Project Report

Project Title: Laptop Rental System

Platform: Salesforce

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A CRM APPLICATION FOR LAPTOP RENTALS

Project Overview

Abstract:
The **Laptop Rentals** project aims to create a Salesforce-based solution to manage laptop rentals efficiently. By leveraging custom objects, automation, and dynamic reporting, the project addresses challenges such as real-time inventory tracking, automated notifications, and rental scheduling. This system is designed to enhance operational efficiency, ensure accurate data handling, and provide a seamless experience for administrators and users. The solution supports scalability, making it adaptable to future enhancements.

Detailed Overview:
The **Laptop Rentals** project focuses on automating and streamlining laptop rental processes within an organization. It leverages Salesforce features such as custom objects, validation rules, flows, and dashboards to improve efficiency and accuracy. The project aims to:

- Maintain accurate inventory records.
- Automate booking and notification processes.
- Provide real-time insights into laptop availability and usage.

This solution not only enhances resource management but also aligns with organizational goals of improving service quality and scalability.

Objectives

Business Goals:

- Improve resource management for laptop rentals.
- Enhance customer satisfaction by automating notifications and ensuring timely responses.

Specific Outcomes:

- A scalable solution for managing rental records.
- Automated notifications for booking confirmations and inventory updates.
- Real-time tracking of laptop availability and usage.

Salesforce Key Features and Concepts Utilized

1. Objects:

- Created a custom object named `LaptopBookings` to manage rental records.
- Key fields include:
  - **Laptop Name** (Text)
  - **Core Type** (Picklist: e.g., i3, i5, i7)
  - **Amount** (Currency)
  - **Total No. of Laptops** (Number)
  - **Laptops Available** (Formula Field).

2. Tabs:

- Added a custom tab for `LaptopBookings` to make it accessible in the **Laptop Rentals Lightning App**.
- Enables users to view, create, and manage booking records.

3. The Lightning App:

- Built a **Laptop Rentals App** using Salesforce Lightning Experience.
- Integrated the `LaptopBookings` tab, dashboards, and reports into the app for streamlined navigation and usability.

4. Fields:

- Configured fields on the `LaptopBookings` object for tracking rental data:
  - Example: The **Laptops Available** formula dynamically updates as bookings are made.

5. Validation Rules:

- Implemented validation rules to ensure data integrity, such as:
  - Preventing bookings when `Laptops Available` is 0.
  - Validating email address formats for notification purposes.

6. Profiles and Permissions:

- Configured profiles to control access to the `LaptopBookings` object and other resources.
- Example: Admins can create and edit all records, while regular users can only view their own bookings.

7. Roles and Hierarchy:

- Defined roles to manage data visibility:
    - Admins: Full access to all records.
    - Managers: View records of users in their hierarchy.
    - Users: View and edit their bookings.

8. Users:

- Created users with appropriate roles and profiles to match project requirements.

9. Flows:

- Automated processes using Salesforce Flows:
    - Example 1: **Laptop Booking Notification Flow**—Sends email notifications to users and admins.
    - Example 2: **Inventory Update Flow**—Reduces `Laptops Available` after a booking is confirmed.

10. Reports:

- Built reports for real-time insights into rentals and inventory:
    - Examples:
        - **Rental Summary Report**: Total bookings by laptop type.
        - **Revenue Report**: Total earnings from rentals over time.

11. Dashboards:

- Created dashboards to visualize key metrics:
    - Widgets like pie charts for laptop type distribution and bar graphs for monthly rental trends.

Detailed Steps to Solution Design:

1. Object Creation

Create Total Laptops Object:

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

    1) Enter the label name>> Total Laptops

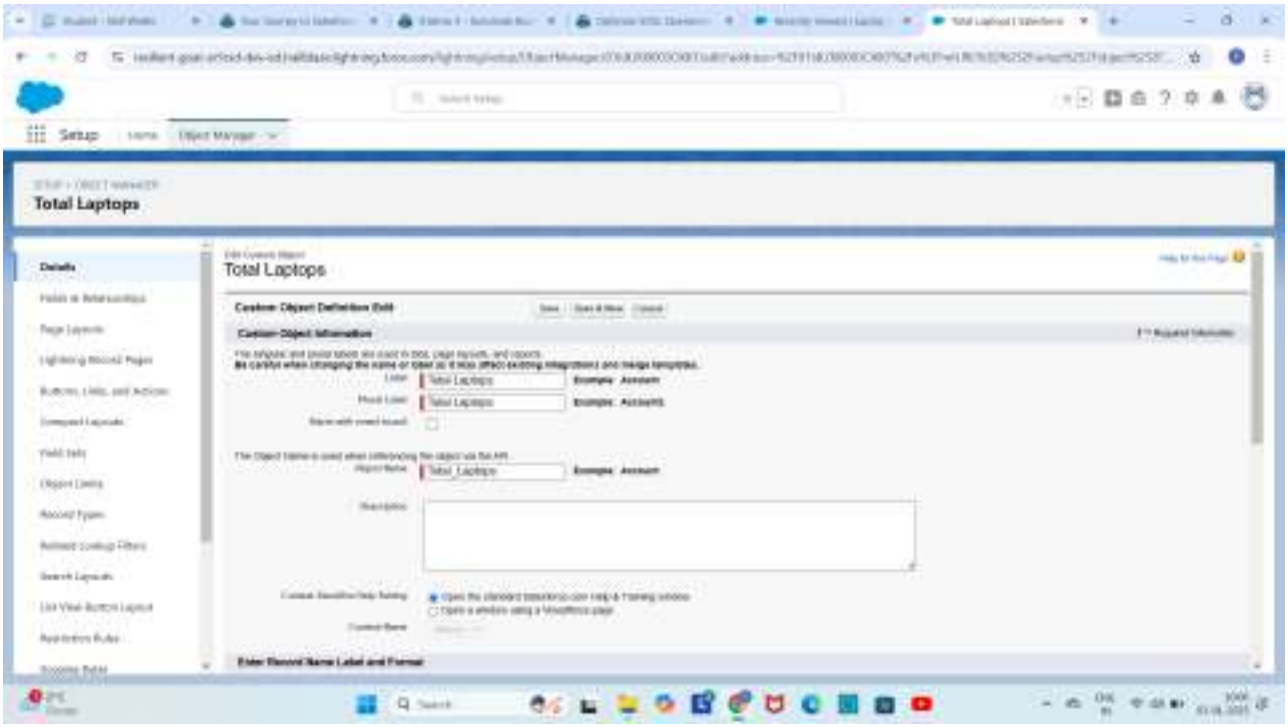
    2) Plural label name>> Total Laptops

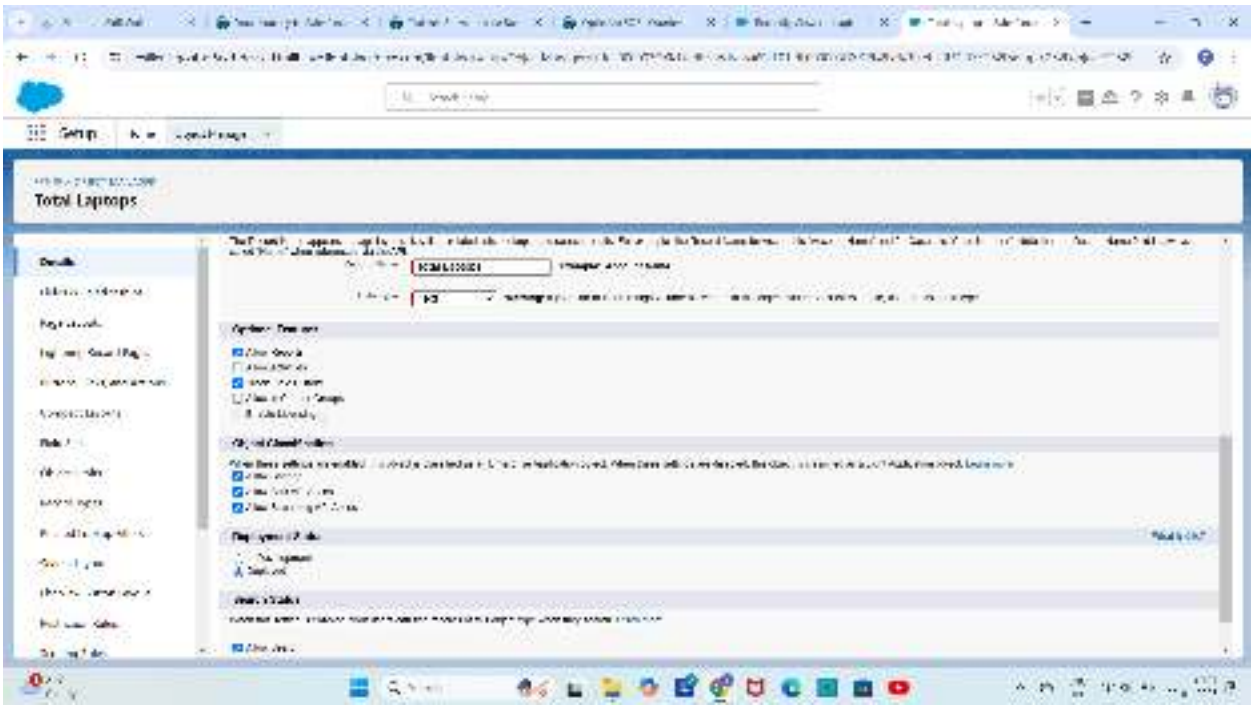
    3) Enter Record Name Label and Format

    Record Name >>Total Laptops

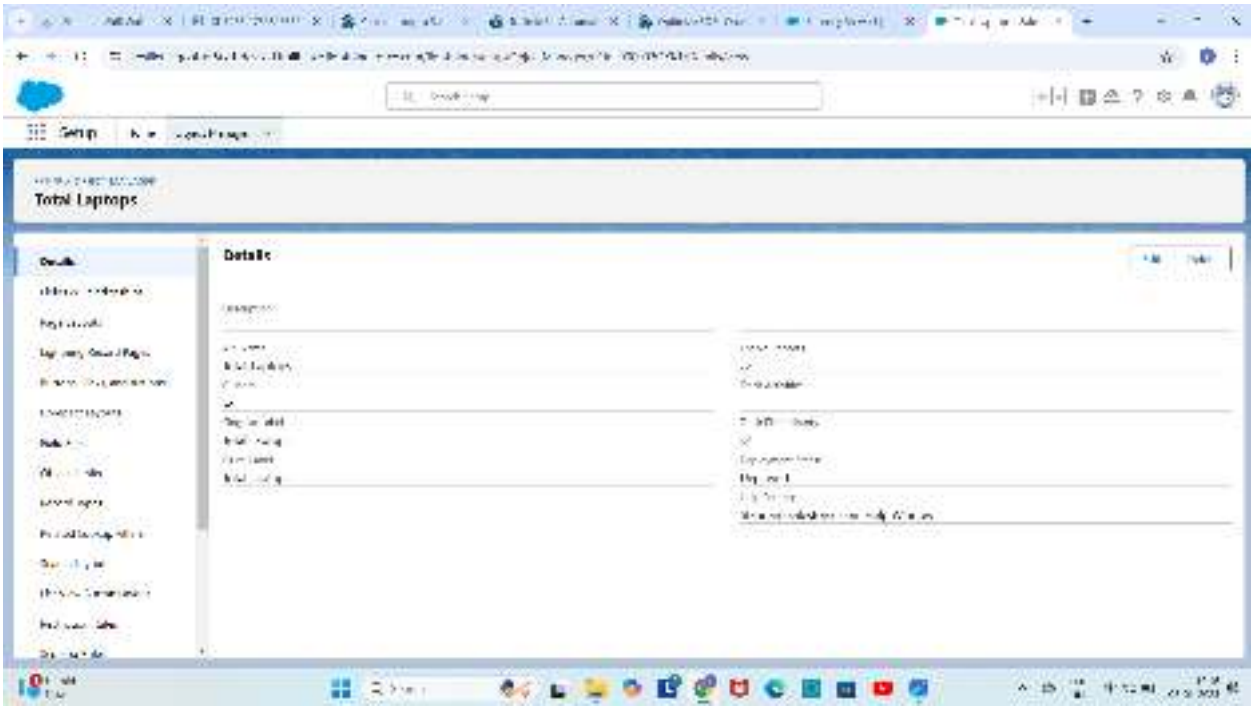
    Data Type >> Text

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





Total Laptops object created:



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

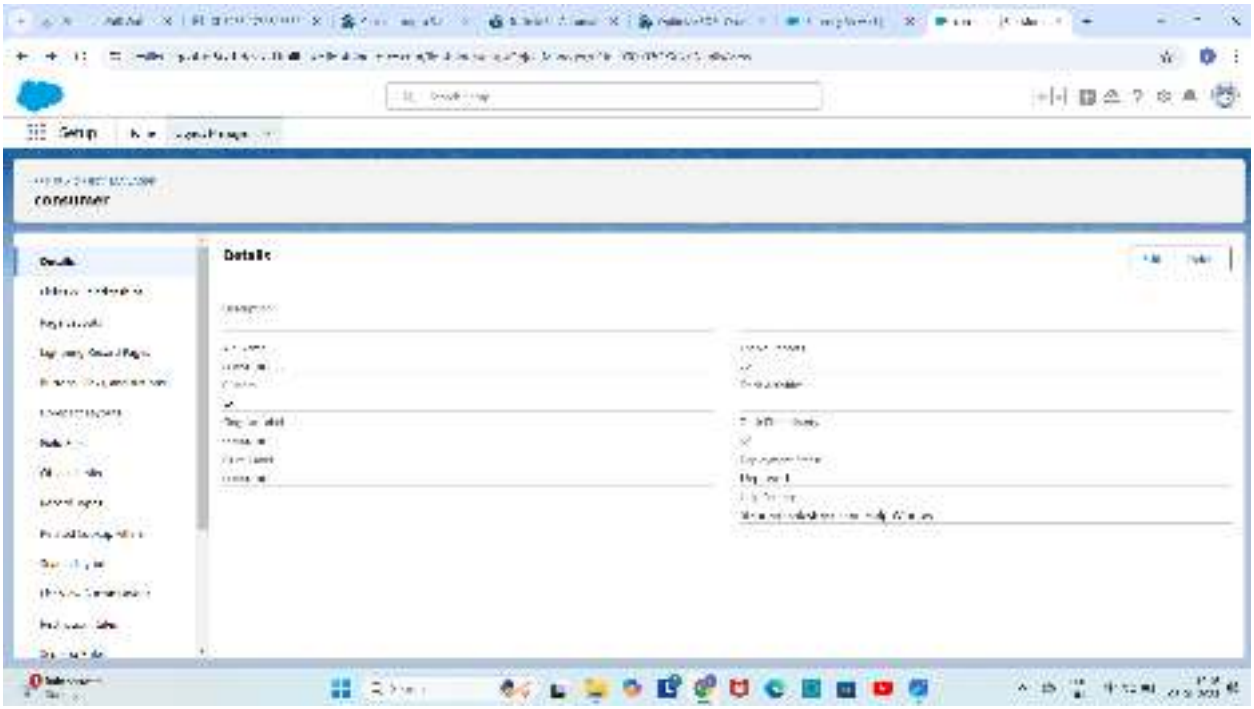
3) Enter Record Name Label and Format

Record Name >> consumer_name

Data Type >> Name

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

Consumer object created sucessfully by following above steps:



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

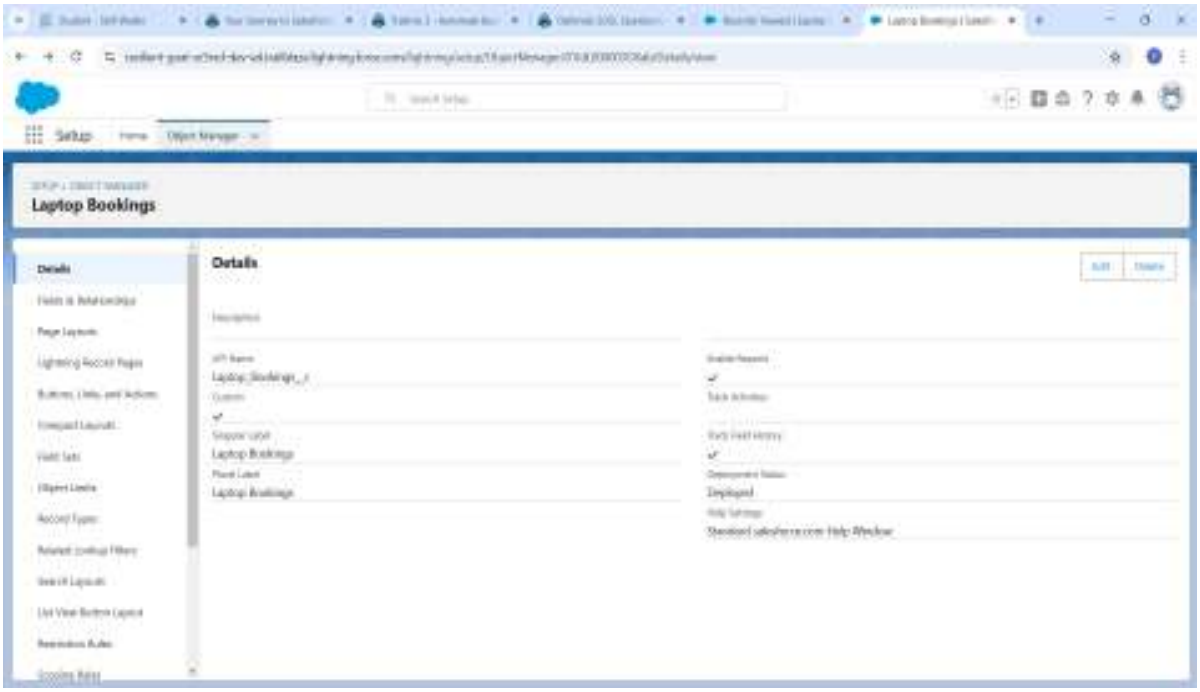
3) Enter Record Name Label and Format

Record Name >> Laptop Bookings

Data Type >> Name

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

Laptop Bookings object created sucessfully by following above steps:



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

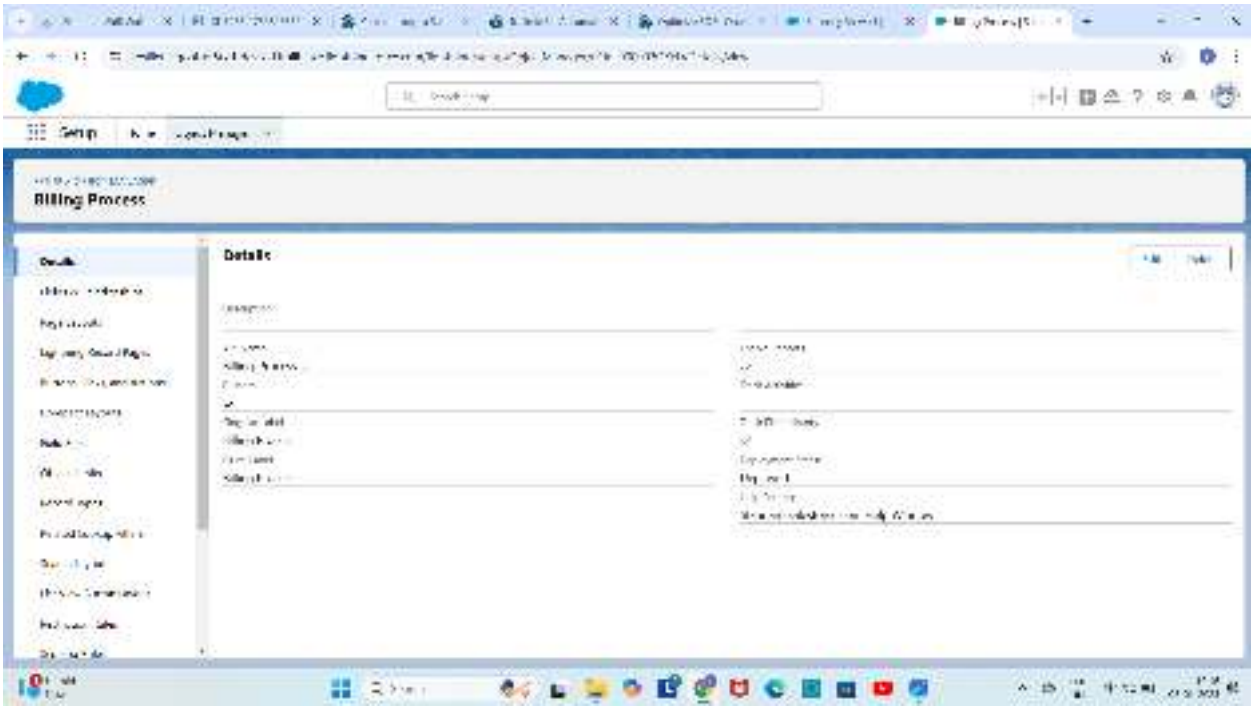
3) Enter Record Name Label and Format

Record Name >> Billing ProcessName

Data Type >> Name

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

Billing Process object created sucessfully by following above steps:



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.

Creating a Custom Tab

To create a Tab:( )
Go to setup page >> Type Tabs in Quick Find bar >> click on tabs >> New (under custom object tab)

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 .
Make sure that the Append tab to users' existing personal customizations is checked.

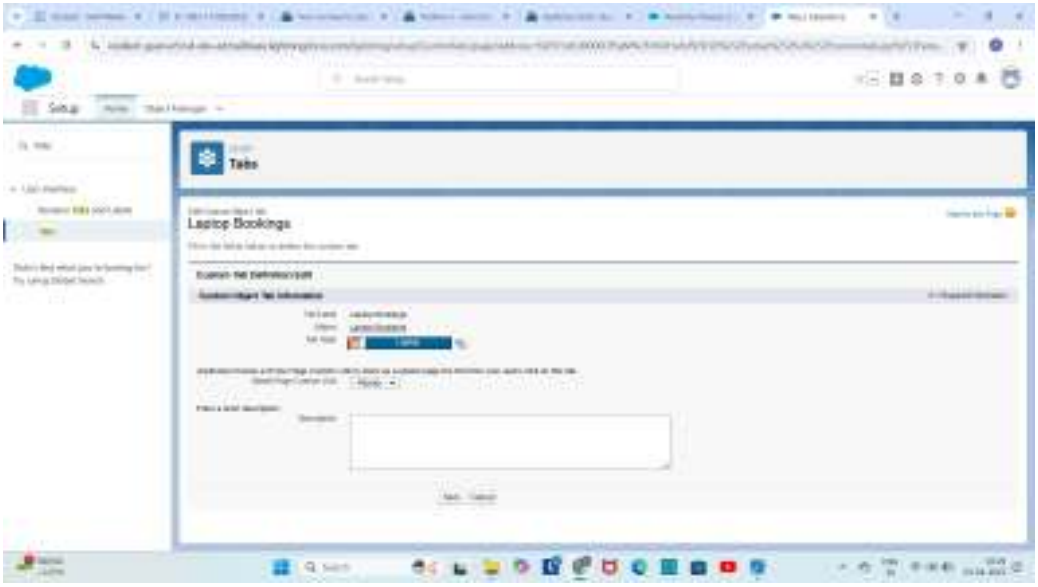
Click save

Activity 2: Creating Remaining Tabs

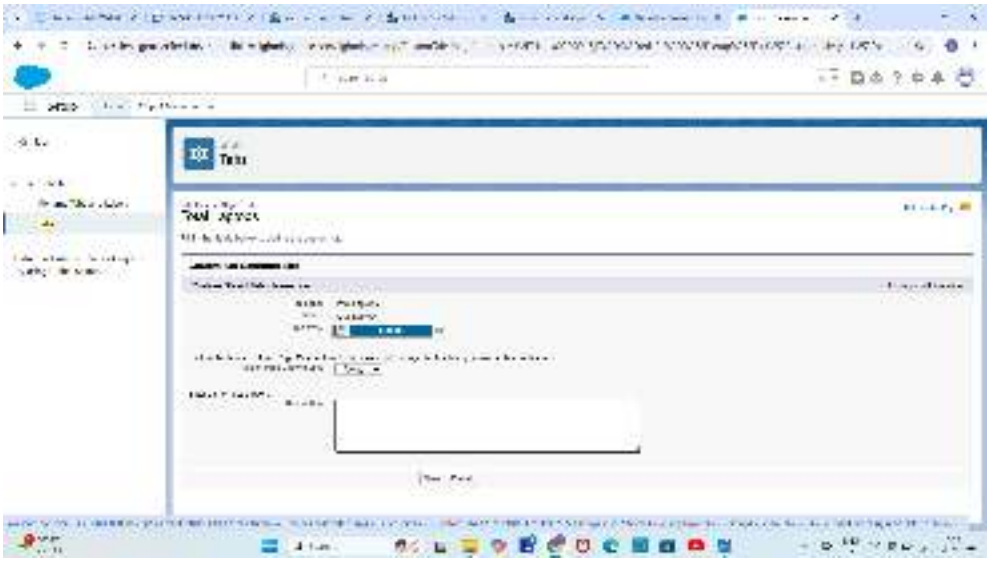
Now create the Tabs for the remaining Objects, they are “consumer,Laptop Booking,Billing process”.

Follow the same steps as mentioned in Activity -1

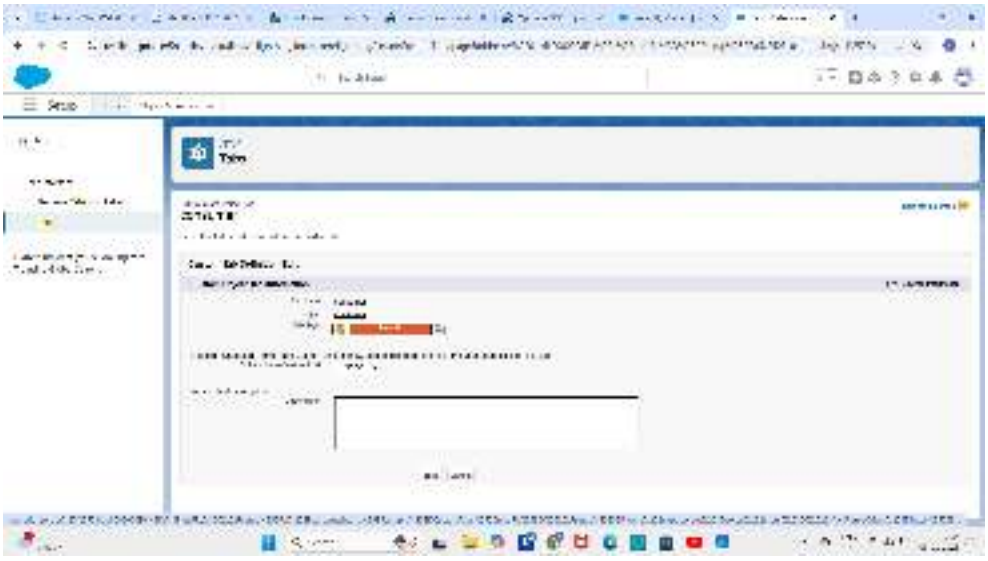
Billing process Tab Created:



Total Laptops Tab created:



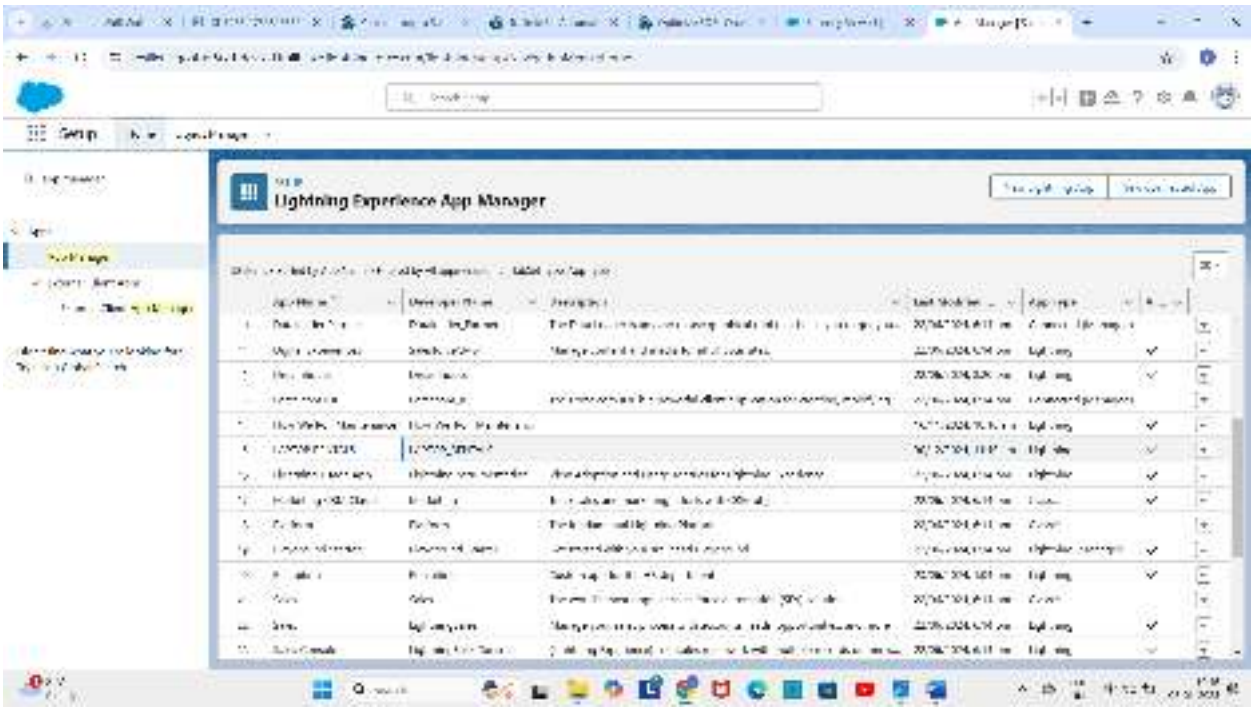
Consumer Tab created:



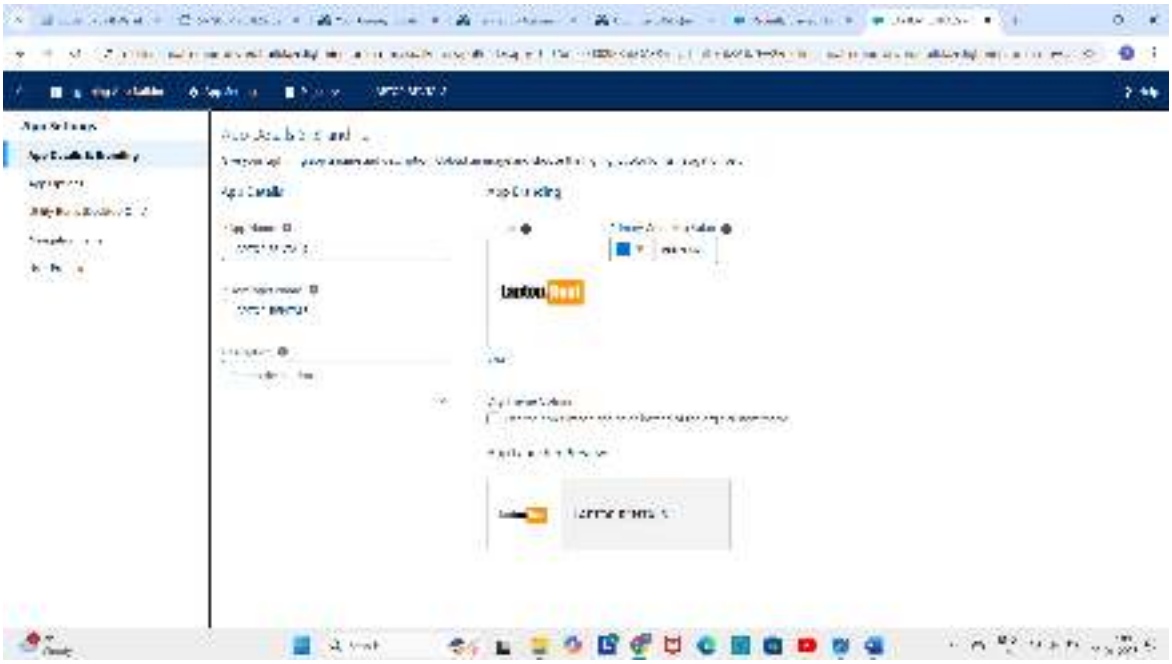
Create a Lightning App

To create a lightning app page:

Go to setup page >> search “app manager” in quick find >> select “app manager” >> click on New lightning App.

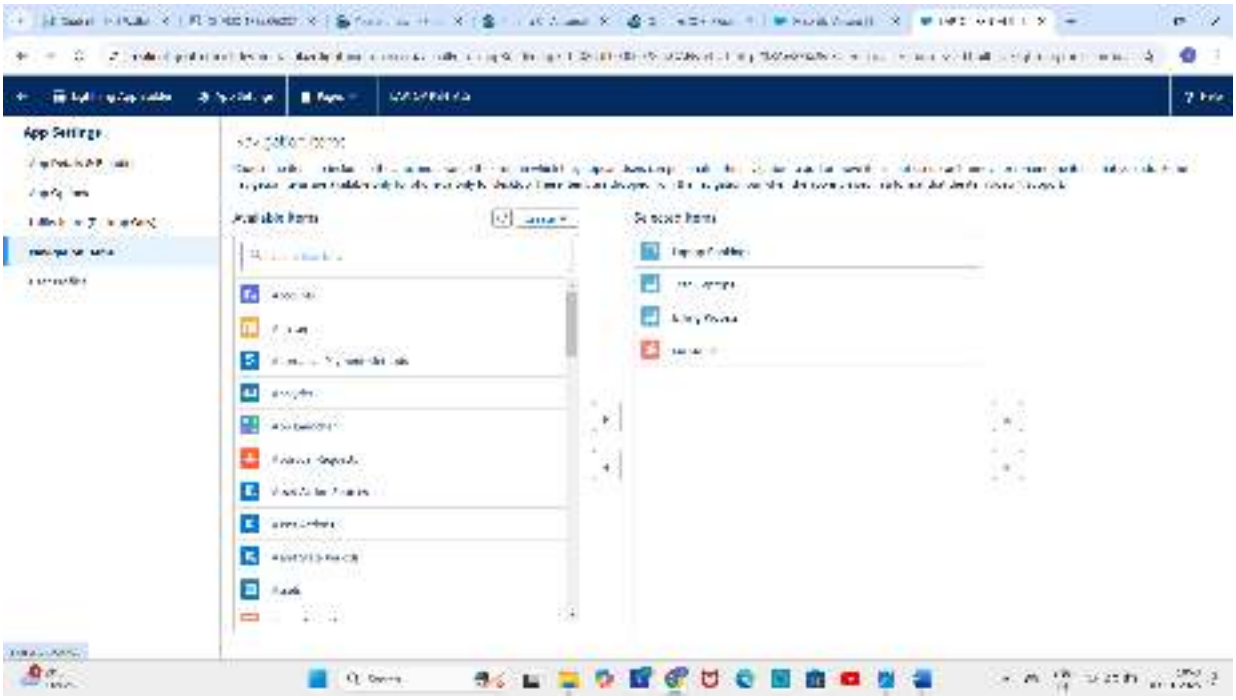


Fill the app name in app details as LAPTOP RENTALS >>Next >> (App option page) keep it as default >> Next >> (Utility Items) keep it as default >> Next.



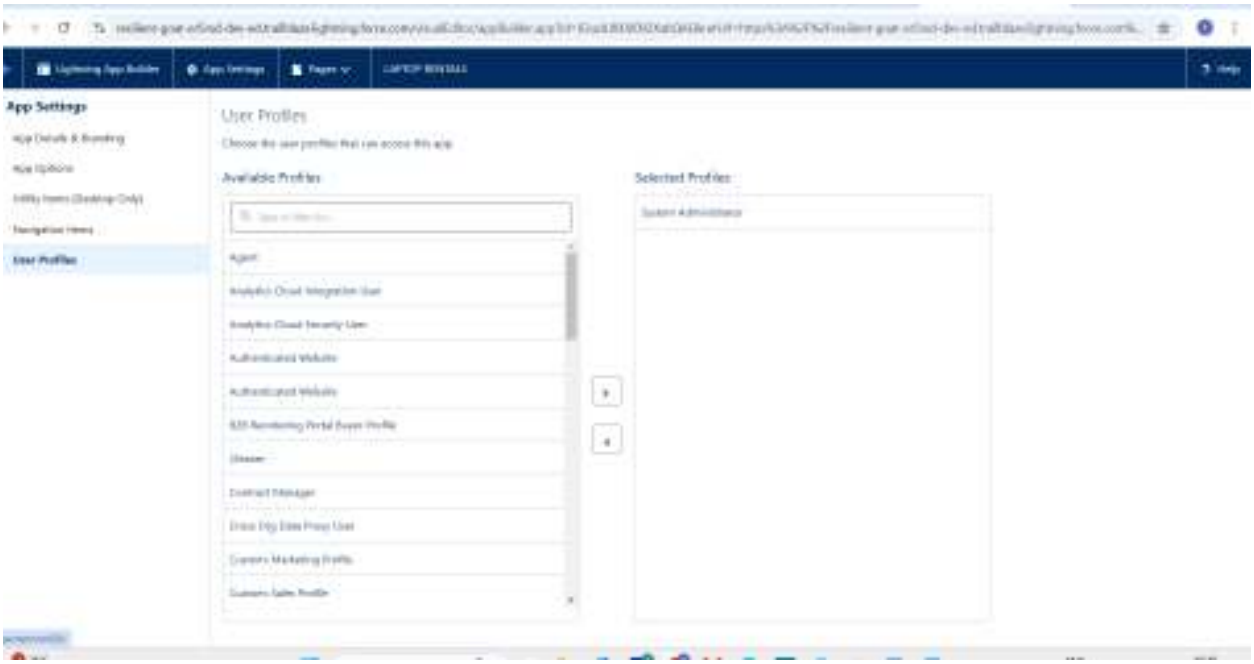
Upload a photo that is related to your app.

To Add Navigation Items:

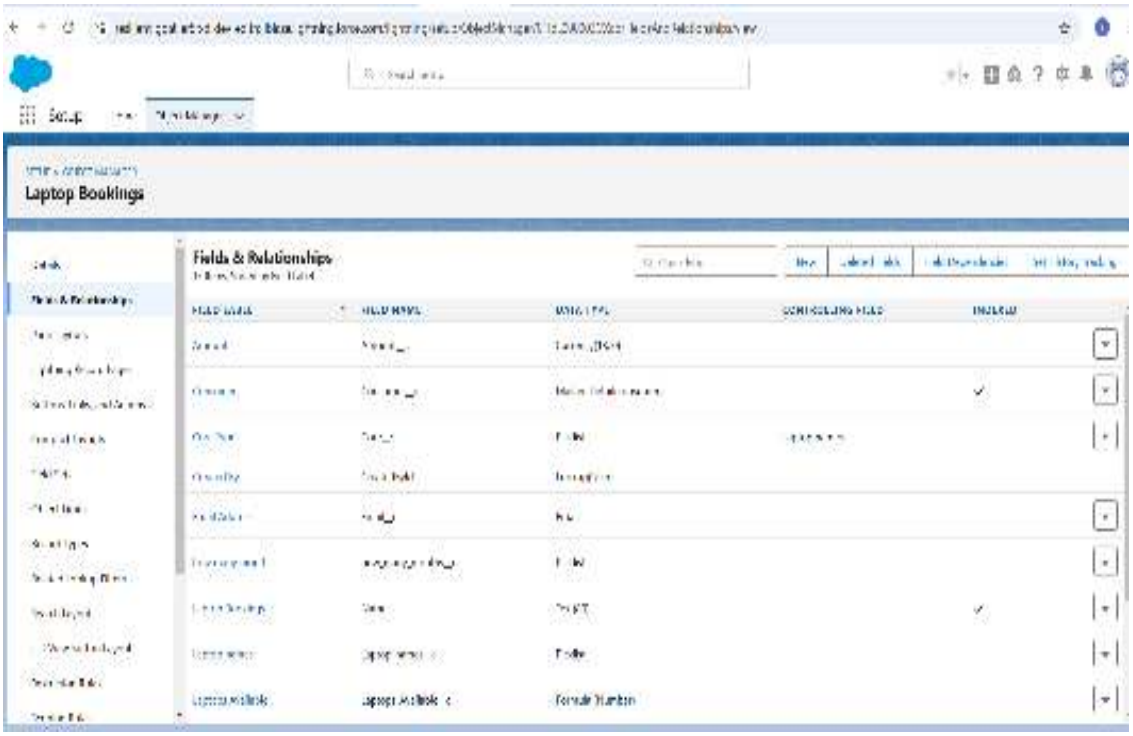


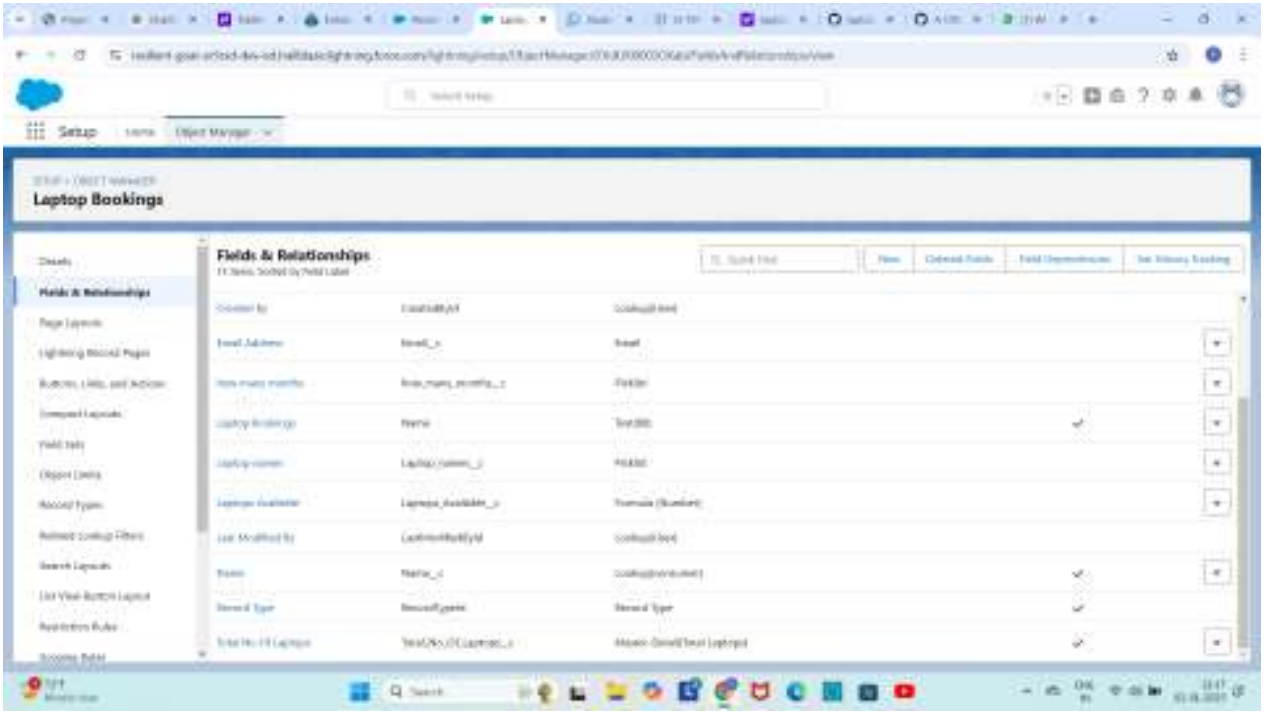
Select the items (Total Laptops,consumer,Laptop Booking,Billing Process) from the search bar and move it using the arrow button >> Next.

To Add User Profiles:



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





Fields:Creating the field in consumer object

1. To create fields in an object:

Go to setup >> click on Object Manager >> type object name(consumer) in search bar >> click on the object.

Now click on “Fields & Relationships” >> New

Select Data Type as a “Phone”

Click on next

Fill the Above as following:

- Field Label: Phone number
- Field Name : gets auto generated
- Click the required option checkbox.
- Click on Next >> Next >> Save and new.

2. To create another fields in an object:

a. Go to setup >> click on Object Manager >> type object name(consumer) in search bar >> click on the object.

b. Now click on “Fields & Relationships” >> New

c. Select Data type as a “Email” and Click on Next

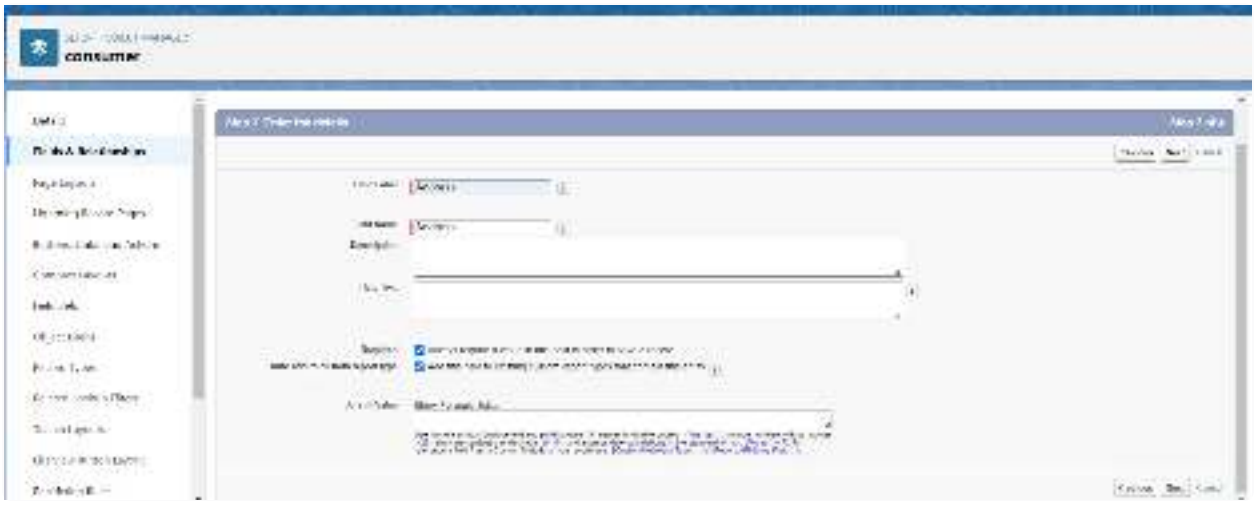
d. Fill the Above as following:

- Field Label: Email
- Field Name :It’s gets auto generated
- Click on Next >> Next >> Save and new.

3. To create another fields in an object:

a. Go to setup >> click on Object Manager >> type object name(consumer) in search bar >> click on the object.
b. Now click on “Fields & Relationships” >> New
c. Select Data type as a “Text Area” and Click on Next
d. Fill the Above as following:

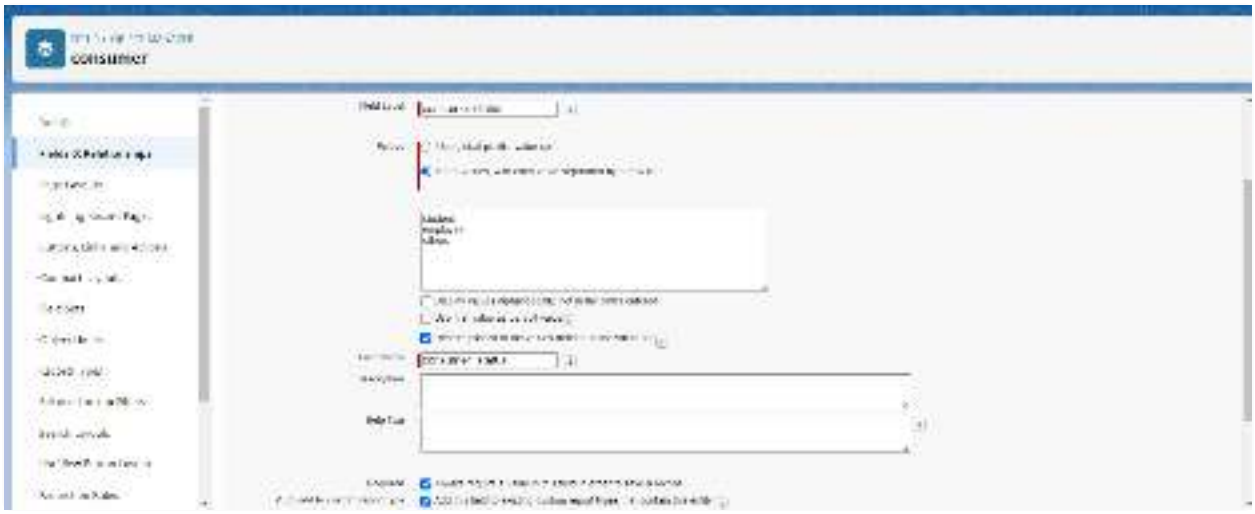
- Field Label: Address
- Field Name : It’s gets auto generated
- Select Required field.
- Click on Next >> Next >> Save and new.



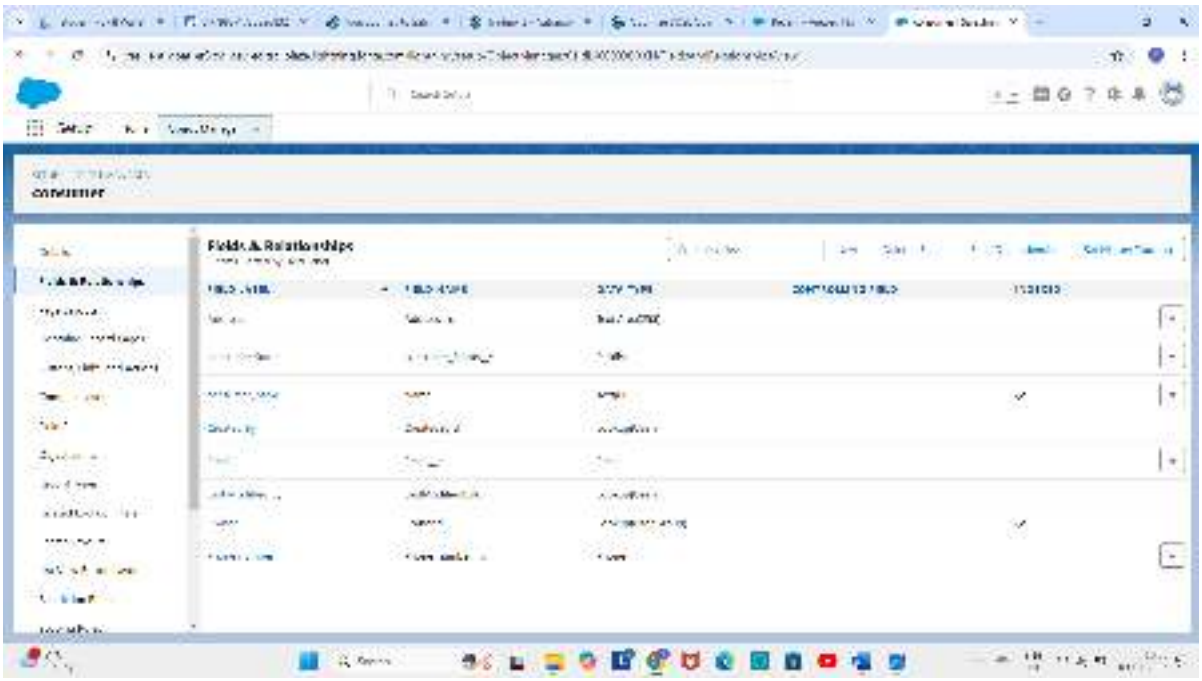
4. To create another fields in an object:

Go to setup >> click on Object Manager >> type object name(consumer) in search bar >> click on the object.
Now click on “Fields & Relationships” >> New
Select Data type as a “Picklist” and Click on Next

Fill the Above as following:
Field Label: consumer Status
Value - Select enter values with each value separated by a new line
Student
Employee
Others
Select required
Field Name :It's gets auto generated
Click on Next >> Next >> Save and new.



Feildscreated in Consumer:



Creating the field in Laptops Bookings object

1. To create fields in an object:

1. Go to setup >> click on Object Manager >> type object name(Laptop Booking) in the search bar >> click on the object.
2. Now click on “Fields & Relationships” >> New
3. Select Data Type as a “Picklist”
4. Label: Laptop Names
5. Picklist values are:-1.Dell 2. Acer 3.Hp 4.Mac

6. Select required
7. Click on Next >> Next >> Save and new

2. To Create a Fields & Relationship to an Laptop Booking Object

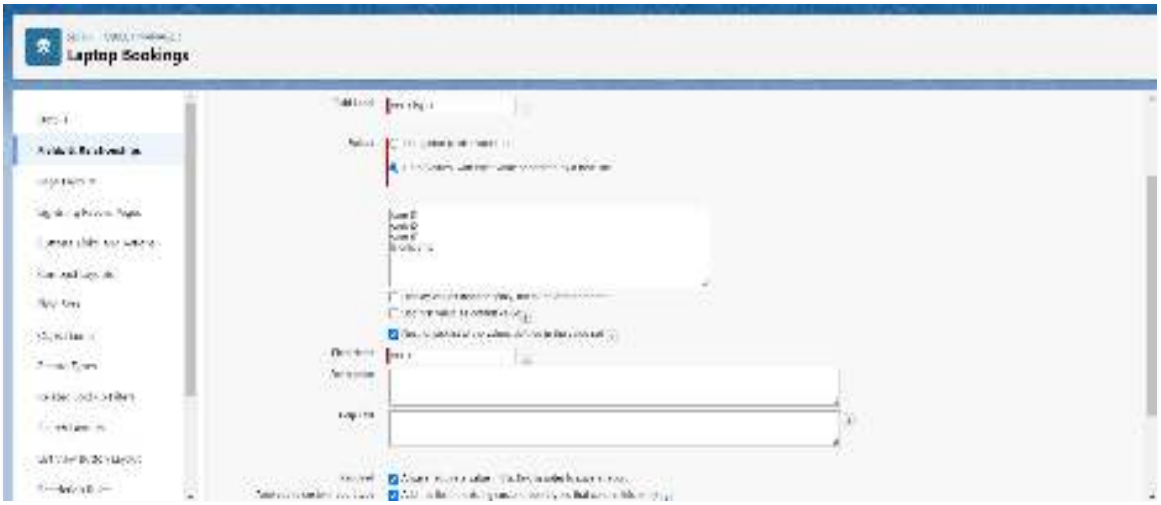
To create fields & relationship to an object:

1.Go to setup >> click on Object Manager >> type object name(Laptop Booking) in the search bar >> click on the object.

2.Now click on “Fields & Relationships” >> New

3.Select Data Type as a “Picklist” and Label: Core Type

4.Picklist values are:-1.core i3 2. Core i5 3. Core i7 4.Bionic Chip .



5.Select required

6.Click on Next >> Next >> Save and new

NOTE:-

Field Dependency:

A field dependency refers to a relationship between two fields on an object where the values of one field determine the available values for another field. Field dependencies are commonly used to create picklist field relationships, where the available options in a dependent picklist are determined by the value selected in a controlling picklist.

Need to use Field Dependency:

By using the field dependency we can get the different Values by selecting the different Picklist.

3. To Create a Field Dependency in the Laptop Booking Object

To create field dependency to an object:

1.Go to setup >> click on Object Manager >> type object name(Laptop Booking) in the search bar >> click on the object.

2.click field dependency and next

3. Select **Controlling Field** as Laptop Names and **Dependent Field** as Core Type

4. Click the include value for dell-core i3,i5,i7 and for acer i3,i5,i7 and for hp i3,i5,i7 and also for mac bionic chip include the values for it.

Click save.

To Create a Fields & Relationship to an Laptop Booking and Total Laptops Objects

To create fields & relationship to an object:

1. Go to setup >> click on Object Manager >> type object name(Laptop Booking) in the search bar >> click on the object.
2. Now click on “Fields & Relationships” >> New
3. Select Data Type as a “Master-Detail Relationship”
4. Click on Next
5. Click on the Related to drop down and Select the “consumer” object and click on Next
6. Fill the Above as following:

- Change the Field Label: Consumer
- Field Name :It’s gets auto generated

Click on Next >> Next >> Save and new.

To create fields in an object:

1.Go to setup >> click on Object Manager >> type object name(Laptop Booking) in the 2.search bar >> click on the object.

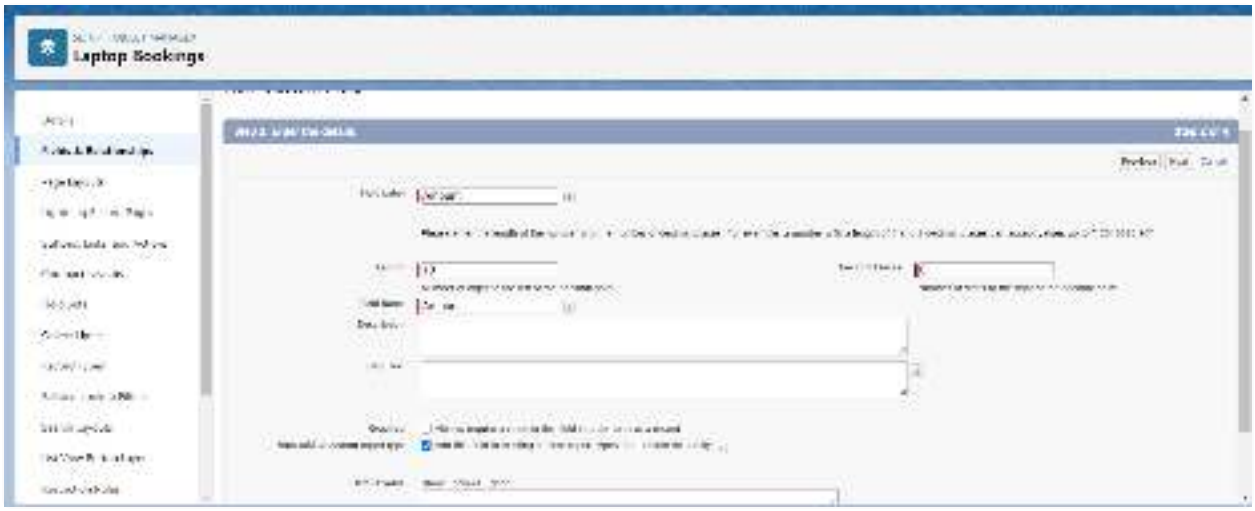
3.Now click on “Fields & Relationships” >> New

4.Select Data Type as a “Currency”

5.Click on Next

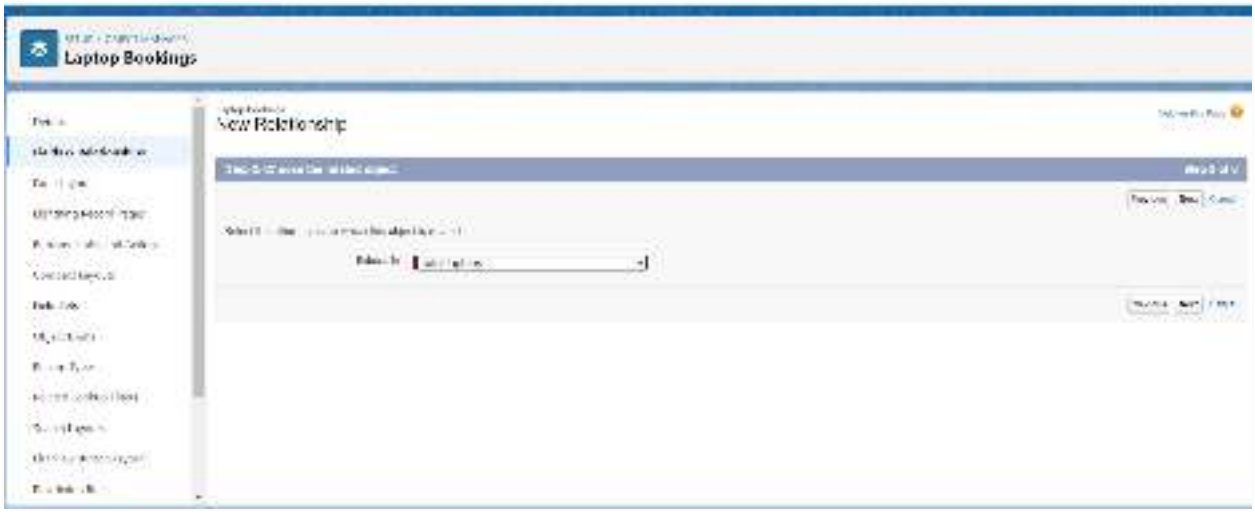
Fill the Above as following:

- Field Label: Amount
- Length: (18,0)
- Field Name :It's gets auto generated
- Click on Next >> Next >> Save and new



To Create a Fields & Relationship to an Object

Go to setup >> click on Object Manager >> type object name(Laptop Booking) in the search bar >> click on the object.
Now click on "Fields & Relationships" >> New
Select Data Type as a "Lookup Relationship"
Click on Next



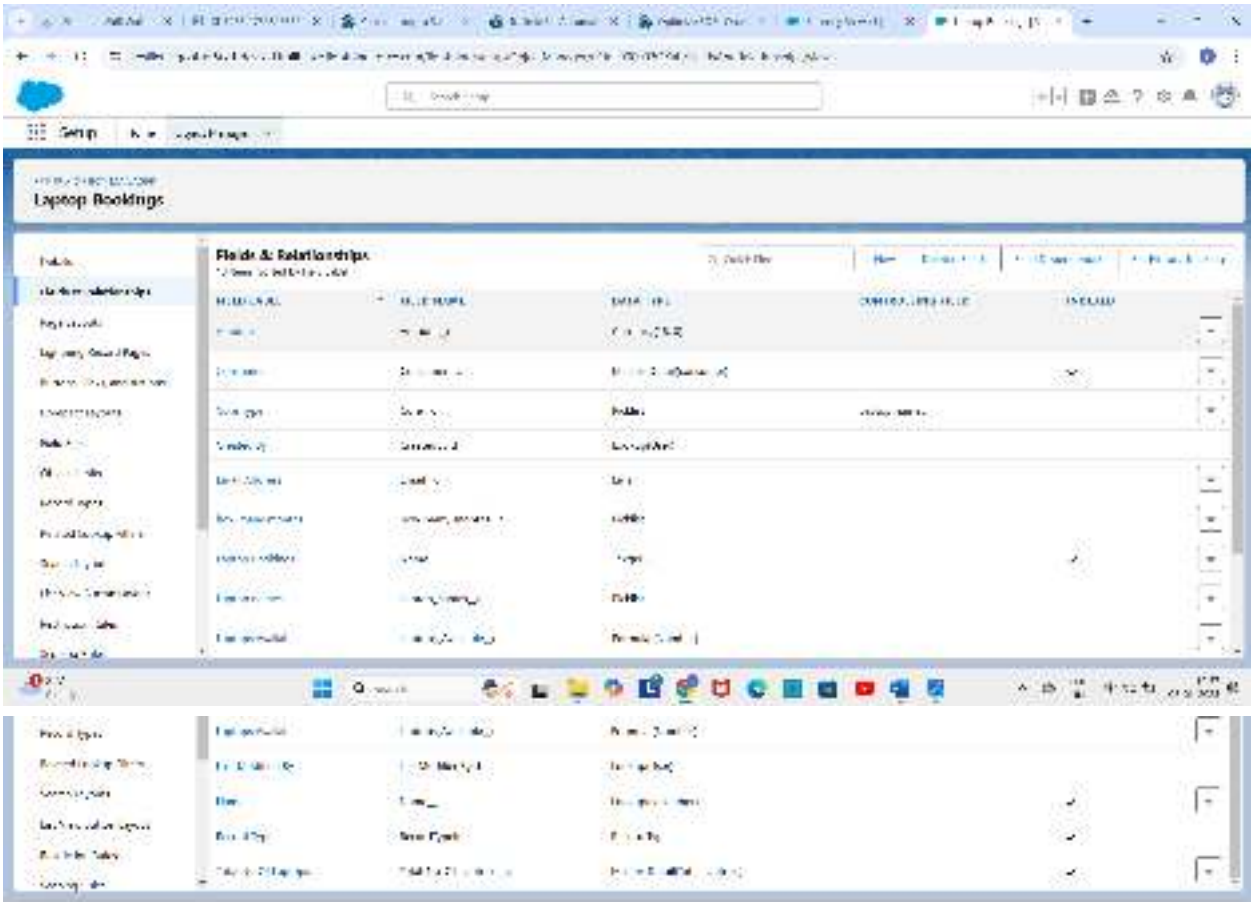
Click on the Related to drop down and Select the "Total Laptops" object and click on Next

- Fill the Above as following:
- Change the Field Label: Total No Of Laptops
- Field Name :It's gets auto generated
- Click on Next >> Next >> Save and new.

4. To Create a Fields & Relationship to an Laptop Booking Object

To create fields & relationship to an object:
Go to setup >> click on Object Manager >> type object name(Laptop Booking) in the search bar >> click on the object.
Now click on "Fields & Relationships" >> New
Select Data Type as a "Email"
Click on Next and save it.

Fields created in Laptop bookings:



To Create a Rollup Summary Field in “Total Laptops Object”

After Creating the Master-Detail Relationship Than Only you can create the Rollup Summary

Go to setup >> click on Object Manager >> type object name(Total Laptops) in the search bar >> click on the object.

Now click on “Fields & Relationships” >> New

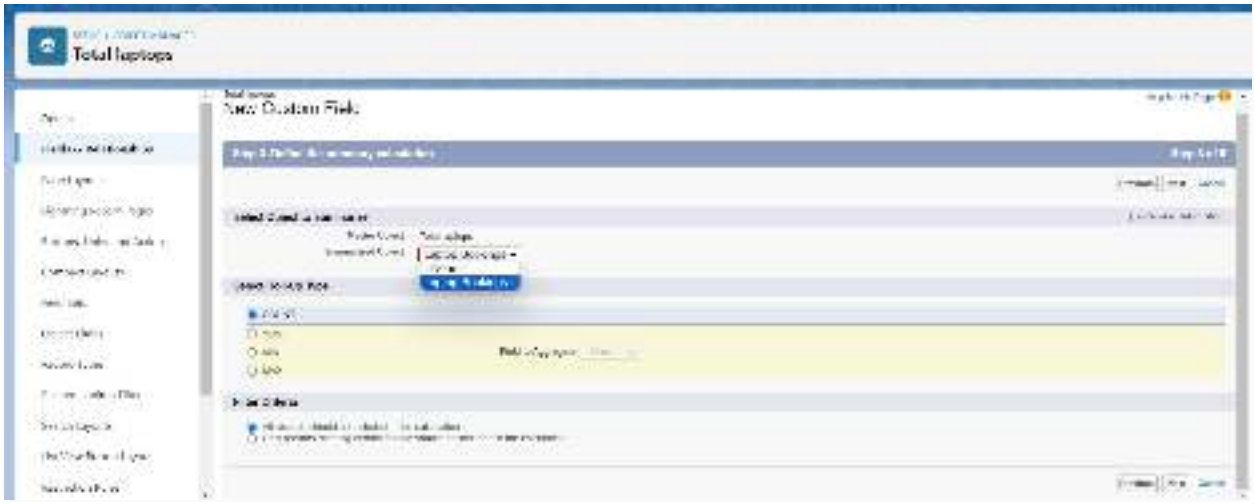
Select Data type as a “Roll-up Summary” and Click on Next

- Fill the Above as following:
- Field Label: Laptops delivered
- Field Name :It’s gets auto generated

- Click on Next

Select the Laptop Bookings in the Summarized Object

Select the count Radio button in the select Roll-up Type



Fields created in Total Laptops:

To create fields in an object:

Go to setup >> click on Object Manager >> type object name(Laptop Booking) in the search bar >> click on the object.
Now click on “Fields & Relationships” >> New
Select Data type as a “Formula” and Click on Next
Fill the Above as following:

- Field Label: Laptops Available
- Field Name : It’s gets auto generated
- Select the Formula Return Type as “Number”
- Select the Decimal places as “0” and Click on Next
- Click on the Advanced Formula and Enter the value in formula box “ 50 - ” and Click on insert field than you will find a pop window under the Laptop Booking select the Total No Of Laptops in the second Column and select the Laptops delivered in the third column and click on insert
- “ 50 - Total_no_of_laptops__r.Laptops_delivered__c ” and Check Syntax

- Click on Next >> Next >> Save and new

To create fields in an object:

1.Go to setup >> click on Object Manager >> type object name(Laptop Booking)

2.search bar >> click on the object.

3.Now click on “Fields & Relationships” >>New

4.Select Data Type as a “picklist” and Label: how many months

Picklist values are 1.2.3.4.5
Click and save it.

Creation of Fields & Relationship for Billing Process Object

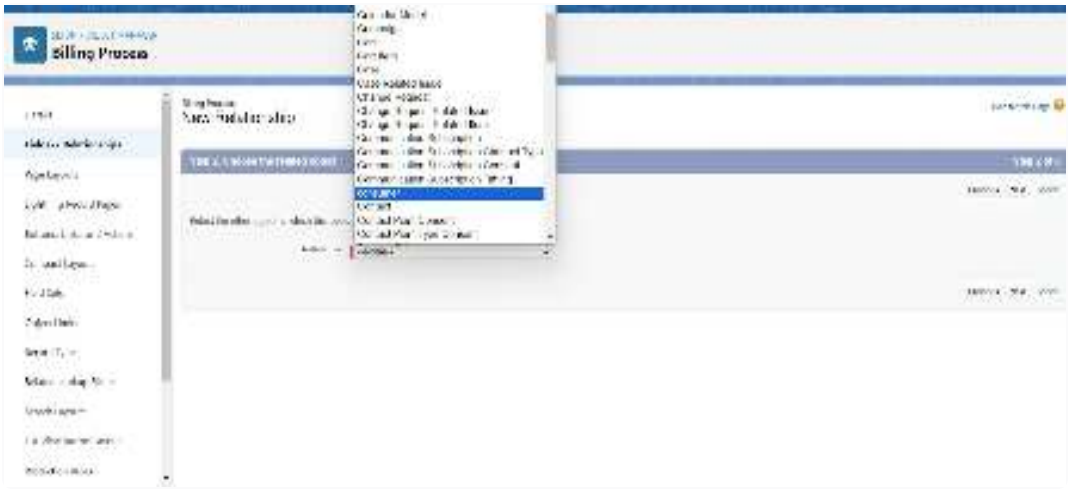
1. To create fields & relationship to an object:

Go to setup >> click on Object Manager >> type object name(Billing Process) in the search bar >> click on the object.

Now click on “Fields & Relationships” >> New

Select Data Type as a “Master-detail Relationship”
Click on Next

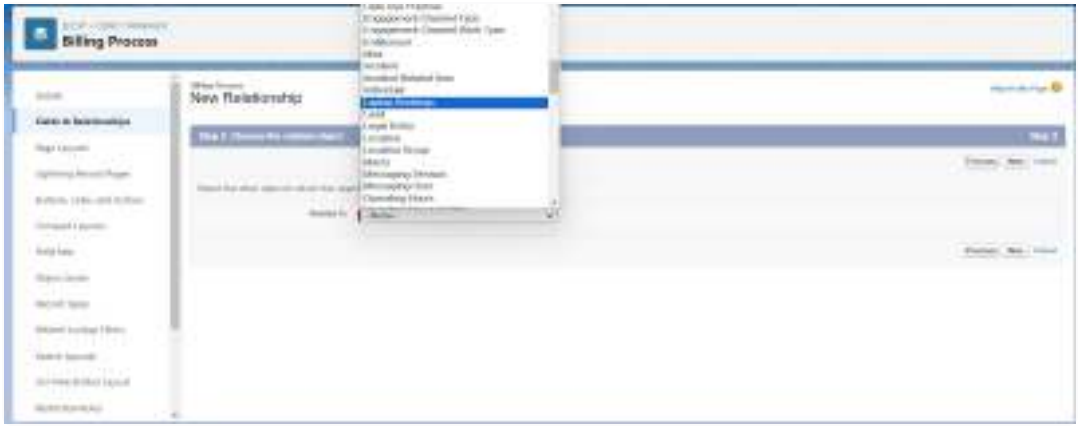
Click on the Related to drop down and Select the consumer object and click on Next



Fill the Above as following:
Change the Field Label: Name
Field Name :It’s gets auto generated
Click on Next >> Next >> Save and new.

2. To create another fields & relationship to an object:

Go to setup >> click on Object Manager >> type object name(Billing Process) in the search bar >> click on the object.
Now click on “Fields & Relationships” >> New
Select Data Type as a “Lookup Relationship”
Click on Next
Click on the Related to drop down and Select the Laptop Booking object and click on Next



Fill the Above as following:
Change the Field Label: Laptop Booking
Field Name :It's gets auto generated
Click on Next >> Next >>Save and new.

3. Creation of another fields for the billing process object

To create fields in an object:

a. Go to setup >> click on Object Manager >> type object name(Billing Process) in the search bar >> click on the object.
b. Now click on "Fields & Relationships" >> New
c. Select Data Type as a "Picklist"
d. Fill the Above as following:

Field Label: Payment Mode

Value >> Select enter values with each value separated by a new line

Cash
Check
Credit card
Debit card
UPI
Phonepe
Gpay
Paytm

e. Select required

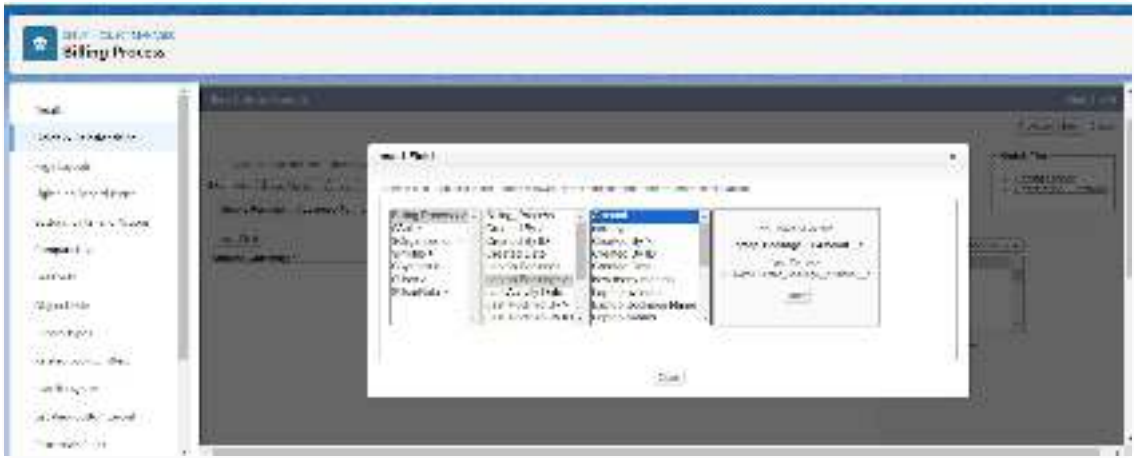
Click on Next >> Next >> Save and new.

Cross Object Formula Field:
In Salesforce, a cross-object formula field allows you to create a formula that references fields from related objects. It enables you to perform calculations or display data from related records without the need for custom code or complex workflows.

Why do we need to create the Cross Object Formula Field:
If we want to get the Particular field from another object in that case we will use the Cross object Formula field. For that First we need to create the relationship b/w two objects and relate the field with formula data type.

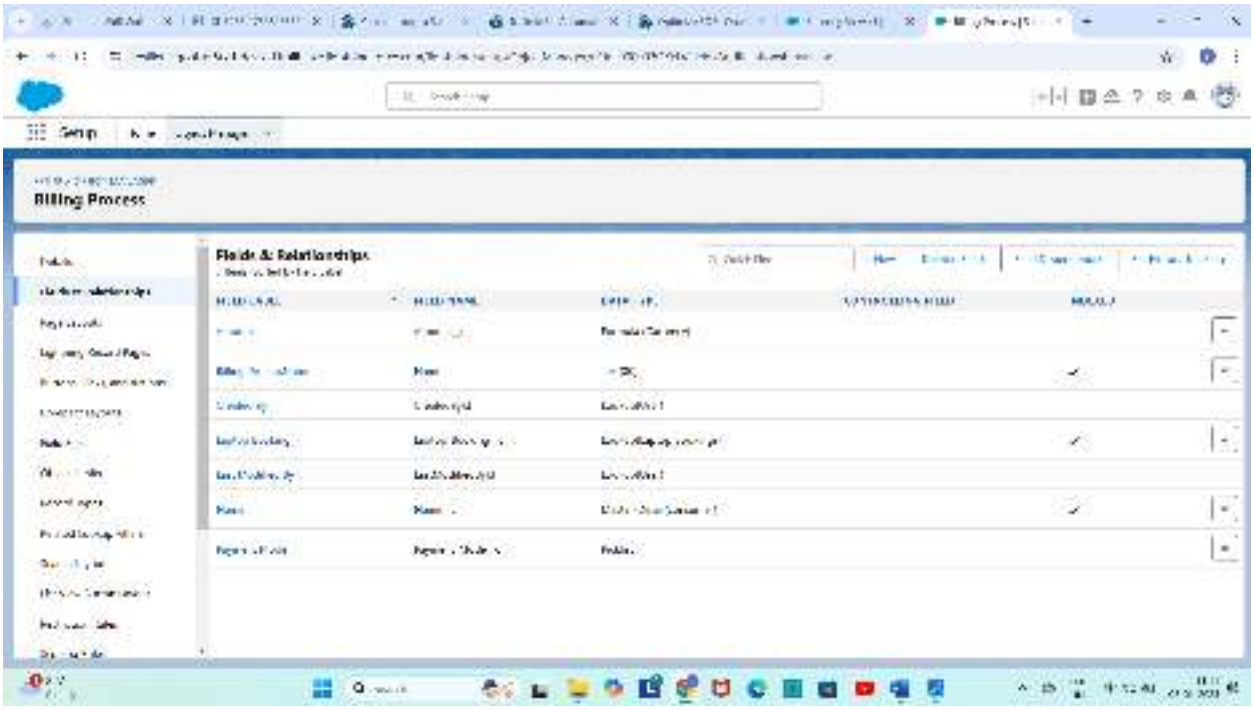
4. Create a Cross object formula Field in billing process Object

a. Go to setup >> click on Object Manager >> type object name(Billing Process) in the search bar >> click on the object.
b. Now click on “Fields & Relationships” >> New
c. Select Data Type as a “Formula”
d. Click on Next
e. Enter the Field label: Amount, the Field name gets auto generated and click on Next.(Formula return type Currency).
f. In the Advanced Formula Click on the Insert field in the popup Screen Select the Billing Process and in the second drop down select the Laptop Booking and in the three drop down select the Amount field and click on Insert
g. “ Laptop_Booking__r.Amount__c ”.
h. Click on the Check syntax: No syntax errors in merge fields



Click on Next >> Next >> Save and new.

Fields Creted in Billing Process:



Validation rule:

Creating the validation rule for phone number field in consumer object

Creating the validation rule for phone number field in consumer object

1. Go to the setup page >> click on object manager >> From drop down click edit for consumer object.
2. Click on the validation rule >> click New.
3. Enter the Rule name as “Phonenumberoremailblankrule ”.
4. Enter the description as “phone number and email number should not be blank”.
5. Enter the formula as “OR(ISBLANK(phone_number__c) , ISBLANK(email__c))” and check the syntax.
6. Save the validation rule.

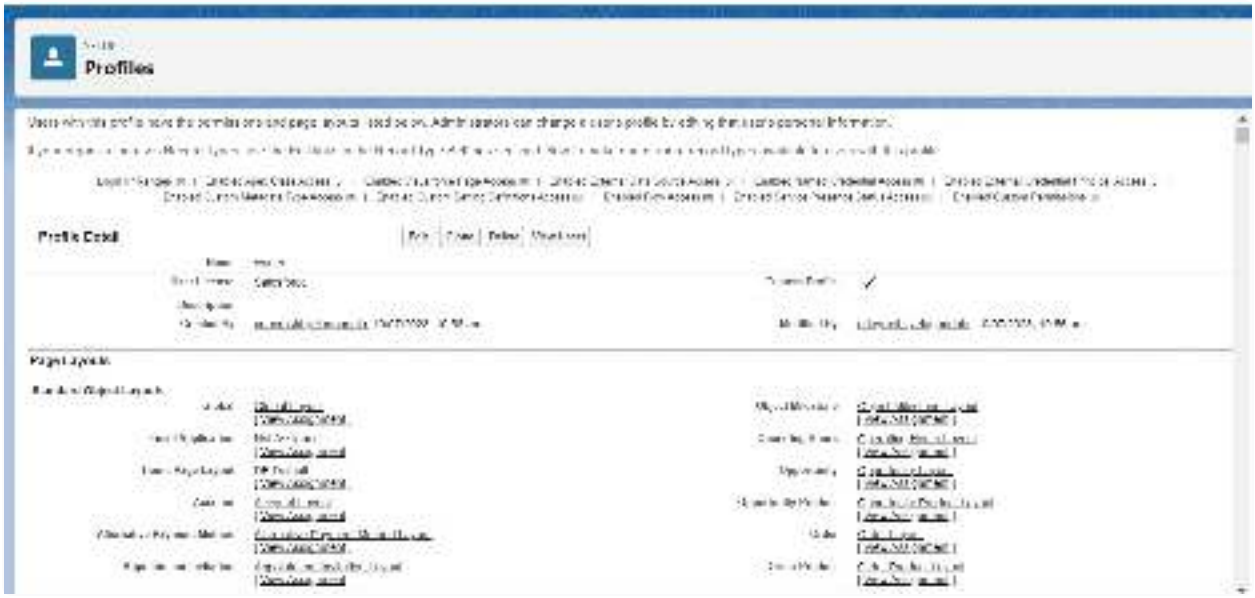
Created validation rule in consumer:

Profiles:

owner Profile

To create a new profile:

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



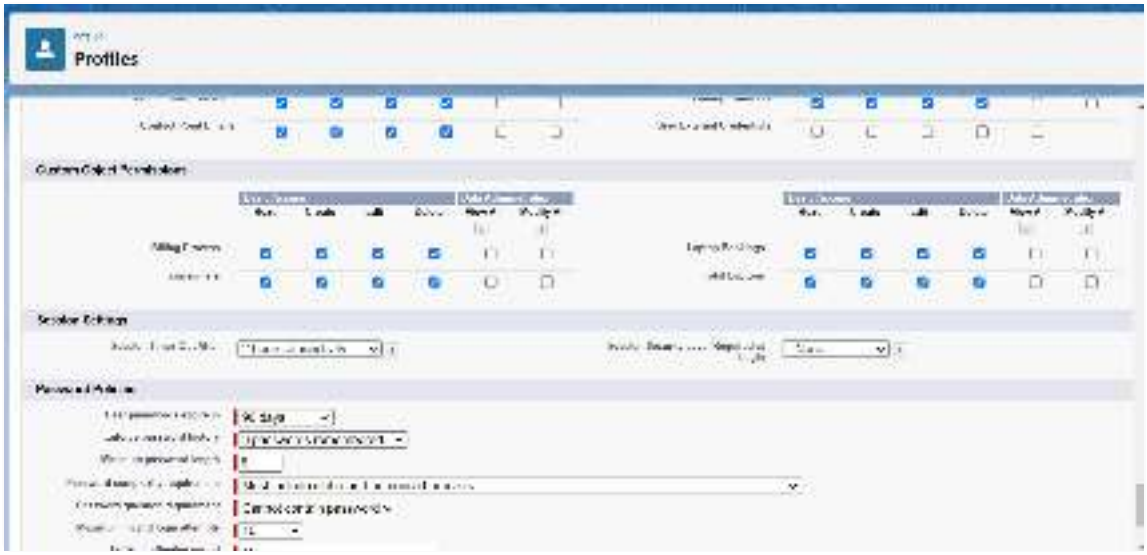
3. Scroll down to Custom Object Permissions and Give access permissions for Total Laptops, consumers , Laptop Booking and Billing Process objects as mentioned in the below diagram.

3. Give Access and Save it.

Agent Profile

1. Go to setup >> type profiles in 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. Give access and save it.

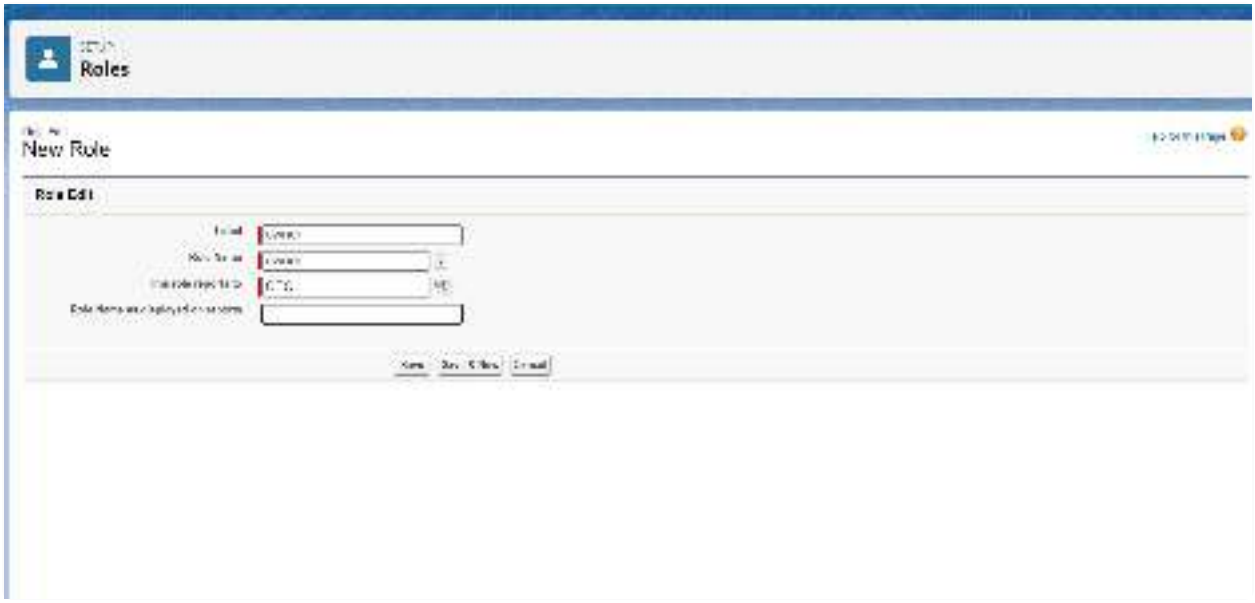
Roles and Hierarchy:

Creating owner Role

1. Go to quick find >> Search for Roles >> click on set up roles.

2.Click on Expand All and click on add role under whom this role works.

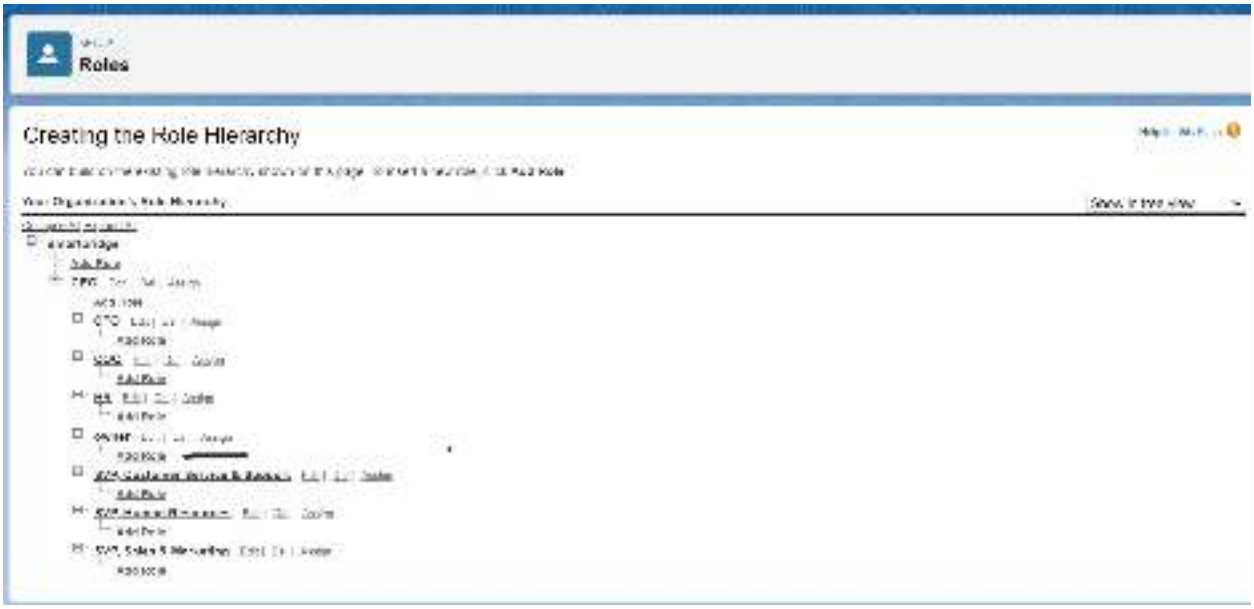
1. Give Label as “owner” and Role name gets auto populated. Then click on Save.



2. Click and save it.

Activity 2: Creating Agent roles

Creating another two roles under Owner

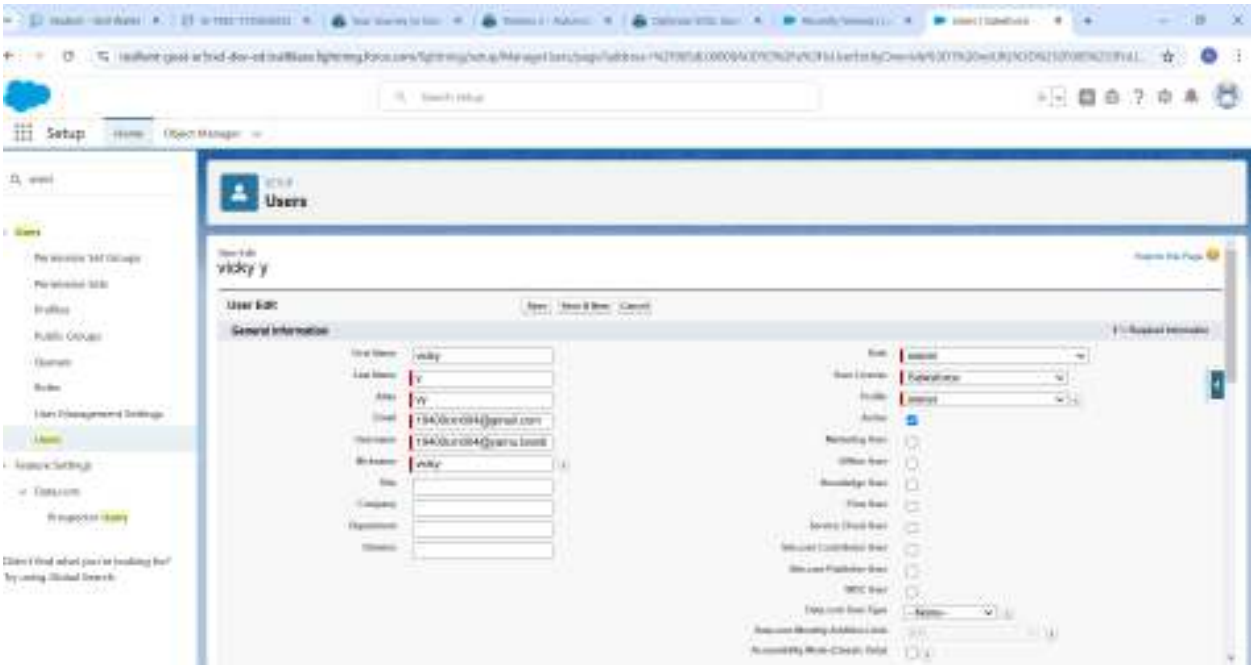
1. Go to quick find - Search for Roles - click on set up roles.
2. Click plus on CEO role, and click add role under owner.
3. 

4. Give Label as “Agent” and Role name gets auto populated. Then click on Save.

User

Create User:

1. Go to setup - type users in quick find box - select users -click New user.
2. Fill in the fields
3. First Name : vicky
4. Last Name : y
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 : owner
10. User license : Salesforce
11. Profiles : owner.

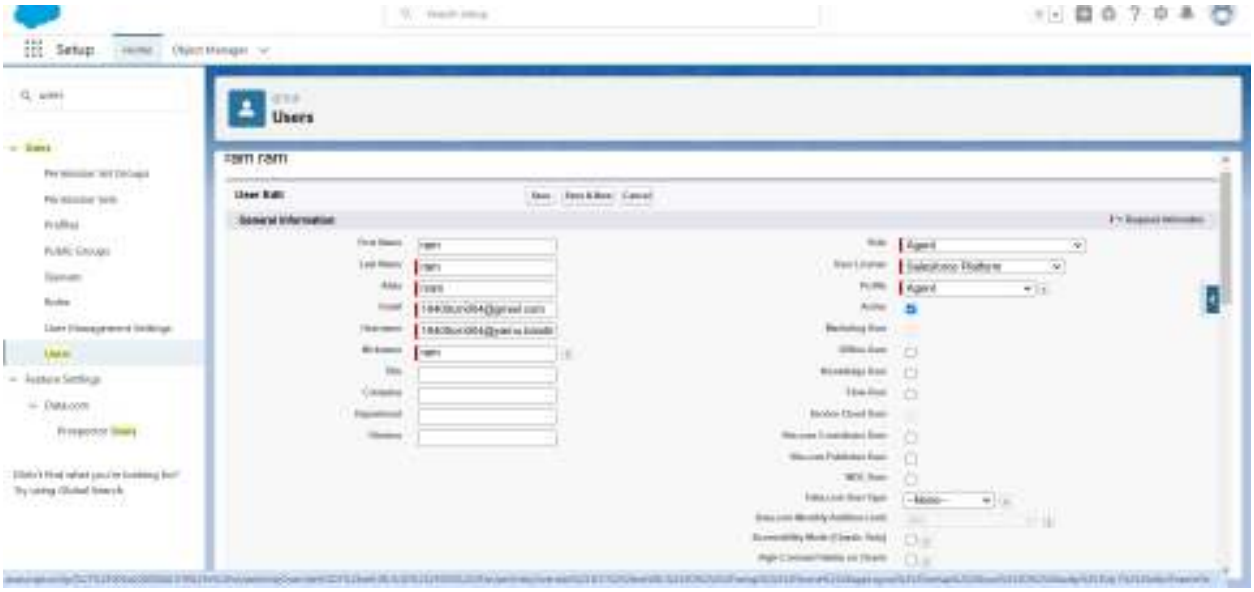


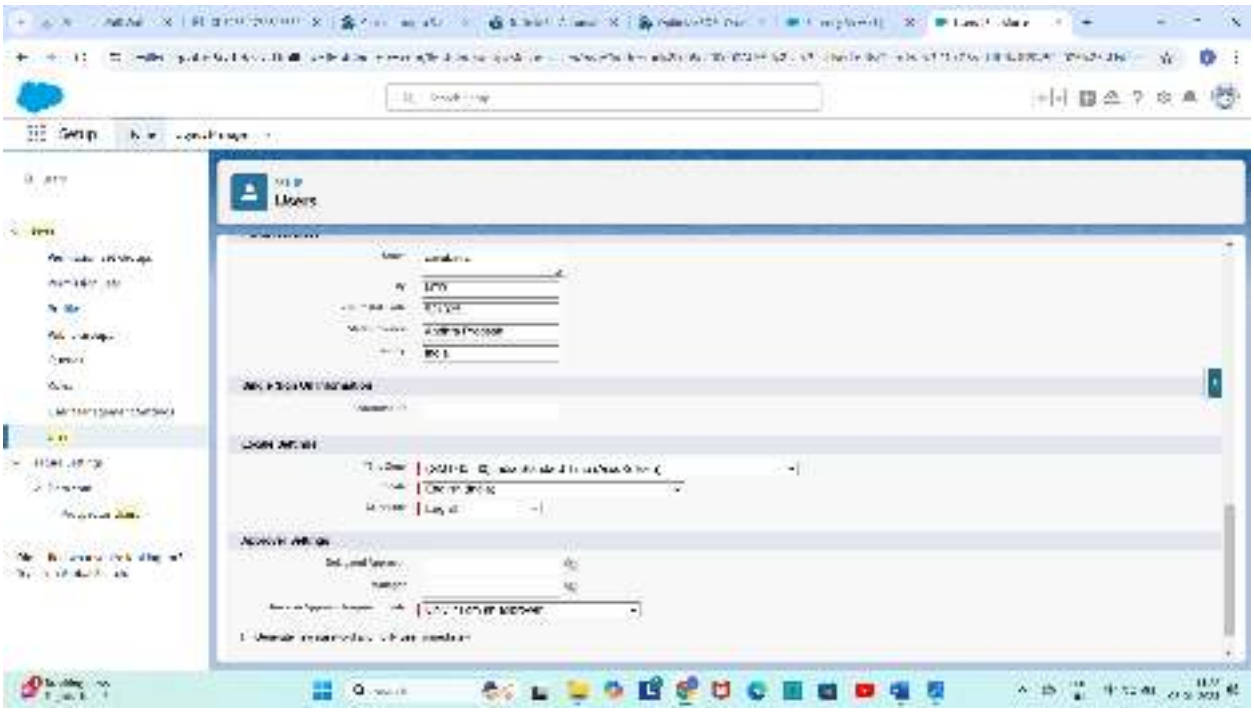
Save it.

Activity 2: creating another users

1. Go to setup -type users in 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.





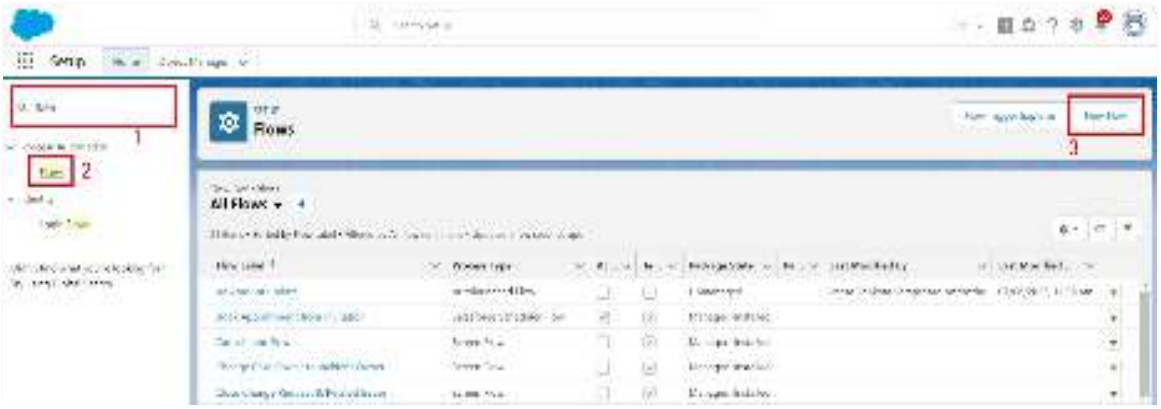
13. Save it.

Flows:

Create a Flow on dell laptop:

Activity -

1. Go to setup >>type Flow in quick find box >> Click on the Flow and Select the New Flow.



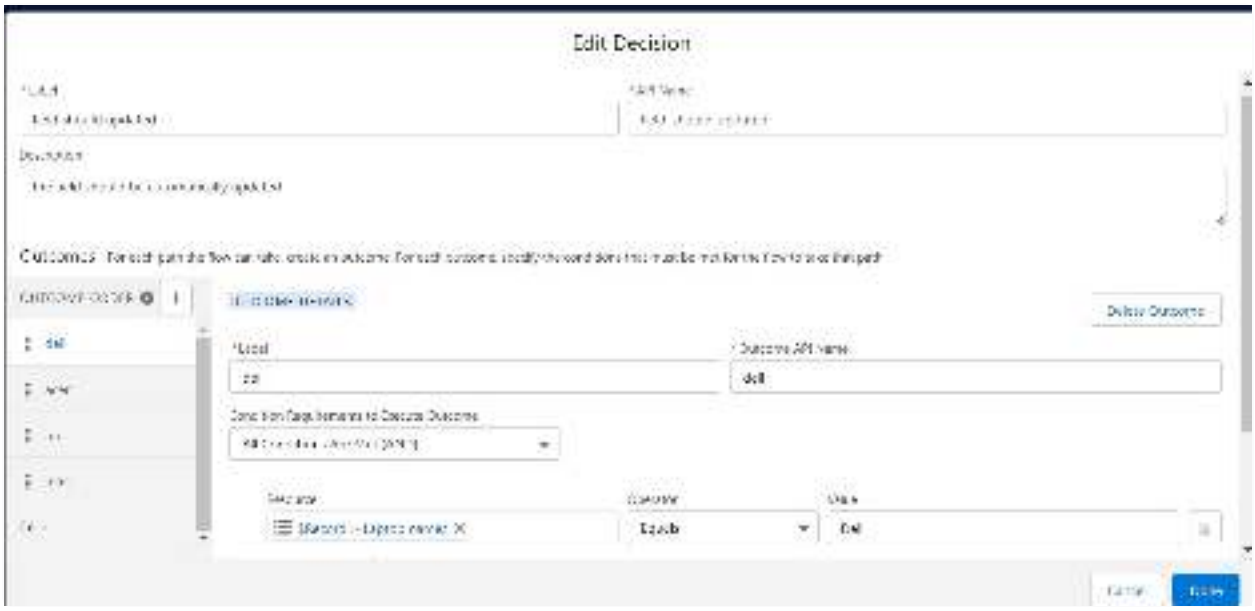
2. Select the Record-triggered flow and Click on Create.

3. Select the Object as a Laptop Booking in the Drop down list.
4. Select the Trigger Flow when: “A record is Created or Updated”.
5. Select the Optimize the flow for: “Actions and Related Records” and Click on Done.

Under the Record-triggered Flow Click on “+” Symbol and In the Drop down List select the “Decision Element”.

7. Enter the Details Label: Field should be Update, API name: Gets Automatically Generated.
8. Enter the Outcome Details Label: dell , Outcome API name: Gets Automatically Generated.

- Resource: Select $Record.Laptop_name__c.
- Operator: Select Equals.
- Value: Select dell
- Add the same outcome order to acer , hp, mac.
- Rename Default outcome as False
- Click done.



10.Go to flow page

11. Beside dell there is a symbol '+' click on that.
12. Again select decision

13. Enter the Details Label: Field should Update(any one u want), API name: Gets Automatically Generated.
14. select the Outcome Details Label: dell core i3 , Outcome API name: Gets Automatically Generated.

- Resource: Select {!$Record.core_type__c}.
- Operator: Select Equals.
- Value: Select core i3.
- Then again click the symbol '+' outcome details

15. select the Outcome '+' Details Label: dell core i5 , Outcome API name: Gets Automatically Generated.

- Resource: Select Record.core type.
- Operator: Select Equals.
- Value: Select core i5.
- Then again click the symbol'+' outcome details

16. Enter the Outcome Details Label: dell core i7 , Outcome API name: Gets Automatically Generated.

- Resource: Select Record.core type.
- Operator: Select Equals.
- Value: Select core i7.

17. Click done.

18. So go to the flow page select '+' after core i3 then again select the decision.
19. Enter the Details Label: months selected , API name: Gets Automatically

Generated.

20. Enter the Outcome Details Label: dell 1(i3) , Outcome API name: Gets Automatically Generated.
21.

- Resource: Select Record.how many months.
- Operator: Select Equals.
- Value: 1.

23. Enter the Outcome Details Label: dell 2(i3) , Outcome API name: Gets Automatically Generated.

- Resource: Select Record.how many months.
- Operator: Select Equals.
- Value: Select 2..

24. Click '+' outcome details
25. Enter the Outcome Details Label: dell 3(i3) , Outcome API name: Gets Automatically Generated.

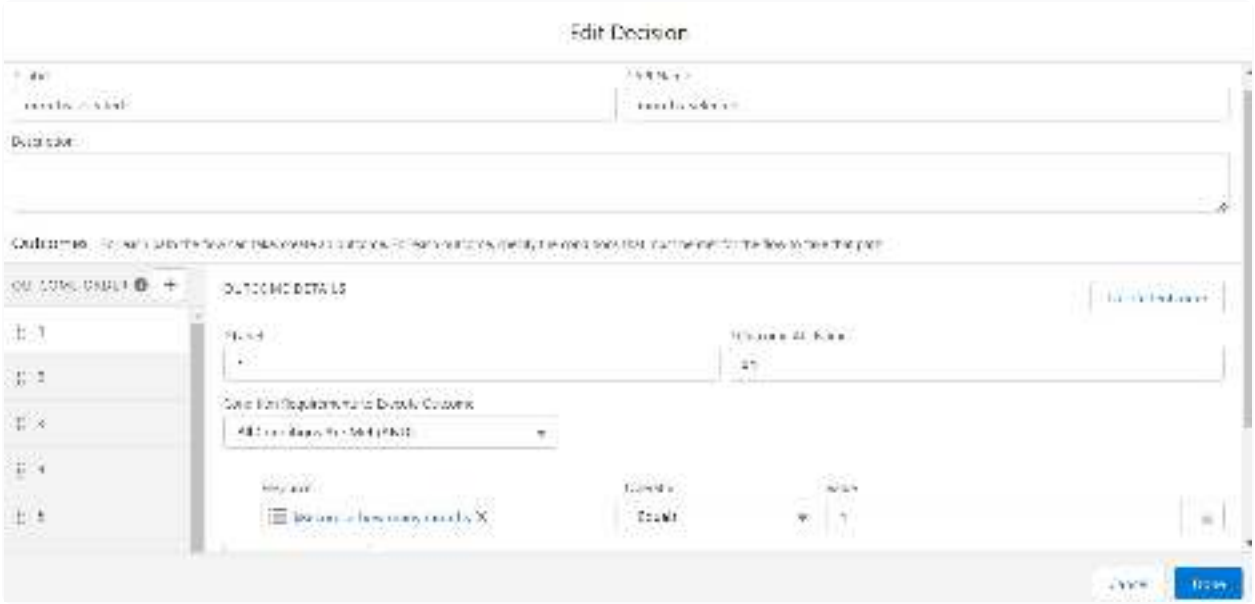
- Resource: Select Record.how many months.
- Operator: Select Equals.
- Value: Select 3..

26. Click '+' outcome details
27. Enter the Outcome Details Label: dell 4(i3) , Outcome API name: Gets Automatically Generated.

- Resource: Select Record.how many months.
- Operator: Select Equals.
- Value: Select 4..

28. Click '+' outcome details
29. Enter the Outcome Details Label: dell 5(i3) , Outcome API name: Gets Automatically Generated.

- Resource: Select Record.how many months.
- Operator: Select Equals.
- Value: Select 5.



30. Follow the above picture you will understand.
31. After dell 1(i3) there is '+' symbol like dell 2(i3),dell 3(i3),dell 4(i3),dell 5(i3).
32. Click on '+' then select update records for each and every outcome.
33. Enter the Details Label: one month of dell i3 rate , API name: Gets Automatically Generated. Enter label name in a similar way for other update records.
34. Field:- Amount__c , value:- for dell 1(i3)-1000, dell 2(i3)-2000, dell 3(i3)-3000, dell 4(i3)-4000, dell 5(i3)-5000. Follow all these finally and update the Amount field value based on the number of months.
35.
36. Click done.

37. Enter the Details Label: months selected , API name: Gets Automatically Generated.
38. Enter the Outcome Details Label: dell 1(i7) , Outcome API name: Gets Automatically Generated.
39.

- Resource: Select Record.how many months.
- Operator: Select Equals.
- Value: 1.

40. Enter the Outcome Details Label: dell 2(i7) , Outcome API name: Gets

Automatically Generated.

- Resource: Select Record.how many months.
- Operator: Select Equals.
- Value: Select 2..

41. Click '+' outcome details
42. Enter the Outcome Details Label: dell 3(i7) , Outcome API name: Gets Automatically Generated.

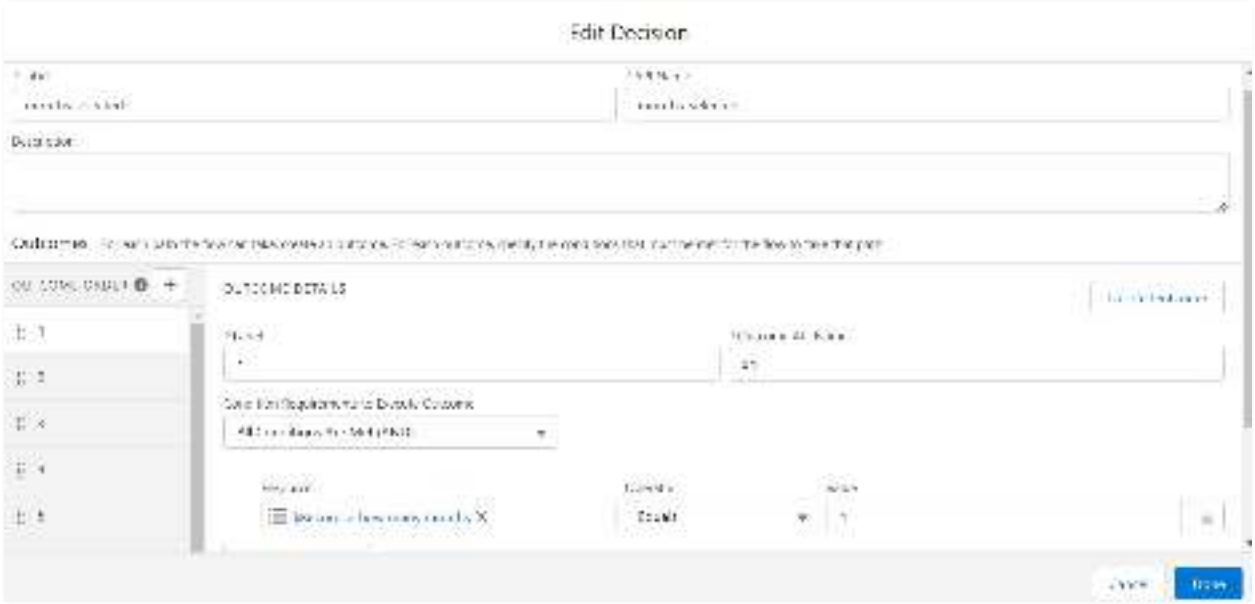
- Resource: Select Record.how many months.
- Operator: Select Equals.
- Value: Select 3..

43. Click '+' outcome details
44. Enter the Outcome Details Label: dell 4(i7) , Outcome API name: Gets Automatically Generated.

- Resource: Select Record.how many months.
- Operator: Select Equals.
- Value: Select 4.

45. Click '+' outcome details
46. Enter the Outcome Details Label: dell 5(i7) , Outcome API name: Gets Automatically Generated.

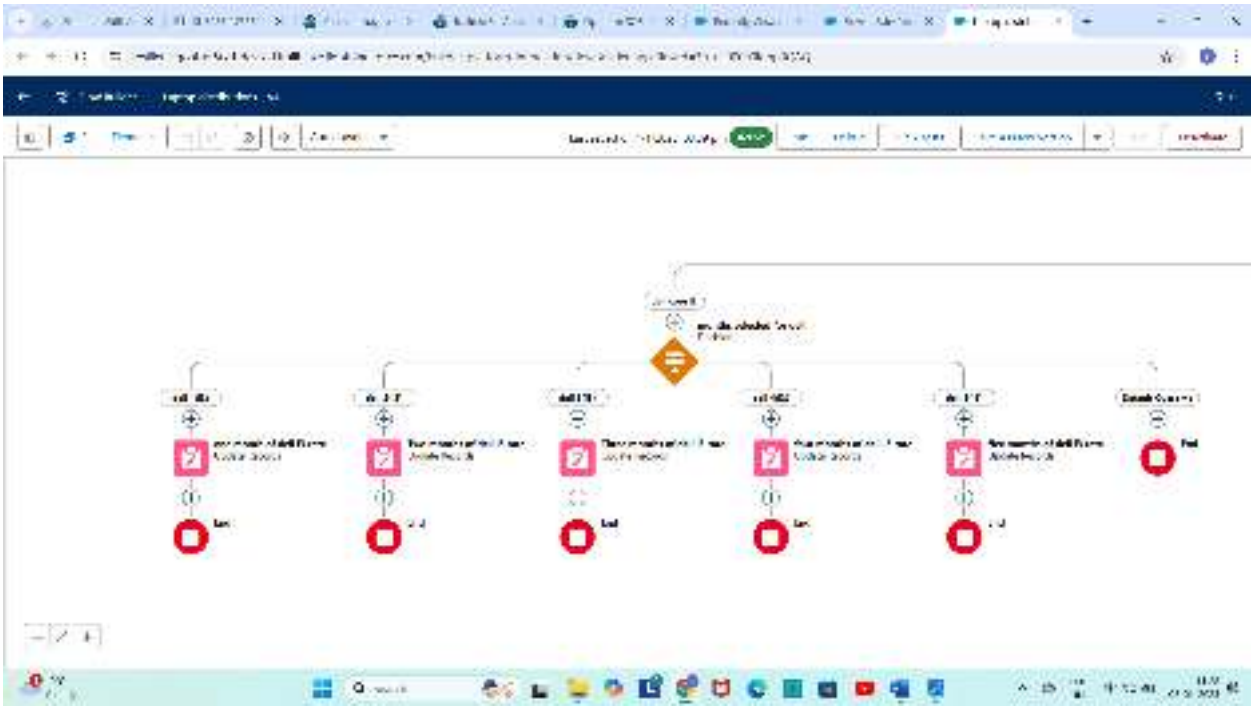
- Resource: Select Record.how many months.
- Operator: Select Equals.
- Value: Select 5.

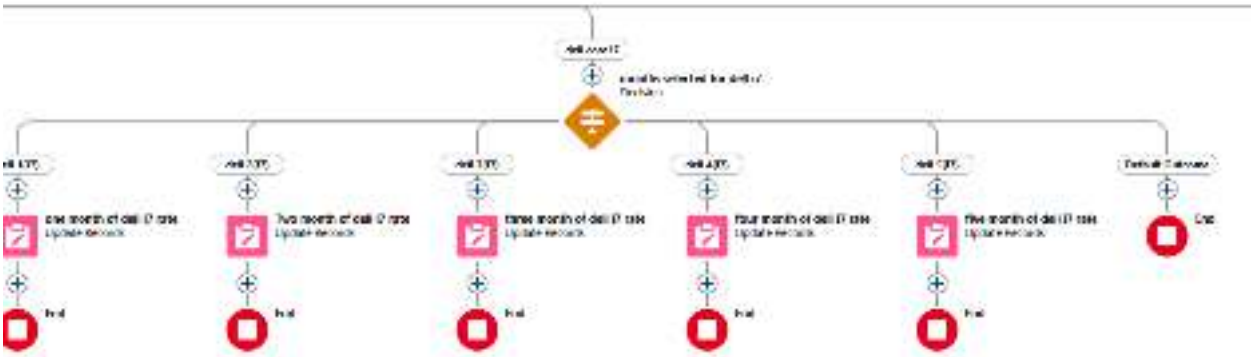


47. Follow the above picture you will understand.

48. After dell 1(i7) there is '+' symbol like dell 2(i7),dell 3(i7),dell 4(i7),dell 5(i7).
49. Click on '+' then select update records
50. Enter the Details Label: one month of dell i5 rate , API name: Gets Automatically Generated.
51. Field:- Amount__c , value:- for dell 1(i7)-2000, dell 2(i7)-4000, dell 3(i7)-6000, dell 4(i7)-8000, dell 5(i7)-10000. Follow for all these finally
52. Click done.
53. **Follow the steps from 37 to 53 for Dell i5 and update the Amount for each month (1,2,3,4,5) as 1500, 2500,3500,4500,5500 respectively.**

Flow creted on Dell laptop:



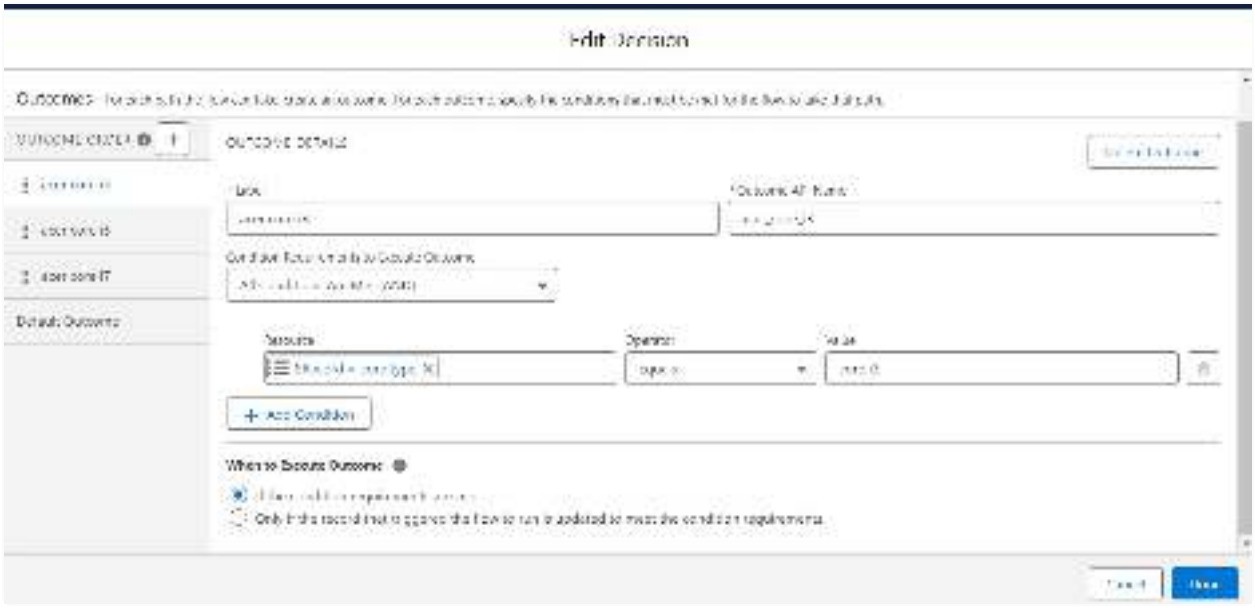


Over all dell Laptop flow:

creating flow on acer laptop

a. Go to flow page

- Beside acer there is a symbol '+' click on that.
- Again select decision
- Enter the Details Label: Acer core type selection, API name: Gets Automatically Generated.
- Select the Outcome Details Label: acer core i3 , Outcome API name: Gets Automatically Generated.
    i. Resource: Select Record.core type.
    ii. Operator: Select Equals.
    iii. Value: Select core i3.
- Similarly create outcomes for acer core i5 and acer core i7 also.



Click done.

a. Go to flow page

a. Beside dell there is a symbol '+' click on that.
b. Again select decision

a. Enter the Details Label: Acer months selected , API name: Gets Automatically Generated.
b. Enter the Outcome Details Label: acer 1(i3) , Outcome API name: Gets Automatically Generated.
c.

- Resource: Select Record.how many months.
- Operator: Select Equals.
- Value: 1.

a. Enter the Outcome Details Label: acer 2(i3) , Outcome API name: Gets Automatically Generated.

- Resource: Select Record.how many months.
- Operator: Select Equals.
- Value: Select 2..

a. Click '+' outcome details
b. Enter the Outcome Details Label: acer 3(i3) , Outcome API name: Gets Automatically Generated.

- Resource: Select Record.how many months.
- Operator: Select Equals.
- Value: Select 3..

a. Click '+' outcome details

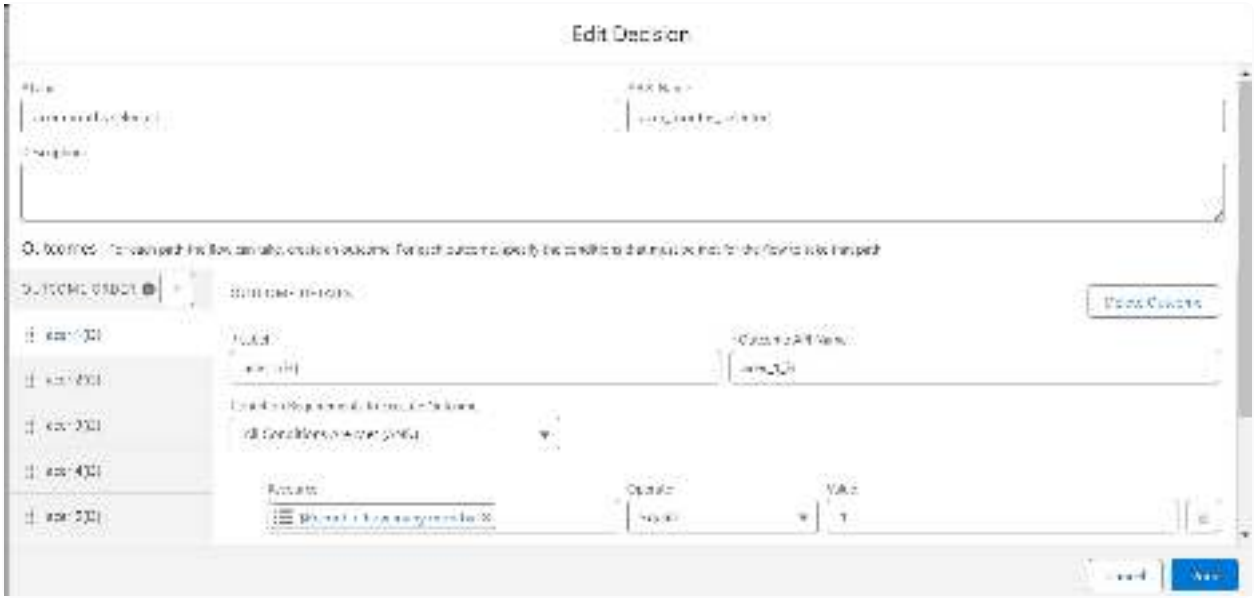
b. Enter the Outcome Details Label: acer 4(i3) , Outcome API name: Gets Automatically Generated.

- Resource: Select Record.how many months.
- Operator: Select Equals.
- Value: Select 4.

a. Click '+' outcome details

b. Enter the Outcome Details Label: acer 5(i3) , Outcome API name: Gets Automatically Generated.

- Resource: Select Record.how many months.
- Operator: Select Equals.
- Value: Select 5.



Click done.

a. After acer 1(i3) there is '+' symbol like acer 2(i3),acer 3(i3),acer 4(i3),acer 5(i3).

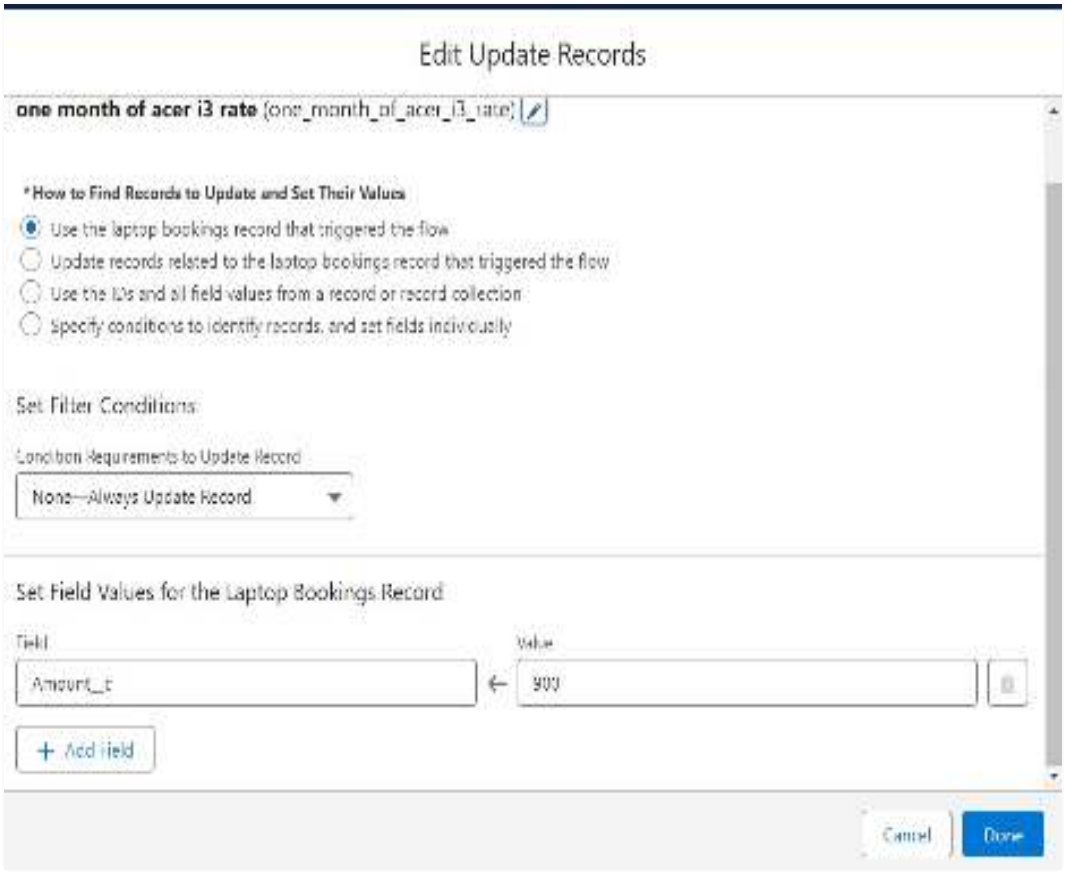
b. Click on '+' then select update records

c. Enter the Details Label: one month of acer i3 rate , API name: Gets Automatically Generated.

d. Field:- Amount__c , value:- for acer 1(i3)-900, acer 2(i3)-1800, acer 3(i3)-

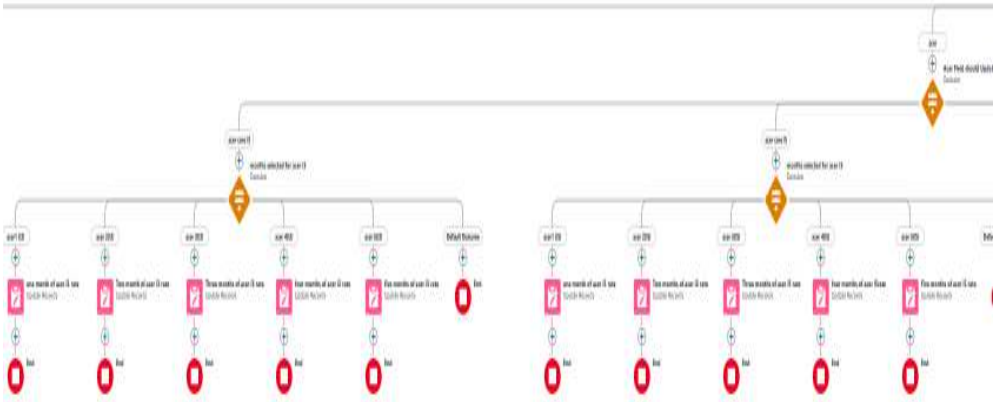
2700, acer 4(i3)-3600, acer 5(i3)-4800. Follow for all these finally

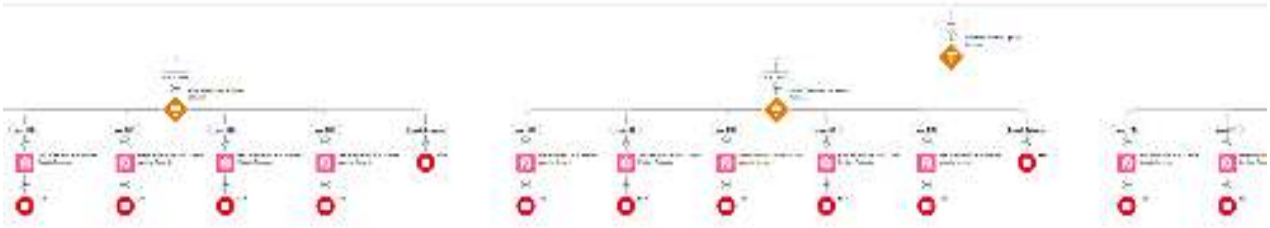
e. **Follow the steps from 8 to 22 and create decision and Update record elements for Acer core i5 and Acer core i7. But enter different Amount values.**



f. Click done

Flows Completed on acer Laptop:





creating a flow on hp laptop:

Go to flow page

1.
    a. Beside hp there is a symbol '+' click on that.
    b. Again select decision
    c. Enter the Details Label: HP core selection, API name: Gets Automatically Generated.
    d. select the Outcome Details Label: hp core i3 , Outcome API name: Gets Automatically Generated.
    - Resource: Select Record.core type.
    - Operator: Select Equals.
    - Value: Select hp i3.
2.
    a. Similarly create outcomes for hp core i5 and hp core i7 also.
    b. Go to flow page
3.
    a. Beside hp there is a symbol '+' click on that.
    b. Again select decision
4.
    a. Enter the Details Label: hp core i5 month selection , API name: Gets Automatically Generated.
    b. Enter the Outcome Details Label: hp 1(i5) , Outcome API name: Gets Automatically Generated.
    c.
    - Resource: Select Record.how many months.
    - Operator: Select Equals.

- Value: 1.

5.

a. Enter the Outcome Details Label: hp 2(i5) , Outcome API name: Gets Automatically Generated.
- Resource: Select Record.how many months.
- Operator: Select Equals.
- Value: Select 2..

a. Click '+' outcome details

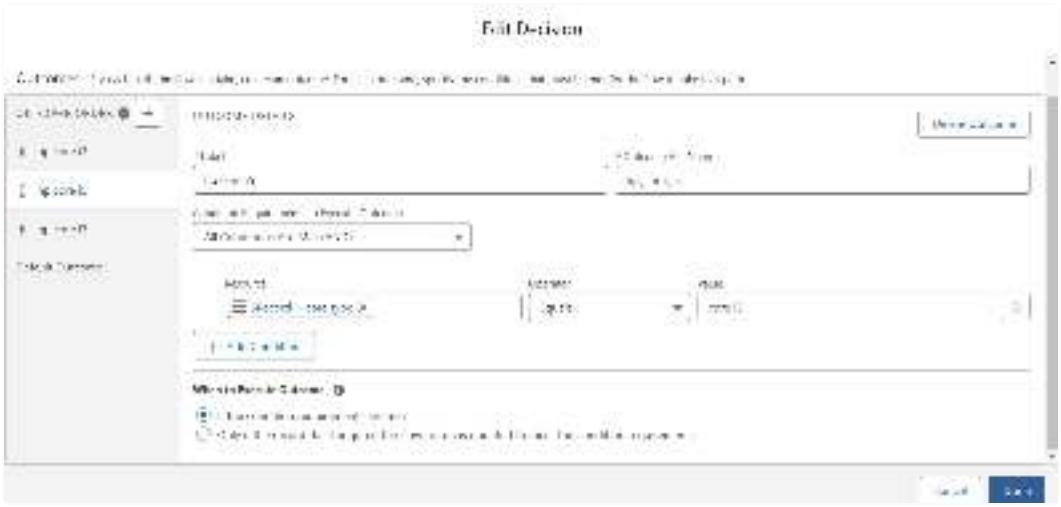
b. Enter the Outcome Details Label: hp 3(i5) , Outcome API name: Gets Automatically Generated.
- Resource: Select Record.how many months.
- Operator: Select Equals.
- Value: Select 3..

a. Click '+' outcome details

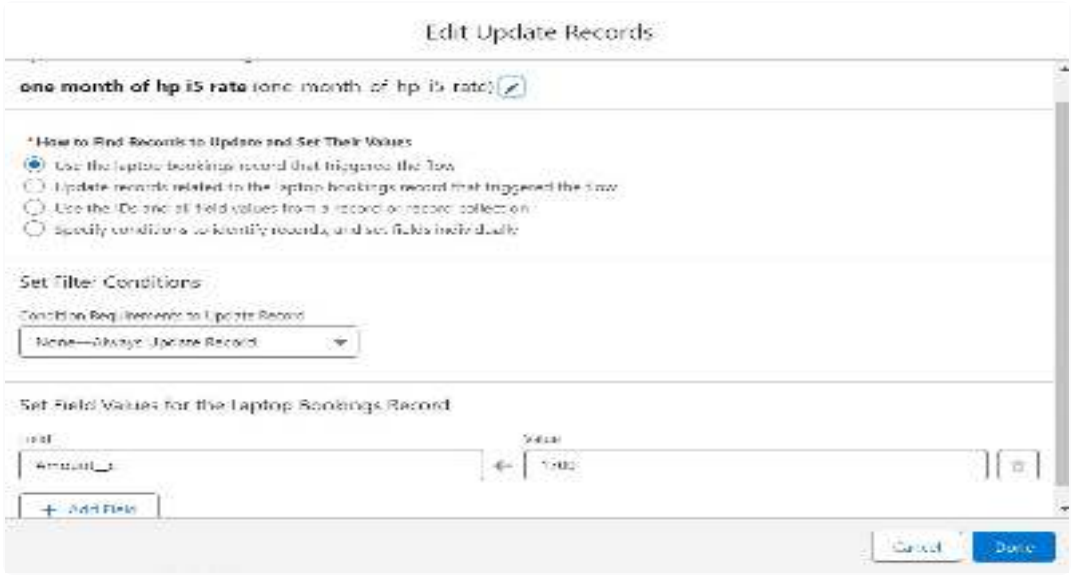
b. Enter the Outcome Details Label: hp 4(i5) , Outcome API name: Gets Automatically Generated.
- Resource: Select Record.how many months.
- Operator: Select Equals.
- Value: Select 4.

a. Click '+' outcome details

b. Enter the Outcome Details Label: hp 5(i5) , Outcome API name: Gets Automatically Generated.
- Resource: Select Record.how many months.
- Operator: Select Equals.
- Value: Select 5.



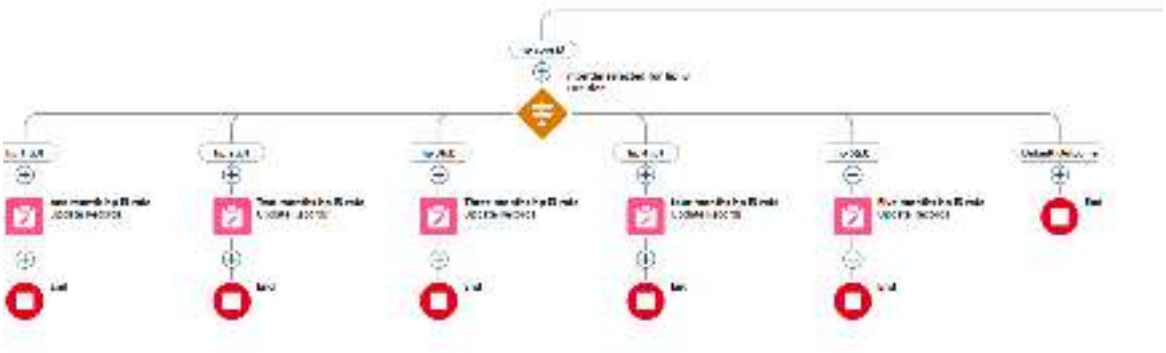
6. Click on done.
7.
    a. After hp 1(i5) there is '+' symbol like hp 2(i5), hp 3(i5), hp 4(i5),hp 5(i5).
    b. Click on '+' then select update records
    c. Enter the Details Label: one month of hp i5 rate , API name: Gets Automatically Generated.
    d. Field:- Amount__c , value:- for hp 1(i5)-1700, hp 2(i5)-3400, hp 3(i5)-5100, hp 4(i5)-6800, hp 5(i5)-8500. Follow for all these finally
    e. **Follow the steps from 8 to 22 and create decision and Update record elements for Hp core i3 and Hp core i7. But enter different Amount values**



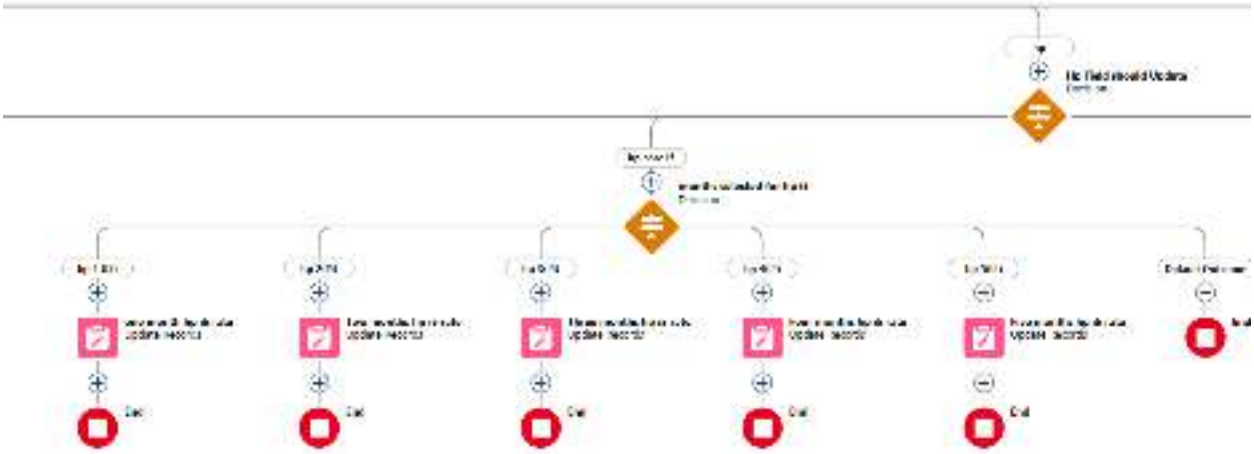
8. Click done.

Flows created on hp laptop with core types:

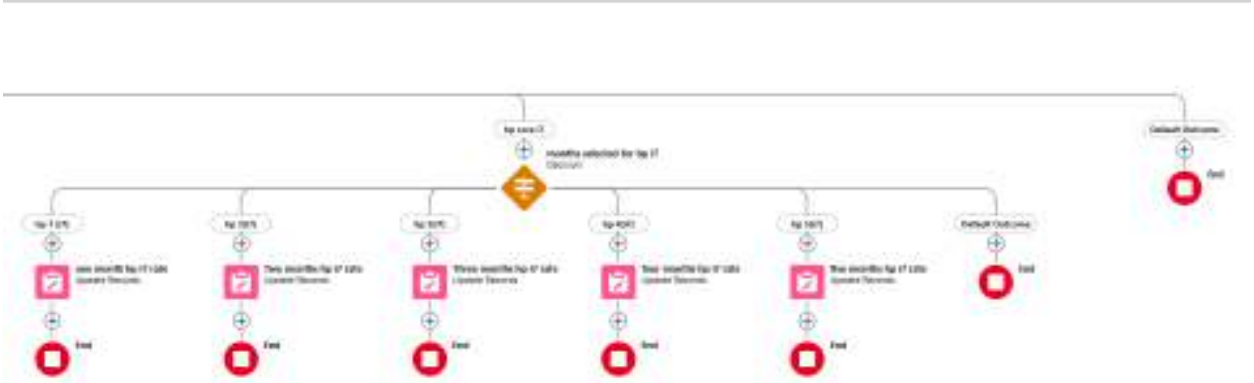
HP i3:



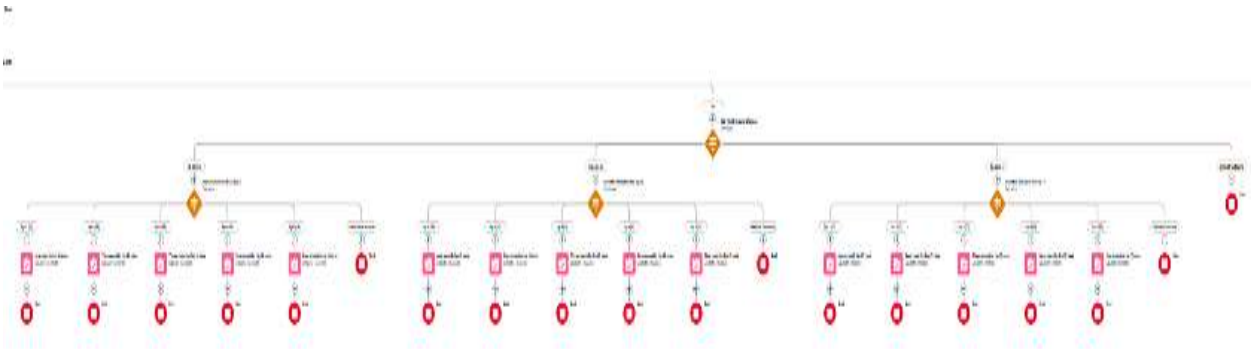
Hp i5:



HP i7:



Overall Flow on Hp:



creating a flow on mac laptop:

a. Go to flow page
b. Beside mac there is a symbol '+' click on that.
c. Again select decision
d. Enter the Details Label: mac should be Updated, API name: Gets Automatically Generated.
e. select the Outcome Details Label: mac laptop , Outcome API name: Gets Automatically Generated.

- Resource: Select Record.core type.
- Operator: Select Equals.
- Value: Select Bionic Chip.

Click done.

Go to flow page

a. Beside Mac there is a symbol '+' click on that.
b. Again select decision

a. Enter the Details Label:Mac months selected , API name: Gets Automatically Generated.
b. Enter the Outcome Details Label: mac bionic chip(1) , Outcome API name: Gets Automatically Generated.
c.

- Resource: Select Record.how many months.
- Operator: Select Equals.
- Value: 1.

a. Enter the Outcome Details Label: mac bionic chip(2) , Outcome API name: Gets Automatically Generated.

- Resource: Select Record.how many months.
- Operator: Select Equals.
- Value: Select 2..

a. Click '+' outcome details
b. Enter the Outcome Details Label: mac bionic chip(3) , Outcome API name: Gets Automatically Generated.

- Resource: Select Record.how many months.
- Operator: Select Equals.
- Value: Select 3..

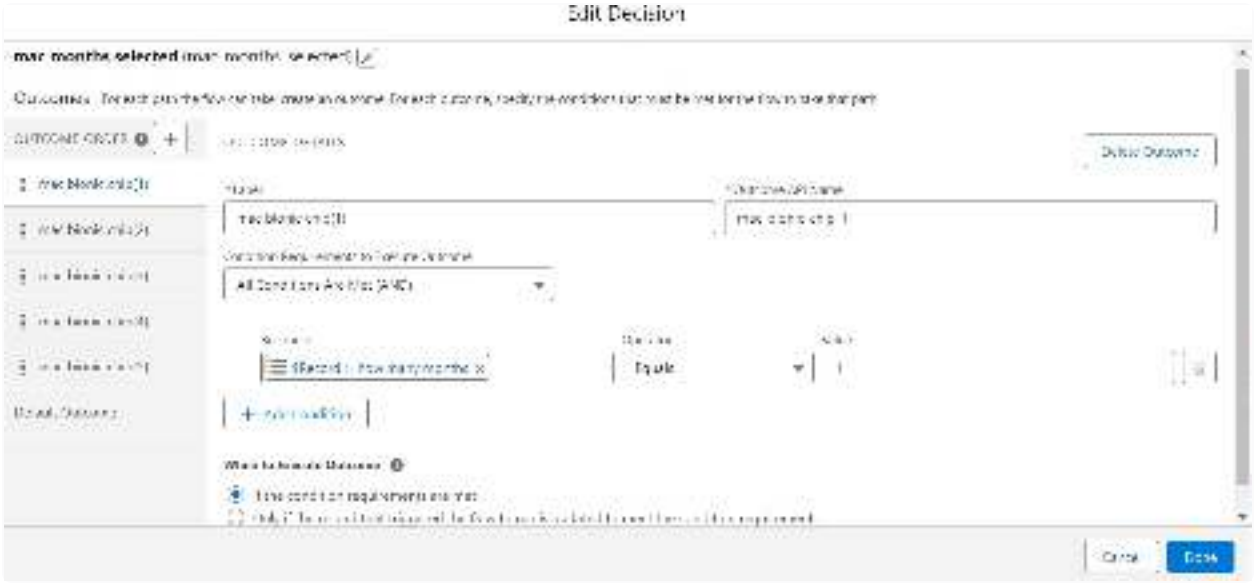
a. Click '+' outcome details
b. Enter the Outcome Details Label: mac bionic chip(4) , Outcome API name: Gets Automatically Generated.

- Resource: Select Record.how many months.
- Operator: Select Equals.
- Value: Select 4.

a. Click '+' outcome details
b. Enter the Outcome Details Label: mac bionic chip(5) , Outcome API name: Gets Automatically Generated.

- Resource: Select Record.how many months.

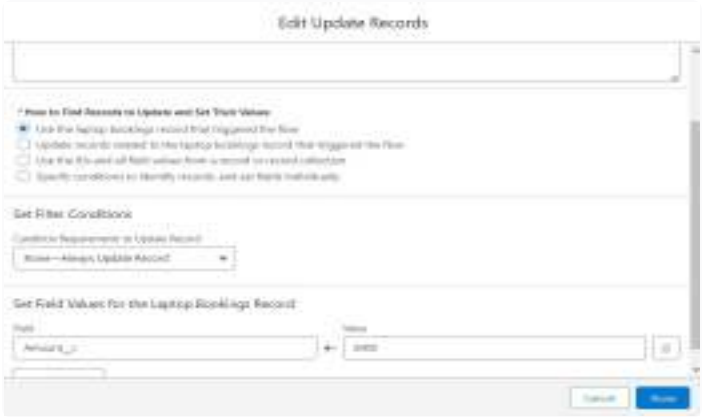
- Operator: Select Equals.
- Value: Select 5.



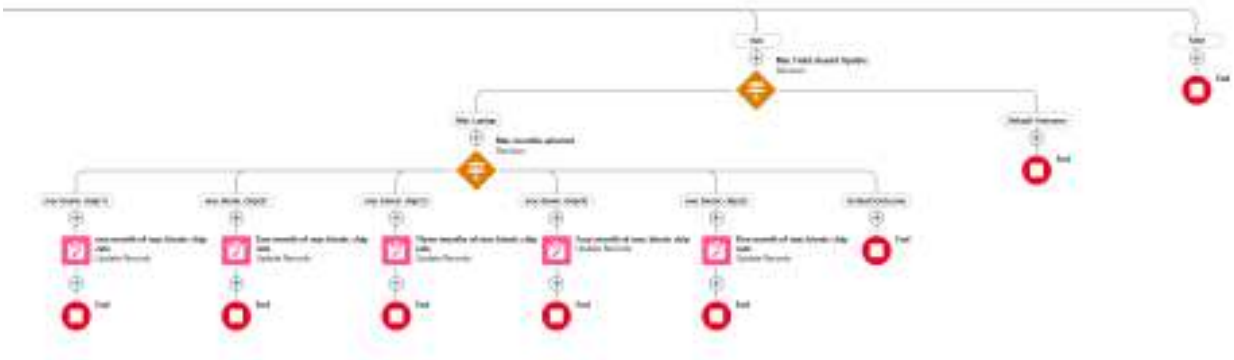
Click done.

a. After mac bionic chip(1) there is '+' symbol like mac bionic chip(2), mac bionic chip(3), mac bionic chip(4),mac bionic chip(5).
b. Click on '+' then select update records
c. Enter the Details Label: one month of mac rate , API name: Gets Automatically Generated.
d. Field:- Amount__c , value:- for one month of mac bionic chip rate-1700, two month of mac bionic chip rate-3400, three month of mac bionic chip rate-5100, four month of mac bionic chip rate-6800, five month of mac bionic chip rate-8500. Follow for all these finally

Click done.

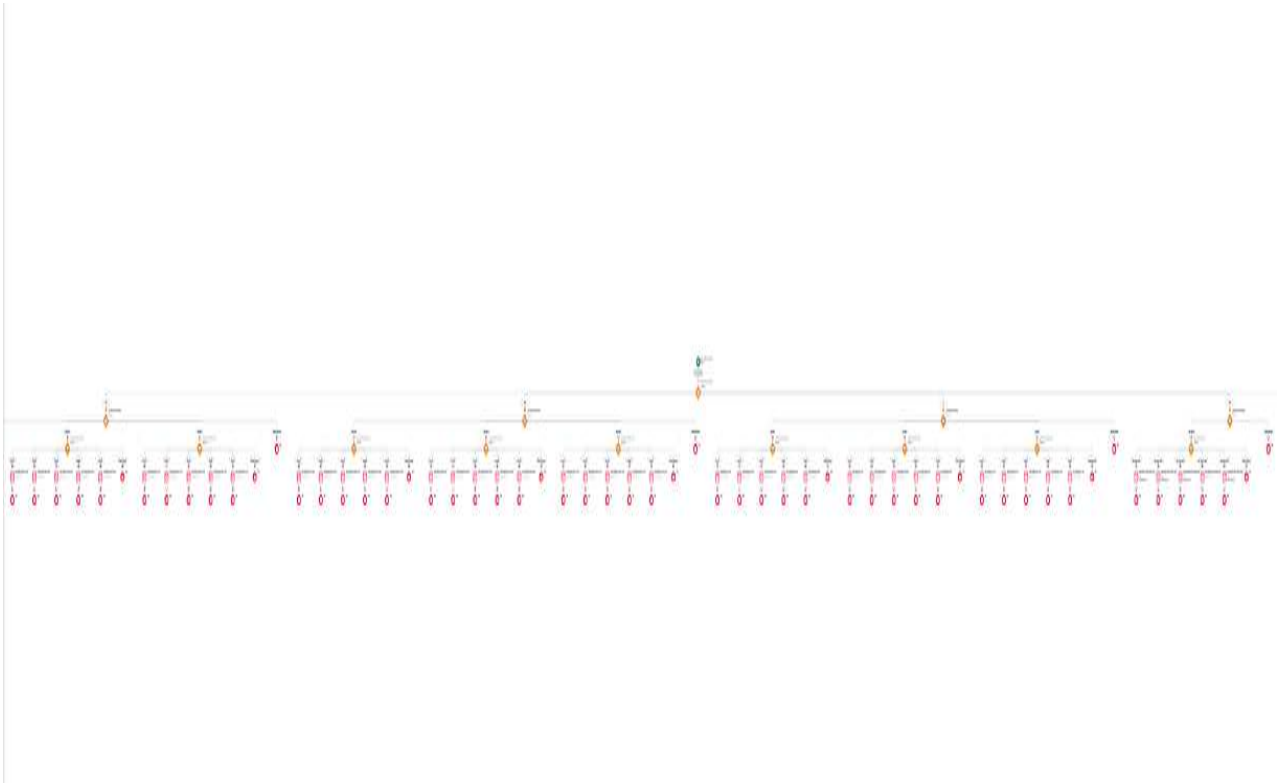


FLOW on Mac Laptop:



Click on save .
Label:- Laptop distributions, api name:- automatically filled
Save the flow and activate it.

Laptop Distribution Flow:

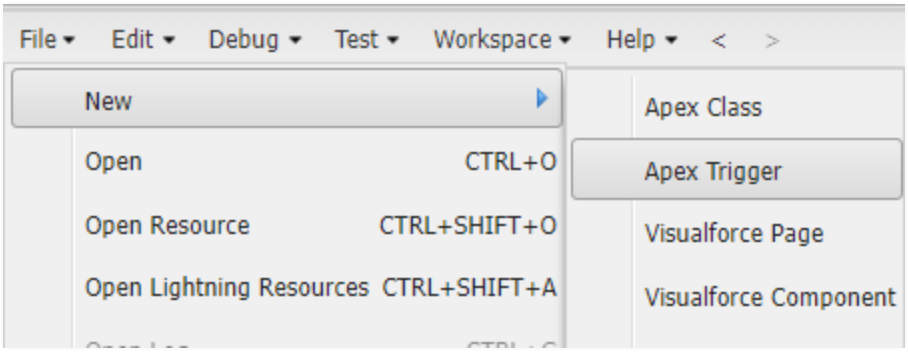


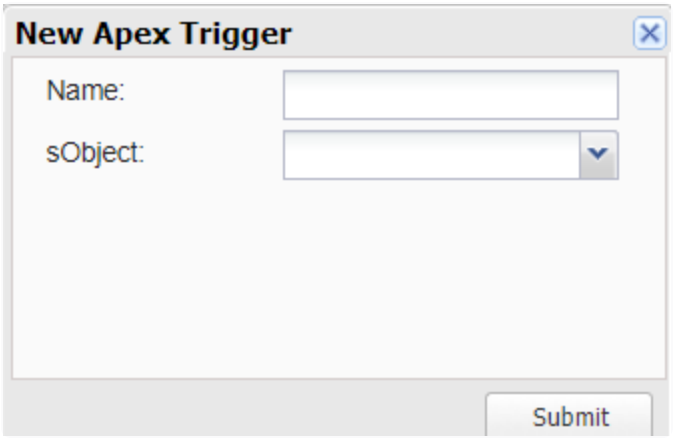
Apex:

Apex Trigger and Handler Class

How to create a new trigger :

1. While still in the trailhead account, navigate to the gear icon in the top right corner.
2. Click on developer console and you will be navigated to a new console window.
3. Click on the File menu in the toolbar, and click on new? Trigger.
4. Enter the trigger name and the object to be triggered.





Syntax For creating trigger :

The syntax for creating trigger is :

Trigger [trigger name] on [object name](Before/After event)

{

}

Trigger code:

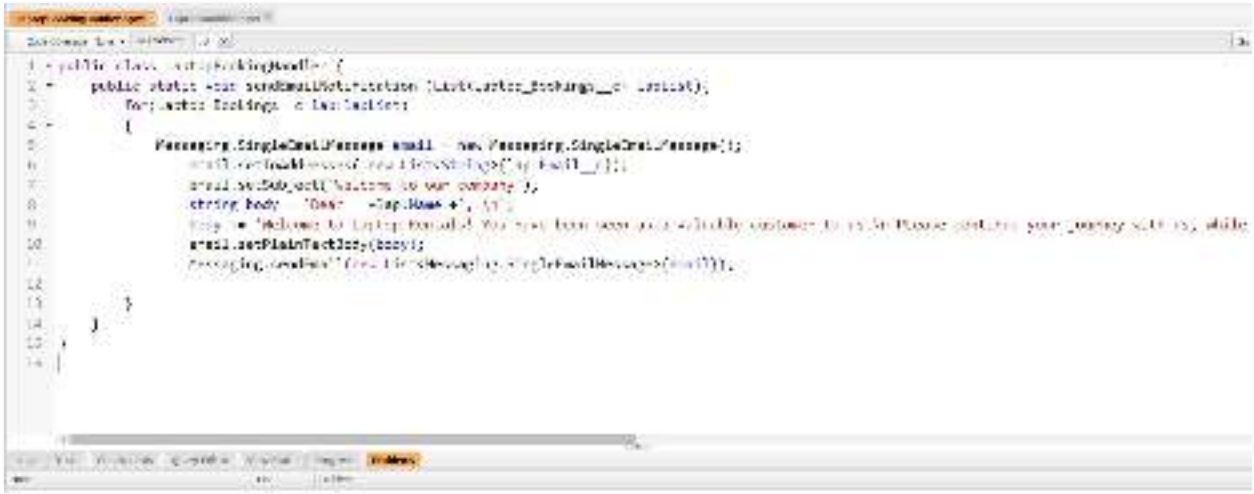
```
trigger LaptopBooking on Laptop_Bookings__c (After insert,after update) {

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


}
```

Note:- copy the API names
1.LaptopBooking - trigger name
2.Laptop_Bookings__c -as per your org(go to laptop bookings object and copy from that object api name).

Handler Class:



Code Snippet :

```
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 Customer, \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_name__c;
            email.setPlainTextBody(body);
                Messaging.sendEmail(new List<Messaging.SingleEmailMessage>{email});

        }
    }
}
```

Note:-

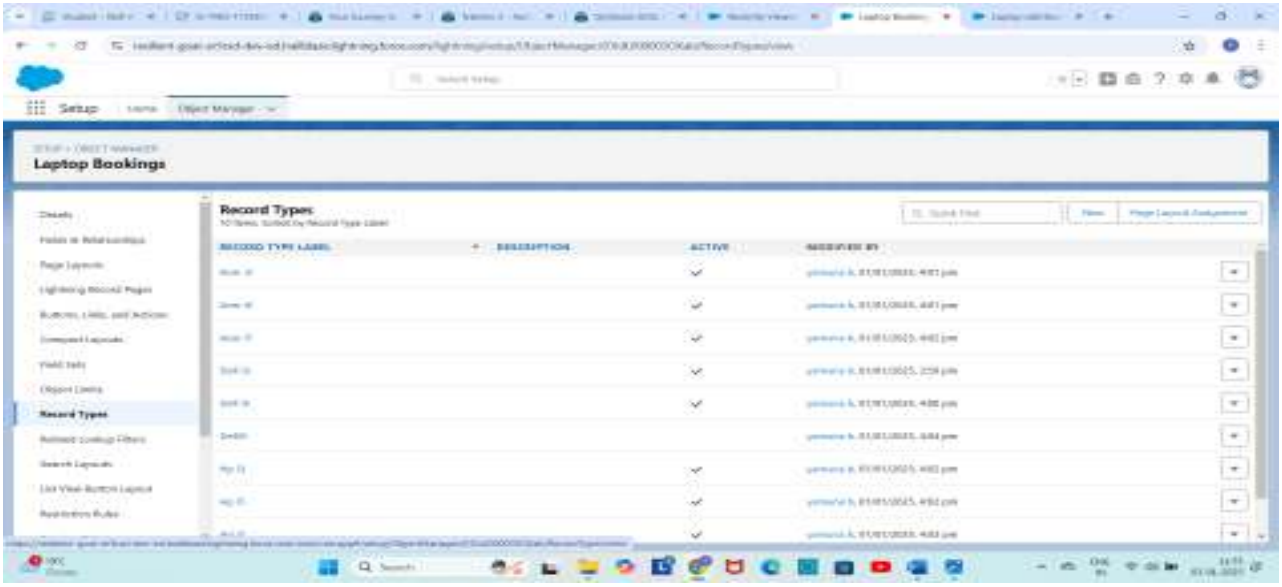
1.Class name:- LaptopBookingHandler
2.API Name:- Laptop_Bookings__c(as per your org go to laptop booking object and copy from that).
3.core__c (as per your org go to laptop booking object and copy from that).
4.Laptop_type__c.(as per your org go to laptop booking object and copy from that).

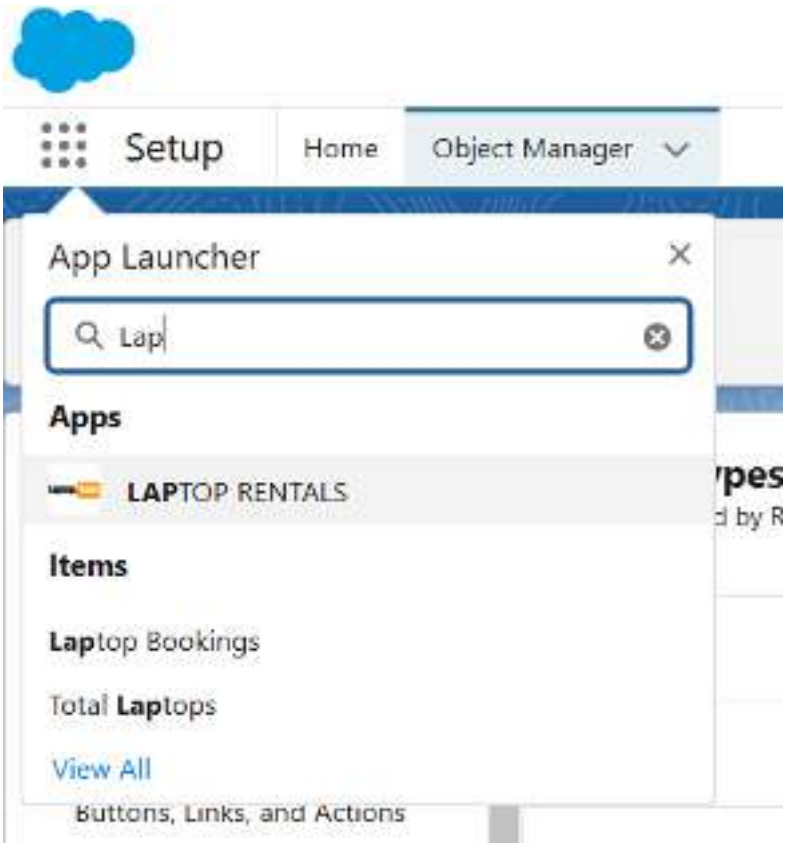
In this project , trigger is called whenever the particular record's sum exceeds the threshold i.e minimum business requirement value. Then the code in the trigger will get executed.

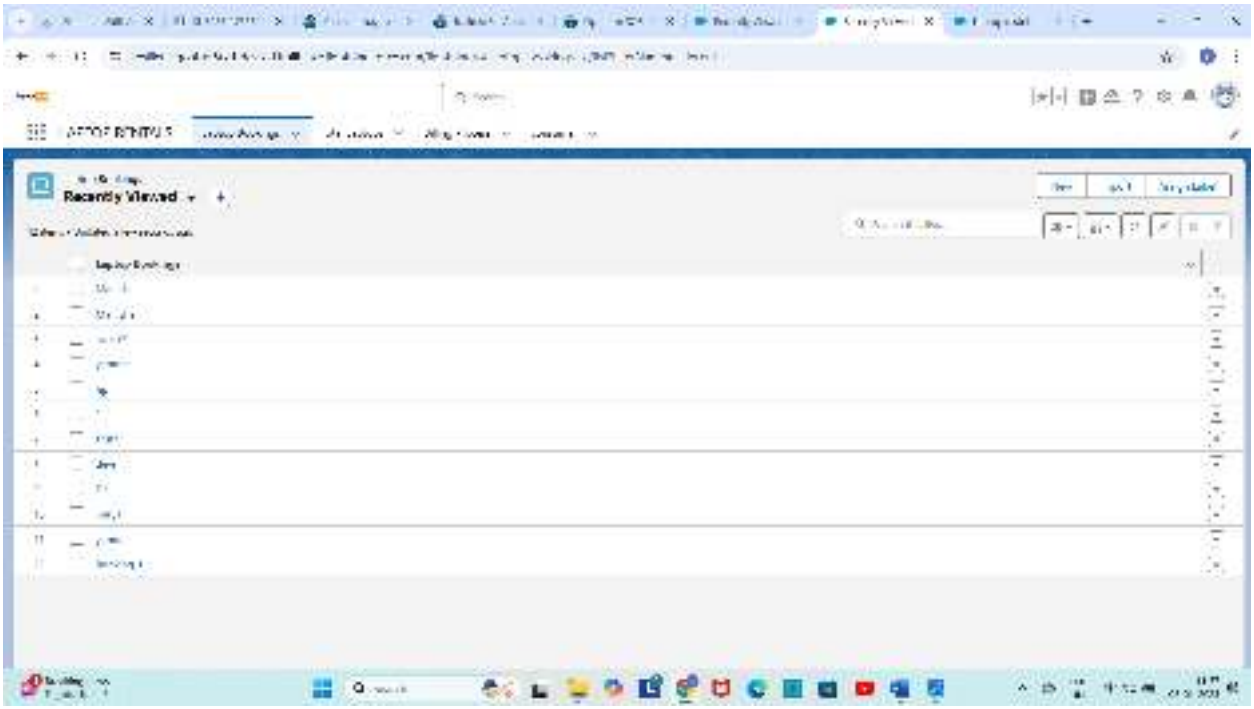
Reports:

Create Report

1. **Note: Before creating reports just fill the 10-12 records in the Laptop Bookings object.**
2. **Create records for each one you have to create at least 2 different records i.e dell(i3), dell(i7),acer(i3),hp(i5),mac(bionic chip).**



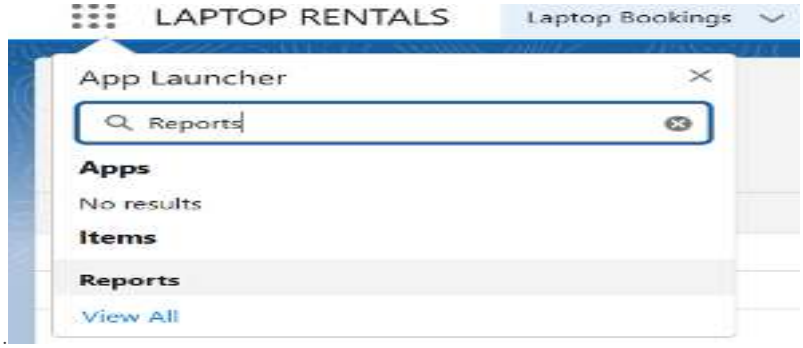

Setup
Home
Object Manager
App Launcher
Lap
Apps
LAPTOP RENTALS
Items
Laptop Bookings
Total Laptops
View All
Buttons, Links, and Actions



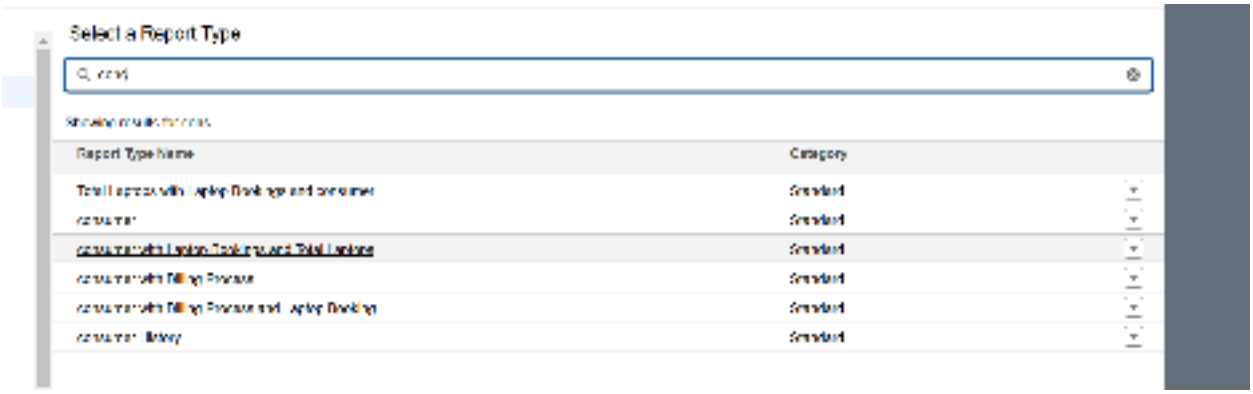
3.

Go to the app ? click on the reports tab

Click New Report



3.Select report type from category or from report type panel or from search panel “consumer with Laptop Bookings and total laptops” ? click on start report.



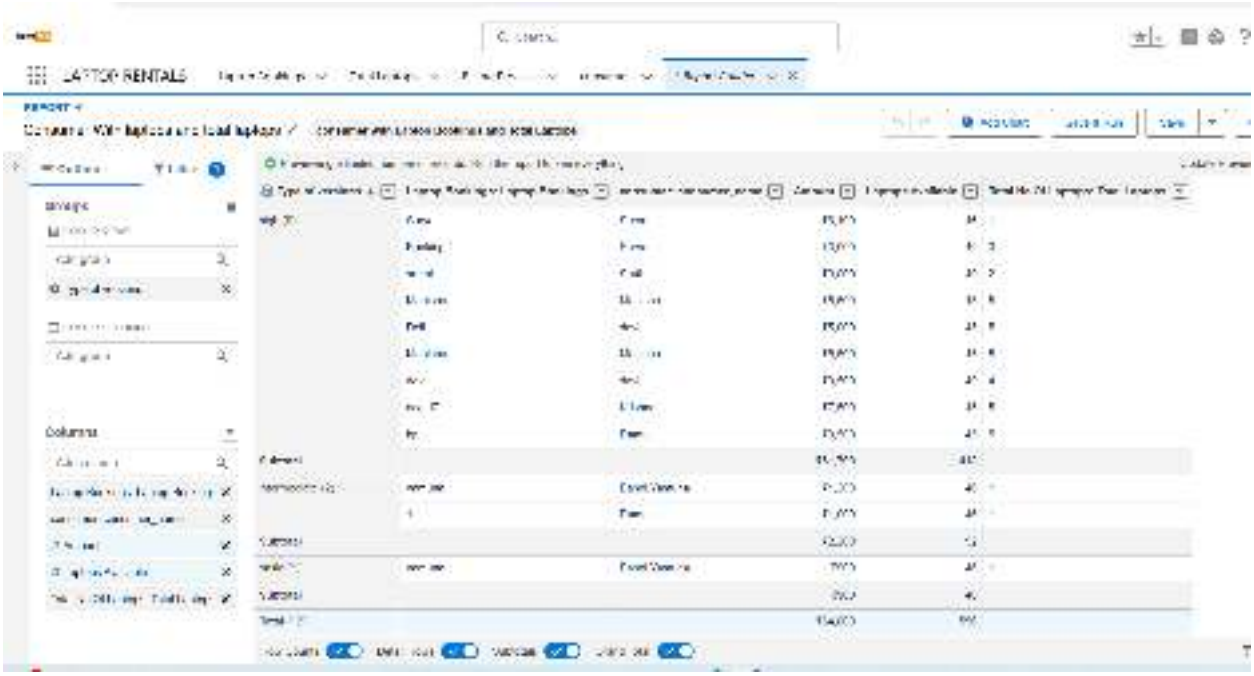
4.Create a simple tabular report

5.Add fields from left pane, make sure that Amount field will be selected.

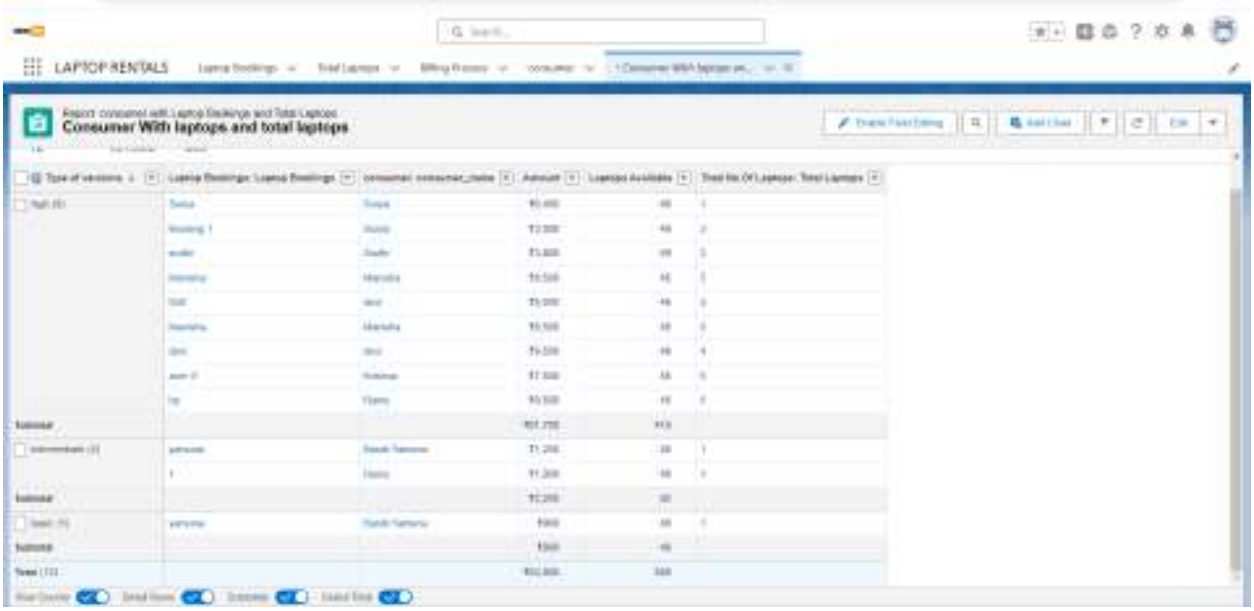
6.Click the Amount column drop down and select bucket list.

Click apply it.

8. Select Types of version in Group By Rows to create **a summary report**. Follow the image for other fields.

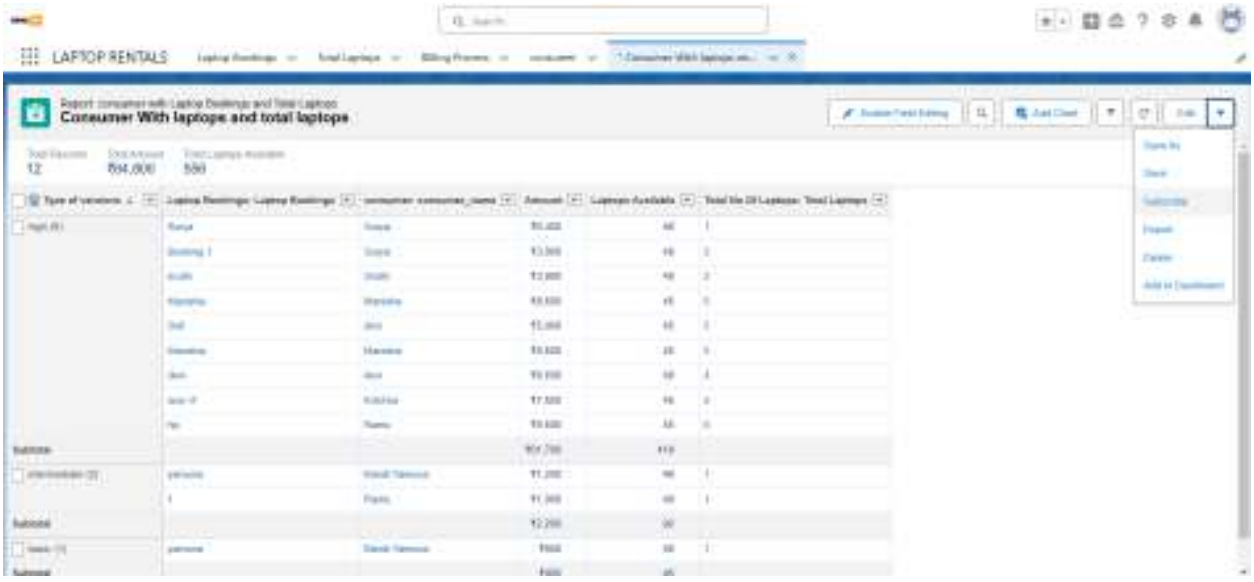


Click on Save & run it.

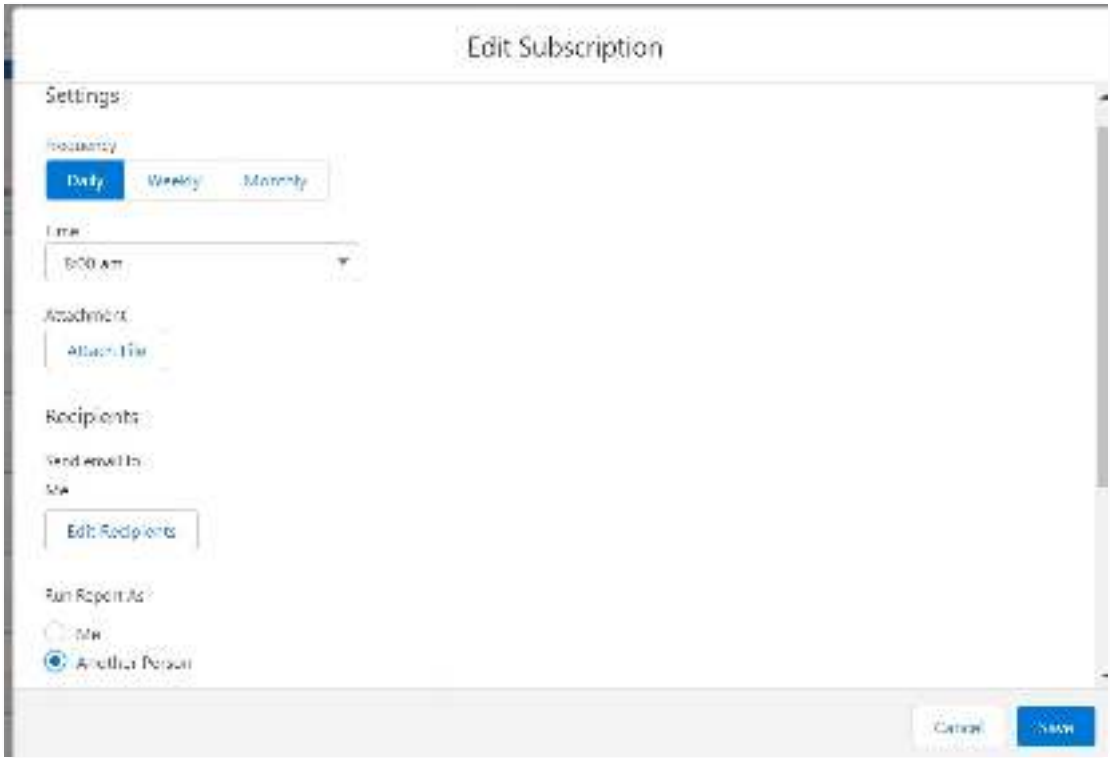


Sharing report to owner

a. Click edit drop down and select subscribe option

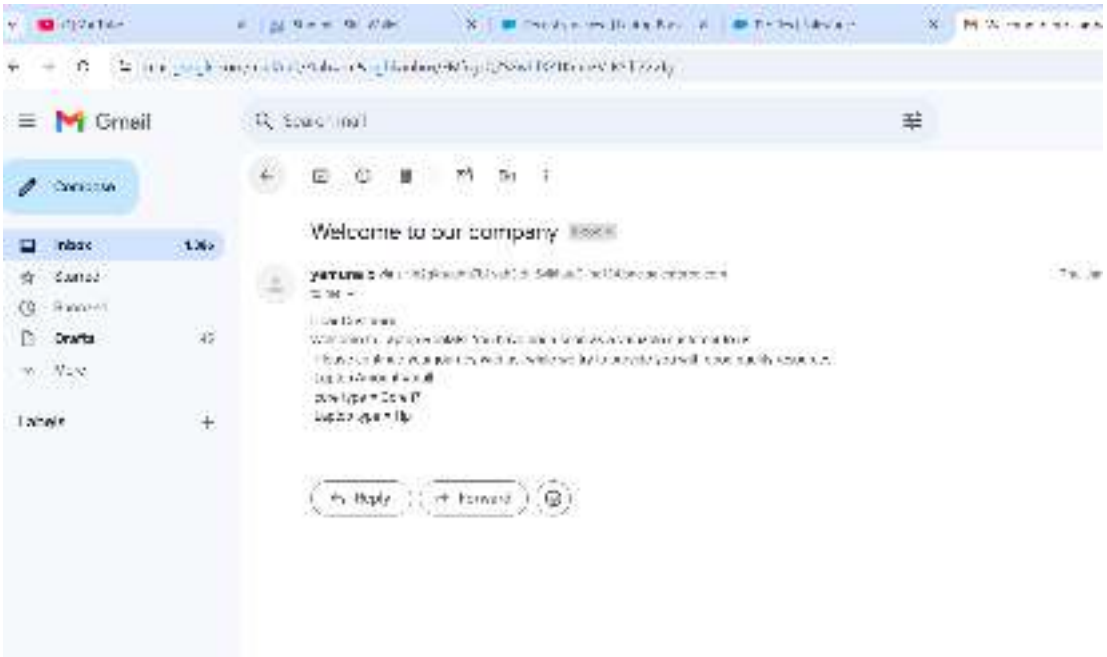


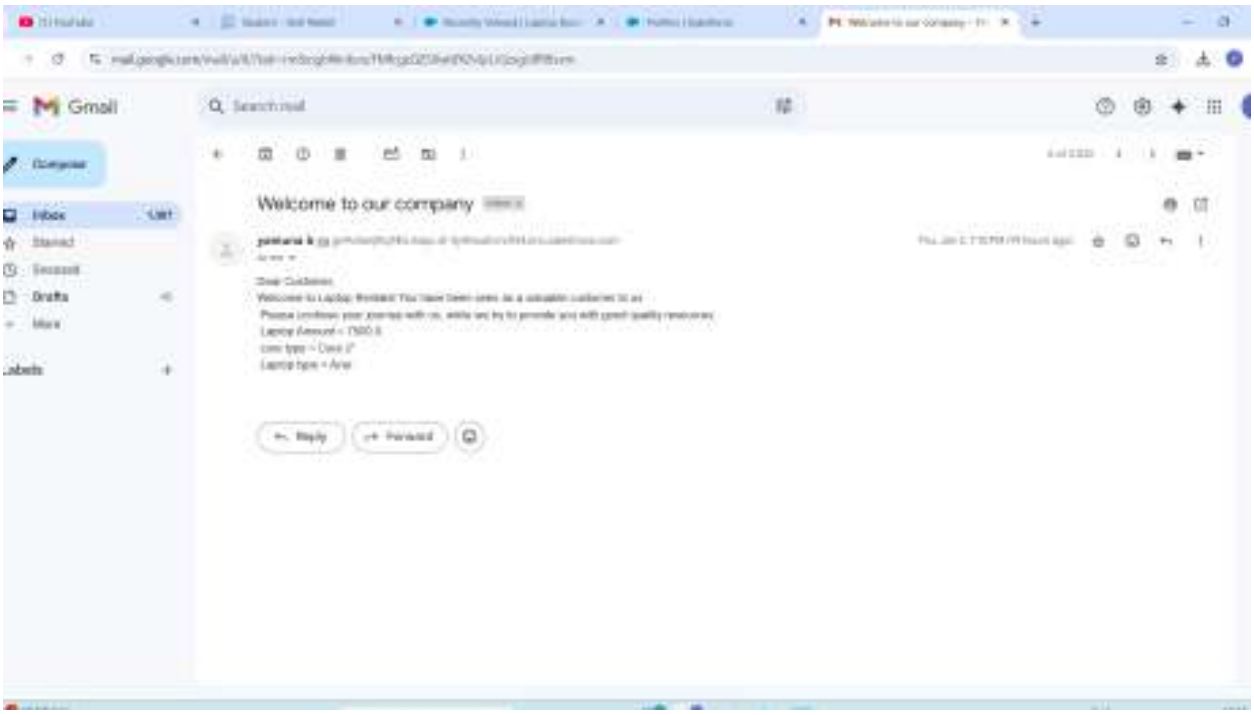
a. Follow as per below image.



a. After selecting the run report as a “another person” select your personal account or whom you want to send that mail to.
b. Click save.

NOTE: The owner gets daily email notification of that laptop booking report.so that he can see all data remotely.



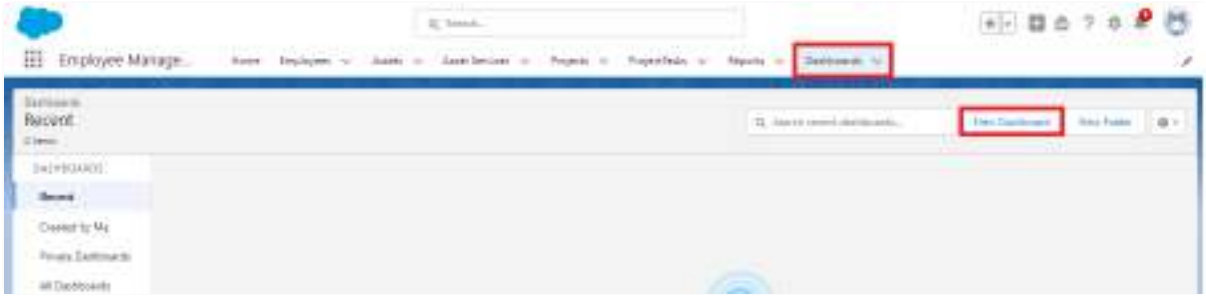


Create Dashboard Folder

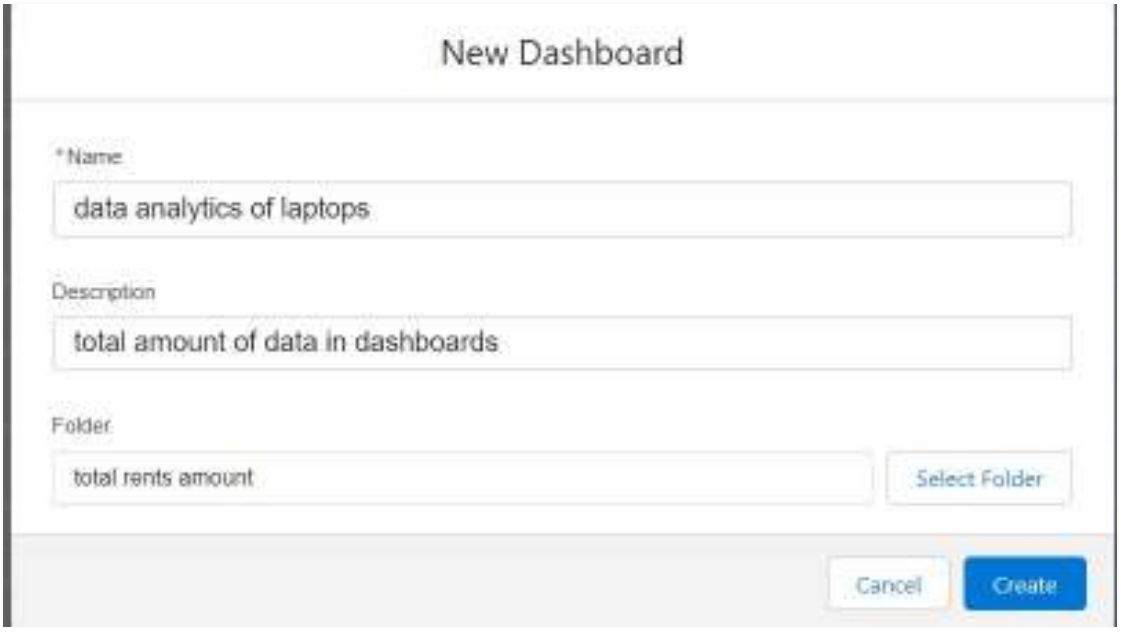
1. Click on the app launcher and search for the dashboard.
2. Click on the dashboard tab.
3. Click the new folder, give the folder label as “total rent amount”.
4. Folder unique names will be auto populated.
5. Click save.

Create Dashboard

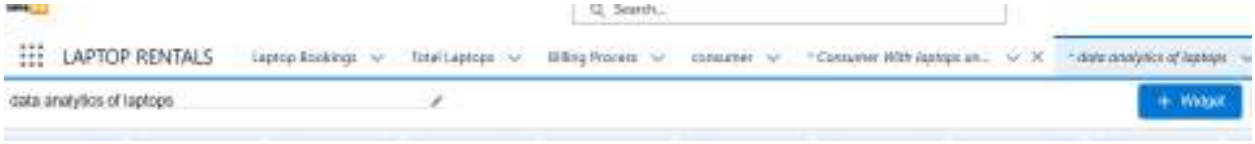
1. Go to the app >> click on the Dashboards tabs.



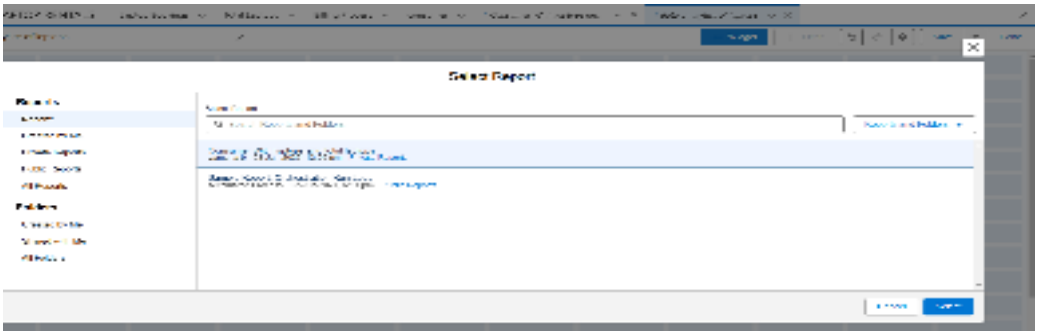
2. Give a Name and select the folder that was created, and click on create.

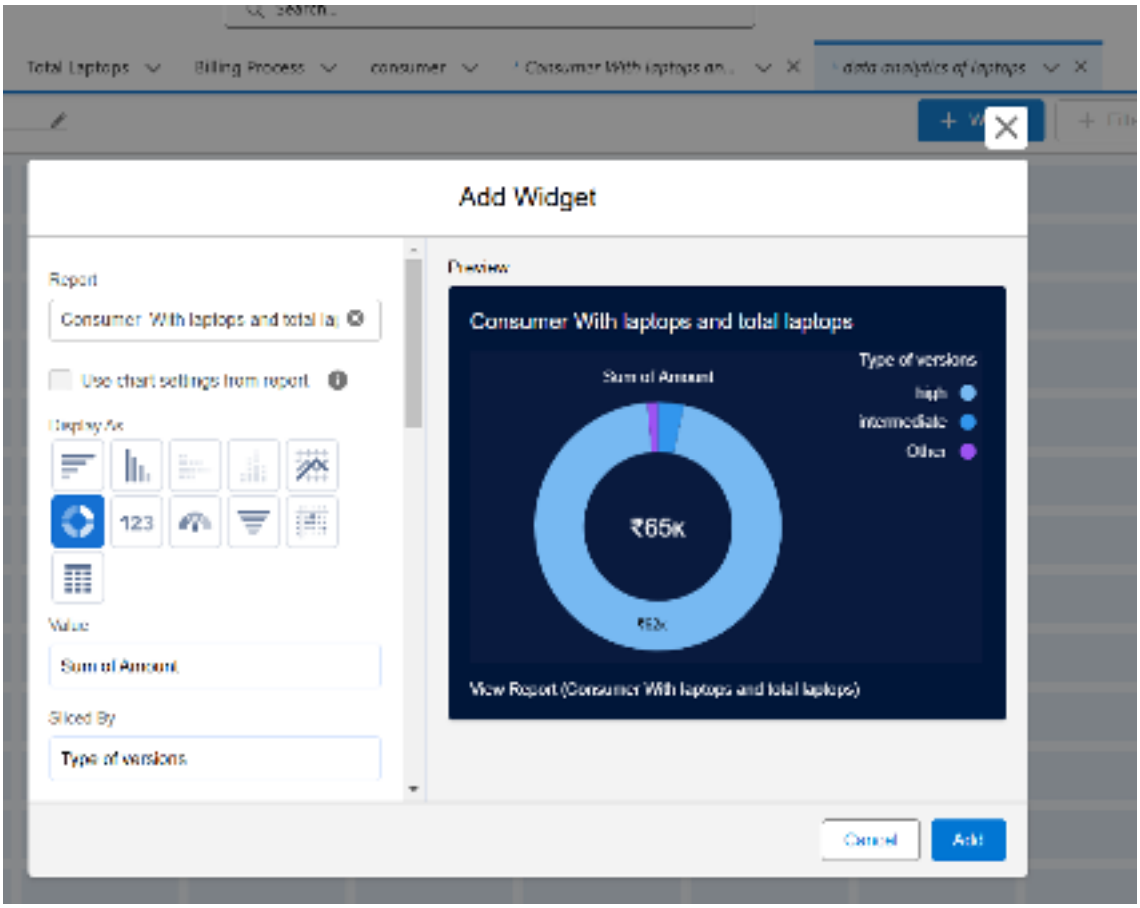


3. Select add widget.



4. Select a Report and click on select.





5. Select the dark component and add to the dashboards.
6. Save it.
7. Click done.

5. Testing and Validation

- **Unit Testing:** Apex test classes for validating trigger logic and email notifications.
- **User Interface Testing:** Ensure correct data display and functionality for booking and inventory tracking.

6. Key Scenarios Addressed by Salesforce in the Implementation

- Real-time updates on laptop availability after each booking.
- Automated email notifications for booking confirmations.
- Preventing overbooking by dynamically validating available stock.
- Detailed reporting on laptop rentals and inventory status.

Conclusion:

Summary of Achievements: The project successfully automated the management of laptop rentals, improved inventory tracking accuracy, and enhanced user experience with real-time notifications and dashboards. This solution is scalable and supports future enhancements like integration with external systems for broader functionality.

THE END