

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 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.

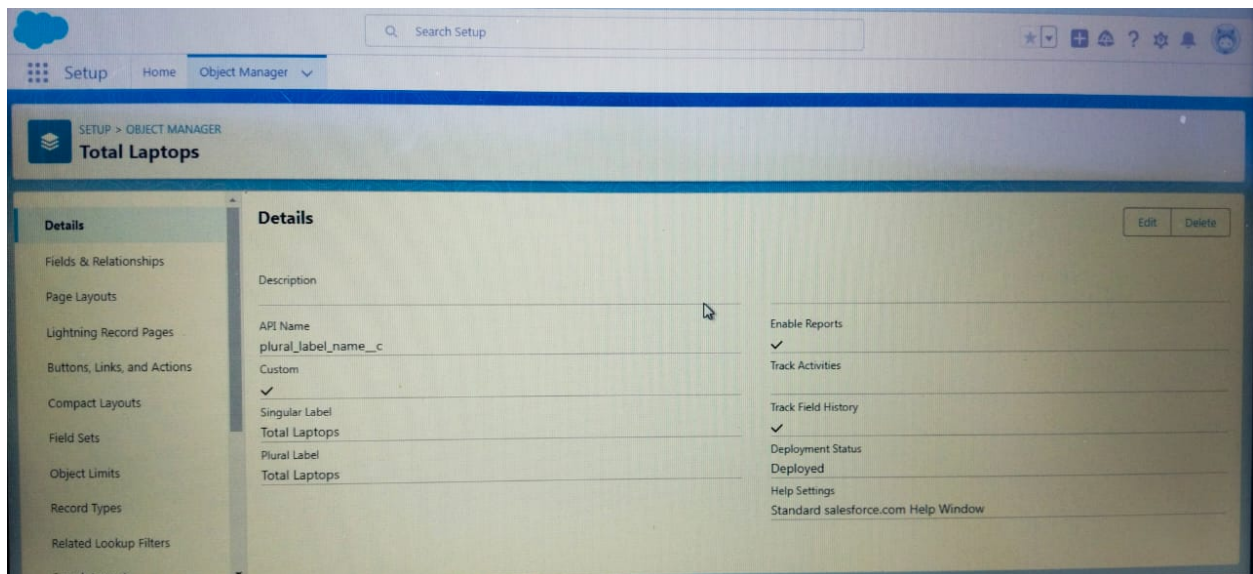
Detailed Setup Instructions:

1. Creating Custom Objects

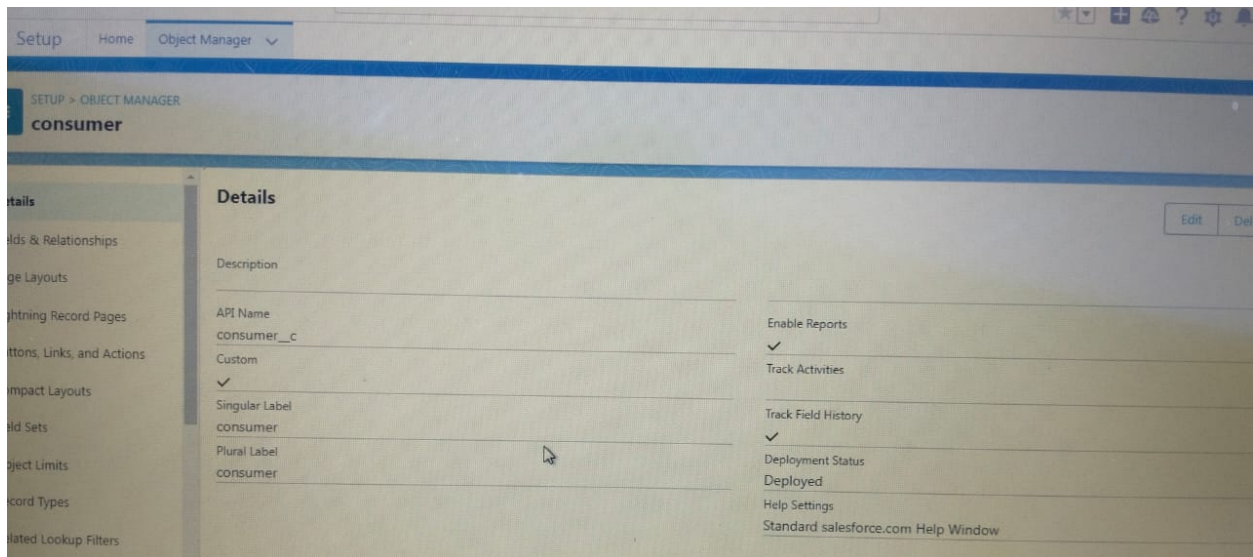
- Navigate to Setup: Go to the Setup page and click on Object Manager
- Create Custom Object: Total Laptops
 - Click on Create > Custom Object.
 - Enter the following details:
 - Label Name: Total Laptops
 - Plural Label Name: Total Laptops
 - Record Name Label: Total Laptops
 - Data Type: Text

- Enable the following options:
 - Allow Reports
 - Allow Search
 - Track Field History
- Click Save.
- Repeat for the following Custom Objects:
 - Consumer
 - Laptop Booking
 - Billing Process

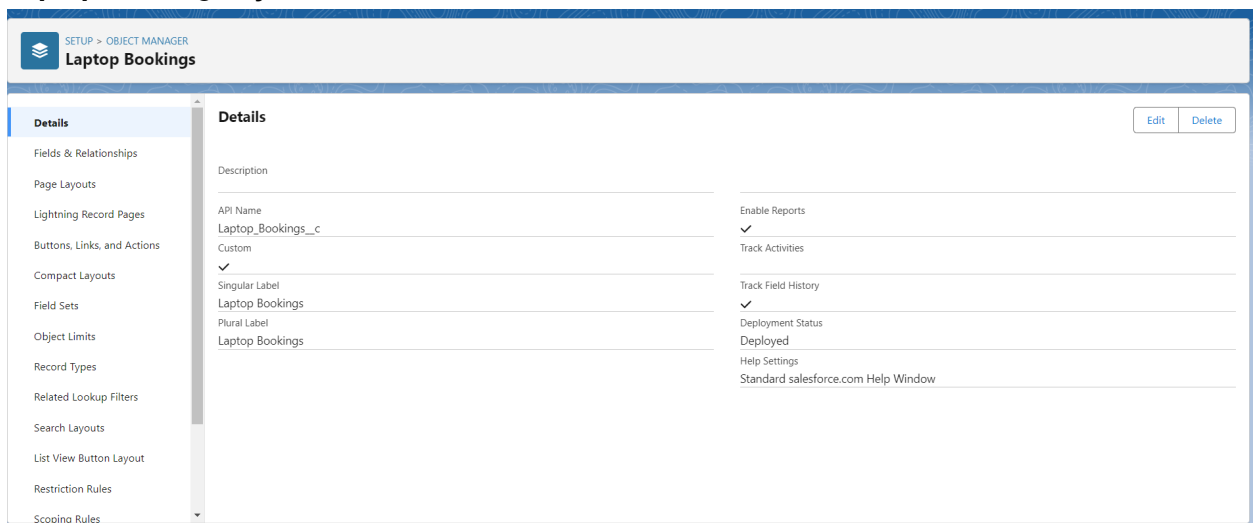
Total Laptops Object:



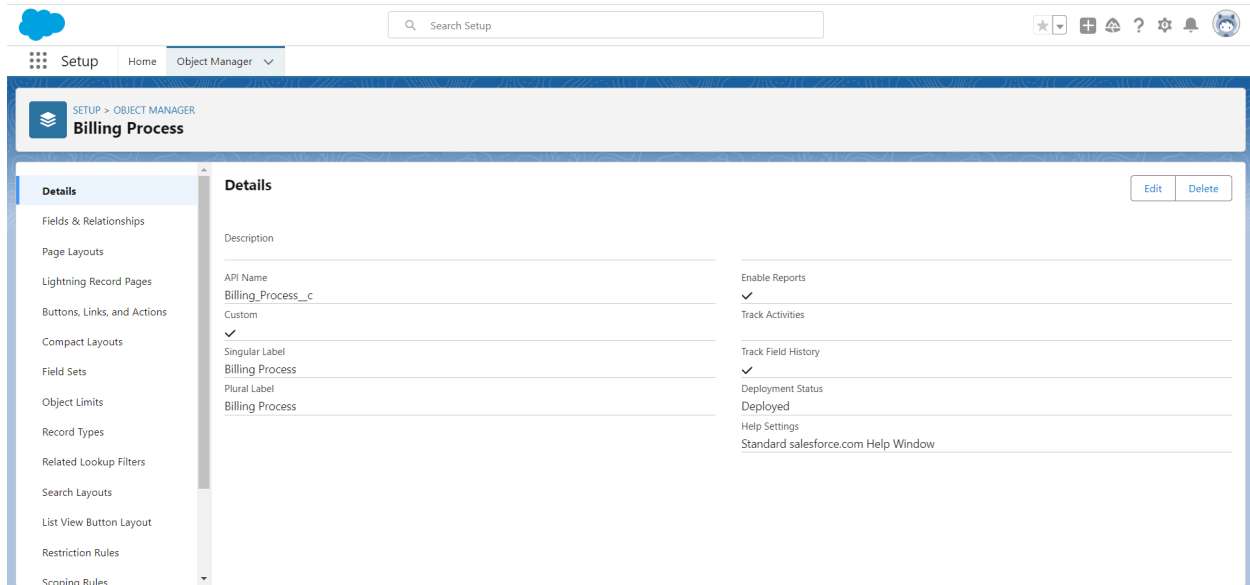
Consumer Object:



Laptop Booking Object:



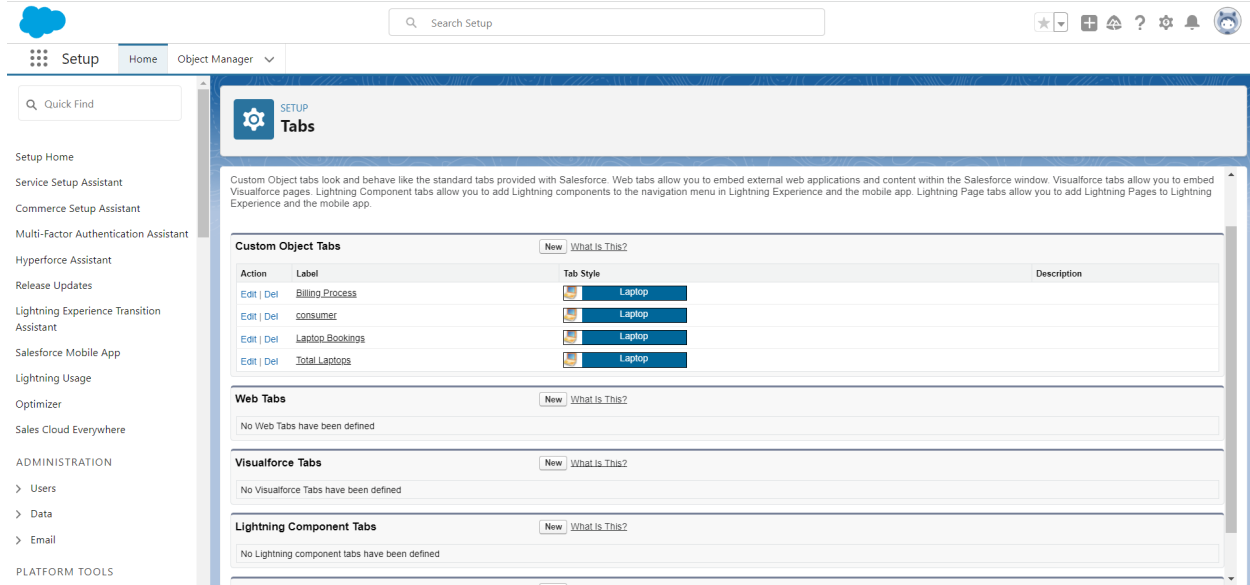
Billing Process Object:



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 Process

Tabs:



3. 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:

← Lightning App Builder

⚙ App Settings

📄 Pages ▾

LAPTOP RENTALS

ⓘ Help

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

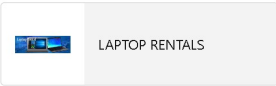
Image ⓘ

Clear

Primary Color Hex Value ⓘ

■

#0070D2

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

App Launcher Preview


App Naviagtion:

← Lightning App Builder

⚙ App Settings

📄 Pages ▾

LAPTOP RENTALS

ⓘ Help

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 format that the item doesn't support.

Available Items

🔄 Create ▾

Type to filter list...

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

consumer

Laptop Bookings

Billing Process

▶

◀

▲

▼

App User Profiles:

Lightning App Builder
App Settings
Pages
LAPTOP RENTALS
? Help

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 Total Laptops, Consumer, Laptop Booking, and Billing Process objects.

Total Laptops Fields:

Search Setup

Setup
Home
Object Manager

SETUP > OBJECT MANAGER
Total Laptops

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
Restriction Rules
Scoping Rules
Triggers

Fields & Relationships

6 Items, Sorted by Field Label

New
Deleted Fields
Field Dependencies
Set History Tracking

FIELD LABEL	FIELD NAME	DATA TYPE	CONTROLLING FIELD	INDEXED
Created By	CreatedById	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:

Setup Home Object Manager

Search Setup

consumer

Details

Fields & Relationships

8 Items, Sorted by Field Label

Quick Find New Deleted Fields Field Dependencies Set History Tracking

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	CreatedById	Lookup(User)		
Email	Email_c	Email		
Last Modified By	LastModifiedById	Lookup(User)		
Owner	OwnerId	Lookup(User,Group)		✓
Phone number	Phone_number_c	Phone		

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

Restriction Rules

Scoping Rules

Triggers

Laptop Booking Fields:

Setup Home Object Manager

Search Setup

Laptop Bookings

Details

Fields & Relationships

11 Items, Sorted by Field Label

Quick Find New Deleted Fields Field Dependencies Set History Tracking

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)		✓

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

Restriction Rules

Scoping Rules

Triggers

Billing Process Fields:

Setup > OBJECT MANAGER
Billing Process

Details

Fields & Relationships
7 Items, Sorted by Field Label

Quick Find

New Deleted Fields Field Dependencies Set History Tracking

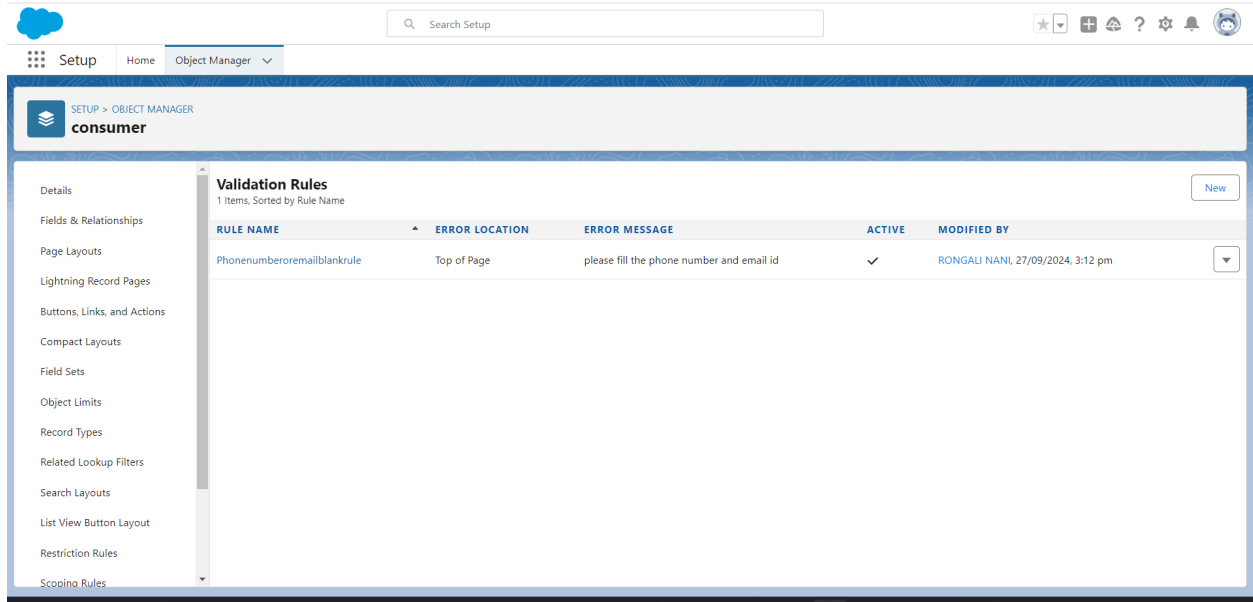
FIELD LABEL	FIELD NAME	DATA TYPE	CONTROLLING FIELD	INDEXED
Amount	Amount__c	Formula (Number)		
Billing ProcessName	Name	Text(80)		✓
Created By	CreatedById	Lookup(User)		
Laptop Booking	Laptop_Booking__c	Lookup(Laptop Bookings)		✓
Last Modified By	LastModifiedById	Lookup(User)		
Name	Name__c	Master-Detail(consumer)		✓
Payment Mode	Payment_Mode__c	Picklist		

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
Restriction Rules
Scoping Rules
Triggers

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:

The screenshot shows the Salesforce Setup interface for the 'Users' section. The left sidebar contains navigation links like 'Setup', 'Home', and 'Object Manager'. The main content area is titled 'All Users' and includes a search bar and a list of users. The user 'y_vicky' is highlighted as the owner.

Action	Full Name	Alias	Username	Role	Active	Profile
<input type="checkbox"/> Edit	Chatter Expert	Chatter	chatty.00duv000009quzd2as.rm1agfcdskmo@chatter.salesforce.com		✓	Chatter Free User
<input type="checkbox"/> Edit	NANI_RONGALI	RNANI	rongalinani@tendi.com		✓	System Administrator
<input type="checkbox"/> Edit	ramesh ram	rrame	rongalinani2002@gmail.com	Agent	✓	Standard Platform User
<input type="checkbox"/> Edit	User Integration	integ	integration@00duv000009quzd2as.com		✓	Analytics Cloud Integration User
<input type="checkbox"/> Edit	User Security	sec	insightsecurity@00duv000009quzd2as.com		✓	Analytics Cloud Security User
<input type="checkbox"/> Edit	y_vicky	yvush	rongalinani2004@gmail.com	owner	✓	Standard User

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 lapList){  
        for(Laptop_Bookings__c lap:lapList)  
        {  
            Messaging.SingleEmailMessage email = new Messaging.SingleEmailMessage();  
            email.setToAddresses( new List{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 to us.\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{email});
    }
}
}

```

Laptop Booking Trigger:

trigger LaptopBooking on Laptop_Bookings__c (After insert,after update)

```

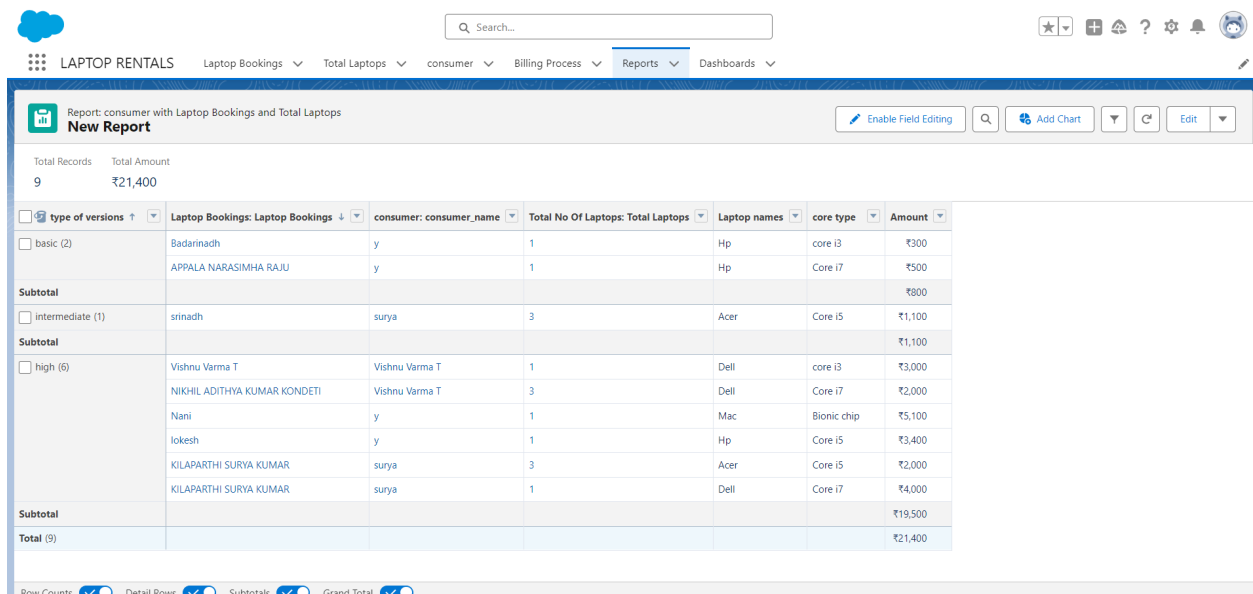
{
    if(trigger.isAfter && ( trigger.isInsert || trigger.isupdate))
    {
        LaptopBookingHandler.sendEmailNotification(trigger.new);
    }
}

```

9. Generating Reports and Dashboards

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

Report:



The screenshot shows a Salesforce report interface. At the top, there's a navigation bar with 'LAPTOP RENTALS' and various tabs like 'Laptop Bookings', 'Total Laptops', 'consumer', 'Billing Process', 'Reports', and 'Dashboards'. The 'Reports' tab is active. Below the navigation bar, the report title is 'Report: consumer with Laptop Bookings and Total Laptops'. There are buttons for 'Enable Field Editing', 'Add Chart', and 'Edit'. The report shows a summary of 9 total records with a total amount of ₹21,400. The main table displays individual bookings with columns for 'type of versions', 'Laptop Bookings', 'consumer: consumer_name', 'Total No Of Laptops: Total Laptops', 'Laptop names', 'core type', and 'Amount'. The data is grouped into three categories: 'basic (2)', 'intermediate (1)', and 'high (6)'. Each category has a 'Subtotal' row. The 'Total (9)' row at the bottom shows the overall total amount of ₹21,400.

type of versions	Laptop Bookings	consumer: consumer_name	Total No Of Laptops: Total Laptops	Laptop names	core type	Amount
basic (2)	Badarinadh	y	1	Hp	core i3	₹300
	APPALA NARASIMHA RAJU	y	1	Hp	Core i7	₹500
	Subtotal					₹800
intermediate (1)	srinadh	surya	3	Acer	Core i5	₹1,100
	Subtotal					₹1,100
high (6)	Vishnu Varma T	Vishnu Varma T	1	Dell	core i3	₹3,000
	NIKHIL ADITHYA KUMAR KONDETI	Vishnu Varma T	3	Dell	Core i7	₹2,000
	Nani	y	1	Mac	Bionic chip	₹5,100
	Iokesh	y	1	Hp	Core i5	₹3,400
	KILAPARTHI SURYA KUMAR	surya	3	Acer	Core i5	₹2,000
	KILAPARTHI SURYA KUMAR	surya	1	Dell	Core i7	₹4,000
	Subtotal					₹19,500
	Total (9)					₹21,400

Dashboard:

