

# A CRM APPLICATION FOR WHOLESALE RICE MILL

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:** The application can generate detailed reports and analytics regarding daily how much rice sold and total income per daily, revenue generated, popular amenities, and most bought customers. Easy to understand the data to the owner, improving resource allocation, and planning future development.

**A rollup summary field:** This 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.

**A cross-object formula field:** It is a formula field that references fields from another object in Salesforce. This type of formula allows users to calculate the total amount from number of rice taken\*price/kg and it displays the total amount I have to pay.

**Validation rules:** 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. so, In this project i gave Isblank formula. Isblank formula is used to verify whether it is blank it shows error.

**Permission sets:** Organization Wide Defaults(OWD) in salesforce is the baseline level of access that the most restricted user should have. Organizational Wide Defaults are used to restrict access. 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.

# Object

What Is an Object?

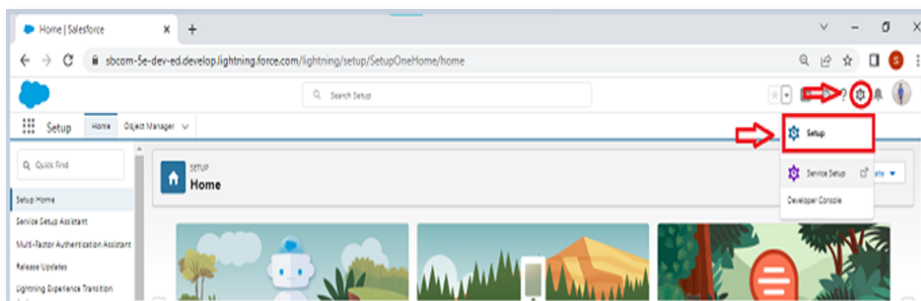
Salesforce objects are database tables that permit you to store data that is specific to an organization. What are the types of Salesforce objects

Salesforce objects are of two types:

1. Standard Objects: Standard objects are the kind of objects that are provided by 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 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 gear icon -click setup.



To create an object:

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



2. On Custom object defining page:
3. Enter the label name, plural label name, click on Allow reports, Allow search.

4. Click on Save.

## Create Supplier Object

To create an object:

1. From the setup page >> Click on Object Manager>> Click on Create>>Click on

Custom Object.

1. Enter the label name>>supplier
2. Plural label name>>supplier
3. Enter Record Name Label and Format
  - Record Name >> supplier Name
  - Data Type>>Text
2. Click on Allow reports and Track Field History and allow search
3. Allow search >> Save.

## Create Rice mill Object

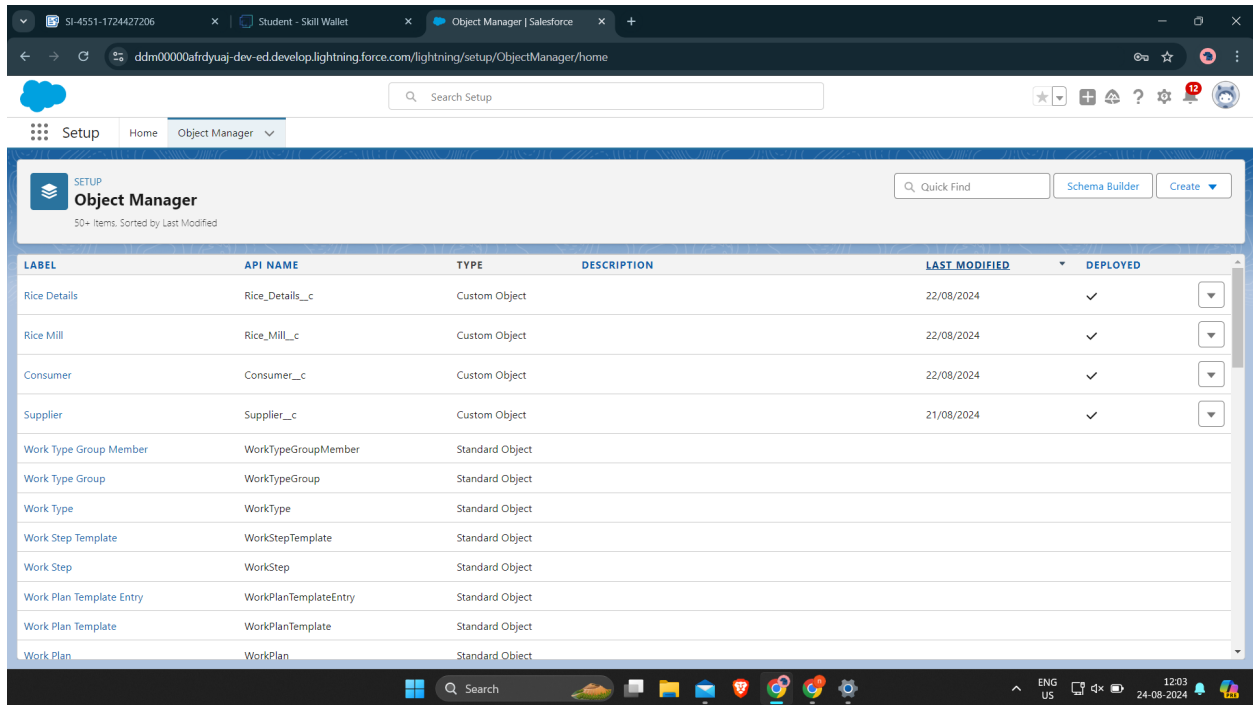
To create an object:

1. From the setup page >> Click on Object Manager>>Click on Create >> Click on Custom Object.
1. Enter the label name>>rice mill
2. Plural label name>> rice mills
3. Enter Record Name Label and Format
  - Record Name >>
  - Data Type >> Auto Number
  - Display Format >> rice-{000}
  - Starting number >> 1
2. Click on Allow reports and Track Field History, Allow Search and Save.

## Create consumer Objects

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

1. Use these display format for the consumer
  - label name >> consumer
  - Plural label name >> consumers
  - Display Format >> consumers-{000}
  - Starting number >> 1



# Tabs

What is Tab : A tab is like a user interface that is used to build records for objects and to view the records in the objects.

Types of Tabs:

## 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.com tabs such as accounts, contacts, and opportunities.

## Web Tabs

Web Tabs are custom tabs that display web content or applications embedded in the salesforce.com window. Web tabs make it easier for your users to quickly access content and applications they frequently use without leaving the salesforce.com application.

## Visualforce Tabs

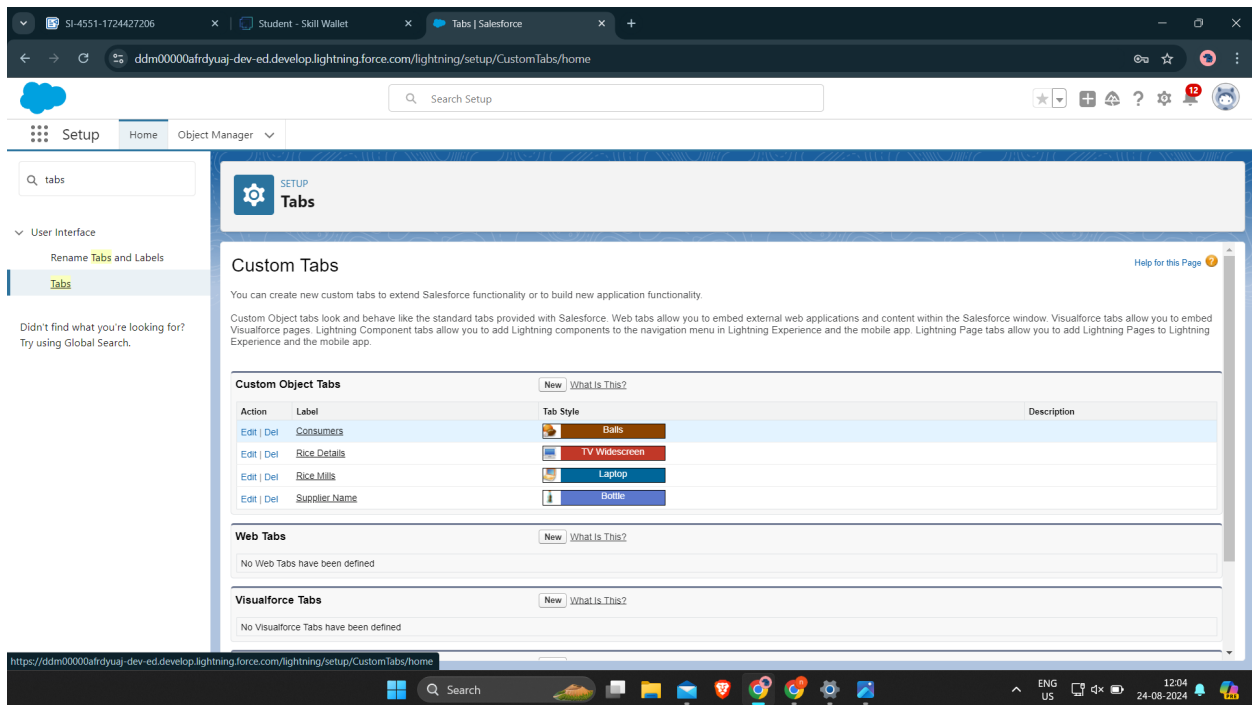
Visualforce Tabs are custom tabs that display a Visualforce page. Visualforce tabs look and behave like standard salesforce.com tabs such as accounts, contacts, and opportunities.

## Lightning Component Tabs

Lightning Component tabs allow you to add Lightning components to the navigation menu in Lightning Experience and the mobile app.

## Lightning Page Tabs

Lightning Page Tabs let you add Lightning Pages to the mobile app navigation menu. Lightning Page tabs don't work like other custom tabs. Once created, they don't show up on the All Tabs page when you click the Plus icon that appears to the right of your current tabs. Lightning Page tabs also don't show up in the Available Tabs list when you customize the tabs for your apps.

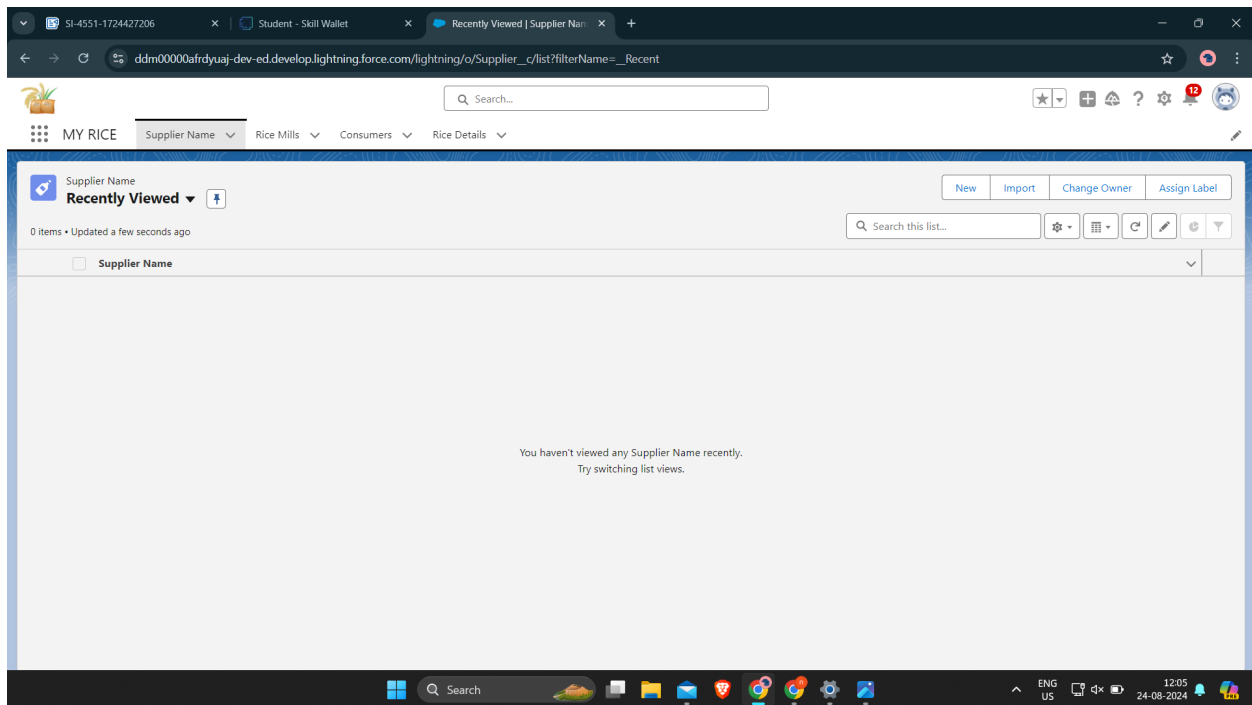


# The Lightning App

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

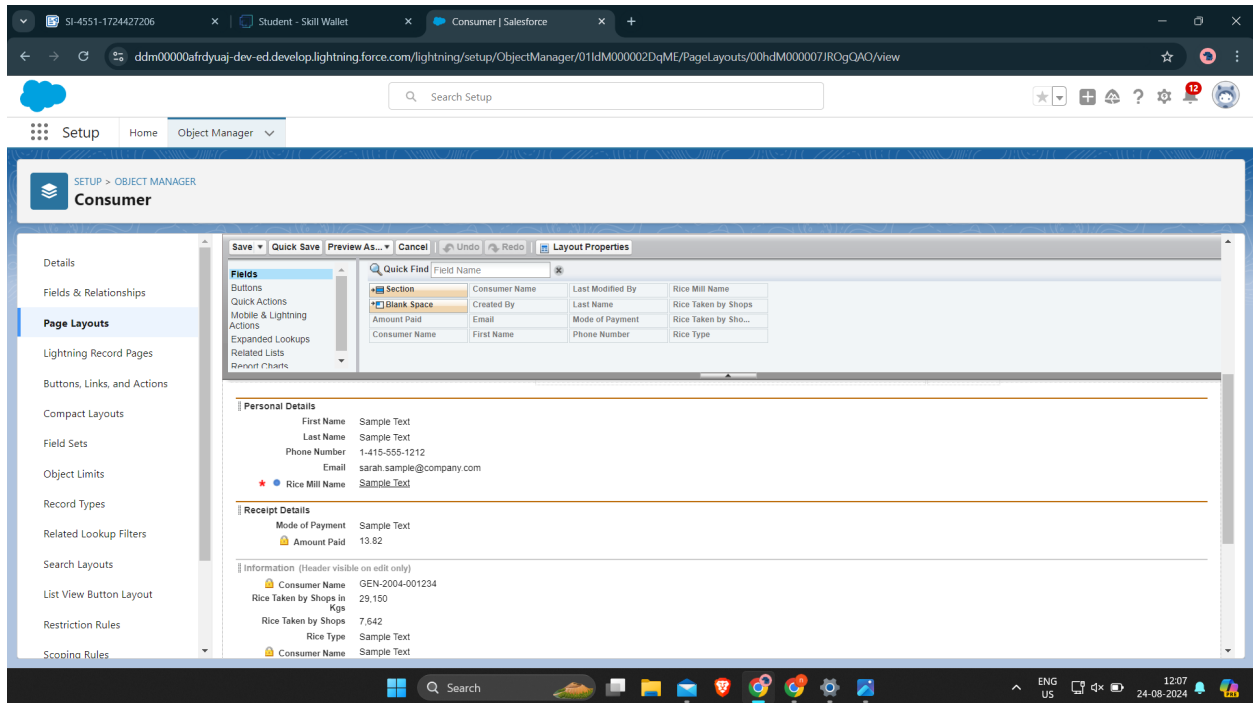
other items all in one convenient bundle in the navigation bar.

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 org can work more efficiently by easily switching between apps.



## 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.



# Profiles

A profile is a group/collection of settings and permissions that define what a user can do in salesforce. 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.

Types of profiles in salesforce

## 1. Standard profiles:

By default salesforce provides below standard profiles.

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

We cannot deleted standard ones

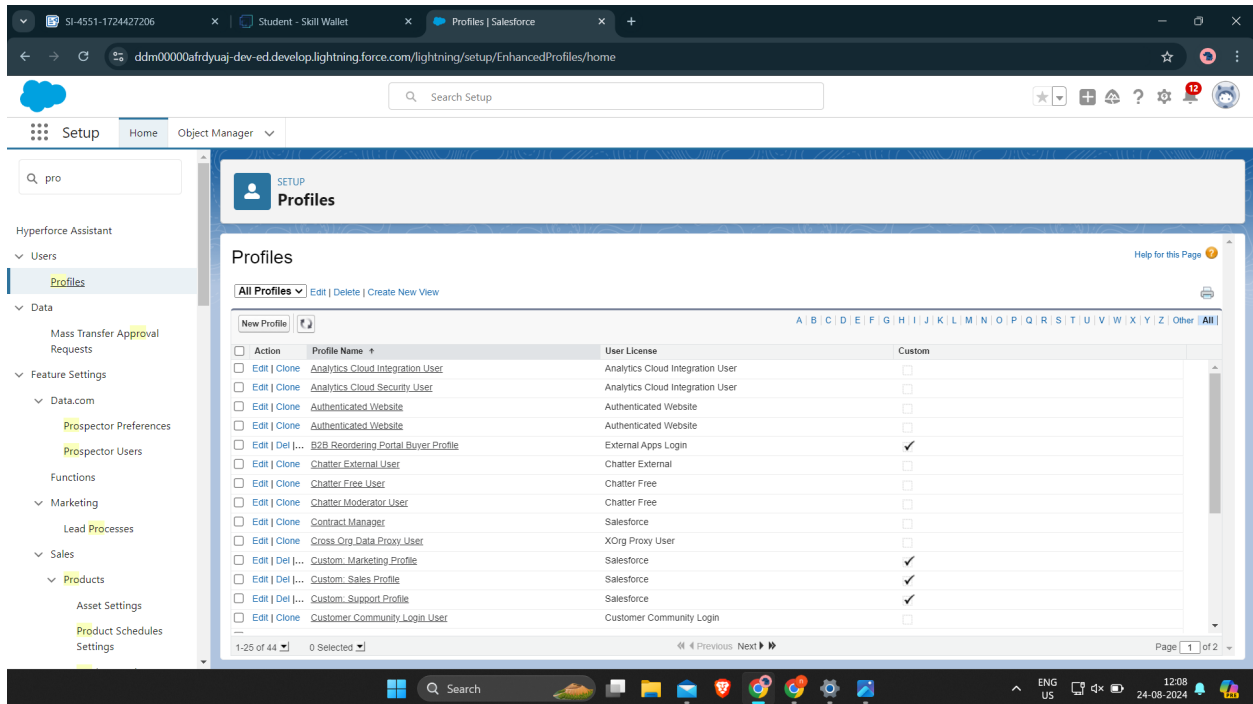
Each of these standard ones includes a default set of permissions for all of the standard objects available on the platform.



## 2. Custom Profiles:

Custom ones defined by us.

They can be deleted if there are no users assigned with that particular one.



The screenshot shows the Salesforce Setup interface for the 'Profiles' section. The left sidebar contains a navigation menu with categories like Users, Data, Feature Settings, Functions, Marketing, Lead Processes, Sales, and Products. The main content area displays a table of profiles with columns for Action, Profile Name, User License, and Custom. The table lists various profiles, including 'Analytics Cloud Integration User', 'Authenticated Website', 'External Apps Login', 'Chatter External', 'Chatter Free', 'Chatter Moderator User', 'Contract Manager', 'Cross Org Data Proxy User', 'Custom: Marketing Profile', 'Custom: Sales Profile', 'Custom: Support Profile', and 'Customer Community Login User'. The 'Custom' column has checkboxes, with some profiles marked as 'Custom' (checked). The bottom of the screen shows the Windows taskbar with the search bar and system tray.

Action	Profile Name	User License	Custom
<input type="checkbox"/> Edit   Clone	Analytics Cloud Integration User	Analytics Cloud Integration User	<input type="checkbox"/>
<input type="checkbox"/> Edit   Clone	Analytics Cloud Security User	Analytics Cloud Integration User	<input type="checkbox"/>
<input type="checkbox"/> Edit   Clone	Authenticated Website	Authenticated Website	<input type="checkbox"/>
<input type="checkbox"/> Edit   Clone	Authenticated Website	Authenticated Website	<input type="checkbox"/>
<input type="checkbox"/> Edit   Del   ...	B2B Reordering Portal Buyer Profile	External Apps Login	<input checked="" type="checkbox"/>
<input type="checkbox"/> Edit   Clone	Chatter External User	Chatter External	<input type="checkbox"/>
<input type="checkbox"/> Edit   Clone	Chatter Free User	Chatter Free	<input type="checkbox"/>
<input type="checkbox"/> Edit   Clone	Chatter Moderator User	Chatter Free	<input type="checkbox"/>
<input type="checkbox"/> Edit   Clone	Contract Manager	Salesforce	<input type="checkbox"/>
<input type="checkbox"/> Edit   Clone	Cross Org Data Proxy User	XOrg Proxy User	<input type="checkbox"/>
<input type="checkbox"/> Edit   Del   ...	Custom: Marketing Profile	Salesforce	<input checked="" type="checkbox"/>
<input type="checkbox"/> Edit   Del   ...	Custom: Sales Profile	Salesforce	<input checked="" type="checkbox"/>
<input type="checkbox"/> Edit   Del   ...	Custom: Support Profile	Salesforce	<input checked="" type="checkbox"/>
<input type="checkbox"/> Edit   Clone	Customer Community Login User	Customer Community Login	<input type="checkbox"/>

## 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.

Screenshot of the Salesforce Setup interface showing the Profiles page. The browser address bar shows the URL: `ddm00000afdrdyuaj-dev-ed.develop.lightning.force.com/lightning/setup/EnhancedProfiles/home`.

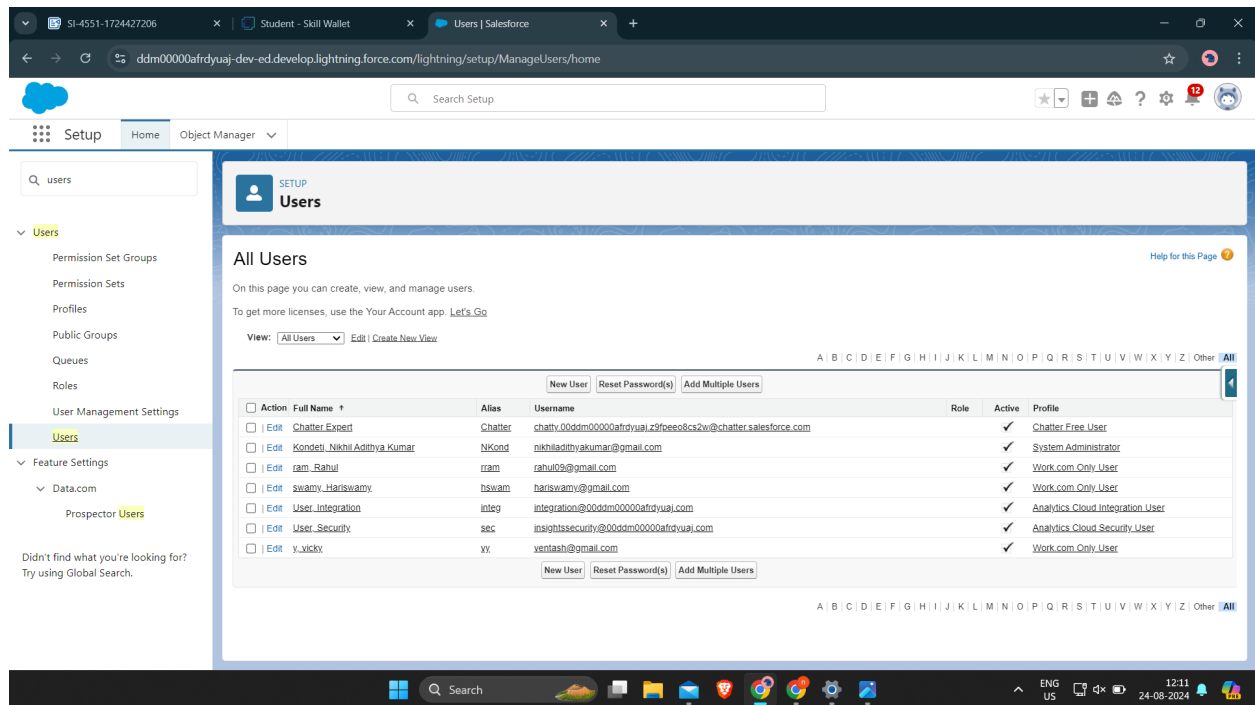
The Setup navigation bar includes links for Setup, Home, and Object Manager. The left sidebar shows the navigation menu with "Profiles" selected under the "Users" section.

The main content area displays the "Profiles" page. It includes a search bar, a "New Profile" button, and a table of existing profiles. The table has columns for Action, Profile Name, User License, and Custom. The "B2B Reordering Portal Buyer Profile" is highlighted.

Action	Profile Name	User License	Custom
<input type="checkbox"/> Edit   Clone	Analytics Cloud Integration User	Analytics Cloud Integration User	<input type="checkbox"/>
<input type="checkbox"/> Edit   Clone	Analytics Cloud Security User	Analytics Cloud Integration User	<input type="checkbox"/>
<input type="checkbox"/> Edit   Clone	Authenticated Website	Authenticated Website	<input type="checkbox"/>
<input type="checkbox"/> Edit   Clone	Authenticated Website	Authenticated Website	<input type="checkbox"/>
<input type="checkbox"/> Edit   Del   ...	B2B Reordering Portal Buyer Profile	External Apps Login	<input checked="" type="checkbox"/>
<input type="checkbox"/> Edit   Clone	Chatter External User	Chatter External	<input type="checkbox"/>
<input type="checkbox"/> Edit   Clone	Chatter Free User	Chatter Free	<input type="checkbox"/>
<input type="checkbox"/> Edit   Clone	Chatter Moderator User	Chatter Free	<input type="checkbox"/>
<input type="checkbox"/> Edit   Clone	Contract Manager	Salesforce	<input type="checkbox"/>
<input type="checkbox"/> Edit   Clone	Cross Org Data Proxy User	XOrg Proxy User	<input type="checkbox"/>
<input type="checkbox"/> Edit   Del   ...	Custom: Marketing Profile	Salesforce	<input checked="" type="checkbox"/>
<input type="checkbox"/> Edit   Del   ...	Custom: Sales Profile	Salesforce	<input checked="" type="checkbox"/>
<input type="checkbox"/> Edit   Del   ...	Custom: Support Profile	Salesforce	<input checked="" type="checkbox"/>
<input type="checkbox"/> Edit   Clone	Customer Community Login User	Customer Community Login	<input type="checkbox"/>

# 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.



## 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

**Sharing Settings**

Object	Sharing Model	Public Read Only
Tableau Host Mapping	Public Read Only	Private
User Provisioning Request	Private	Private
Waitlist	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
Rice Details	Controlled by Parent	Controlled by Parent
Rice Mill	Public Read/Write	Public Read Only
Supplier	Public Read/Write	Public Read Only

**Other Settings**

- Manager Groups ☐
- Secure guest user record access ☒
- Require permission to view record names in lookup fields ☐

## Report:

**Report: Rice Mills with Consumers**  
**Range of Amount Per Day**

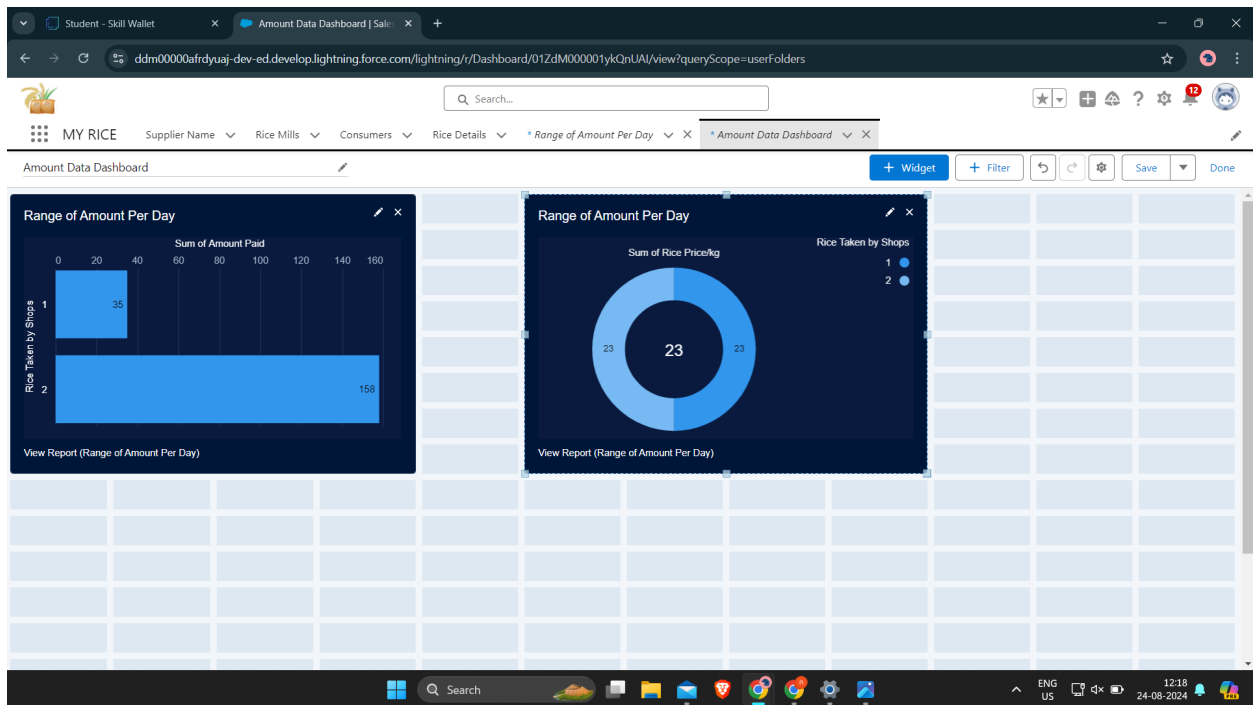
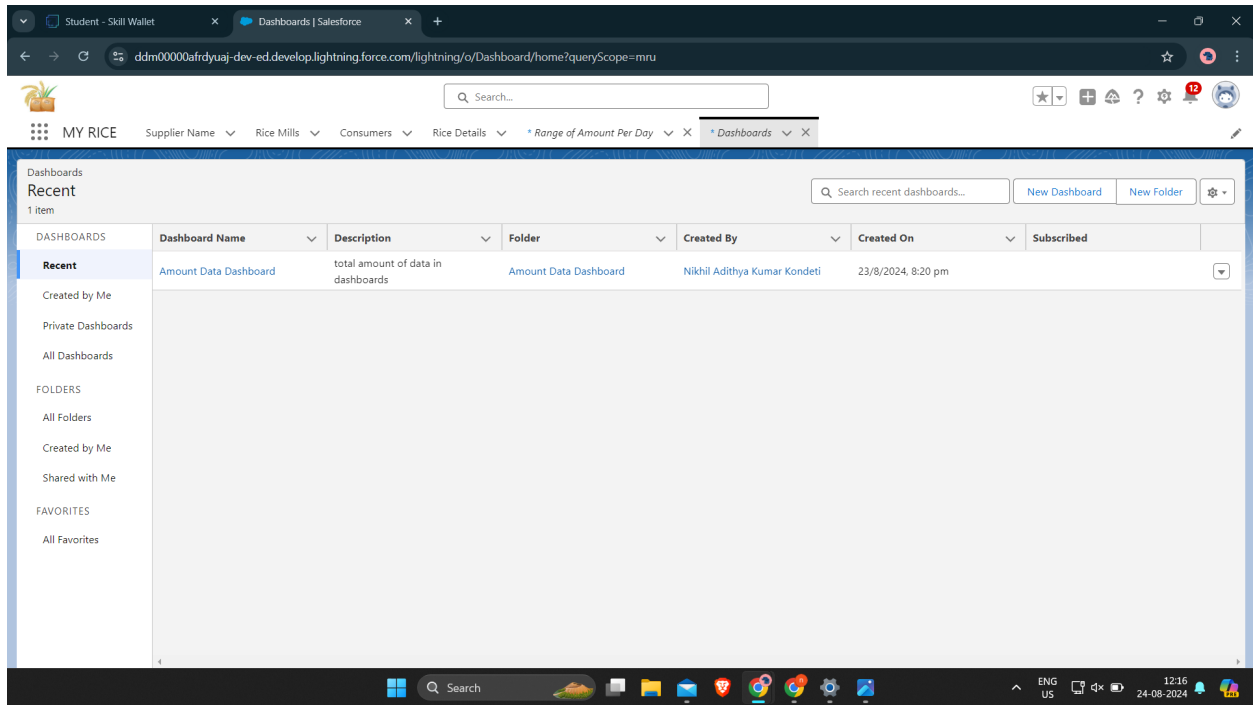
Enable Field Editing | Add Chart | Edit

Consumer Name	Rice Type	Rice Price/kg	Mode of Payment	Amount Paid
kumrajha kum	Normal Rice	12	Credit Card	12.00
rani rao	Basmati	11	UPI	11.00
lohiha bora	Basmati	12	Net Banking	12.00
<b>Subtotal</b>		<b>23</b>		<b>35.00</b>
mahib man	Normal Rice	11	UPI	22.00
Rowanj rao	Basmati	12	UPI	24.00
arjuna Rao	Basmati	12	Credit Card	24.00
Nanika nani	Basmati	11	UPI	22.00
anikumar reddy	Normal Rice	11	Debit Card	22.00
vamsi Rao	Basmati	11	Credit Card	22.00
maresh roy	Basmati	11	Credit Card	22.00
<b>Subtotal</b>		<b>23</b>		<b>158.00</b>
<b>Total (10)</b>		<b>23</b>		<b>193.00</b>

Row Counts ☒ Detail Rows ☒ Subtotals ☒ Grand Total ☒

## 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.



## APEX

Apex is a strongly typed, object-oriented programming language that allows developers to execute flow and transaction control statements on the Lightning platform server in

conjunction with calls to the Lightning Platform? API. Using syntax that looks like Java and acts like database stored procedures, Apex enables developers to add business logic to most system events, including button clicks, related record updates, and Visualforce pages. Apex code can be initiated by Web service requests and from triggers on objects.

It is as similar as java i.e, it also supports OOP( Object oriented programming) like Classes, objects, methods.

## Creating Classes :

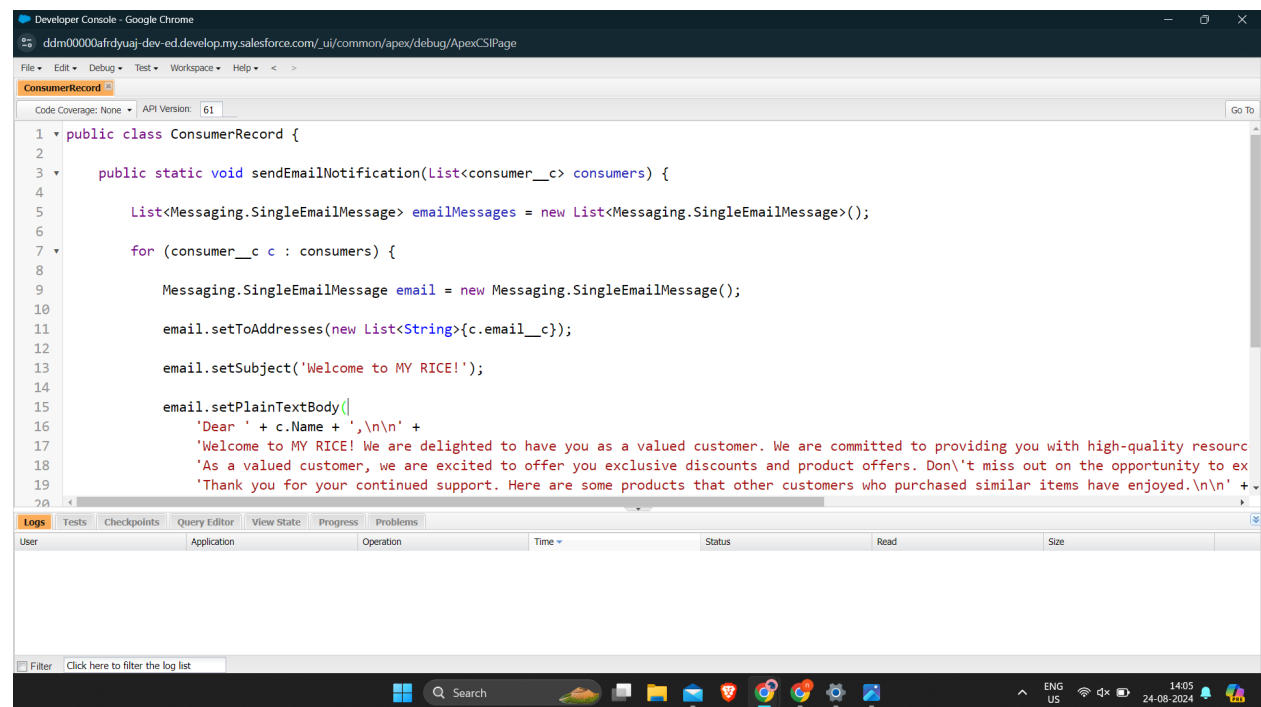
Apex classes are modeled on their counterparts in Java. You'll define, instantiate, and extend classes, and you'll work with interfaces, Apex class versions, properties, and other related class concepts.

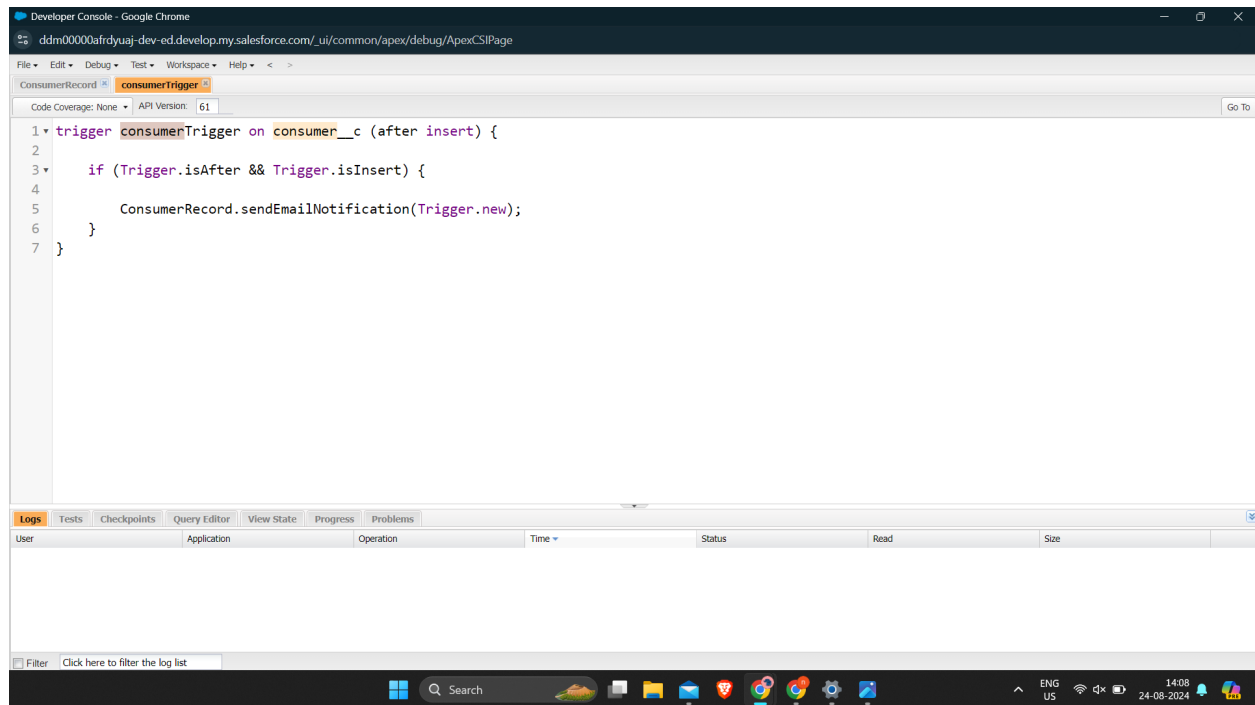
- **Class:**

As in Java, you can create classes in Apex. A class is a template or blueprint from which objects are created. An object is an instance of a class.

- **Object**

Object is an instance of a class, where it can access all the properties that are present in a class i.e, variables and methods.





THANK YOU