

Project Documentation:

CRM Application for Laptop Rentals

Category: Salesforce

Skills Required:

- Salesforce Developer

Project Overview:

The CRM Application for Laptop Rentals is designed to streamline the process of renting laptops to customers. The application leverages Salesforce's powerful CRM capabilities to enhance customer experience, optimize store operations, and improve overall efficiency. The application also includes features to effectively communicate with potential customers through email.

Features and Functionalities:

- **Total Laptops Management:** Track and manage the inventory of laptops available for rent.
- **Consumer Management:** Manage customer details and interactions.
- **Laptop Booking Process:** Handle laptop booking requests and manage bookings.
- **Billing Process:** Manage billing and payment processes for laptop rentals.
- **User Roles and Profiles:** Define roles like Owner and Agent to manage different levels of access within the application.
- **Validation Rules:** Ensure data accuracy and completeness.
- **Automation via Flows and Apex:** Automate key processes such as laptop distribution using Salesforce Flows and Apex triggers.
- **Reports and Dashboards:** Generate insightful reports and visualize data on the dashboard.

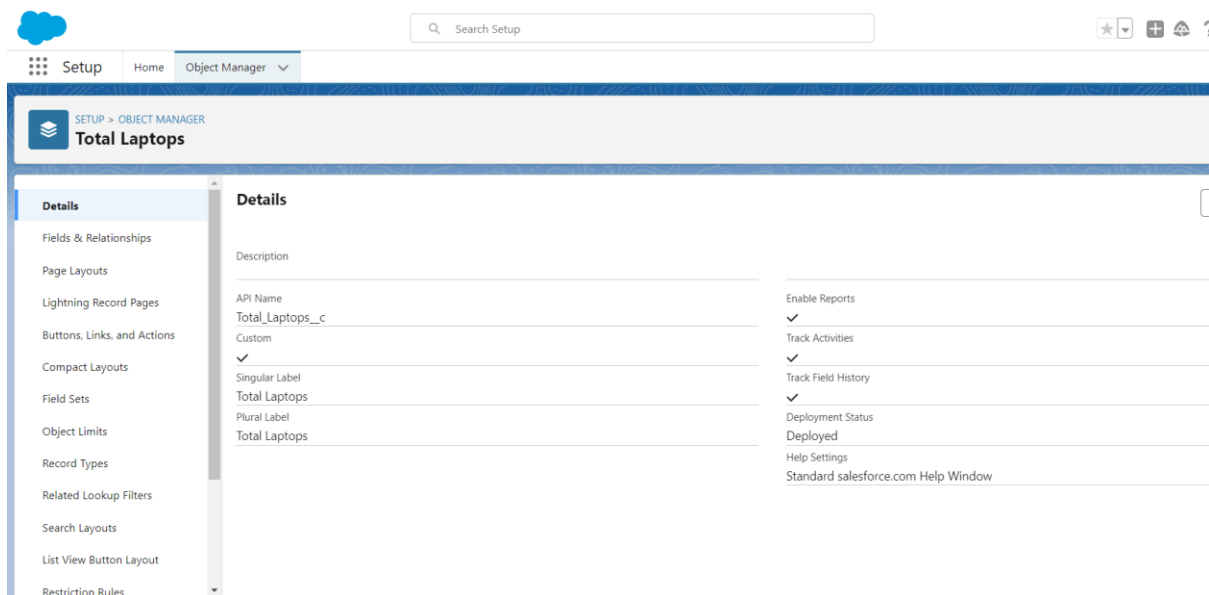
Detailed Setup Instructions:

1. Creating Custom Objects

- **Navigate to Setup:** Go to the Setup page and click on Object Manager.
- **Create Custom Object: Total Laptops**
 - Click on **Create > Custom Object**.
 - Enter the following details:
 - **Label Name:** Total Laptops
 - **Plural Label Name:** Total Laptops
 - **Record Name Label:** Total Laptops
 - **Data Type:** Text
 - Enable the following options:
 - **Allow Reports**
 - **Allow Search**

- **Track Field History**
- **Click Save.**
- **Repeat for the following Custom Objects:**
 - **Consumer**
 - **Laptop Booking**
 - **Billing Process**

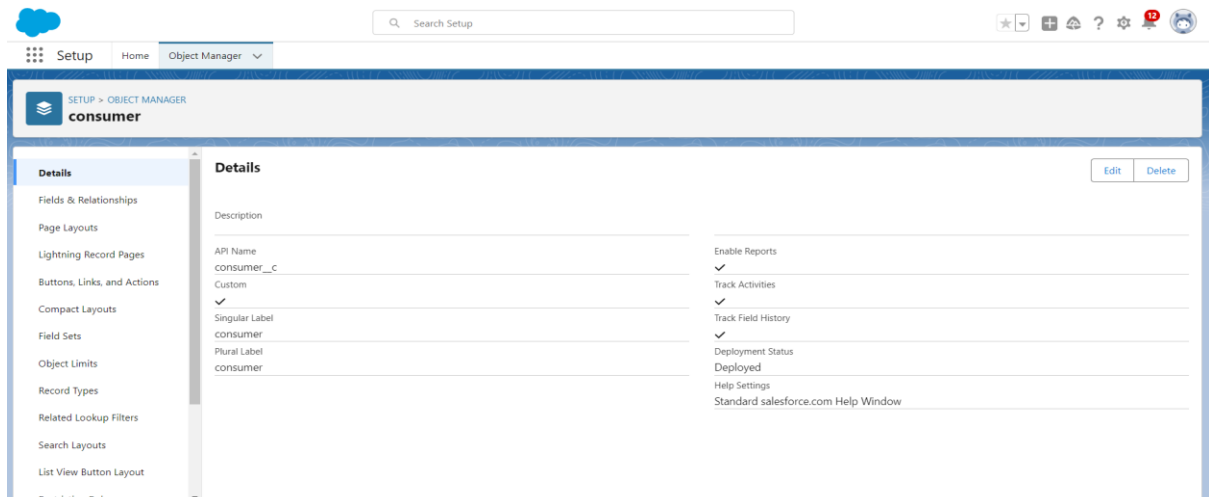
Total Laptops Object :



The screenshot shows the Salesforce Setup interface for the 'Total Laptops' custom object. The left sidebar contains a navigation menu with options like 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 displays the following information:

Field	Value
Description	
API Name	Total_Laptops__c
Custom	✓
Singular Label	Total Laptops
Plural Label	Total Laptops
Enable Reports	✓
Track Activities	✓
Track Field History	✓
Deployment Status	Deployed
Help Settings	Standard salesforce.com Help Window

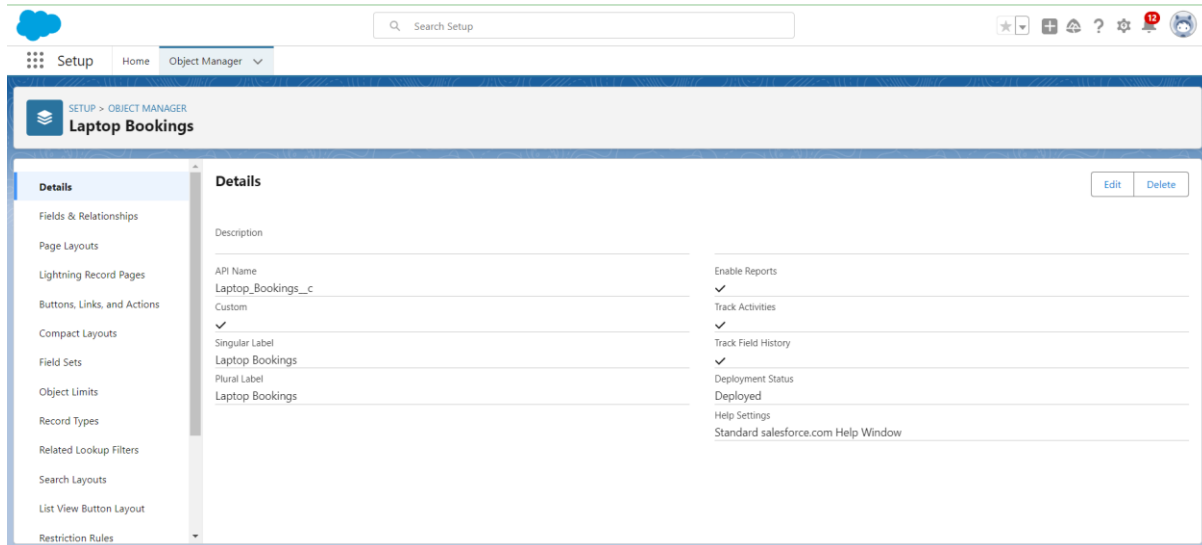
consumer Object :



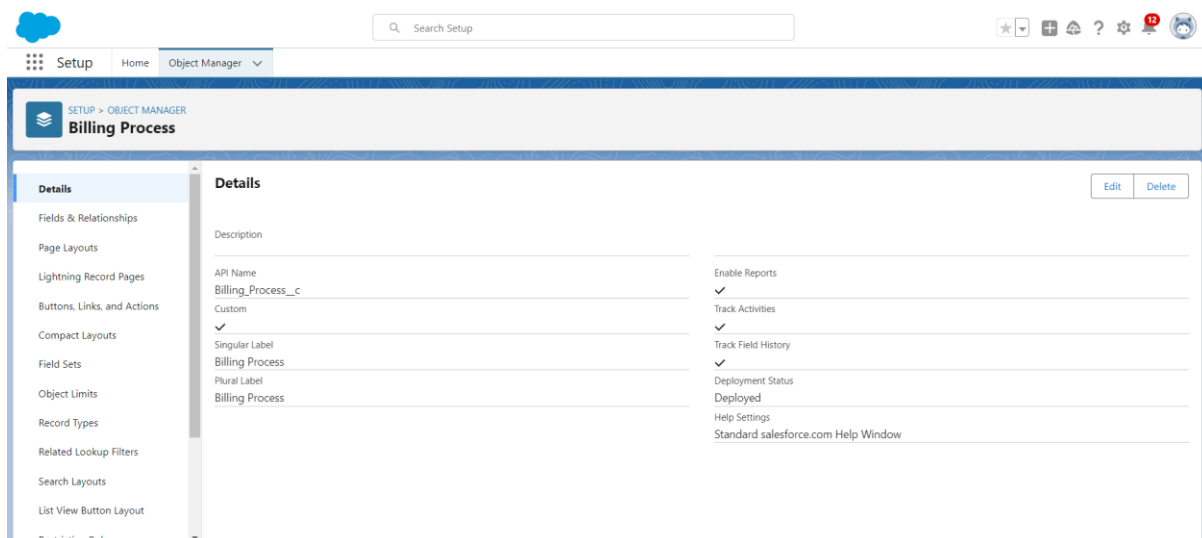
The screenshot shows the Salesforce Setup interface for the 'consumer' custom object. The left sidebar contains a navigation menu with options like Fields & Relationships, Page Layouts, Lightning Record Pages, Buttons, Links, and Actions, Compact Layouts, Field Sets, Object Limits, Record Types, Related Lookup Filters, Search Layouts, List View Button Layout, and Restriction Rules. The main content area is titled 'Details' and displays the following information:

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

Laptop Booking Object:



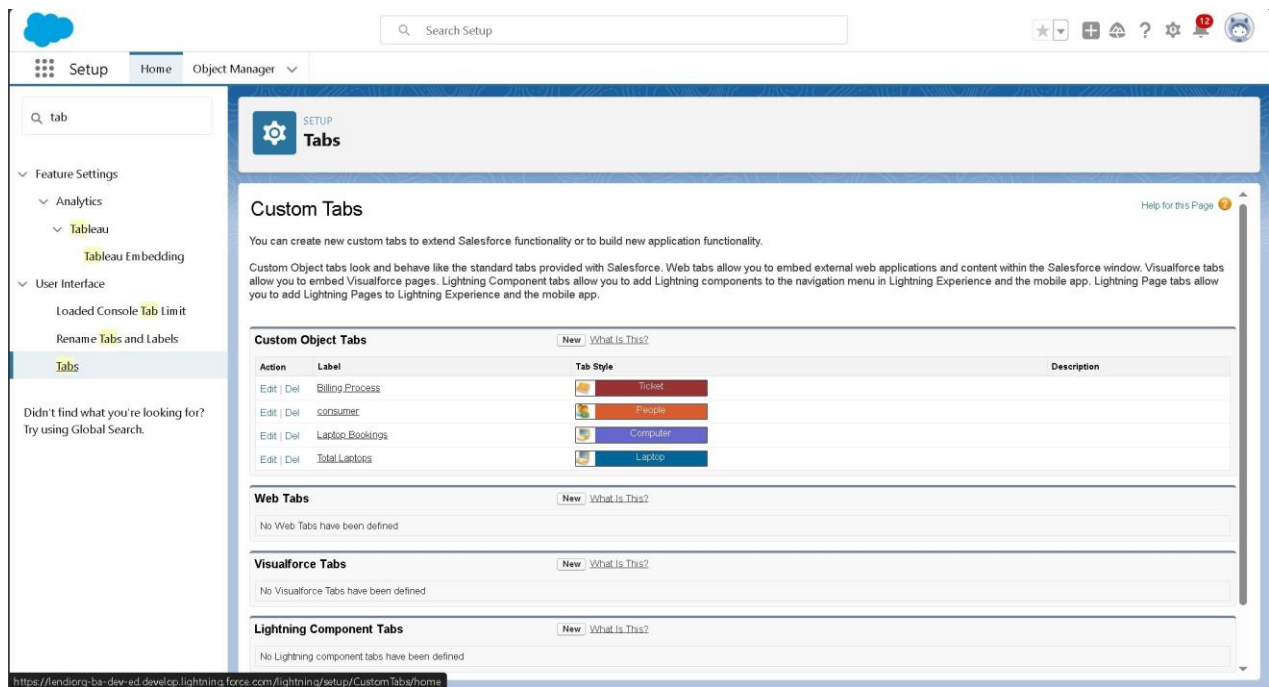
Billing Process Object:



2.Creating Tabs

- **Navigate to Setup:** Type **Tabs** in the Quick Find bar and select **Tabs**.
- **Create a New Tab:**
 - Click on **New** under Custom Object Tabs.
 - Select **Object:** Total Laptops
 - Choose a **Tab Style**.
 - Click **Next** and keep the default settings on the profiles page.
 - Uncheck **Include Tab in Custom App** and ensure **Append tab to users' existing personal customizations** is checked.
 - Click **Save**.
- **Repeat for the following Custom Objects:**
 - **Consumer**
 - **Laptop Booking**
 - **Billing Prosses**

Tabs:



1. Creating a Lightning App Page

- **Navigate to App Manager:** Go to the Setup page and search for **App Manager** in the Quick Find bar.
- **Create a New Lightning App:**
 - Click on **New Lightning App**.
 - Fill in the **App Name**: LAPTOP RENTALS.
 - Click **Next** and keep the default settings on the App Options and Utility Items pages.
 - Upload a related photo for the app.
 - **Add Navigation Items:**
 - Select **Total Laptops, Consumer, Laptop Booking, Billing Process** from the search bar and move them using the arrow button.
 - **Add User Profiles:**
 - Search for **System Administrator** in the search bar and add it to the app.
 - Click **Save & Finish**

App Details:

App Settings

App Details & Branding

App Options

Utility Items (Desktop Only)

Navigation Items

User Profiles

App Details & Branding

Give your Lightning app a name and description. Upload an image and choose the highlight color for its navigation bar.

App Details

*App Name LAPTOP RENTALS

*Developer Name LAPTOP RENTALS

Description
Enter a description.

App Branding

Image

Primary Color Hex Value #000000

Date

Org Theme Options
☐ Use the app's image and color instead of the org's custom theme

App Launcher Preview

LAPTOP RENTALS

App Naviagtion:

App Settings

App Details & Branding

App Options

Utility Items (Desktop Only)

Navigation Items

User Profiles

Navigation Items

Choose the items to include in the app, and arrange the order in which they appear. Users can personalize the navigation to add or move items, but users can't remove or rename the items that you add. Some navigation items are available only for phone or only for desktop. These items are dropped from the navigation bar when the app is viewed in a form at that the item doesn't support.

Available Items

Accounts

All Sites

Alternative Payment Methods

Analytics

App Launcher

Appointment Categories

Appointment Invitations

Approval Requests

Asset Action Sources

Asset Actions

Asset State Periods

Assets

Selected Items

Total Laptops

computer

Laptop Bookings

Billing Process

App User Profiles:

App Settings

App Details & Branding

App Options

Utility Items (Desktop Only)

Navigation Items

User Profiles

User Profiles

Choose the user profiles that can access this app.

Available Profiles

Agent

Analytics Cloud Integration User

Analytics Cloud Security User

Authenticated Website

Authenticated Website

B2B Reordering Portal Buyer Profile

Contract Manager

Custom Marketing Profile

Custom Sales Profile

Custom Support Profile

Customer Community Login User

Customer Community Plus Login User

Selected Profiles

System Administrator

4.Adding Fields to the Objects

- Follow the standard Salesforce procedure to add necessary fields to the TotalLaptops, Consumer, Laptop Booking, and Billing Process objects.

The screenshot shows the Salesforce Setup interface for the 'Total Laptops' object. The left sidebar contains navigation links: Details, Fields & Relationships (selected), 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 'Fields & Relationships' and shows a table of 6 fields. The table has columns: FIELD LABEL, FIELD NAME, DATA TYPE, CONTROLLING FIELD, and INDEXED. The fields listed are: Created By (CreatedBy, Lookup(User)), Laptops Available (Laptops_Available__c, Formula (Number)), Laptops delivered (Laptops_delivered__c, Roll-Up Summary (COUNT Laptop Bookings)), Last Modified By (LastModifiedById, Lookup(User)), Owner (OwnerId, Lookup(User,Group)), and Total Laptops (Name, Text(80)).

FIELD LABEL	FIELD NAME	DATA TYPE	CONTROLLING FIELD	INDEXED
Created By	CreatedBy	Lookup(User)		
Laptops Available	Laptops_Available__c	Formula (Number)		
Laptops delivered	Laptops_delivered__c	Roll-Up Summary (COUNT Laptop Bookings)		
Last Modified By	LastModifiedById	Lookup(User)		
Owner	OwnerId	Lookup(User,Group)		✓
Total Laptops	Name	Text(80)		✓

Consumer Fields:

The screenshot shows the Salesforce Setup interface for the 'consumer' object. The left sidebar contains navigation links: Details, Fields & Relationships (selected), 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 'Fields & Relationships' and shows a table of 8 fields. The table has columns: FIELD LABEL, FIELD NAME, DATA TYPE, CONTROLLING FIELD, and INDEXED. The fields listed are: Address (Address__c, Text Area(255)), consumer Status (consumer_Status__c, Picklist), consumer_name (Name, Text(80)), Created By (CreatedBy, Lookup(User)), Email (Email__c, Email), Last Modified By (LastModifiedById, Lookup(User)), Owner (OwnerId, Lookup(User,Group)), and Phone number (Phone_number__c, Phone).

FIELD LABEL	FIELD NAME	DATA TYPE	CONTROLLING FIELD	INDEXED
Address	Address__c	Text Area(255)		
consumer Status	consumer_Status__c	Picklist		
consumer_name	Name	Text(80)		✓
Created By	CreatedBy	Lookup(User)		
Email	Email__c	Email		
Last Modified By	LastModifiedById	Lookup(User)		
Owner	OwnerId	Lookup(User,Group)		✓
Phone number	Phone_number__c	Phone		

Laptop Booking Fields:

Field Label	Field Name	Data Type	Controlling Field	Indexed
Amount	Amount__c	Currency(18, 0)		
core type	core_type__c	Picklist	Laptop names	
Created By	CreatedById	Lookup(User)		
Email	Email__c	Email		
how many months	how_many_months__c	Picklist		
Laptop Bookings	Name	Text(80)		✓
Laptop names	Laptop_type__c	Picklist		
Laptops Available	Laptops_Available__c	Formula (Number)		
Last Modified By	LastModifiedById	Lookup(User)		
name	name__c	Master-Detail(consumer)		✓
Total No Of Laptops	Total_No_Of_Laptops__c	Master-Detail(Total Laptops)		✓

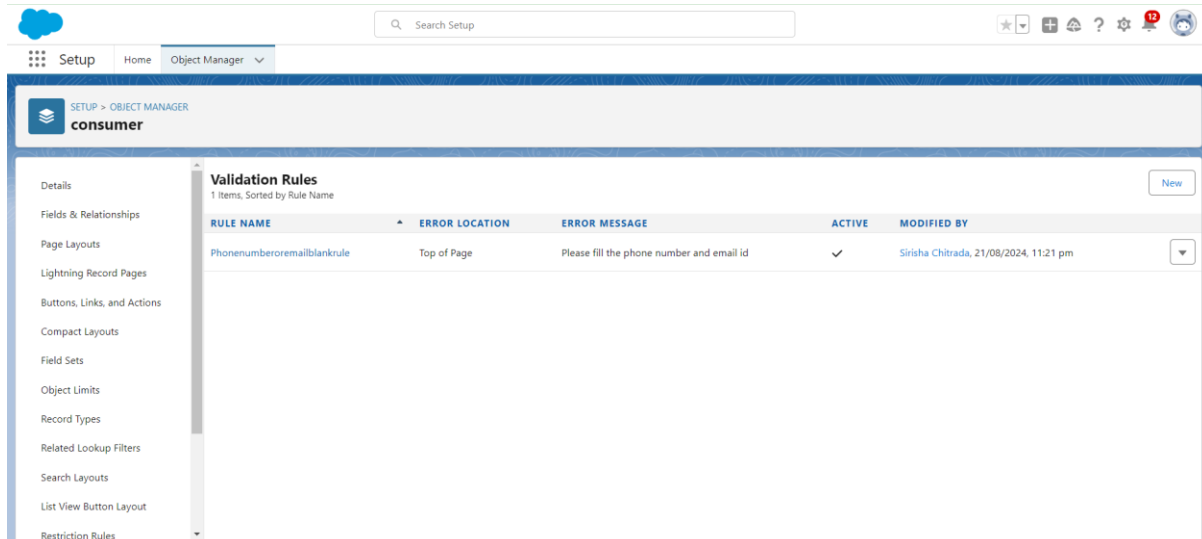
Billing Process Fields:

Field Label	Field Name	Data Type	Controlling Field	Indexed
Amount	Amount__c	Formula (Number)		
Billing ProcessName	Name	Text(80)		✓
Created By	CreatedById	Lookup(User)		
Laptop Booking	Laptop_Booking__c	Lookup(Laptop Bookings)		✓
Last Modified By	LastModifiedById	Lookup(User)		
Name	Name__c	Master-Detail(consumer)		✓
Payment Mode	Payment_Mode__c	Picklist		

5. Creating a Validation Rule

- **Navigate to Object Manager:** Go to the Setup page and click on Object Manager.
- **Edit Consumer Object:** Select Consumer from the drop-down and click Edit.
- **Create a Validation Rule:**
 - Click on **Validation Rules > New**.
 - Enter the following details:
 - **Rule Name:** Phonenumeroemailblankrule
 - **Description:** Phone number and email number should not be blank.
 - **Formula:** `OR(ISBLANK(phone_number__c) , ISBLANK(email__c))`
 - Check the syntax and click **Save**.

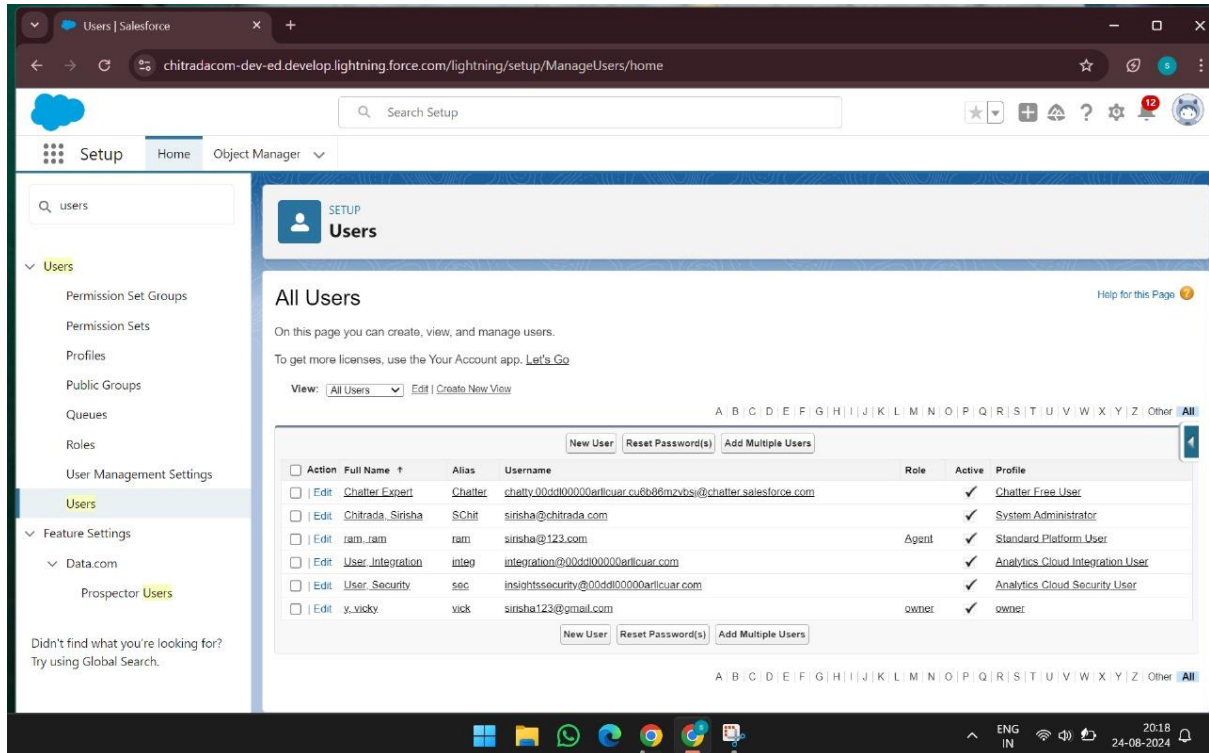
Rule:



6. Creating Users

- **Navigate to Users:** Go to Setup, type **Users** in the Quick Find box, and select **Users**.
- **Create New User:**
 - Click **New User** and fill in the following details:
 - **First Name:** Vicky
 - **Last Name:** Y
 - **Alias:** [Alias Name]
 - **Email:** [Your Personal Email]
 - **Username:** text@text.text
 - **Nickname:** [Nickname]
 - **Role:** Owner
 - **User License:** Salesforce
 - **Profiles:** Owner
 - Click **Save**.
- **Repeat for Another User:**
 - **First Name:** Ram
 - **Last Name:** Ram
 - **Alias:** [Alias Name]
 - **Email:** [Your Personal Email]
 - **Username:** text@text.text
 - **Nickname:** [Nickname]
 - **Role:** Agent
 - **User License:** Salesforce Platform
 - **Profiles:** Standard Platform User
 - Click **Save**.

Users:



7. Creating a Flow for Laptop Distribution

- Create a Salesforce Flow to automate the laptop distribution process. This flow should handle the assignment of laptops to customers based on availability and booking details.

Flow:



8. Developing Apex Code

- **LaptopBookingHandler Class:** Write an Apex class to handle the business logic related to laptop bookings.
- **LaptopBooking Trigger:** Develop a trigger on the Laptop Booking object to automate processes like updating availability or sending notifications.

LaptopBookingHandler Class:

```

public class LaptopBookingHandler {
    public static void sendEmailNotification (List<Laptop_Bookings_c> lapList){
        for(Laptop_Bookings_c lap:lapList)
        {
            Messaging.SingleEmailMessage email = new Messaging.SingleEmailMessage();
            email.setToAddresses( new List<String>{lap.Email_c}); email.setSubject('Welcome to
            our company');
            string body = 'Dear ' +lap.Name +', \n';
            body += 'Welcome to Laptop Rentals! You have been seen as a valuable customer tous.\n Please
            continue your journey with us, while we try to provide you with good quality resources. \n Laptop
            Amount = ' + lap.Amount_c + ' \n core type = '+lap.core_type_c +' \n Laptop type = '+lap.Laptop_type_c;
            email.setPlainTextBody(body);
            Messaging.sendEmail(new List<Messaging.SingleEmailMessage>{email});
        }
    }
}

```

Laptop Booking Trigger:

```

trigger LaptopBooking on Laptop_Bookings_c (After insert,after update) {if(trigger.isAfter && (
    trigger.isInsert || trigger.isupdate))
    {
        LaptopBookingHandler.sendEmailNotification(trigger.new);
    }
}

```

9. Generating Reports and Dashboards

- **Generate Reports:** Create custom reports to track key metrics such as total laptopsavailable, booking status, and customer details.
- **Create a Dashboard:** Place the generated reports on a Salesforce dashboard forquick and easy visualization.

Report:

consumer with laptops and tot...

chitradacom-dev-ed.develop.lightning.force.com/lightning/r/Report/00OdL000006BTcjUAG/view?queryScope=userFolders

Search...

LAPTOP RENTALS Billing Process Total Laptops Laptop Bookings consumer *consumer with laptops and...

Report: consumer with Laptop Bookings and Total Laptops
consumer with laptops and total laptops

Enable Field Editing Add Chart Edit

Total Records: 12 Total Amount: ₹41,650

types of version	consumer: consumer_name	Laptop Bookings: Laptop Bookings	Total No Of Laptops: Total Laptops	Laptop names	core type	Amount
basic (3)	Kiran	Kiran	20	Hp	core i7	₹700
	Sirisha	Sirisha	20	Dell	core i5	₹450
	Nikhil	Nikhil	15	Hp	core i7	₹500
Subtotal						₹1,650
intermediate (1)	Chinna	Doremon	10	Acer	core i5	₹1,500
Subtotal						₹1,500
high (8)	Vishnu	Vishnu	25	Mac	Bionic Chip	₹8,500
	Sneha	Sneha	15	Acer	core i5	₹5,400
	Sneha	Shinchuan	10	Dell	core i7	₹4,000
	Vyshu	Vyshu	20	Acer	core i7	₹5,000
	Mahesh	Mahesh	20	Mac	Bionic Chip	₹6,800
	Chetan	Chetan	10	Dell	core i3	₹2,000
Grand Total						₹41,650

Row Counts: 3 Detail Rows: 3 Subtotals: 2 Grand Totals: 1

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Dashboard:

