

CRM Application for Wholesale Rice Mill

Overview

The **Rice Mill CRM Application** is a tailor-made solution designed to automate and enhance the management of daily rice mill operations. This application leverages **Salesforce CRM** capabilities to deliver daily reports on rice production, sales, and customer insights to the rice mill owner. By streamlining data collection and reporting, it enables efficient decision-making, improved resource allocation, and a seamless customer experience.

Key Features and Functionality

1. Reporting and Dashboards

- **Purpose:** Provides real-time insights into rice mill operations.
- **Capabilities:**
 - Generate daily reports on:
 - Amount of rice produced.
 - Quantity of rice sold.
 - Revenue generated per type of rice.
 - Identification of frequent buyers.
 - **Visualization:** Easy-to-read charts and graphs for better decision-making.

2. Rollup Summary Fields

- **Purpose:** Summarize data from related child objects to parent objects.
- **Functions Supported:**
 - **COUNT:** Number of rice entries.
 - **SUM:** Total amount of rice supplied.
 - **MIN/MAX:** Earliest/latest date of transactions.
- **Example:** Display the total value of rice supplied on a related supplier record.

3. Cross-Object Formula Fields

- **Purpose:** Compute and display values by referencing fields from related objects.
- **Example:**
 - **Formula:** Number of Rice Taken * Price Per Kg = Total Amount
 - **Usage:** Display the total payable amount directly on the rice transaction record.

4. Validation Rules

- **Purpose:** Ensure data integrity and accuracy by applying conditional rules.
- **Implementation:**
 - **IsBlank Formula:** Validates required fields to ensure they are not empty.
 - **Error Messaging:** Displays user-friendly error messages for invalid inputs.

5. Permission Sets

- **Purpose:** Manage access levels using **Organization Wide Defaults (OWD)**.
- **Implementation:**

- Created custom roles with specific visibility:
 - **Owner:** Access to employer and worker records.
 - **Employer:** Access to worker records.
 - **Worker:** Limited to self-related data.
- Ensures secure and restricted access to sensitive information.

Pre-Requisites

1. **Salesforce Developer Account:** Required for building and testing the application.
2. **Salesforce Admin Concepts Knowledge:** Familiarity with Salesforce objects, fields, and relationships.
3. **System Requirements:**
 - Two web browsers installed.
 - Reliable internet connection

What You'll Learn

- **Real-Time Salesforce Project Execution:** Practical experience with Salesforce project development.
- **Object and Relationship Management:** Understanding object types and relationships in Salesforce.
- **Formula Fields and Validation Rules:**
 - Create cross-object formula fields.
 - Implement validation rules with error messaging.
- **Page Layouts:** Customize page layouts for better user experience.

- **Rollup Summary Fields:** Summarize data effectively for reporting.
- **Reports and Dashboards:** Build detailed and interactive visual reports.

Conclusion

This mini-project offers a hands-on approach to mastering Salesforce concepts while addressing real-world business needs. It equips learners with the skills to create robust CRM applications tailored to specific industry requirements, enhancing their employability and technical expertise.



The screenshot shows the Salesforce Lightning interface with the URL `yesaswicom3-dev-ed.develop.lightning.force.com`. The top navigation bar includes links for Student - Skill Wallet, SI-8924-1735122749, Recent | Dashboards | Salesforce, salesforce_virtual_internship/d..., and A-CRM-APPLICATION-FOR-W... The header also features a search bar and various icons.

The main content area displays the Dashboards page under the 'Recent' section. The sidebar on the left lists categories: DASHBOARDS, FOLDERS, and FAVORITES. The main table shows one dashboard entry:

DASHBOARD	Dashboard Name	Description	Folder	Created By	Created On	Subscribed
Recent	estimated data	total amount of data in dashboards	amount data dashboard	Yesaswi Yesaswi	25/12/2024, 3:41 PM	

The screenshot shows the 'estimated data' dashboard with the URL `yesaswicom3-dev-ed.develop.lightning.force.com`. The top navigation bar and header are identical to the previous screenshot.

The main content area displays the 'estimated data' dashboard. The title is 'estimated data' and it shows the message 'total amount of data in dashboards'. It was created on 'As of 25-Dec-2024, 3:51 PM-Viewing as Yesaswi Yesaswi'. The dashboard has two sections:

- range of amount per day**: A chart placeholder with the message 'We can't draw this chart because there is no data.' Below it is a link 'View Report (range of amount per day)'.
- range of amount per day**: Another chart placeholder with the same message and link.

At the bottom right of the dashboard area, there are buttons for Refresh, Edit, and Subscribe.

yesaswicom3-dev-ed.develop.lightning.force.com

Student - Skill Wallet SI-8924-1735122749 estimated data | Salesf... consumer | Salesforce Upload files - Yesaswi3... A-CRM-APPLICATION-...

Search Setup

Setup Home Object Manager

SETUP > OBJECT MANAGER consumer

Fields & Relationships		Quick Find	New	Deleted Fields	Field Dependencies	Set History Tracking
14 Items, Sorted by Field Label						
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	CreatedBy	Lookup(User)				▼
email	email__c	Email				▼
First name	First_name__c	Text(5)				▼
Last Modified By	LastModifiedBy	Lookup(User)				▼
Last name	Last_name__c	Text(5)				▼

yesaswicom3-dev-ed.develop.lightning.force.com

Student - Skill Wallet SI-8924-1735122749 rice mill | Salesforce Upload files - Yesaswi33/salesf... A-CRM-APPLICATION-FOR-W...

Search Setup

Setup Home Object Manager

SETUP > OBJECT MANAGER rice mill

Fields & Relationships		Quick Find	New	Deleted Fields	Field Dependencies	Set History Tracking
6 Items, Sorted by Field Label						
FIELD LABEL	FIELD NAME	DATA TYPE	CONTROLLING FIELD	INDEXED		
Created By	CreatedBy	Lookup(User)				▼
Last Modified By	LastModifiedBy	Lookup(User)				▼
Owner	OwnerId	Lookup(User,Group)		✓		▼
rice 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)				▼

yesaswicom3-dev-ed.develop.lightning.force.com

Student - Skill Wallet SI-8924-1735122749 Upload files · Yesaswi33/salesf... rice details | Salesforce A-CRM-APPLICATION-FOR-W...

Search Setup

Setup Home Object Manager

SETUP > OBJECT MANAGER
rice details

Fields & Relationships		FIELD LABEL	FIELD NAME	DATA TYPE	CONTROLLING FIELD	INDEXED
Page Layouts		Created By	CreatedById	Lookup(User)		
Lightning Record Pages		Last Modified By	LastModifiedById	Lookup(User)		
Buttons, Links, and Actions		rice details Name	Name	Auto Number		✓
Compact Layouts		rice distributed	rice_distributed_c	Number(5, 0)		▼
Field Sets		rice mill 1(one)	rice_mill_1_one_c	Master-Detail(rice mill)		▼
Object Limits		supplier Name	supplier_c	Master-Detail(supplier)		✓
Record Types						▼
Related Lookup Filters						▼
Search Layouts						▼
List View Button Layout						▼

yesaswicom3-dev-ed.develop.lightning.force.com

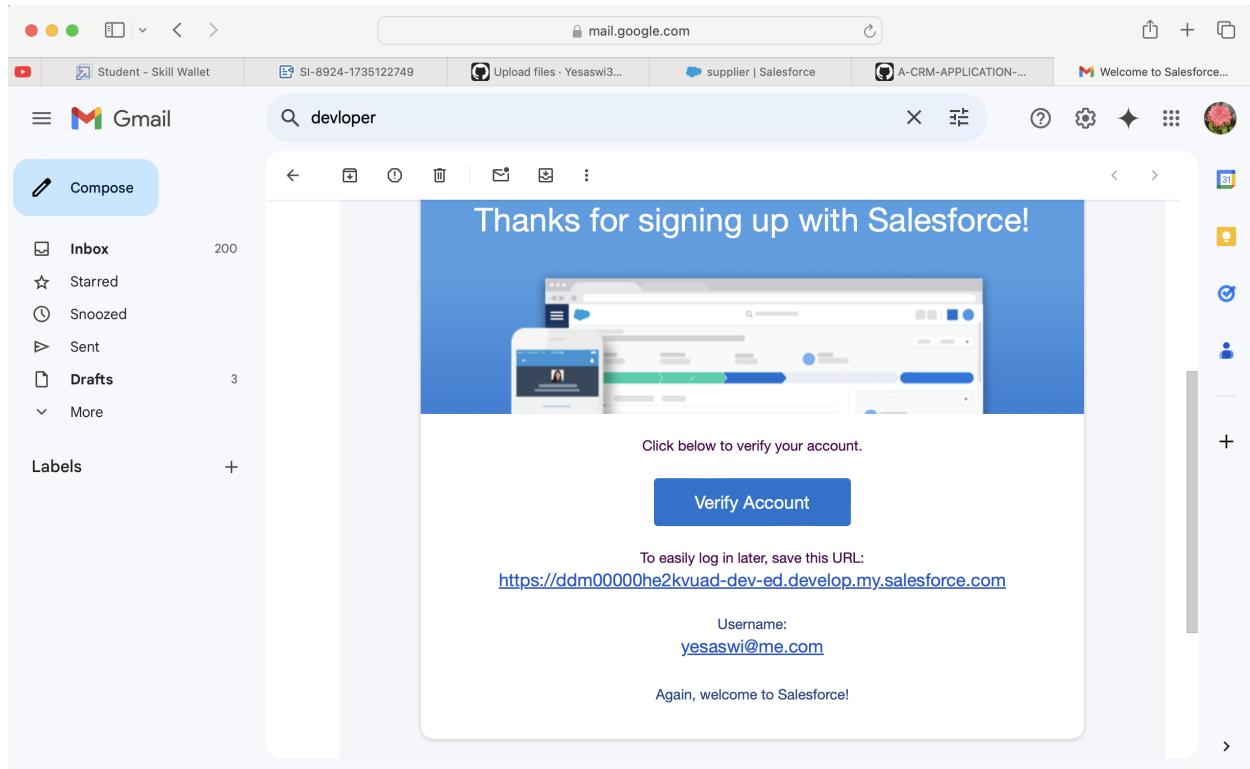
Student - Skill Wallet SI-8924-1735122749 Upload files · Yesaswi33/salesf... supplier | Salesforce A-CRM-APPLICATION-FOR-W...

Search Setup

Setup Home Object Manager

SETUP > OBJECT MANAGER
supplier

Details		Details	
Fields & Relationships		Description	<input type="button" value="Edit"/> <input type="button" value="Delete"/>
Page Layouts			
Lightning Record Pages		API Name	Enable Reports
Buttons, Links, and Actions		supplier_c	<input checked="" type="checkbox"/>
Compact Layouts		Custom	Track Activities
Field Sets		✓	
Object Limits		Singular Label	Track Field History
Record Types		supplier	
Related Lookup Filters		Plural Label	Deployment Status
Search Layouts		supplier	Deployed
List View Button Layout			Help Settings
			Standard salesforce.com Help Window



The screenshot shows the Salesforce Setup interface with the "Sharing Settings" page open. The left sidebar has "Sharing" selected under "Security". The main area displays a table of sharing settings for various objects:

Work Type Group	Public Read/Write	Private	✓
AppLog	Public Read/Write	Private	✓
Book	Public Read/Write	Private	✓
Book Line Item	Controlled by Parent	Controlled by Parent	
Book Order	Public Read/Write	Private	✓
consumer	Controlled by Parent	Controlled by Parent	
Flow Personal Configuration	Public Read/Write	Private	✓
FlowTableViewDefinition	Public Read/Write	Private	✓
rice details	Controlled by Parent	Controlled by Parent	
rice mill	Public Read Only	Private	✓
supplier	Public Read Only	Private	✓

Below the table, there's a section for "Other Settings" with checkboxes for "Manager Groups", "Secure guest user record access" (which is checked), and "Require permission to view record names in lookup fields".

The screenshot shows the Salesforce Setup interface with the 'Profiles' page selected. The profile 'employer' is displayed. The 'Profile Detail' section shows the profile name is 'employer', user license is 'Salesforce Platform', and it is a 'Custom Profile'. The 'Page Layouts' section shows standard object layouts for various objects like Global, Lead, Email Application, Object Milestone, Home Page Layout, Operating Hours, etc.

The screenshot shows the Salesforce Setup interface with the 'Profiles' page selected. The profile 'owner' is displayed. The 'Profile Detail' section shows the profile name is 'owner', user license is 'Salesforce', and it is a 'Custom Profile'. The 'Page Layouts' section shows standard object layouts for various objects like Global, Operating Hours, Email Application, Opportunity, Home Page Layout, Opportunity Product, etc.

Screenshot of the Salesforce Setup - Profiles page for the "worker" profile.

Profile worker

Users with this profile have the permissions and page layouts listed below. Administrators can change a user's profile by editing that user's personal information. If your organization uses Record Types, use the Edit links in the Record Type Settings section below to make one or more record types available to users with this profile.

Profile Detail

Name	worker	Edit	Clone	Delete	View Users
User License	Salesforce Platform	Custom Profile <input checked="" type="checkbox"/>			
Description					
Created By	Yesaswi Yesaswi, 24/12/2024, 7:27 pm	Modified By	Yesaswi Yesaswi	Modified On	24/12/2024, 10:17 pm

Page Layouts

Standard Object Layouts	Global	Lead
Global Layout	[View Assignment]	Lead Layout
Email Application	Not Assigned [View Assignment]	Object Milestone
Home Page Layout	Home Page Default [View Assignment]	Operating Hours
		Operating Hours Layout [View Assignment]

Screenshot of the "MY RICE" application interface showing the Reports section.

Reports

Recent (7 items)

REPORTS

Report Name	Description	Folder	Created By	Created On	Subscribed
range of amount per day	estimated rice per day	Yesaswi Yesaswi	25/12/2024, 3:18 PM	<input checked="" type="checkbox"/>	
Sample Report: Orchestration Work Items	What orchestration work items were created and what's the current status of each work item?	Public Reports	Automated Process	19/12/2024, 10:25 PM	<input type="checkbox"/>
Sample Report: Orchestration Step Runs	What orchestration step runs have been created and what's the current status of each run?	Public Reports	Automated Process	19/12/2024, 10:25 PM	<input type="checkbox"/>
Sample Report: Orchestration Stage Runs	What orchestration stage runs have been created and what's the current status of each run?	Public Reports	Automated Process	19/12/2024, 10:25 PM	<input type="checkbox"/>
Sample Report: Orchestration Run Logs	What orchestration run logs were created and what happened in their associated orchestration runs?	Public Reports	Automated Process	19/12/2024, 10:25 PM	<input type="checkbox"/>
Sample Report: Orchestration Runs	What orchestration runs have been created and what's the current status of each run?	Public Reports	Automated Process	19/12/2024, 10:25 PM	<input type="checkbox"/>

FOLDERS

FAVORITES

Screenshot of a Salesforce Lightning interface showing a report and the Setup page.

Report: rice mills with consumers range of amount per day

Total Records: 0 Total rice price/kg: 0.00 Total Amount Paid: 0.00

No Results

No records returned. Try editing report filters.

- Show All rice mills.
- Edit other filters in the filter panel.

Row Counts Detail Rows Subtotals Grand Total

Setup - Roles

Search: roles

Users

- Roles

Feature Settings

- Sales
 - Contact Roles on Contracts
 - Contact Roles on Opportunities
- Service
 - Case Teams
 - Case Team Roles
 - Contact Roles on Cases

Didn't find what you're looking for?
Try using Global Search.

Your Organization's Role Hierarchy

NA

- Add Role
- CEO
- CFO
- COO
- owner
- employer
- worker
- SVP, Customer Service & Support
- Customer Support, International
- Customer Support, North America
- Installation & Repair Services

Collapsible tree view

Screenshot of the Salesforce Setup interface showing the "Tabs" page under "Custom Tabs".

Custom Tabs

You can create new custom tabs to extend Salesforce functionality or to build new application functionality.

Custom Object tabs look and behave like the standard tabs provided with Salesforce. Web tabs allow you to embed external web applications and content within the Salesforce window. Visualforce tabs allow you to embed Visualforce pages. Lightning Component tabs allow you to add Lightning components to the navigation menu in Lightning Experience and the mobile app. Lightning Page tabs allow you to add Lightning Pages to Lightning Experience and the mobile app.

Action	Label	Tab Style	Description
Edit Del	Book Line Items	Pencil	
Edit Del	Book Orders	Stack of Cash	
Edit Del	Books	Books	
Edit Del	consumers	Box	
Edit Del	rice details	Box	
Edit Del	rice mills	Box	
Edit Del	supplier	Box	

Web Tabs

New What Is This?

Screenshot of the Salesforce Reports page titled "Created by Me".

Reports

Created by Me

1 item

REPORTS

- Recent
- Created by Me**
- Private Reports
- Public Reports
- All Reports

FOLDERS

- All Folders
- Created by Me
- Shared with Me

FAVORITES

- All Favorites

Search reports created by me... New Report New Folder

Report Name	Description	Folder	Created By	Created On	Subscribed
range of amount per day	estimated rice per day	Yesaswi Yesaswi	25/12/2024, 3:18 PM	✓	