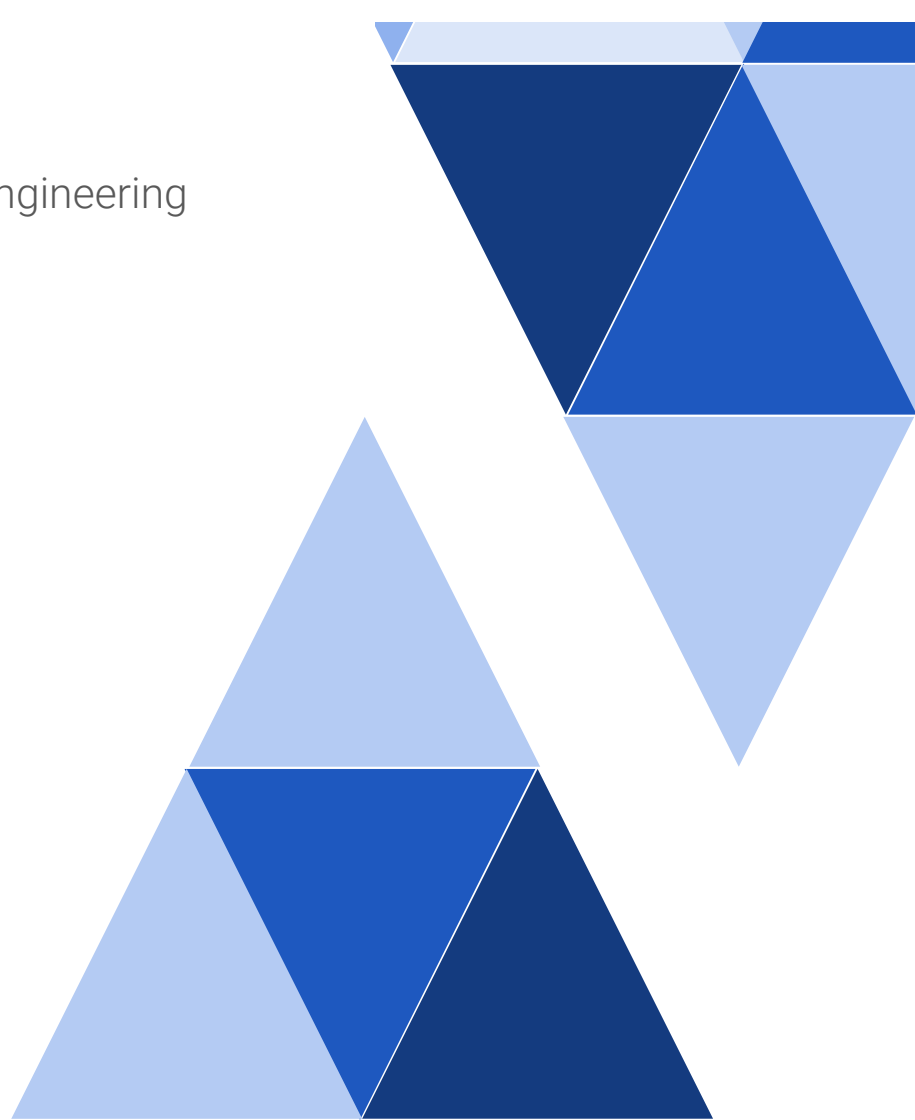




FinalReport

# A CRM Application for Laptop Rentals

Project Done By :  
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Lakireddy Bali Reddy College of Engineering



## 1. Object Creation

Click on the gear icon and select **Setup**.

1. From the Setup page, go to the Object Manager, then click Create and choose Custom Object. On the custom object page, enter a label name, plural label name, and select options like **Allow Reports** and **Allow Search**.
2. Click **Save**.

### 1.1. Create Total Laptops Object

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

The screenshot shows the Salesforce Object Manager configuration page for a custom object named 'Total Laptops'. The left sidebar contains a navigation menu with options: Details (selected), Fields & Relationships, Page Layouts, Lightning Record Pages, Buttons, Links, and Actions, Compact Layouts, Field Sets, Object Limits, Record Types, Related Lookup Filters, Search Layouts, and List View Button Layout. The main content area is titled 'Details' and includes 'Edit' and 'Delete' buttons. It contains the following fields and values:

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

1) Enter the label name>> Total Laptops

2) Plural label name>> Total Laptops

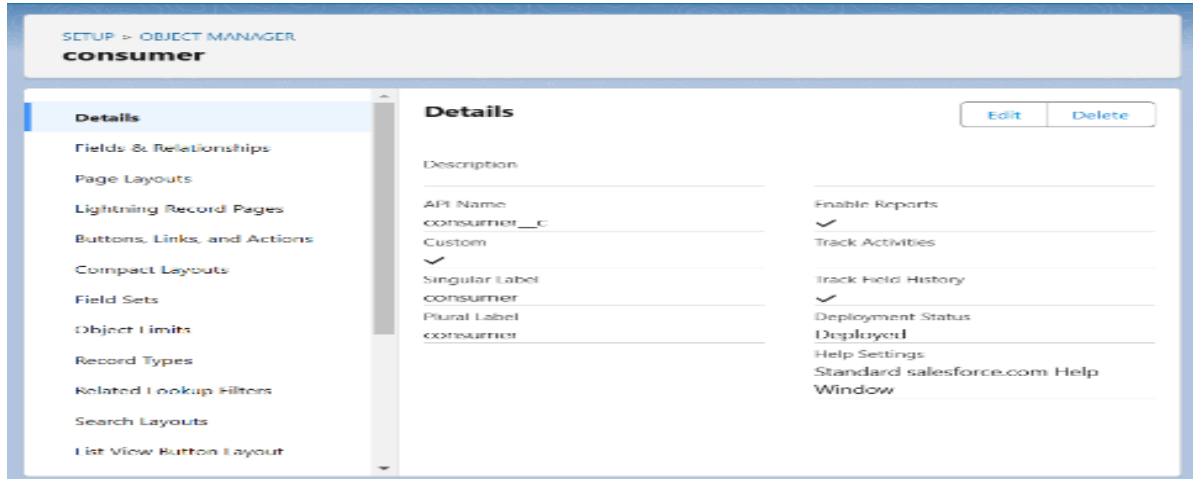
Three) Enter Record Name Label, and Format

Record Name >>Total Laptops

Data Type >> Text

1. Click on Allow reports, Allow search, and Track Field History,
2. Allow search >> Save.

## 1.2. Create consumer Object



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

- 1) Enter the label name >> consumer
- 2) Plural label name >> consumer
- 3) Enter Record Name Label, and Format

Record Name >> consumer\_name

Data Type >> Name

Click on Allow reports, Allow search, and Track Field History,

Allow search >> Save.

## 1.3 Create Laptop Bookings Object

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

- 1) Enter the label name >> Laptop Bookings
- 2) Plural label name >> Laptop Bookings
- 3) Enter Record Name Label, and Format

Record Name >> Laptop Bookings

Data Type >> Name

Click on Allow reports, Allow search, and Track Field History,

Allow search >> Save.

The screenshot shows the Salesforce Setup page for the 'Billing Process' object. The left sidebar contains a list of configuration options: 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, and List View Button Layout. The 'Details' section is selected. The main content area shows the following details:

Details	
Description	
API Name	Billing_Process__c
Custom	✓
Singular Label	Billing Process
Plural Label	Billing Process
Enable Reports	✓
Track Activities	
Track Field History	✓
Deployment Status	Deployed
Help Settings	Standard salesforce.com Help Window

Buttons: Edit, Delete

## 1.4 Create Billing Process Object

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

1) Enter the label name >> Billing Process

2) Plural label name >> Billing Process

The screenshot shows the Salesforce Setup page for the 'Laptop Bookings' object. The left sidebar contains a list of configuration options: 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, and List View Button Layout. The 'Details' section is selected. The main content area shows the following details:

Details	
Description	
API Name	Laptop_Bookings__c
Custom	✓
Singular Label	Laptop Bookings
Plural Label	Laptop Bookings
Enable Reports	✓
Track Activities	
Track Field History	✓
Deployment Status	Deployed
Help Settings	Standard salesforce.com Help Window

Buttons: Edit, Delete

3) Enter Record Name Label, and Format

Record Name >> Billing ProcessName

Data Type >> Name

1. Click on Allow reports, Allow search, and Track Field History,
2. Allow search >> Save.

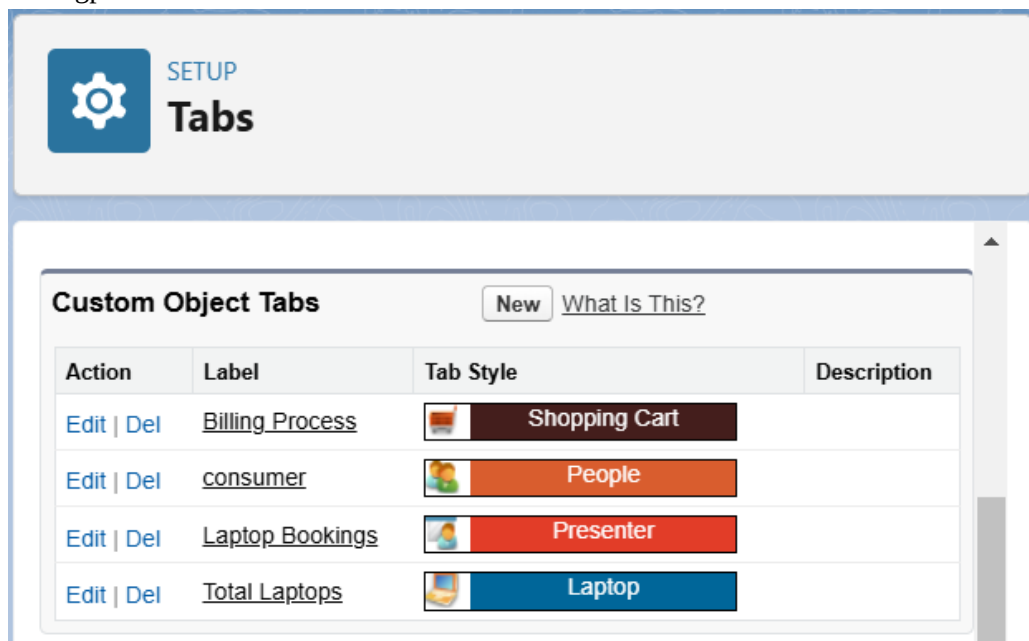
## 2. Creating a Custom Tab

To create a Tab: ( )

1. Go to the setup page >> Type Tabs in the Quick Find bar >> click on tabs >> New (under the custom object tab)
1. Select Object(Total Laptops) >> Select the tab style >> Next (Add to profiles page) keep it as default >> Next (Add to Custom App) uncheck the include tab .
2. Click save.

Activity 2: Creating Remaining Tabs

1. Now create the Tabs for the remaining Objects; they are “consumer, Laptop Booking, Billingprocess”.



## 3. Create a Lightning App

To create a lightning app page:

1. Go to the setup page >> search “app manager” in quick find >> select “app manager” >> click on New lightning App.
1. Fill the app name in app details as LAPTOP RENTALS >>Next >> (App option page) keep it as

default >> Next >> (Utility Items) keep it as default >> Next.

**2. To Add Navigation Items:**

Select the items (Total Laptops, consumer, Laptop Booking, Billing Process) from the search bar and move them using the arrow button >> Next.

**3. To Add User Profiles:**

Search profiles (System administrator) in the search bar >> click on the arrow button >> save & finish.

## **4. Fields**

### **4.1 Create fields in the Consumer object**

**1. Navigate to the Consumer Object:**

- Go to Setup.
- Click on Object Manager.
- Search for the Consumer object and select it.

**2. Create the Phone Field:**

- Click on Fields & Relationships >> New.
- Select Data Type as Phone >> Next.
- Set the Field Label as Phone number (Field Name will auto-generate).
- Mark the field as Required.
- Click Next >> Save & New.

**3. Create the Email Field:**

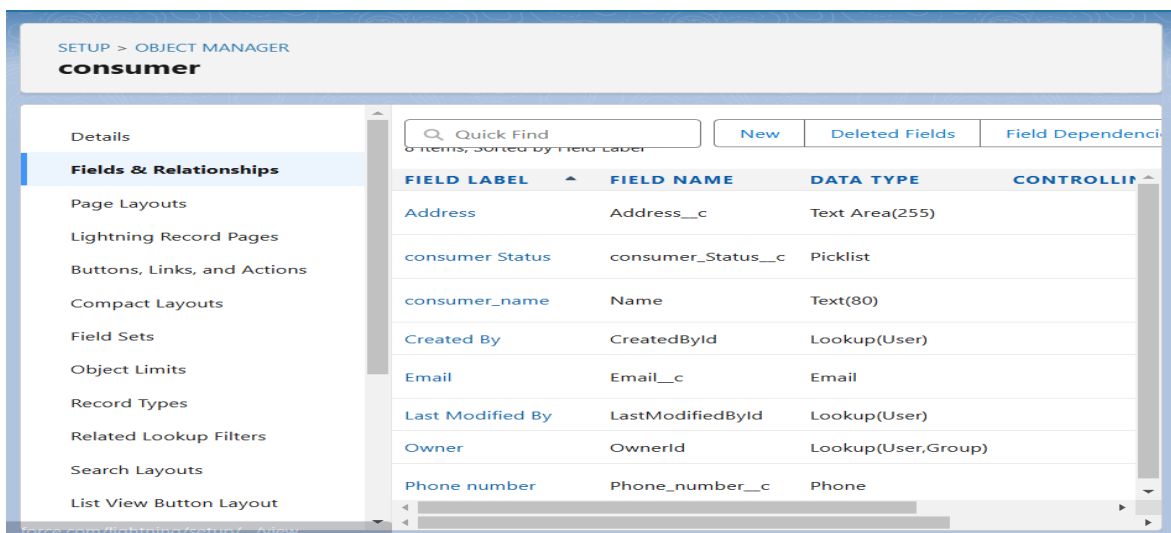
- Select Data Type as Email >> Next.
- Set the Field Label as Email (Field Name will auto-generate).
- Click Next >> Save & New.

**4. Create the Address Field:**

- Select Data Type as Text Area >> Next.
- Set the Field Label as Address (Field Name will auto-generate).
- Mark the field as Required.
- Click Next >> Save & New.

**5. Create the Consumer Status Field:**

- Select Data Type as Picklist >> Next.
- Set the Field Label as Consumer Status (Field Name will auto-generate).
- Enter Picklist Values:
  - Student
  - Employee
  - Others
- Mark the field as Required.
- Click Next >> Save.



## 4.2 Creating the field in Laptops Bookings object

### 1. Open the Laptop Booking Object:

- Go to **Setup > Object Manager**, search for **Laptop Booking**, and select it.

### 2. Create the Laptop Names Field:

- Go to Fields & Relationships > New.
- Choose Picklist as the data type.
- Set the Field Label to Laptop Names and enter these values: Dell, Acer, HP, Mac.
- Mark the field as Required and click Next > Save & New.

### 3. Create the Core Type Field:

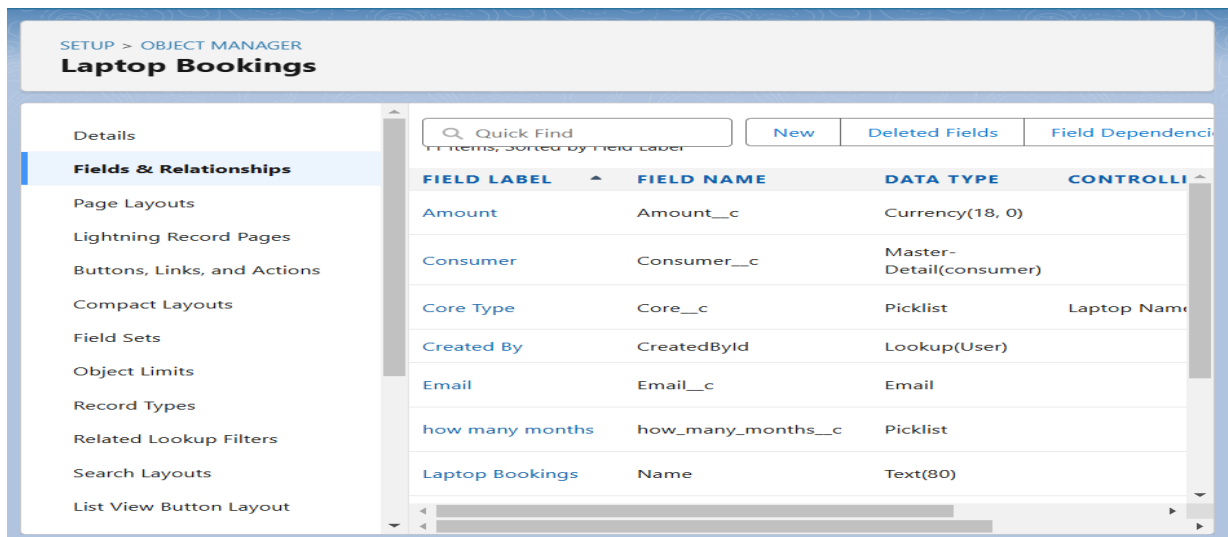
- Go to Fields & Relationships > New.
- Choose Picklist as the data type.
- Set the Field Label to Core Type and enter these values: Core i3, Core i5, Core i7, Bionic

Chip.

- Mark the field as Required and click Next > Save & New.

#### 4. Set Up Field Dependency:

- Go to Field Dependencies > New.
- Choose Laptop Names as the Controlling Field and Core Type as the Dependent Field.
- Map values:
  - Dell, Acer, HP: Allow Core i3, Core i5, Core i7.
  - Mac: Allow Bionic Chip.
- Click **Save**.



### 4.3 Creation of Fields & Relationship for Billing Process Object

#### Creation of Fields & Relationships for Billing Process Object

##### 1. Master-Detail Relationship for the Billing Process:

Go to Setup >> Object Manager >> Search for Billing Process >> Fields & Relationships >> New >> Select Master-Detail Relationship >> Next >> Choose Consumer from the related objects dropdown >> Set Field Label to Name >> Next >> Save & New.

##### 2. Lookup Relationship for Laptop Booking:

Go to Setup >> Object Manager >> Search for Billing Process >> Fields & Relationships >> New >> Select Lookup Relationship >> Next >> Choose Laptop Booking from the related objects dropdown >> Set Field Label to Laptop Booking >> Next >> Save & New.

##### 3. Picklist Field for Payment Mode:

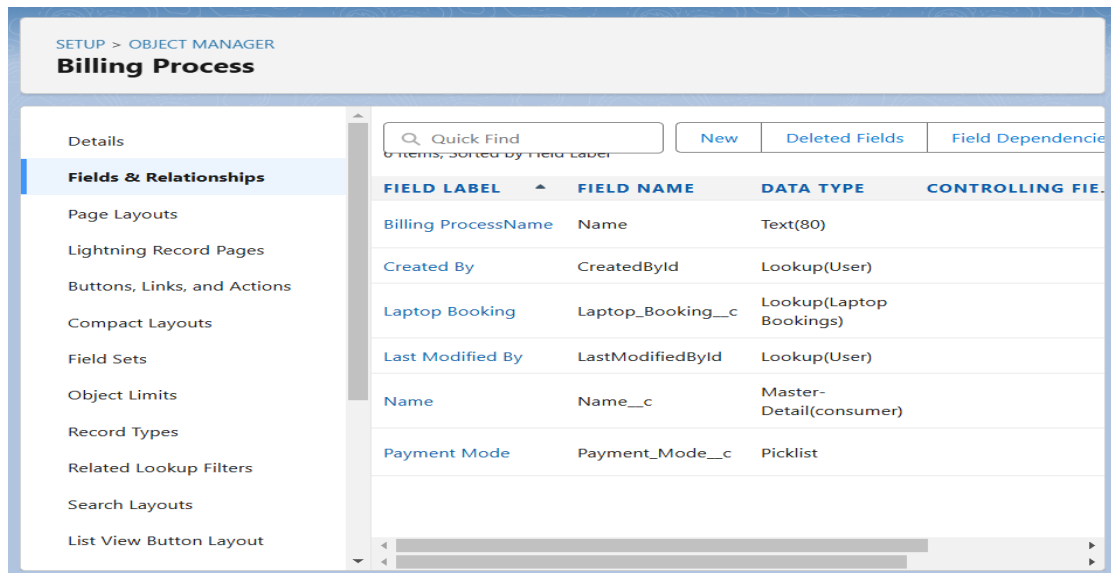
Go to Setup >> Object Manager >> Search for Billing Process >> Fields & Relationships >>



New >> Select Picklist >> Set Field Label to Payment Mode and enter values (Cash, Check, Credit Card, Debit Card, UPI, PhonePe, GPay, Payment) >> Mark as Required >> Next >> Save & New.

#### 4. Cross-Object Formula Field:

Go to Setup >> Object Manager >> Search for Billing Process >> Fields & Relationships >> New >> Select Formula >> Next >> Set Field Label to Amount (Formula Return Type: Currency) >> Click Insert Field >> Select Laptop Booking Amount field (Laptop\_Booking\_\_r.Amount\_\_c) >> Check Syntax >> Next >> Save & New.

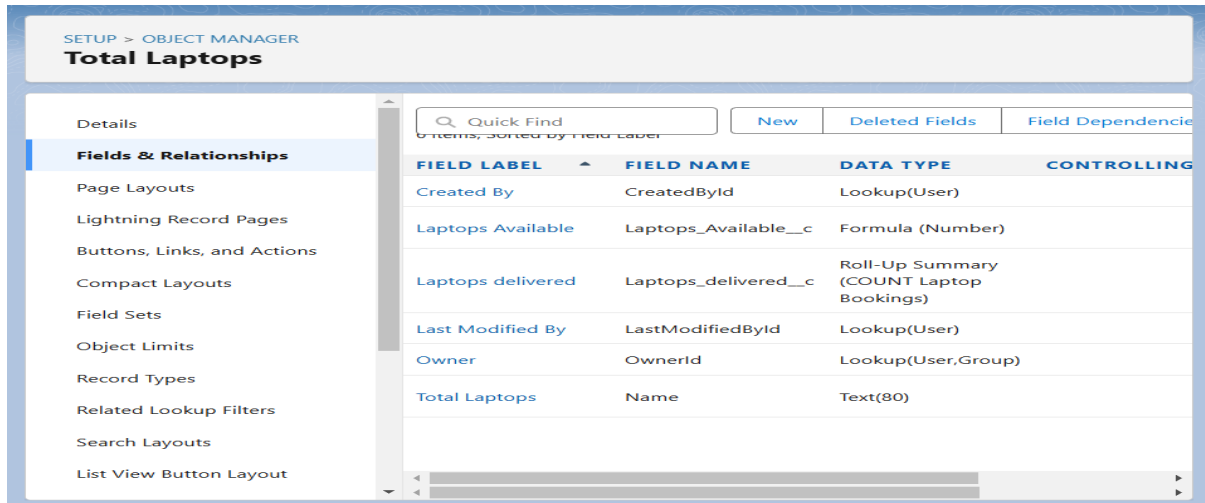


### 4.4 Creating the Field in Total Laptops Object

#### 1. Formula Field for Laptops Available:

Go to Setup >> Object Manager >> Search for Total Laptops >> Fields & Relationships >> New >> Select Formula >> Next

- Set Field Label: Laptops Available
- Field Name: Auto-generated
- Select Formula Return Type: Number
- Set Decimal Places: 0
- Click Next



1. **Formula for Laptops Available:**  
In the Advanced Formula section, enter the formula:
  2. *50 - Laptops\_delivered\_\_c*
    - Check Syntax to ensure there are no errors.
2. **Finalize:**  
Click Next >> Next >> Save & New.

## 5.Validation Rules:

Creating the Validation Rule for the Phone Number Field in Consumer Object

Go to Setup >> Object Manager >> Select Consumer object and click Edit.

Under the Validation Rules section, click New.

Enter the following:

- Rule Name: Phonenumeroemailblankrule
- Description: Phone number and email number should not be blank.
- Formula: *OR(ISBLANK(phone\_number\_\_c), ISBLANK(email\_\_c))*

Check Syntax to ensure there are no errors.

# consumer Validation Rule

[Help for this Page](#) ?

[Back to consumer](#)

## Validation Rule Detail

Edit

Clone

Rule Name	Phonenumberoremailblankrule	Active	<input checked="" type="checkbox"/>
Error Condition Formula	OR( ISBLANK( Phone_number__c ) , ISBLANK( Email__c ) )		
Error Message	Please fill phone number and email id	Error Location	Top of Page
Description	phone number and email number should not be blank		
Created By	<u>Vara Lakshmi Madugula</u> , 04/01/2025, 1:50 pm	Modified By	<u>Vara Lakshmi Madugula</u> , 04/01/2025, 1:50 pm

Edit

Clone

## 6.Profiles

### 6.1 owner Profile

1.Go to setup >> type profiles in the quick find box >> click on profiles >> clone the desired profile (Standard User) >> enter profile name (owner) >> Save.

2. Scroll down to Custom Object Permissions and Give access permissions for Total Laptops, consumers, Laptop Booking and Billing Process objects as mentioned in the below diagram.

3.Give Access and Save it.

#### Profile Detail

Edit

Clone

Delete

View Users

Name	owner	
User License	Salesforce	Custom Profile <input checked="" type="checkbox"/>
Description		
Created By	<u>Vara Lakshmi Madugula</u> , 04/01/2025, 2:06 pm	Modified By <u>Vara Lakshmi Madugula</u> , 04/01/2025, 2:11 pm

#### Custom Object Permissions

	Basic Access				Data Administration	
	Read	Create	Edit	Delete	View All	Modify All
Billing Process	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
consumer	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Laptop Bookings	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Total Laptops	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>

### 6.2 Agent Profile

1. Go to setup >> type profiles in the quick find box >> click on profiles >> clone the desired profile (Standard Platform User) >> enter profile name

(Agent) >>Save.

2. While still on the profile page, then click Edit.
3. Scroll down to Custom Object Permissions and Give access permissions for Total Laptops, consumer, Laptop Bookings, and Billing Process objects as mentioned in the below diagram.

4.

**Profile Detail** Edit Clone Delete View Users

Name	Agent
User License	Salesforce Platform
Description	
Created By	Vara Lakshmi Madugula, 04/01/2025, 2:17 pm
Modified By	Vara Lakshmi Madugula, 04/01/2025, 2:19 pm

Custom Profile ☒

**Custom Object Permissions**

	Basic Access				Data Administration	
	Read	Create	Edit	Delete	View All	Modify All
Billing Process	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
consumer	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

	Basic Access				Data Administration	
	Read	Create	Edit	Delete	View All	Modify All
Laptop Bookings	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Total Laptops	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

## 7. Roles and Hierarchy

### Creating Owner Role:

1. Go to Quick Find >> Search for Roles >> Click on Set Up Roles.
2. Click on Expand All, then click Add Role under "Whom this role works".
3. Set the Label as "Owner" (Role name auto-populates).
4. Click Save.

### Creating Agent Roles:

Go to Quick Find >> Search for Roles >> Click on Set Up Roles. Under CEO Role, click Add Role under Owner. Set the Label as "Agent" (Role name auto-populates).



## Creating the Role Hierarchy

You can build on the existing role hierarchy shown on this page. To insert a new role, click **Add Role**.

### Your Organization's Role Hierarchy

[Collapse All](#) [Expand All](#)



## 8. Users

### Create User


1. Go to setup - type users in the quick find box - select users -click New user.
2. Fill in the fields
3. First Name : Vicky
4. Alias : Give a Alias Name
5. Email id : Give your Personal Email id
6. Username : Username should be in this form: text@text.text
7. Nick Name : Give a Nickname
8. Role : owner
9. User license : Salesforce
10. Profiles : owner.

Save it.

### Activity 2: creating another user

1. Go to setup -type users in the quick find box - select users -click New user.
2. Fill in the fields

3. First Name : ram
4. Last Name : ram
5. Alias : Give a Alias Name
6. Email id : Give your Personal Email id
7. Username : Username should be in this form: text@text.text
8. Nick Name : Give a Nickname
9. Role : Agent
10. User license ; Salesforce platform
11. Profiles : Agent.
12. Save it.


SETUP  
**Users**

---

### Active Users Help for this Page ?

On this page you can create, view, and manage users.

To get more licenses, use the Your Account app. [Let's Go](#)

View: Active Users Edit Create New View

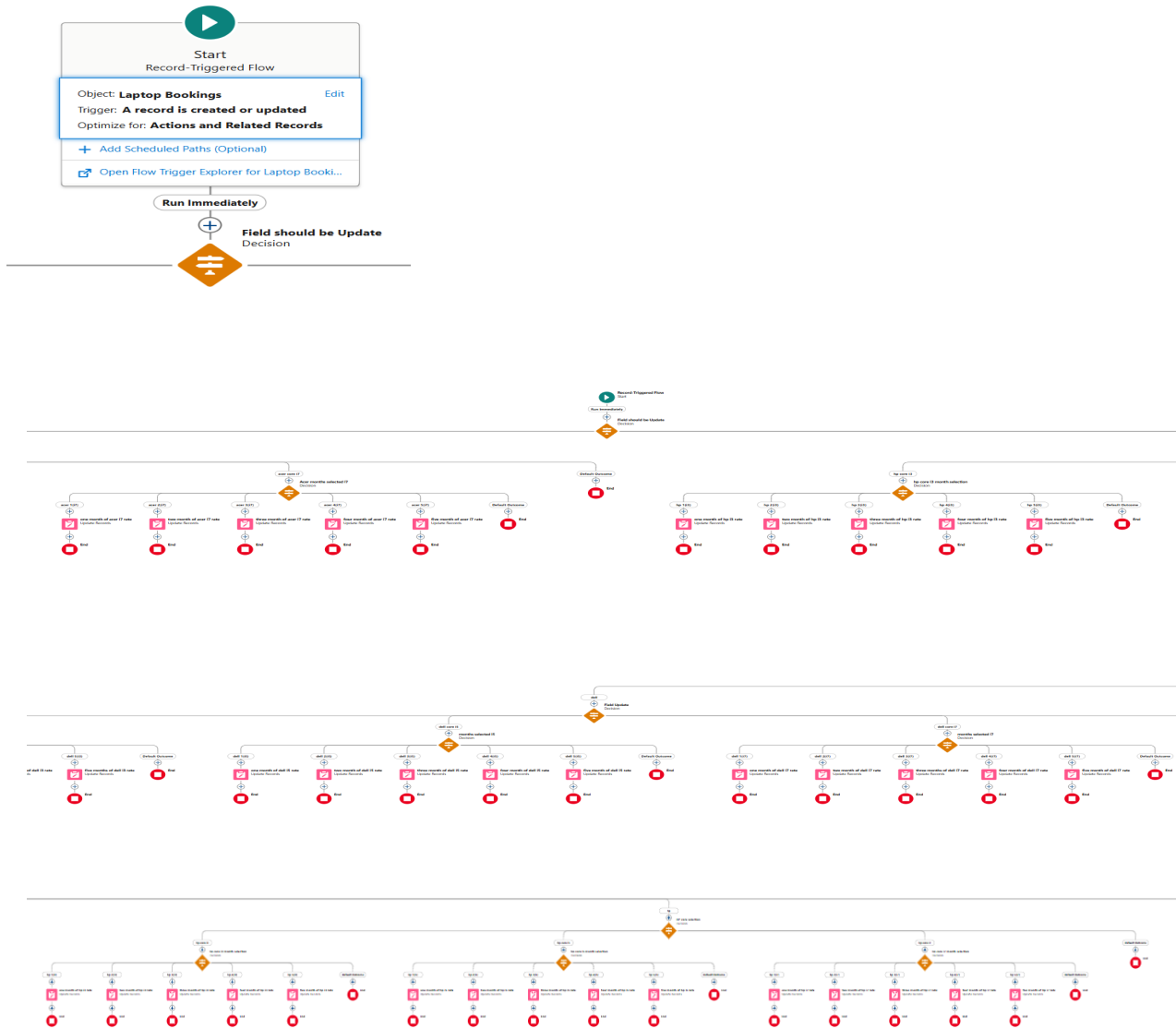
A B C D E F G H I J K L M N O P Q R S T U V W X Y Z Other All

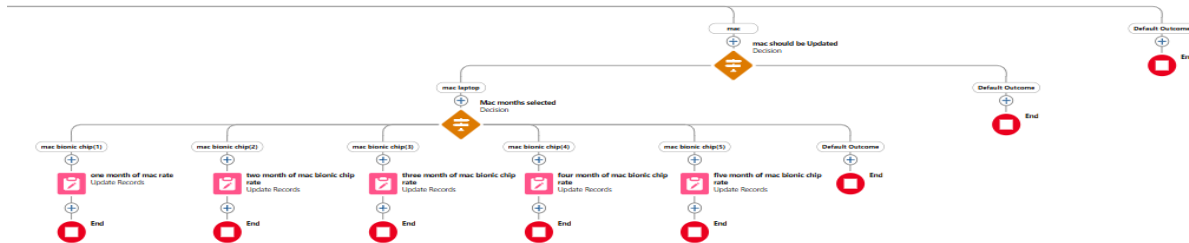
New User Reset Password(s) Add Multiple Users

<input type="checkbox"/>	Action	Full Name ↑	Alias	Username	Role	Active	Profile
<input type="checkbox"/>	<a href="#">Edit</a>	Chatter Expert	Chatter	chatty.00dns000009qt012aa_c9gkoqukops9@chatter.salesforce.com		✓	Chatter Free User
<input type="checkbox"/>	<a href="#">Edit</a>	Madugula Vara Lakshmi	VMadu	project@vara.com		✓	System Administrator
<input type="checkbox"/>	<a href="#">Edit</a>	ram ram	rram	vara@98.com	Agent	✓	Agent
<input type="checkbox"/>	<a href="#">Edit</a>	User Integration	integ	Integration@00dns000009qt012aa.com		✓	Analytics Cloud Integration User
<input type="checkbox"/>	<a href="#">Edit</a>	User Security	sec	insightssecurity@00dns000009qt012aa.com		✓	Analytics Cloud Security User
<input type="checkbox"/>	<a href="#">Edit</a>	y_vicky	vara	vara@12345.com	owner	✓	owner

## 9.Flow

[https://lakireddybalireddycolleg-d8-dev-ed.develop.lightning.force.com/builder\\_platform\\_interaction/flowBuilder.app?flowId=301NS00000sXW6rYAG](https://lakireddybalireddycolleg-d8-dev-ed.develop.lightning.force.com/builder_platform_interaction/flowBuilder.app?flowId=301NS00000sXW6rYAG)





## 10. Apex

To create an Apex Trigger and Handler Class:

### 1. Create the Trigger:

- Go to Developer Console in Salesforce.
- Click File > New > Trigger.
- trigger name
- Define the events (e.g., After Insert, After Update).

Action	Name ↑	Namespace Prefix	sObject Type	Api Version	Status	Size Without Comments	Last Modified By
<a href="#">Edit</a>   <a href="#">Del</a>	LaptopBooking		Laptop_Bookings	62.0	Active	220	<a href="#">Vara Lakshmi Madugula</a> , 04/01/2025, 4:58 pm

**Apex Triggers**

---

Apex Trigger

LaptopBooking

Help for this Page ?

**Apex Trigger Detail**

[Edit](#)
[Delete](#)
[Download](#)
[Show Dependencies](#)

Name	LaptopBooking	sObject Type	Laptop Bookings
Code Coverage	0% (0/2)	Status	Active
Created By	<a href="#">Vara Lakshmi Madugula</a> , 04/01/2025, 4:51 pm	Last Modified By	<a href="#">Vara Lakshmi Madugula</a> , 04/01/2025, 4:58 pm
Namespace Prefix			

Apex Trigger

Version Settings

Trace Flags

```

1 trigger LaptopBooking on Laptop_Bookings__c (After Insert,after update) {
2
3
4
5   if(trigger.isAfter && ( trigger.isinsert || trigger.isupdate))
6   {
7
8     LaptopBookingHandler.sendEmailNotification(trigger.new);
9
10  }
11
12
13
14
15}

```

### 2. Create the Handler Class:

- Go to Developer Console.
- Click File > New > Apex Class.



- . Define the handler class, which contains the logic for actions (like sending emails).

**SETUP**  
**Apex Classes**

Name	Namespace Prefix	Created By	Status	Code Coverage	Last Modified By
LaptopBookingHandler		Vara Lakshmi Madugula	Active	0% (0/10)	Vara Lakshmi Madugula

Created: 04/01/2025, 4:53 pm

**Class Body** | Class Summary | Version Settings | Trace Flags

```

1 public class LaptopBookingHandler {
2
3     public static void sendEmailNotification (List<Laptop_Bookings__c> lapList){
4         for(Laptop_Bookings__c lap:lapList)
5         {
6             Messaging.SingleEmailMessage email = new Messaging.SingleEmailMessage();
7             email.setToAddresses( new List<String>({lap.Email__c});
8             email.setSubject('Welcome to our company');
9             string body = 'Dear Customer, \n';
10            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;
11            email.setPlainTextBody(body);
12            Messaging.sendEmail(new List<Messaging.SingleEmailMessage>({email});
13        }
14    }
15 }

```

Action	Name	Namespace Prefix	Api Version	Status	Size Without Comments	Last Modified By
<a href="#">Edit</a>   <a href="#">Del</a>   <a href="#">Security</a>	LaptopBookingHandler		62.0	Active	888	Vara Lakshmi Madugula


04/01/2025, 4:58 pm

## 11.Report







To create a report in Salesforce, first, make sure you have 10-12 records in the Laptop Bookings object, including at least two records for each of these types: Dell (i3), Dell (i7), Acer (i3), HP (i5), and Mac (Bionic Chip). Then, go to the Reports tab in your app and click New Report. Select the report type Consumer with Laptop Bookings and Total Laptops, and click Start Report.











Next, choose a Tabular Report layout and add fields from the left pane, making sure to include the Amount field. Click the drop-down next to the Amount column and choose Bucket List, then apply the changes. To create a summary report, select Types of Version to group by rows.

Finally, click Save and then Run the report to view the results.

**Laptop Bookings**  
**Recently Viewed**  [New](#) [Import](#) [Assign Label](#)

10 items • Updated a few seconds ago

<input type="checkbox"/>	<b>Laptop Bookings</b>	
1	<input type="checkbox"/> Acer i7 Booking	
2	<input type="checkbox"/> Acer i5 Booking	
3	<input type="checkbox"/> HP i3 Booking	
4	<input type="checkbox"/> hp i7 Booking	
5	<input type="checkbox"/> Dell i5 Booking	
6	<input type="checkbox"/> MacBook Bionic Booking	
7	<input type="checkbox"/> HP i5 Booking	
8	<input type="checkbox"/> Acer i3 Booking	
9	<input type="checkbox"/> Dell i7 Booking	
10	<input type="checkbox"/> Dell i3 Booking	

# Sharing report to owner

Report: consumer with Laptop Bookings and Total Laptops

Laptop Rentals

Total Records

10

Total Amount

₹52,500

Average Amount

₹5,250

Maximum Amount

₹12,000

type of versions	itype	consumer: consumer_name	Laptop Bookings: Laptop Bookings	Total No Of Laptops: Total Laptops	Core Type	Amount
high (10)						
	Acer i3 Booking (1)	Alice Brown	Acer i3 Booking	2	Core i7	₹12,000
	Subtotal					₹12,000 Avg: ₹12,000 Max: ₹12,000
	Acer i5 Booking (1)	john	Acer i5 Booking	3	Core i5	₹7,500
	Subtotal					₹7,500 Avg: ₹7,500 Max: ₹7,500
	Acer i7 Booking (1)	Jane Smith	Acer i7 Booking	2	Core i5	₹6,000
	Subtotal					₹6,000 Avg: ₹6,000 Max: ₹6,000
	Dell i3 Booking (1)	john	Dell i3 Booking	2	core i3	₹3,000
	Subtotal					₹3,000 Avg: ₹3,000 Max: ₹3,000
	Dell i5 Booking (1)	Jane Smith	Dell i5 Booking	2	Core i5	₹3,500
	Subtotal					₹3,500 Avg: ₹3,500 Max: ₹3,500
	Dell i7 Booking (1)	Jane Smith	Dell i7 Booking	1	Core i7	₹6,000
	Subtotal					₹6,000 Avg: ₹6,000 Max: ₹6,000
	HP i5 Booking (1)	Alice Brown	HP i5 Booking	1	Core i5	₹1,700
	Subtotal					₹1,700 Avg: ₹1,700 Max: ₹1,700
	hp i7 Booking (1)	Alice Brown	hp i7 Booking	2	core i3	₹3,000
	Subtotal					₹3,000 Avg: ₹3,000 Max: ₹3,000
	MacBook Bionic Booking (1)	Charlie Davis	MacBook Bionic Booking	5	Bionic Chip	₹5,800
	Subtotal					₹5,800 Avg: ₹5,800 Max: ₹5,800
Subtotal						₹52,500 Avg: ₹5,250 Max: ₹12,000
Total (10)						₹52,500 Avg: ₹5,250 Max: ₹12,000

# 12.Dash Board

