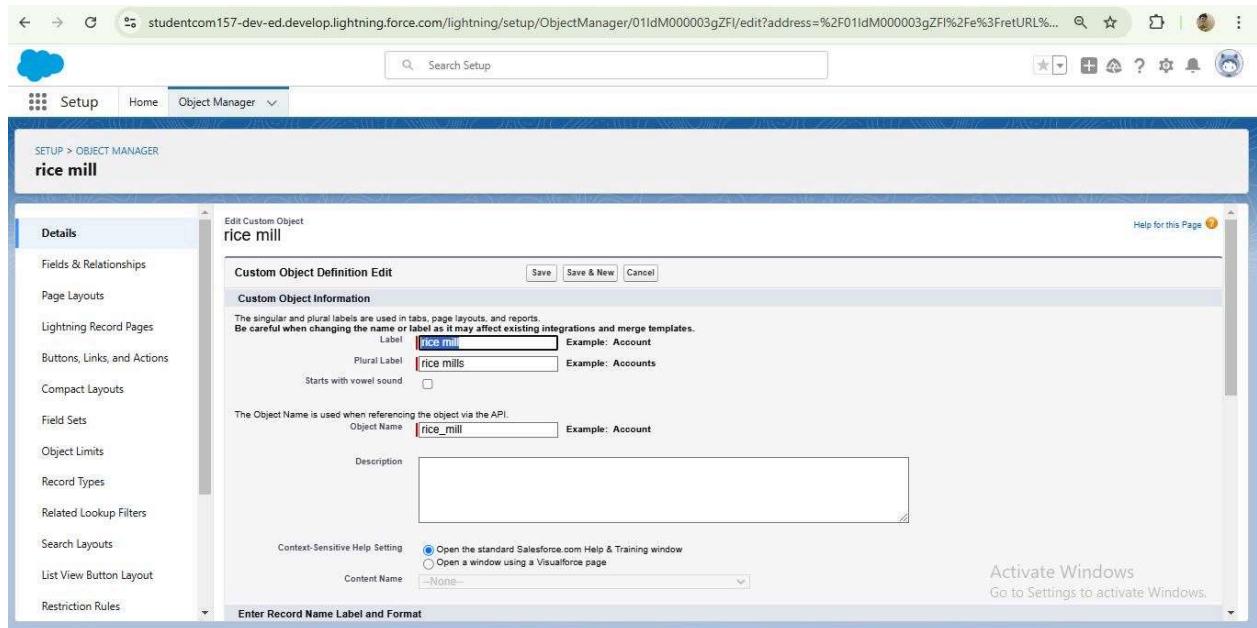
### **Save the Custom Object:**

- Click on Save

The screenshot shows the Salesforce Object Manager interface. The URL in the browser is [studentcom157-dev-ed.lightning.force.com/lightning/setup/ObjectManager/01lM000003gZFI/Details/view](https://studentcom157-dev-ed.lightning.force.com/lightning/setup/ObjectManager/01lM000003gZFI/Details/view). The page title is "rice mill". The left sidebar lists various configuration tabs: Details, Fields & Relationships, Page Layouts, Lightning Record Pages, Buttons, Links, and Actions, Compact Layouts, Field Sets, Object Limits, Record Types, Related Lookup Filters, Search Layouts, List View Button Layout, and Restriction Rules. The main content area is titled "Details" and contains the following information:

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

At the bottom right, there is a message: "Activate Windows Go to Settings to activate Windows."



### **Activity 3: Create Consumer Object**

To create a Consumer object in Salesforce, follow the same steps as mentioned in Activity 2 for creating the Rice Mill object. Use the following details for the Consumer object:

#### **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: Leave it 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.

## Save the Custom Object:

- Click on Save.

The screenshot shows the Salesforce Setup interface under the Object Manager. A custom object named "consumer" is selected. The left sidebar lists various configuration tabs like Details, Fields & Relationships, Page Layouts, etc. The main "Details" tab is open, showing fields such as API Name (consumer\_c), Label (consumer), Plural Label (consumers), and Description (consumer). On the right, there are checkboxes for Enable Reports, Track Activities, Track Field History, Deployment Status (Deployed), and Help Settings. At the bottom right, there are "Edit" and "Delete" buttons.

- 

This screenshot shows the "Edit Custom Object Definition" page for the "consumer" object. It's a more detailed view than the previous one. It includes sections for "Custom Object Information" (Label: consumer, Plural Label: consumers), "Object Name" (Object Name: consumer, Example: Account), and "Description". There are also settings for "Context-Sensitive Help Setting" (radio buttons for standard help or Visualforce page) and "Content Name" (dropdown menu with "None"). The right side of the screen displays the same "Activate Windows" message as the previous screenshot.

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## Activity 4: Create Rice Details Object

To create a Rice Details 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:

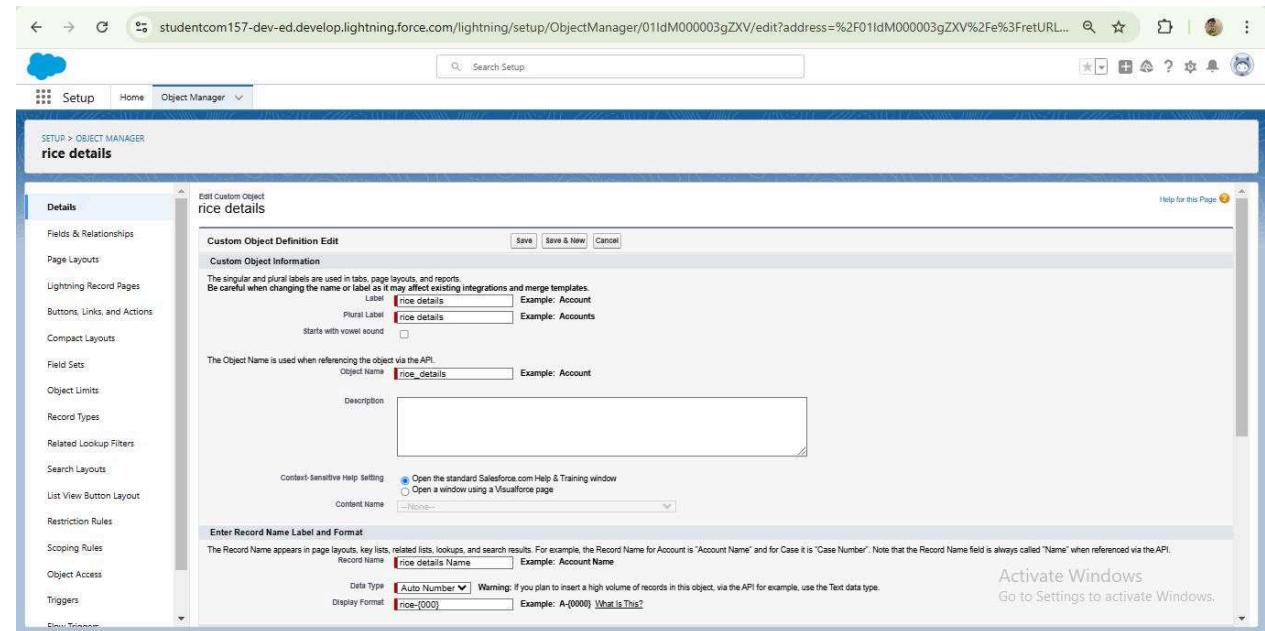
- Enter the Label Name: Rice Details.
- Enter the Plural Label Name: Rice Details.
- Enter the Record Name Label and Format:
- Record Name: Leave it blank.
- Data Type: Auto Number
- Display Format: rice-{000}
- Starting Number: 1

### Set Additional Options:

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

### Save the Custom Object:

- Click on Save.



## Milestone 3 - Tabs

### What is a Tab?

A tab is a user interface element used to build records for objects and view the records within those objects.

**Custom Tabs:** Custom object tabs are the user interface for custom applications that

you build in salesforce.com. They look and behave like standard Salesforce tabs such as accounts, contacts, and opportunities.

### **Activity 1: 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 on Save.

The screenshot shows the Salesforce Setup interface with the 'Custom Tabs' page open. The URL is `studentcom157-dev-ed.develop.lightning.force.com/lightning/setup/CustomTabs/page?address=%2F01rdM00000QT8Cw%3Fsetupid%3DCustomTabs`. The page title is 'SETUP Tabs'. On the left, there's a sidebar with 'User Interface' expanded, showing 'Rename Tabs and Labels' and 'Tabs' selected. A search bar at the top says 'Search Setup' with the query 'tabs'. The main content area shows a 'Custom Object Tab' for 'supplier'. It has fields for 'Tab Label' (supplier), 'Object' (supplier), 'Description' (empty), 'Created By' (Maram Gayathri, 01/01/2025, 11:52 am), and 'Modified By' (Maram Gayathri, 01/01/2025, 11:52 am). The 'Tab Style' is set to 'Box'. There's also a 'Splash Page Custom Link' field. A 'Help for this Page' link is available. At the bottom right, there's an 'Activate Windows' message with a link to 'Go to Settings to activate Windows.'

## Activity 2: Creating Remaining Tabs

To create tabs for the remaining objects (Rice Mill, Consumer, Rice Details), follow the same steps as mentioned in Activity 1

The screenshot shows the Salesforce Setup interface with the 'Custom Tabs' page open. The URL is `studentcom157-dev-ed.develop.lightning.force.com/lightning/setup/CustomTabs/page?address=%2F01rdM00000QT7IY%3Fsetupid%3DCustomTabs`. The page title is 'SETUP Tabs'. The sidebar on the left shows 'User Interface' expanded, with 'Rename Tabs and Labels' and 'Tabs' selected. A search bar at the top says 'Search Setup' with the query 'tabs'. The main content area shows a 'Custom Object Tab' for 'rice mill'. It has fields for 'Tab Label' (rice mill), 'Object' (rice mill), 'Description' (empty), 'Created By' (Maram Gayathri, 01/01/2025, 11:55 am), and 'Modified By' (Maram Gayathri, 01/01/2025, 11:55 am). The 'Tab Style' is set to 'Box'. There's also a 'Splash Page Custom Link' field. A 'Help for this Page' link is available. At the bottom right, there's an 'Activate Windows' message with a link to 'Go to Settings to activate Windows.'

The image contains two screenshots of the Salesforce Setup interface, specifically the 'Tabs' section under 'Custom Object Tab'.

**Screenshot 1: Custom Object Tab - consumers**

- Custom Tab Definition Detail:**

Tab Label	consumers	Tab Style	Box
Object	consumer	Splash Page Custom Link	
Description			
Created By	Maram Gayathri, 01/01/2025, 11:55 am	Modified By	Maram Gayathri, 01/01/2025, 11:55 am
- Information:** Didn't find what you're looking for? Try using Global Search.
- Help:** Help for this Page

**Screenshot 2: Custom Object Tab - rice details**

- Custom Tab Definition Detail:**

Tab Label	rice details	Tab Style	Box
Object	rice_details	Splash Page Custom Link	
Description			
Created By	Maram Gayathri, 01/01/2025, 11:56 am	Modified By	Maram Gayathri, 01/01/2025, 11:56 am
- Information:** Didn't find what you're looking for? Try using Global Search.
- Help:** Help for this Page

## Milestone 4 - 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.

### Activity 1: Create a Lightning App

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 MY RICE.
- Click Next.

**App Options 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 & Finish.

The screenshot shows two related pages from the Salesforce Lightning Experience.

**Top Page: Lightning Experience App Manager**

- Header:** studentcom157-dev-ed.develop.lightning.force.com/lightning/setup/NavigationMenus/home
- Left Sidebar:** Setup, Home, Object Manager
- Search Bar:** Search Setup
- Content Area:**
  - Section:** app manager
  - Category:** Apps, App Manager, External Client Apps, External Client App Manager
  - Message:** Didn't find what you're looking for? Try using Global Search.
  - Table:** Shows a list of apps with columns: App Name, Developer Name, Description, Last Modified, Type, and Visibility. One row is selected: MY RICE (Developer Name: MY\_RICE).

**Bottom Page: Lightning App Builder**

- Header:** studentcom157-dev-ed.develop.lightning.force.com/visualEditor/appBuilder.app?id=02udM000009p2dhQAA&retUrl=https%3A%2F%2Fstudentcom157-dev-e...
- Left Sidebar:** App Settings, App Details & Branding, App Options, Utility Items (Desktop Only), Navigation Items, User Profiles
- Content Area:**
  - Section:** App Details & Branding
  - Sub-section:** App Details & Branding
  - Form Fields:**
    - App Name: MY RICE
    - Developer Name: MY\_RICE
    - Description: Enter a description...
    - Image: A placeholder image for the app icon.
    - Primary Color Hex Value: #0070D2
    - Org Theme Options: A checkbox for "Use the app's image and color instead of the org's custom theme".
  - Preview:** An App Launcher Preview showing the app icon and name.
  - Footer:** Activate Windows, Go to Settings to activate Windows.

## Milestone 5: Fields

When we talk about Salesforce, fields represent the data stored in the columns of a relational database. They can hold any valuable information that you require for a specific object. The overall searching, deletion, and editing of the records become simpler and quicker with fields.

### Types of Fields

1. Standard Fields
2. Custom Fields

## **Standard Fields**

As the name suggests, Standard Fields are the predefined fields in Salesforce that perform a standard task. The main point is that you can't simply delete a Standard Field unless it is a non-required standard field. Otherwise, users have the option to delete them freely at any point from the application. Some common fields you will find in every Salesforce application include:

- Created By
- Owner
- Last Modified
- Field Made During Object Creation

## **Custom Fields**

On the other side of the coin, Custom Fields are highly flexible, and users can change them according to their requirements. Each organization or company can use them if necessary. It means you do not always need to include them in the records, unlike Standard Fields. Hence, the final decision depends on the user, who can add or remove Custom Fields as needed.

### **Activity 1: Creating the Number Field in RiceDetails 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. A custom field named 'rice distributed' has been created on the 'rice details' object. The field is defined as a Number type with the API name 'rice\_distributed\_\_c'. The page includes a sidebar for Fields & Relationships and a main panel for Custom Field Definition Detail.

## Activity 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: 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 Rice Mill 1 (one).
- Click Next.
- Click Next again.
- Click Save.

The screenshot shows the Salesforce Object Manager interface for the 'rice details' custom field. The left sidebar lists various setup options like Details, Fields & Relationships, Page Layouts, and Lightning Record Pages. The main content area displays the 'Custom Field Definition Detail' for the 'supplier Name' field. Key details shown include:

Field Information	Value	Field Information	Value
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			
Created By	Maram Gavathri, 01/01/2025, 12:10 pm	Modified By	Maram Gavathri, 01/01/2025, 12:10 pm

**Master-Detail Options**

Setting	Value	Setting	Value
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"/>		

At the bottom right, there is a message: "Activate Windows Go to Settings to activate Windows."

The screenshot shows the Salesforce Object Manager interface. On the left, a sidebar lists various setup options like Page Layouts, Lightning Record Pages, and Fields & Relationships. The main area displays a custom field named 'rice mill 1(one)' for the 'rice details' object. The field definition detail page includes fields for Field Label ('rice mill 1(one)'), Field Name ('rice\_mill\_1\_one'), API Name ('rice\_mill\_1\_one\_c'), and Data Type ('Master-Detail'). It also shows the object name ('rice details') and the user who created it ('Maram Gayathri'). A note at the bottom right says 'Activate Windows'.

### **Activity 3: 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. A custom field named "rice mill name" has been created for the "consumer" object. The field is defined as a Master-Detail type, linking to the "rice" object. The "Fields & Relationships" tab is selected in the sidebar. The main pane displays the "Custom Field Definition Detail" for the "rice mill name" field, showing its properties like Field Label, Field Name, API Name, and Data Type.

#### **Activity 4: 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.

The screenshot shows the Salesforce Object Manager interface. The left sidebar has a 'Fields & Relationships' section selected. In the main area, a custom field named 'sum of rice distributed' is being edited for the 'supplier' object. The 'Field Information' section shows the field label 'sum of rice distributed', field name 'sum\_of\_rice\_distributed', and API name 'sum\_of\_rice\_distributed\_\_c'. The 'Roll-Up Summary Options' section shows the data type as 'Roll-Up Summary', the summarized object as 'rice\_details', the field to aggregate as 'rice\_details: rice\_distributed', and the summary type as 'SUM'.

### 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.

SETUP > OBJECT MANAGER  
rice mill

rice mill Custom Field  
**rice distributed to shops**  
Back to rice mill

Custom Field Definition Detail

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	Maram Gayabtri 01/01/2025, 12:23 pm	Modified By	Maram Gayabtri 01/01/2025, 12:23 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			

Activate Windows  
Go to Settings to activate Windows.

## 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 Object Manager interface. The top navigation bar includes 'Setup', 'Home', and 'Object Manager'. The main title is 'rice mill'. On the left, a sidebar lists various setup categories like 'Page Layouts', 'Buttons, Links, and Actions', and 'Field Sets'. The central panel displays the 'Custom Field Definition Detail' for the 'rice taken' field. Key details shown include:

- Field Information:** Field Label: rice taken, Field Name: rice\_taken, API Name: rice\_taken\_c.
- Object Name:** rice mill
- Created By:** Maram Gayathri, 01/01/2025, 12:28 pm
- Modified By:** Maram Gayathri, 01/01/2025, 12:28 pm
- Roll-Up Summary Options:** Data Type: Roll-Up Summary, Summarized Object: consumer, Field to Aggregate: consumer.rice\_taken\_by\_shops\_in\_kgs, Filter Criteria: None.
- Summary Type:** SUM

A message at the bottom right says 'Activate Windows' and 'Go to Settings to activate Windows.'

## Activity 5: 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 top navigation bar includes 'Setup', 'Home', and 'Object Manager'. The main title is 'rice details'. On the left, a sidebar lists various setup options under 'Fields & Relationships'. The central panel displays the 'rice details Custom Field supplier Name' configuration. It shows the 'Field Information' section with details like Field Label: 'supplier Name', Field Name: 'supplier', API Name: 'supplier\_c', and Data Type: 'Master-Detail'. The 'Master-Detail Options' section shows 'Related To' as 'supplier' and 'Child Relationship Name' as 'rice\_details'. A note at the bottom right says 'Activate Windows Go to Settings to activate Windows.'

## Activity 6: 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 links for Setup, Home, and Object Manager. The main title is "rice mill". On the left, a sidebar lists various setup categories like Page Layouts, Lightning Record Pages, and Field Sets. The central panel displays the "Custom Field Definition Detail" for "rice price/kg". Key details shown include:

- Field Information:** Field Label: rice price/kg, Field Name: rice\_price\_kg, API Name: rice\_price\_kg\_c.
- Object Details:** Object Name: rice\_mill, Data Type: Number.
- Timestamps:** Created By: Maram\_Gavathri, 01/01/2025, 12:35 pm; Modified By: Maram\_Gavathri, 01/01/2025, 12:35 pm.

A "Validation Rules" section is visible at the top right of the main panel. A note at the bottom right says "Activate Windows" and "Go to Settings to activate Windows."

## Activity 7: 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:**

<https://studentcom157-dev-ed.lightning.force.com/lightning/setup/ObjectManager/01IdM000003gZPR/FieldsAndRelationships/00NdM00000B8jMb/view>

Setup > OBJECT MANAGER  
**consumer**

**Fields & Relationships**

First name

Custom Field Definition Detail

Field Label	Field Name	Object Name
First name	First_name	consumer
	API Name	Data Type
	First_name__c	Text

Created By: Maram Gayathri, 01/01/2025, 12:38 pm Modified By: Maram Gayathri, 01/01/2025, 12:38 pm

Activate Windows Go to Settings to activate Windows.

## Create New Field For Last Name:

<https://studentcom157-dev-ed.lightning.force.com/lightning/setup/ObjectManager/01IdM000003gZPR/FieldsAndRelationships/00NdM00000B8bLq/view>

Setup > OBJECT MANAGER  
**consumer**

**Fields & Relationships**

Last name

Custom Field Definition Detail

Field Label	Field Name	Object Name
Last name	Last_name	consumer
	API Name	Data Type
	Last_name__c	Text

Created By: Maram Gayathri, 01/01/2025, 12:39 pm Modified By: Maram Gayathri, 01/01/2025, 12:39 pm

Activate Windows Go to Settings to activate Windows.

## Create New Field For Email :

The screenshot shows the Salesforce Object Manager interface. The left sidebar shows navigation options like Details, Fields & Relationships, Page Layouts, Lightning Record Pages, Buttons, Links, and Actions, Compact Layouts, Field Sets, Object Limits, Record Types, and Related Lookup Filters. The main content area is titled 'consumer Custom Field email'. It shows the 'Custom Field Definition Detail' for the 'email' field. The field label is 'email', field name is 'email', API name is 'email\_c', object name is 'consumer', and data type is 'Email'. The field was created by 'Maram Gayathri' on 01/01/2025 at 12:41 pm and modified by the same user at 12:41 pm. A note at the bottom right says 'Activate Windows' and 'Go to Settings to activate Windows.'

## Create New Field For Rice Taken By Shops:

The screenshot shows the Salesforce Object Manager interface. The left sidebar shows navigation options like Details, Fields & Relationships, Page Layouts, Lightning Record Pages, Buttons, Links, and Actions, Compact Layouts, Field Sets, Object Limits, Record Types, and Related Lookup Filters. The main content area is titled 'consumer Custom Field Rice taken by shops'. It shows the 'Custom Field Definition Detail' for the 'Rice taken by shops' field. The field label is 'Rice taken by shops', field name is 'Rice\_taken\_by\_shops', API name is 'Rice\_taken\_by\_shops\_c', object name is 'consumer', and data type is 'Number'. The field was created by 'Maram Gayathri' on 01/01/2025 at 12:42 pm and modified by the same user at 12:42 pm. A note at the bottom right says 'Activate Windows' and 'Go to Settings to activate Windows.'

## Create New Field For Rice Type:

The screenshot shows the Salesforce Object Manager interface. The top navigation bar includes a back arrow, forward arrow, search bar, and various icons. The main title is "SETUP > OBJECT MANAGER consumer". On the left, a sidebar lists "Fields & Relationships" under "consumer Custom Field". The main content area displays the "Rice type" field definition. The "Field Information" section shows the following details:

Field Label	Rice type	Object Name	consumer
Field Name	Rice_type	Data Type	Picklist
API Name	Rice_type__c		
Description			
Help Text			
Data Owner			
Field Usage			
Data Sensitivity Level			
Compliance Categorization			

Below the field information, it shows "Created By" Maram\_Gayathri, 01/01/2025, 12:44 pm and "Modified By" Maram\_Gayathri, 01/01/2025, 12:44 pm. A note at the bottom right says "Activate Windows Go to Settings to activate Windows."

## Create New Field For Phone Number:

The screenshot shows the Salesforce Object Manager interface. The top navigation bar includes a back arrow, forward arrow, search bar, and various icons. The main title is "SETUP > OBJECT MANAGER consumer". On the left, a sidebar lists "Fields & Relationships" under "consumer Custom Field". The main content area displays the "Phone number" field definition. The "Field Information" section shows the following details:

Field Label	Phone number	Object Name	consumer
Field Name	Phone_number	Data Type	Phone
API Name	Phone_number__c		
Description			
Help Text			
Data Owner			
Field Usage			
Data Sensitivity Level			
Compliance Categorization			

Below the field information, it shows "Created By" Maram\_Gayathri, 01/01/2025, 12:40 pm and "Modified By" Maram\_Gayathri, 01/01/2025, 12:40 pm. A note at the bottom right says "Activate Windows Go to Settings to activate Windows."

## Create New Field For Mode Of Payment:

The screenshot shows the Salesforce Object Manager interface. The top navigation bar includes links for Setup, Home, and Object Manager. The main title is "SETUP > OBJECT MANAGER consumer". On the left, a sidebar lists various customization options like Page Layouts, Lightning Record Pages, Buttons, etc. The main content area is titled "consumer Custom Field Mode of payment" and shows the "Custom Field Definition Detail" for the field "Mode\_of\_payment\_c". The field information includes its label ("Mode of payment"), name ("Mode\_of\_payment\_c"), API name ("Mode\_of\_payment\_c"), and data type ("Picklist"). It also shows the object name ("consumer") and the creator ("Maram\_Gayathri"). A note at the bottom right says "Activate Windows" and "Go to Settings to activate Windows".

### Activity 8: 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 top navigation bar includes links for Setup, Home, and Object Manager. The main title is "SETUP > OBJECT MANAGER consumer". On the left, a sidebar lists various setup options like Page Layouts, Lightning Record Pages, and Fields & Relationships. The "Fields & Relationships" option is selected. The main content area displays a "Custom Field Definition Detail" for a field named "Amount Paid" on the "consumer" object. The field label is "Amount Paid", the field name is "Amount\_Paid", and the API name is "Amount\_Paid\_c". Other details shown include Description, Help Text, Data Owner, Field Usage, Data Sensitivity Level, and Compliance Categorization. The field was created by "Maram Gayathri" on 01/01/2025 at 1:09 pm and modified by the same user on the same date and time. A watermark for "Activate Windows" is visible in the bottom right corner.

- Give Field Label and Field Name as “Amount Paid” 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

The screenshot shows the Salesforce Object Manager interface. The top navigation bar includes a back arrow, forward arrow, search bar, and various setup icons. The main title is 'SETUP > OBJECT MANAGER consumer'. On the left, a sidebar lists options like 'Details', 'Fields & Relationships' (which is selected), 'Page Layouts', 'Lightning Record Pages', 'Buttons, Links, and Actions', 'Compact Layouts', 'Field Sets', 'Object Limits', 'Record Types', and 'Related Lookup Filters'. The main content area displays the 'Custom Field Definition Detail' for the 'Consumer Name' field. It shows the field label 'Consumer Name', field name 'Consumer\_Name', API name 'Consumer\_Name\_\_c', and object name 'consumer'. There are sections for 'Field Information', 'Help Text', 'Data Owner', 'Field Usage', 'Data Sensitivity Level', and 'Compliance Categorization'. A note at the bottom right says 'Activate Windows Go to Settings to activate Windows.' The status bar at the bottom indicates the page is on version 011dM000003gZPR/FieldsAndRelationships/00NdM00000B8YJ8/view.

### **Activity 9: 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 “Phonenumberoremailblankrule”.
- Enter the Description as “Phone number and email should not be blank”.
- Enter the formula as: OR( ISBLANK( phone\_number\_\_c ), ISBLANK( 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 back arrow, forward arrow, search bar, and various setup icons. The main title is "SETUP > OBJECT MANAGER consumer". On the left, a sidebar lists options like Details, Fields & Relationships, Page Layouts, Lightning Record Pages, Buttons, Links, and Actions, Compact Layouts, Field Sets, Object Limits, Record Types, and Related Lookup Filters. The main content area is titled "consumer Validation Rule" and displays the following details:

Validation Rule Detail	Edit	Clone	
Rule Name	Phonenumberoremailblankrule	Active	
Error Condition Formula	OR( ISBLANK( Phone_number__c ), ISBLANK( email__c ) )	Error Location	
Error Message	please fill in your phone number	Top of Page	
Description	phone number and email number should not be blank		
Created By	Maram Gayathri, 01/01/2025, 1:15 pm	Modified By	Maram Gayathri, 01/01/2025, 1:15 pm

At the bottom right, there is a message: "Activate Windows Go to Settings to activate Windows."

## Overall Supplier Fields

The screenshot shows the Salesforce Object Manager interface for the "supplier" object. The top navigation bar and sidebar are identical to the previous screenshot. The main content area is titled "Fields & Relationships" and displays the following table:

FIELD LABEL	FIELD NAME	DATA TYPE	CONTROLLING FIELD	INDEXED
Created By	CreatedById	Lookup(User)		
Last Modified By	LastModifiedById	Lookup(User)		
Owner	OwnerId	Lookup(User,Group)	✓	
sum of rice distributed	sum_of_rice_distributed__c	Roll-Up Summary (SUM rice details)		▼
supplier Name	Name	Text(80)	✓	▼

At the bottom right, there is a message: "Activate Windows Go to Settings to activate Windows."

## Overall Rice Mills Fields

studentcom157-dev-ed.develop.lightning.force.com/lightning/setup/ObjectManager/01IdM000003gZFI/FieldsAndRelationships/view

**rice mill**

**Fields & Relationships**  
7 Items, Sorted by Field Label

FIELD LABEL	FIELD NAME	DATA TYPE	CONTROLLING FIELD	INDEXED
Created By	CreatedById	Lookup(User)		
Last Modified By	LastModifiedById	Lookup(User)		
Owner	OwnerId	Lookup(User,Group)		✓
rice distributed to shops	rice_distributed_to_shops_c	Roll-Up Summary (SUM rice details)		▼
rice mill Name	Name	Auto Number		✓
rice price/kg	rice_price_kg_c	Number(5, 0)		▼
rice taken	rice_taken_c	Roll-Up Summary (SUM consumer)	Activate Windows Go to Settings to activate Windows.	▼

## Overall Rice Detail Field

studentcom157-dev-ed.develop.lightning.force.com/lightning/setup/ObjectManager/01IdM000003gZVX/FieldsAndRelationships/view

**rice details**

**Fields & Relationships**  
6 Items, Sorted by Field Label

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 1(one)	rice_mill_1_one_c	Master-Detail(rice mill)		✓
supplier Name	supplier_c	Master-Detail(supplier)		✓

Activate Windows  
Go to Settings to activate Windows.

## Overall Consumer Fields

The screenshot shows the Salesforce Object Manager interface for the 'consumer' object. The left sidebar lists various setup options like Page Layouts, Lightning Record Pages, and Field Sets. The main area is titled 'Fields & Relationships' and displays a table of 14 items, sorted by Field Label. The columns in the table are FIELD LABEL, FIELD NAME, DATA TYPE, CONTROLLING FIELD, and INDEXED. The table includes fields such as Amount Paid, Consumer Name, consumer Name, Created By, email, First name, and Last Modified By.

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(30)		
Last Modified By	LastModifiedById	Lookup(User)		

This screenshot shows the same Salesforce Object Manager interface for the 'consumer' object, but with different field definitions. The table now includes fields like Last modified by, Last name, Mode of payment, Phone number, rice mill name, Rice taken by shops, rice taken by shops in kgs, and Rice type. The 'Last modified by' field is noted as being a Master-Detail field for 'rice mill'.

FIELD LABEL	FIELD NAME	DATA TYPE	CONTROLLING FIELD	INDEXED
Last modified by	Last_modified_by	Lookup(user)		
Last name	Last_name_c	Text(50)		
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(18, 0)		
Rice type	Rice_type_c	Picklist		

## Milestone 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.

### Activity 1: Creating the Page Layout

- Go to Setup → Click on Object Manager → Search for the object (consumer) → From the dropdown 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.
- 

Section	Consumer Name	Last Modified By	rice mill name
Blank Space			Rice taken by shops
Amount Paid	email	Mode of payment	rice taken by sho...
consumer Name	First name	Phone number	Rice type

Activate Windows  
Go to Settings to activate Windows.

## Milestone 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.

### Types of Profiles in Salesforce

#### 1. Standard Profiles

By default, Salesforce provides the following standard profiles:

- Contract Manager
- Read Only
- Marketing User
- Solutions Manager
- Standard User
- System Administrator

## 2. Custom Profiles

Custom profiles are defined by us. They can be deleted if there are no users assigned with that particular profile.

### Activity 1: 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. The top navigation bar includes links for Home, Object Manager, and a search bar. The left sidebar has a 'Profiles' tab selected under the 'Users' category. The main content area is titled 'Profiles' and shows the 'consumers' profile. Under 'Custom Object Permissions', there are two tables:

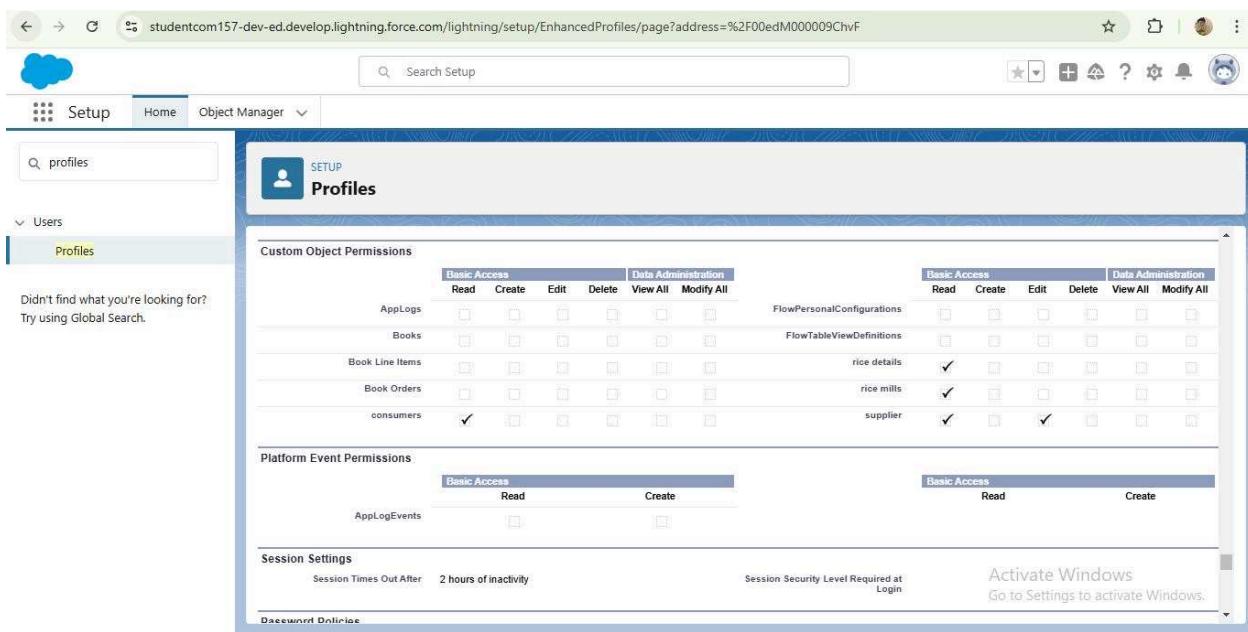
Object	Basic Access						Data Administration					
	Read	Create	Edit	Delete	View All	Modify All	Read	Create	Edit	Delete	View All	Modify All
AppLogs	<input type="checkbox"/>											
Books	<input type="checkbox"/>											
Book Line Items	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>					
Book Orders	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>					
consumers	<input checked="" type="checkbox"/>											

Below the first table, there are entries for 'FlowPersonalConfigurations' and 'FlowTableViewDefinitions'. The second table covers 'rice details', 'rice mills', and 'supplier' objects. At the bottom of the page, there are sections for 'Platform Event Permissions' (with 'AppLogEvents' listed) and 'Session Settings' (showing 'Session Times Out After: 2 hours of inactivity'). A 'Activate Windows' message is also present.

## Activity 2: 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.



## Activity 3: 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 'Profiles' page selected. The left sidebar includes 'Setup', 'Home', 'Object Manager', and a search bar for 'profiles'. A message says 'Didn't find what you're looking for? Try using Global Search.' The main content area is titled 'Profiles' and contains sections for 'Custom Object Permissions' and 'Platform Event Permissions'. The 'Custom Object Permissions' section shows access levels (Read, Create, Edit, Delete, View All, Modify All) for various objects across different profiles. The 'Platform Event Permissions' section shows access levels (Read, Create) for AppLogEvents. At the bottom, there are session settings ('Session Times Out After: 2 hours of inactivity') and security level settings ('Session Security Level Required at').

## Milestone 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.

### Activity 1: 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.

### Activity 2: 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 Roles page. The left sidebar has a 'Users' section with 'Roles' selected. The main area is titled 'Creating the Role Hierarchy' and displays a tree structure of roles. The hierarchy starts with 'student' at the top level, which branches into 'CEO', 'CFO', 'COO', 'owner', and 'SVP, Customer Service & Support'. Each of these roles has an 'Add Role' option. Under 'owner', there is another 'owner' node and an 'employee' node, with 'worker' under 'employee'. Each role node has 'Edit | Del | Assign' options. A message at the bottom right says 'Activate Windows Go to Settings to activate Windows.'

## Milestone 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.

### Activity 1: Create User

- Go to Setup → type "Users" in the quick find box → select Users → click New User.
- Fill in the fields:
  - First Name: Vicky
  - Last Name: Y
  - Alias: Vy

- Email ID: [gaya3maram66@gmail.com](mailto:gaya3maram66@gmail.com)
- Username: [gaya3maram66@gmail.com](mailto:gaya3maram66@gmail.com)
- Nickname: User1735722961277757761
- Role: Owner
- User License: Salesforce
- Profile: Owner
- Save it.

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

**User Detail:**

Name	vicky y	Role	owner
Alias	vy	User License	Salesforce
Email	<a href="mailto:gaya3maram66@gmail.com">gaya3maram66@gmail.com</a> [Verify]	Profile	owner
Username	gaya3maram66@gmail.com	Active	<input checked="" type="checkbox"/>
Nickname	User1735722961277757761	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	Finnish	Mobile Push Registrations	<input type="checkbox"/>

**Links:** Permission Set Assignments, Permission Set Assignments Activation Required, Permission Set Group Assignments, Permission Set License Assignments, Personal Groups, Public Group Membership, Queue Membership, Team, Managers in the Role Hierarchy, OAuth Apps, Third-Party Account Links, Installed Mobile Apps, Authentication Settings for External Systems, Login History, User Provisioning Accounts.

**Activate Windows:** Go to Settings to activate Windows.

## Activity 2: Creating Another Users

- 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: [gaya3maram66@gmail.com](mailto:gaya3maram66@gmail.com)
- Username: [gaya3maram77@gmail.com](mailto:gaya3maram77@gmail.com)
- Nickname: User17357273364786717163
- Role: Employer
- User License: Salesforce Platform
- Profile: Standard Platform User
- Save it.

The screenshot shows the Salesforce Setup interface with the 'Users' tab selected. A search bar at the top finds 'users'. The main content area displays the 'User Detail' page for a user named 'ram ram'. The 'Role' is set to 'employer'. The 'User License' is 'Salesforce Platform' and the 'Profile' is 'Standard Platform User'. The 'Active' checkbox is checked. Other settings include Marketing User, Offline User, Knowledge User, Flow User, Service Cloud User, Site.com Contributor User, Site.com Publisher User, WDC User, and Mobile Push Registrations.

- Go to Setup → type "Users" in the quick find box → select Users → click New User.
- Fill in the fields:
  - First Name: ragu
  - Last Name: raj
  - Alias: rraj
  - Email ID: [gaya3maram66@gmail.com](mailto:gaya3maram66@gmail.com)
  - Username: [gaya3maram@gmail.com](mailto:gaya3maram@gmail.com)
  - Nickname: User17357276106447905820
  - Role: Worker
  - User License: Salesforce Platform

- Profile: Standard Platform User
- Save it.

User Detail

Name	ragu raj	Role	worker
Alias	raj	User License	Salesforce Platform
Email	<a href="mailto:gaya3maram66@gmail.com">gaya3maram66@gmail.com</a> [Verify]	Profile	Standard Platform User
Username	gaya3maram@gmail.com	Active	<input checked="" type="checkbox"/>
Nickname	User1735726106447905820	Marketing User	<input type="checkbox"/>
Title		Offline User	<input type="checkbox"/>
Company		Knowledge User	<input type="checkbox"/>
Department		Flow User	<input type="checkbox"/>
Division		Service Cloud User	<input type="checkbox"/>
Address		Site.com Contributor User	<input type="checkbox"/>
Time Zone	(GMT+05:30) India Standard Time (Asia/Kolkata)	Site.com Publisher User	<input type="checkbox"/>
Locale	English (India)	WDC User	<input type="checkbox"/>
Language	English	Mobile Push Registrations	<a href="#">View</a>

All Users

Action	Full Name	Alias	Username	Role	Active	Profile
<input type="checkbox"/>	Awad, Younes	vawad	yawad.8ingh@ubxd.5eqk1ebizzou.kmxkvfkvevy@student.com		<input checked="" type="checkbox"/>	Cross Org Data Proxy User
<input type="checkbox"/>	Chatter Expert	chatty	chatty.00dm0000000ke70uad.v2QokY2nou@chatter.salesforce.com		<input checked="" type="checkbox"/>	Chatter Free User
<input type="checkbox"/>	Gayathri, Maram	MGaya	maramsayathri@student.com		<input checked="" type="checkbox"/>	System Administrator
<input type="checkbox"/>	Gulson, Auggie	aquis	aquis.yoda8eyZek.80twixcrvp.meuuy60nh5s@student.com		<input checked="" type="checkbox"/>	Cross Org Data Proxy User
<input type="checkbox"/>	lai, zou	rsl	gaya3maram@gmail.com	worker	<input checked="" type="checkbox"/>	Standard Platform User
<input type="checkbox"/>	ram, ram	ram	gaya3maram77@quad.com	employee	<input checked="" type="checkbox"/>	Standard Platform User
<input type="checkbox"/>	User_ Integration	integ	integration@00dm00000hke70uad.com		<input checked="" type="checkbox"/>	Analytics Cloud Integration User
<input type="checkbox"/>	User_Security	sec	insightssecurity@00dm00000hka70uad.com		<input checked="" type="checkbox"/>	Analytics Cloud Security User
<input type="checkbox"/>	y, vicky	yx	gaya3maram66@gmail.com	owner	<input checked="" type="checkbox"/>	owner

## Milestone 10: Permission Sets

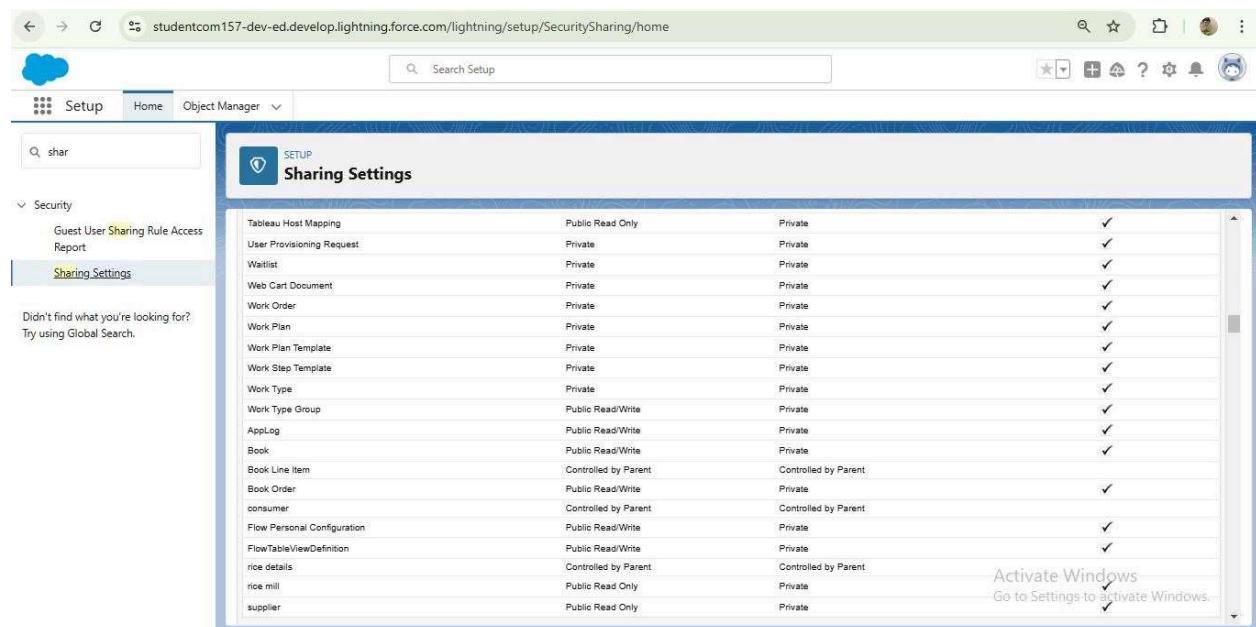
A permission set is a collection of settings and permissions that give users access to various tools and functions. Permission sets extend users' functional access without changing their profiles and are the recommended way to manage your users' permissions.

## Activity 1: 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.

## **Extra Information:**

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.



# Milestone 11: 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.

## Activity 1: 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 Star 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.

The screenshot shows the Salesforce Lightning interface. At the top, there's a navigation bar with links for 'supplier', 'rice mills', 'consumers', 'rice details', and 'Reports'. Below the navigation is a search bar and a toolbar with various icons. The main content area is titled 'Reports' and 'Created by Me'. It displays one item: a report named 'range of amount per day' with a description 'estimated rice per day', created by 'Maram Gayathri' on '1/1/2025, 5:09 pm'. On the left, a sidebar lists 'RECENT', 'Private Reports', 'Public Reports', 'All Reports', 'FOLDERS', 'All Folders', and 'Created by Me'. A message at the bottom right says 'Activate Windows Go to Settings to activate Windows.'

## Activity 2: Sharing Report to Owner

- Click on the report to open it.
- Click the Edit dropdown menu and select the Subscribe option.
- After selecting to run the report as "Another Person," select your personal account or the person you want to send the email to.
- Click Save.
- Note: The owner gets a daily email notification of the Rice Mill report so that they can see all data remotely.

The screenshot shows the 'Edit Subscription' dialog box overlaid on the Salesforce interface. The dialog has a 'Settings' tab with 'Frequency' set to 'Daily' (highlighted in blue), 'Time' set to '8:00 am', and an 'Attachment' button labeled 'Attach File'. Under 'Recipients', it says 'Recipients see the same report data as the person running the report.' and 'Send email to Me'. There's also an 'Edit Recipients' button. In the bottom right corner of the dialog, there are 'Cancel' and 'Save' buttons. The background shows the 'Reports' section with the 'Created by Me' report listed.

## **Activity 3: Create a Report Folder**

### **Steps to Create a Report Folder:**

- Click on the App Launcher and search for "Reports".
- Double-click on "Reports". The "Reports tab" will be auto-populated in the navigation bar. Click on the "Reports" tab, then click on New Folder.
- Give the Folder Label as "Estimated Rice per Day". The Folder Unique Name will be auto-populated.
- Click Save.

### **Moving a Report to the New Folder:**

- Navigate to the App Launcher and click on Reports.
- Click All Reports.
- Select the "Range of Amount per Day" report from the dropdown menu.
- Click Move.
- Select the "Estimated Rice per Day" folder and click Select.

The screenshot shows the Salesforce Lightning interface for managing reports. The top navigation bar includes links for 'supplier', 'rice mills', 'consumers', 'rice details', and 'Reports'. The 'Reports' tab is currently active. The main content area displays a table of reports and folders. The table columns are: Name, Created By, Created On, Last Modified By, and Last Modified Date. The data in the table includes:

	Name	Created By	Created On	Last Modified By	Last Modified Date
Recent	Einstein Bot Reports	Automated Process	22/12/2024, 6:03 pm	Automated Process	22/12/2024, 6:03 pm
Created by Me '23	Einstein Bot Reports Summer	Automated Process	22/12/2024, 6:03 pm	Automated Process	22/12/2024, 6:03 pm
Private Reports '22	Einstein Bot Reports Summer	Automated Process	22/12/2024, 6:03 pm	Automated Process	22/12/2024, 6:03 pm
Public Reports	Einstein Bot Reports Winter '23	Automated Process	22/12/2024, 6:03 pm	Automated Process	22/12/2024, 6:03 pm
All Reports	estimated rice per day	Maram Gayathri	1/1/2025, 5:20 pm	Maram Gayathri	1/1/2025, 5:20 pm

On the left sidebar, under 'Folders', 'All Folders' is selected. Other options include 'Created by Me', 'Shared with Me', and 'Favorites'. At the bottom right of the page, there is a message: 'Activate Windows Go to Settings to activate Windows.'

## Overall Reports (Range of amount per day)

The screenshot shows a Salesforce Lightning interface with a report titled "Report: rice mills with consumers range of amount per day". The report details the amount paid for rice by different consumers. The data is organized into groups by consumer name, showing the rice type, quantity, mode of payment, and amount paid. The total records are 10, with a total amount paid of 186.00.

Total Records	Total rice price/kg	Total Amount Paid		
10	42	186.00		
Rice taken by shops ↑				
3 (1)	consumers-003	basmati	4	Cash
Subtotal			4	12.00
4 (4)	consumers-010	basmati	4	UPI
	consumers-005	normal rice	5	Net banking
	consumers-002	normal rice	3	Credit card
	consumers-004	basmati	4	Cash
Subtotal			16	64.00
5 (5)	consumers-007	normal rice	5	UPI
	consumers-009	normal rice	4	Net banking
	consumers-006	basmati	4	UPI
	consumers-008	normal rice	4	Debit card
	consumers-001	basmati	5	UPI
Subtotal			22	110.00
Total (10)			42	186.00

Activate Windows  
Go to Settings to activate Windows.

## Milestone 12: 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.

### Activity 1: 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.

Name	Created By	Created On	Last Modified By	Last Modified Date
amount data dashboard	Maram Gayathri	1/1/2025, 5:26 pm	Maram Gayathri	1/1/2025, 5:26 pm

## Activity 2: 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

