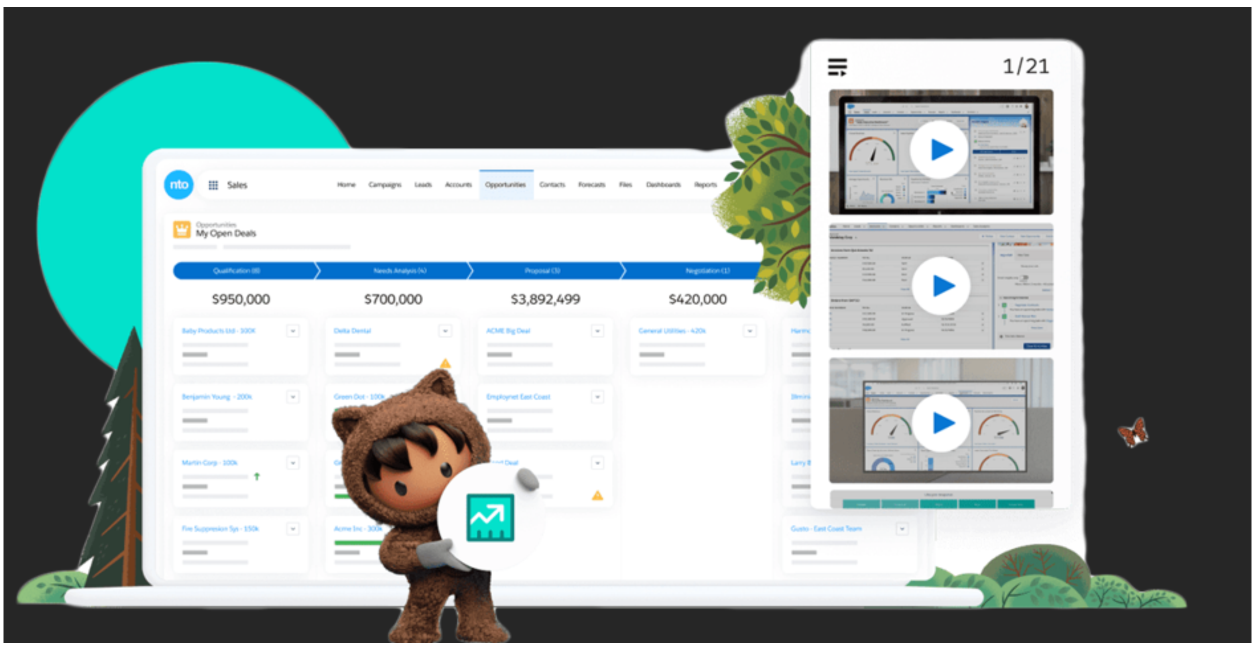
PROJECT:

A CRM APPLICATION FOR LAPTOP RENTALS



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1 Project Overview

This project, "**CRM Application for laptop rentals**" is focused on creating a Salesforce-based application to streamline laptop rental operations. By leveraging custom objects, validation rules, role-based access control, workflow automation, and reporting & dashboarding features within the Salesforce platform, the CRM provides a robust solution for managing the entire rental lifecycle. This comprehensive solution improves customer experience by ensuring timely communication and provides valuable insights for data-driven decision-making, ultimately driving business growth.

1.1 Objectives

Business Goals:

1. To optimize laptop rental operations by streamlining the entire rental process from booking to return.
2. To increase revenue and profitability through effective inventory management.
3. To build customer relationships by collecting valuable customer data and providing personalized service.

Specific Outcomes:

4. **Real-Time Tracking**:Implement a dashboardto monitor laptop availability, rental bookings, customer interactions, and revenue generation.
5. **Automation of Processes**: Streamline rental bookings and inventory management using Salesforce Flows and Triggers.
6. **User-Friendly Interface**: Developtabs for easy customer onboarding, rental requests, and staff access to relevant information.

7. **Comprehensive Reporting**: Generatedetailed reports to analyze rental trends, identify areas for improvement, and track key performance indicators.
8. **Scalability**: Create a flexible and scalable platform that can accommodate a growing number of laptops,customers, and rental requests.

1.2 Salesforce Key Featuresand Concepts Utilized

Custom Objects and Fields: Created tailored objects to manage laptop inventory, rental bookings,customer information, and payment details.

Lightning App Builder: Designed an intuitive and visually appealing Lightning app interface for users to easily navigate and manage rental requests, track inventory, and access customerinformation.

Flows and Automation: Implemented automation for rental bookings, payment processing, and inventory updatesto improve efficiency.

Triggers: Developed Apex triggers to automate backend processes, such as updating inventory availability upon rental bookings or sending automated email notifications to customers.

Reports and Dashboards: Builtdynamic dashboards and reports to provide real-time insights into rental trends,rental revenue etc.

1.3 Detailed Steps to SolutionDesign

Topic no.	Topic Name
1	**Creating objects:** a. Create Total Laptops Object b. Create consumer object c. Create Laptop Bookings object d. Create Billing process object
2	**Create CustomTabs**
3	**Create Lightning App**
4	**Fields:** a. Creating The Field In Consumer Object b. Creating The Field In Laptop Bookings Object c. To Create A Fieldsand Relationship To Laptop Bookings And Total Laptops Object d. Creation of Fields and Relationship For Billing Process Object e. Creating The Field In Total Laptops Object
5	**Validation Rule:** Creating The Validation Rule For Phone Number Field In Consumer Object
6	**Profiles:** a. Owner Profile b. Agent Profile
7	**Roles And Hierarchy:** Creating OwnerRole
8	**Users:** Create User

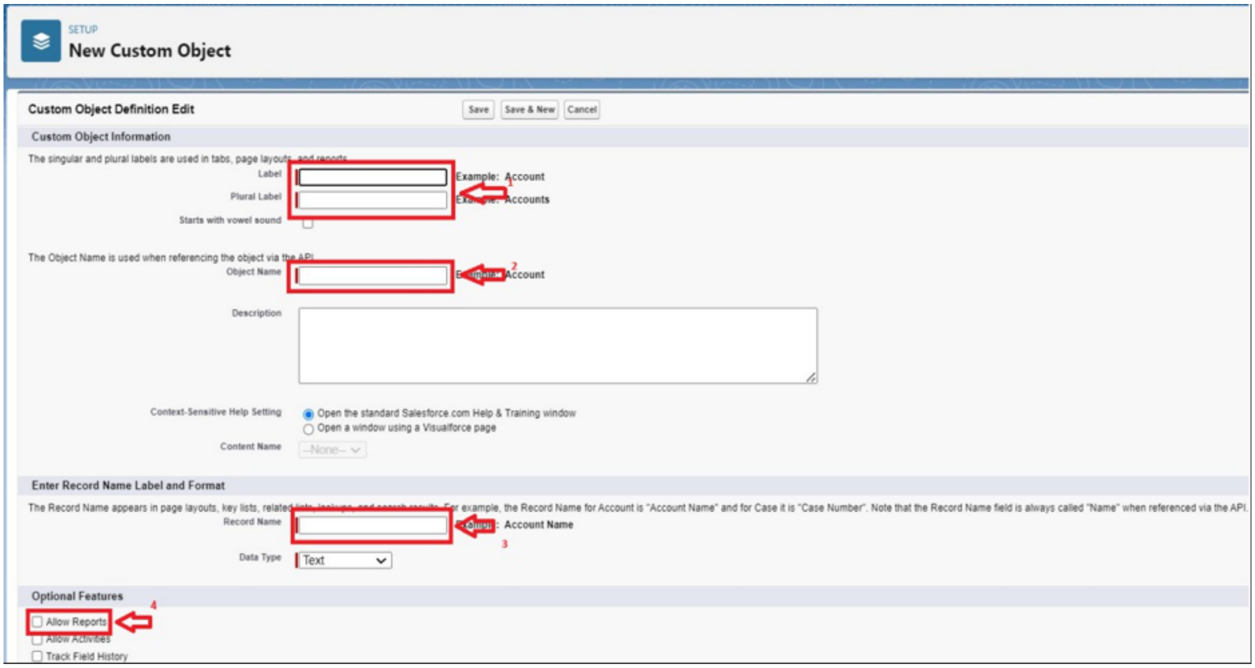
Topic no.	Topic Name
9	**Flows:** a. Create A Flow On Dell Laptop b. Creating FlowOn Acer Laptop c. Creating A Flow On Hp Laptop d. Creating A Flow On Mac Laptop
10	**Apex:** Apex Trigger And Handler Class
11	**Reports:** a. Create Report b. Sharing Report To Owner
12	**Dashboards:** a. Create Dashboard Folder b. Create Dashboard

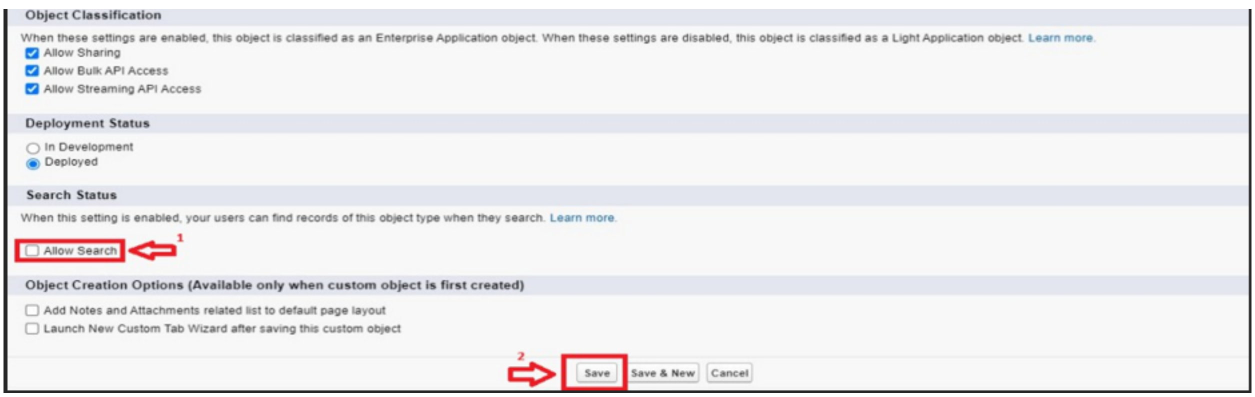
1. Creating Objects

Objects in Salesforce are database tables that allow you to store data specic to your organization. Each object comprises records (rows) and elds (columns) that help organize and structure your data eciently. We use objects to manage and relate various types of information, enabling seamless data tracking, reporting, and analysis within the Salesforce platform. Objects allow users to manage various types of information such as customer accounts, contacts, opportunities, and custom data specic to the organization. Salesforce provides standard objects like Account, Contact, and Opportunity, and users can also create **custom objects**to suit unique business needs.

To create an object:

1. From the setup page > Click on Object Manager > Click on Create > Click on Custom Object.
2. On Custom object defining page:
3. Enter the label name, plural label name, click on Allow reports, Allow search.
4. Click on Save.





1.1 Create Total LaptopsObject

To Createan object:

i. From the Setup page >>Click on Object Manager >>Click on create

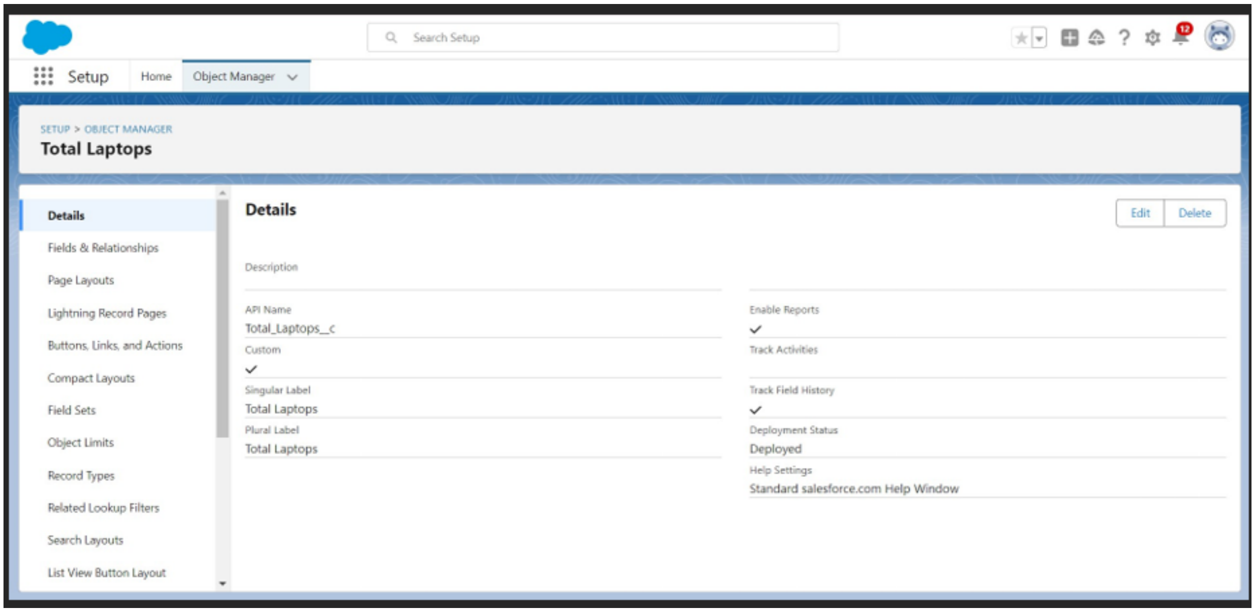
>> Click on Custom Object.

1. Enter the label name >> Laptops
2. Plural label name >>Laptops
3. Enter RecordName Label and Format

Record Name >>Total
Laptops Data Type >> Text

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

iii. Allow search >>Save



1.2 Create Consumer Object

To Createan object:

iv. From the Setup page >>Click on Object Manager >>Click on create

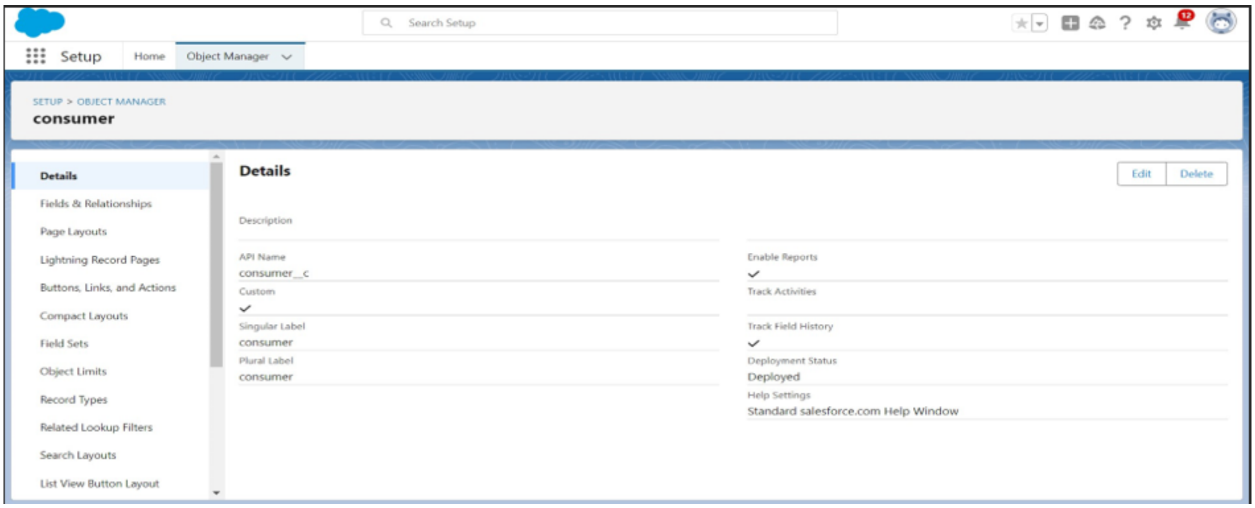
>> Click on Custom Object.

1. Enter the label name >> consumer
2. Plural label name >>consumer
3. Enter Record
   Name Labeland
   Format Record
   Name >>
   consumer_name

Data Type >>
Name

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

vi. Allow search >>Save



1.3 Create Laptop BookingsObject

To Createan object:

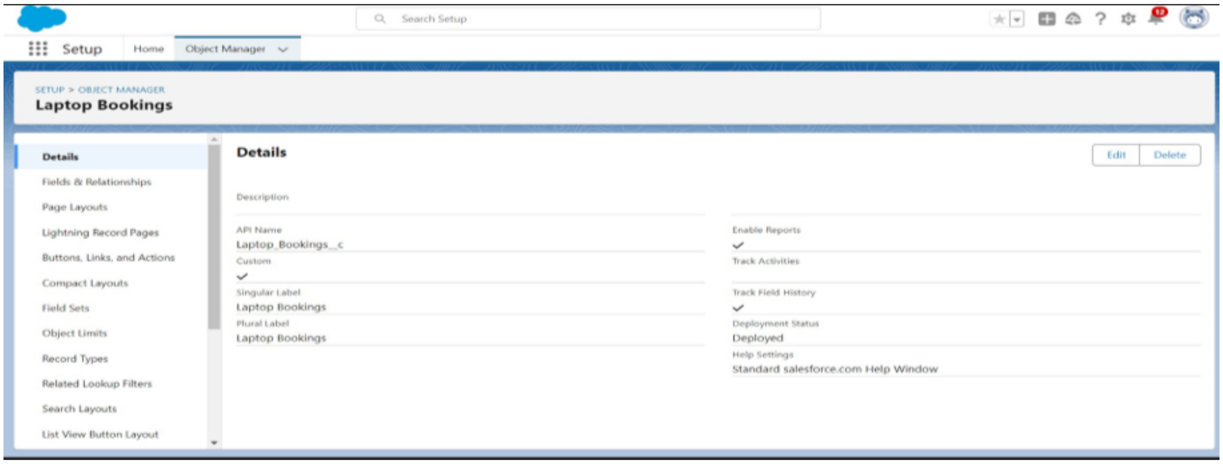
vii. From the Setup page >>Click on Object Manager >>Click on create

>> Click on Custom Object.

1. Enter the label name >> LaptopBookings
2. Plural label name >> Laptop Bookings
3. Enter Record
   Name Labeland
   Format Record
   Name >> Laptop
   Bookings Data
   Type >> Name

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

ix. Allow search >>Save



1.4 Create Billing ProcessObject

To Createan object:

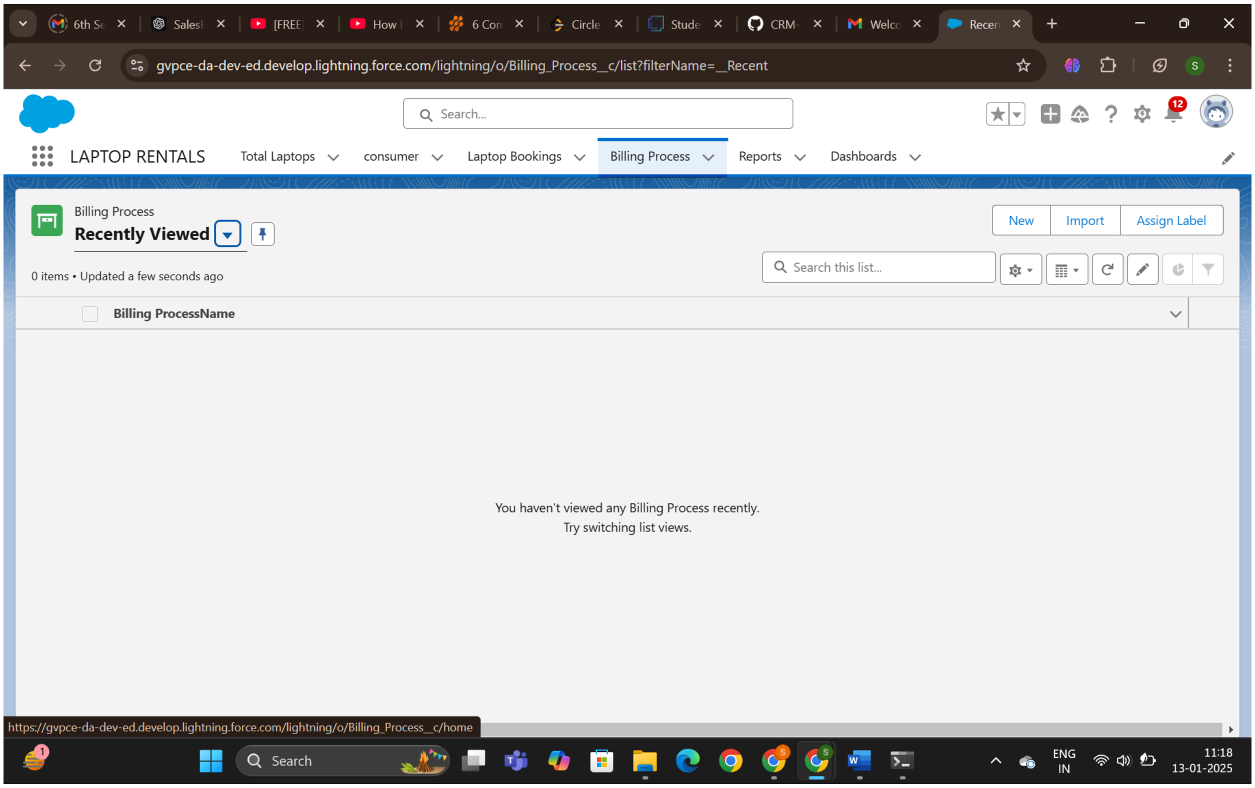
x. From the Setup page >>Click on Object Manager >>Click on create

>> Click on Custom Object.

1. Enter the label name >> BillingProcess
2. Plural label name >> Billing Process
3. Enter Record Name Label and Format Record Name >> Billing ProcessName Data Type >> Name

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

xii. Allow search >>Save



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LAPTOP RENTALS
Total Laptops
consumer
Laptop Bookings
Billing Process
Reports
Dashboards
Billing Process
Recently Viewed
New
Import
Assign Label
0 items • Updated a few seconds ago
Search this list...
Billing ProcessName
You haven't viewed any Billing Process recently.
Try switching list views.
https://gvpce-da-dev-ed.develop.lightning.force.com/lightning/o/Billing_Process__c/home
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2. Creating Tabs

A **tab** is a user interface component that helpsusers organize, access,and manage records of different **objects** within the platform. Salesforce objects represent different types of data, such as Accounts, Contacts, Opportunities, or CustomObjects, and each object has its own tab. Here'sa more detailed explanation of what a tab is and how it functions.

2.1Creating Total Laptops Tab:

i. To create a Tab:

1. Goto setup page >> type Tabs in Quick Find bar >>click on tabs >> New (under custom object tab)

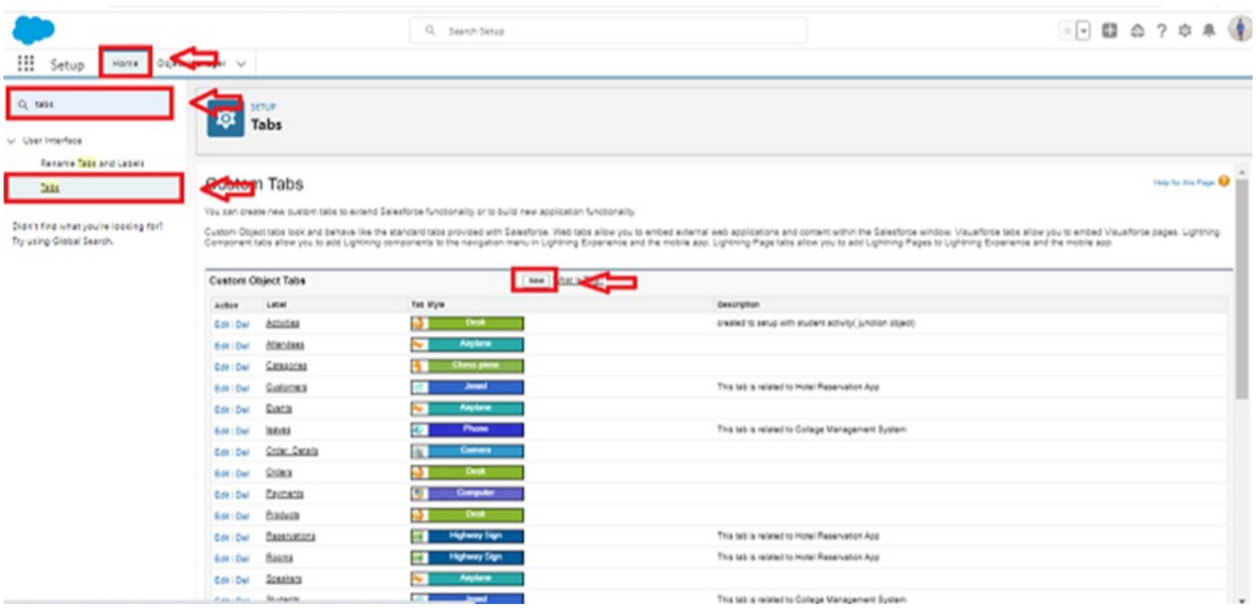
2. Select Object(Total Laptops) >>Select the tab style >>Next (Add to profiles page) keep it as default >> Next (Add to Custom App) uncheck the include tab .
3. Make sure that the Append tab to users' existing personal customizations is checked.
4. Click save.

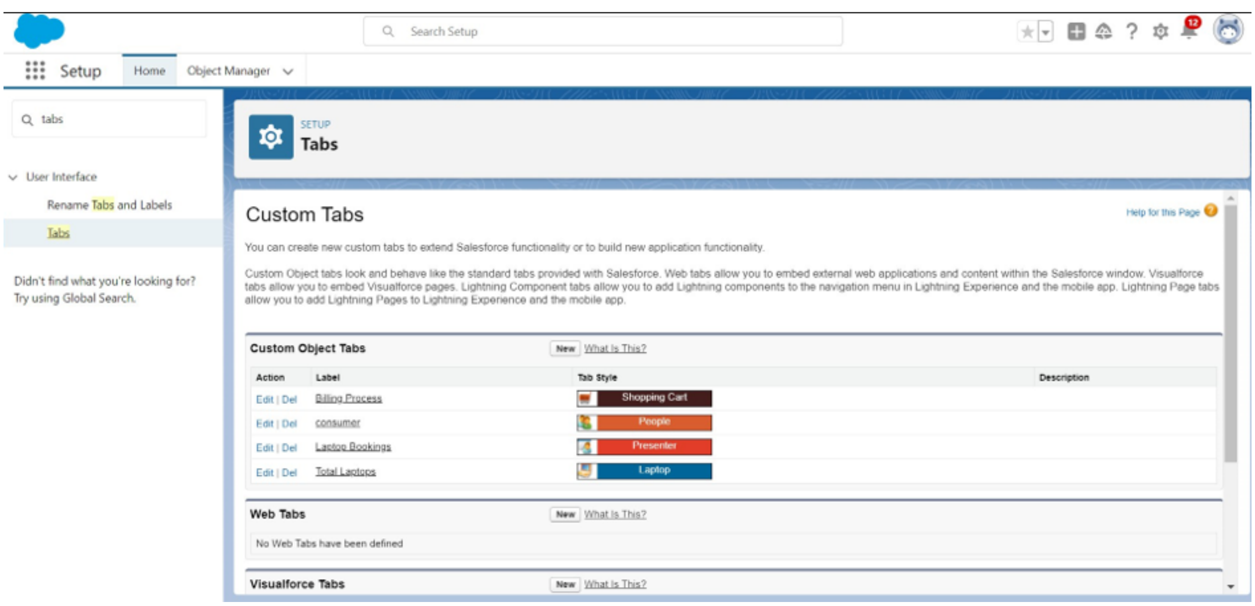
ii. Creating Remaining tabs:

1. Now create the Tabs for the remaining Objects,they are “consumer,Laptop

Booking,Billing process".

2. Follow the same steps as 2.1 .





3. Create Lightning App

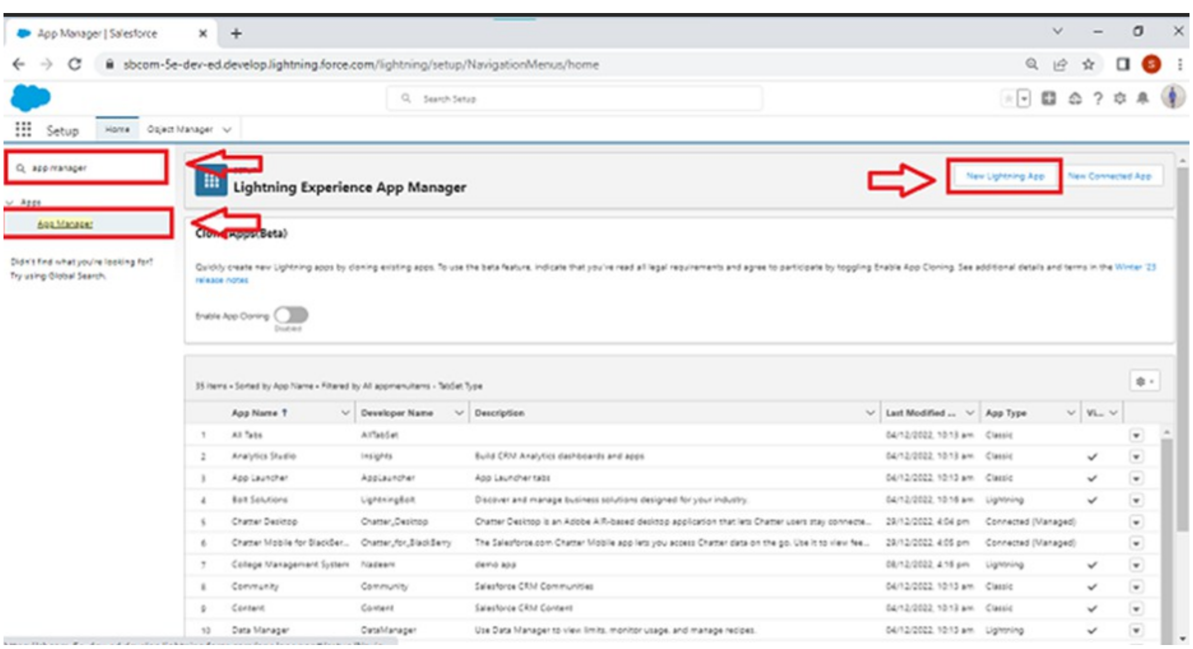
To Createa Lightning app page:

1. Goto setup page >> search“app manager” in quick nd >> select“app manager” >> click on New lightning App.

2. 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.
3. Upload a photo that is relatedto your app.

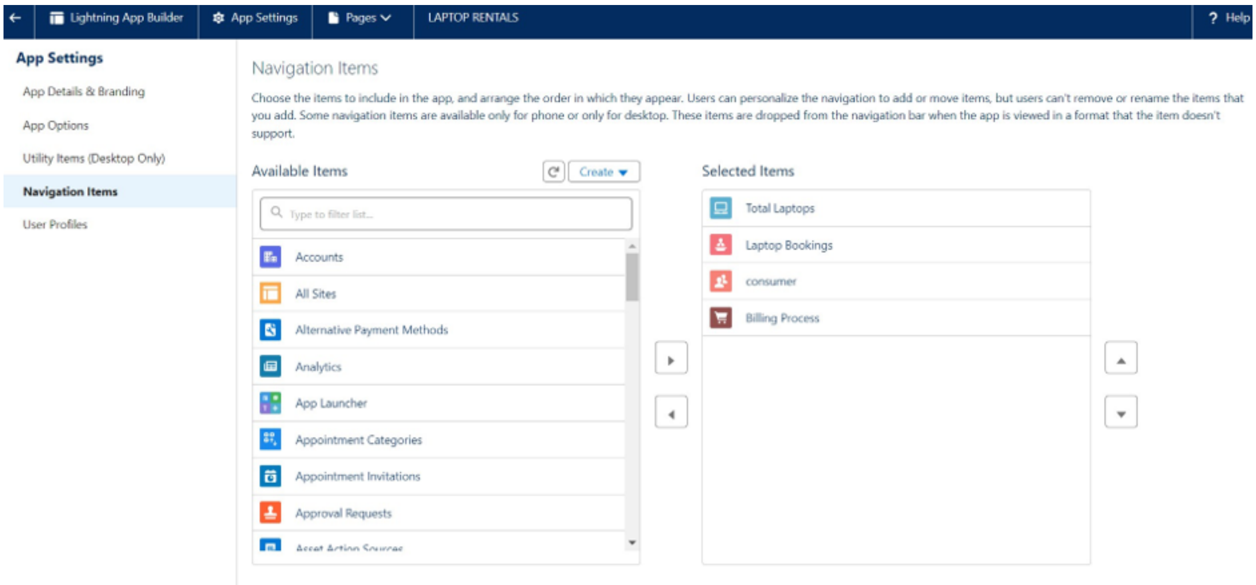
4. To Add Navigation Items:

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



5. To Add User Profiles:

Search profiles (Systemadministrator) in the search bar >> clickon the arrow button >> save & finish.



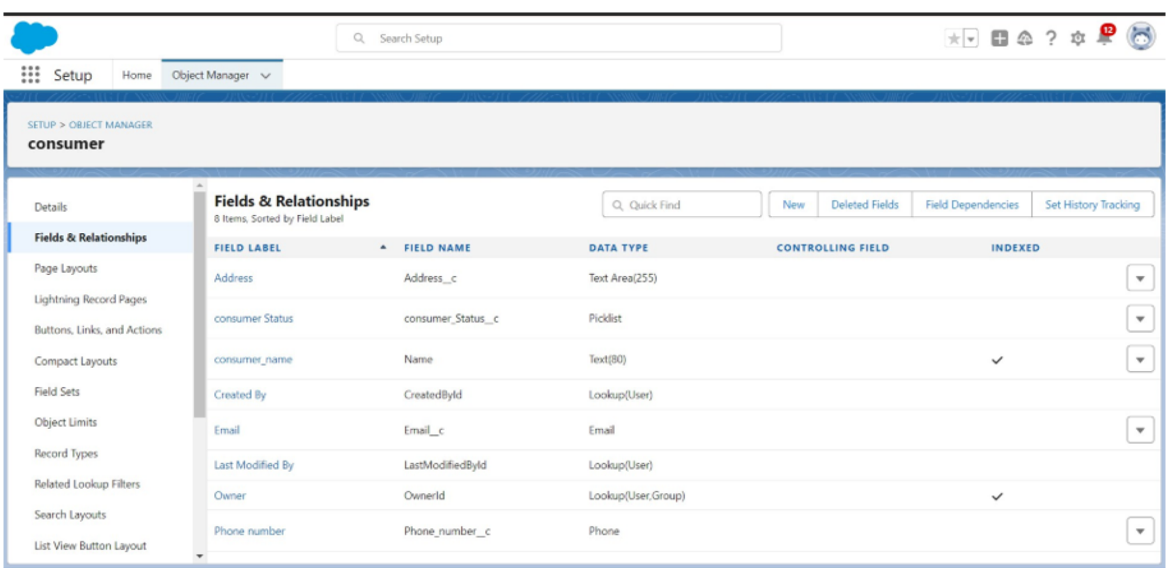
4. Fields

Fields are fundamental building blocks of objects. They store individual pieces of data in a record and define the data type, behavior, and purpose of that data. Fields are associated with both **standard** and**custom objects**. Fields in Salesforce are data containers within objects that store specic pieces of information, such as text, numbers, or dates.

Steps to Create Field For a Object:

1. Go to setup >>click on ObjectManager >> type object name in search bar >> click on the object.
2. Now click on “Fields & Relationships” >>New
3. Select Data Type and fill details like label, name,etc.
4. Click on Next >> Next >> Save and new.

4.1 Creating The FieldsIn Consumer Object



Create Phone numberfield:

1. Select Data Type as a “Phone” and click on next.
2. Field Label: Phone number
3. Field Name : gets auto generated
4. Click the required option checkbox.

- Create Email field:

1. Select Data Type as a “Email” and click on next.
2. Field Label: Email
3. Field Name : gets auto generated

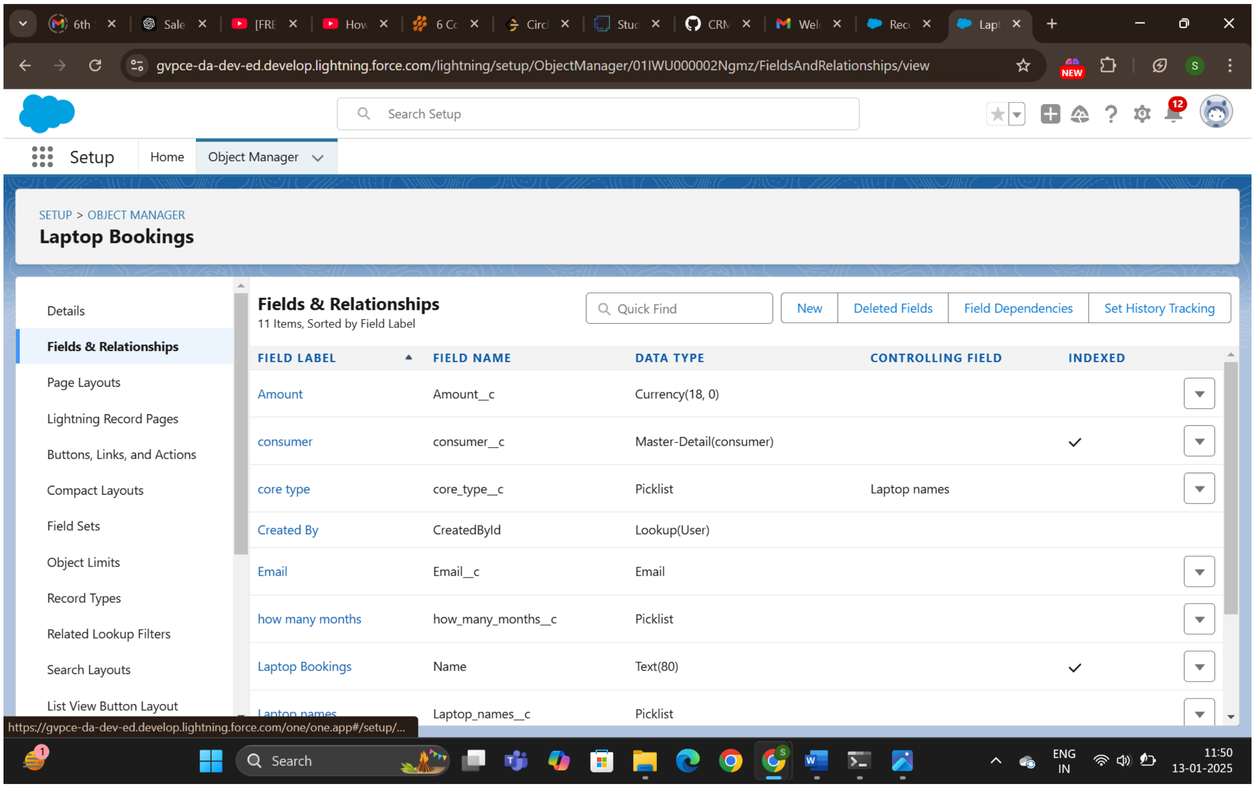
Create Address field:

1. Select Data Type as a “Text Area” and clickon next.
2. Field Label: Address
3. Field Name : gets auto generated

Create Consumer status field:

1. Select Data Type as a “Picklist” and click on next.
2. Field Label: consumer Status
3. Value - Select enter values with each value separated by a new line
4. Select required Field Name :It’s gets auto generated

4.2 Creating The Fields In LaptopBookings Object



Create Laptop Namesfield:

1. Select Data Type as a “Picklist” and click on next.
2. Field Label: Laptop Names
3. Picklist values are: 1.Dell 2.Acer 3.Hp 4.Mac
4. Field Name : gets auto generated

To create Core Type field:

1. Select Data Type as a “Picklist” and click on next.
2. Field Label: Core Type
3. Picklist values are: core i3, core i5, core i7, Bionic chip
4. Select Required

To create field dependency in the Laptop Booking Object:

1. Click field dependency and next.

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

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

1. Create "Master-detail Relationship" in Laptop Booking Object:
   a. Go to setup >> click on Object Manager >> type object name(Laptop Booking) in the search bar >> click on the object.
   b. Now click on “Fields & Relationships” >> New Select Data Type as a “Master-Detail Relationship” and Clickon Next.
   c. Click on the Related to drop down and Select the “consumer” object

   and clickon Next

   d. Fill the Above as following: Change the Field Label:Consumer

   Field Name :It’s gets auto generated

   e. Click on Next >>Next >> Save and new.
2. Create "Currency" field
   a. Field Label:Amount
   b. Length: (18,0)

c. Field Name :It’s gets auto generated
d. Click on Next >>Next >> Save and new

3. Create relationship to "Total Laptops" object
    a. Select Laptop bookingobject in the object manager.
    b. Now click on “Fields & Relationships” >>New
    c. Select Data Type as a “Lookup Relationship” and Click on Next
    d. Click on the Relatedto drop down and Selectthe “Total Laptops” object and click on Next
    e. Change the FieldLabel: Total No Of Laptops
    f. Field Name :It’s gets auto generated
    g. Click on Next >> Next >> Save and new.
4. Create Email fieldin Laptop BookingsObject
5. Create "Rollup Summary" in Total Laptops Object
    a. Field Label: Laptops delivered
    b. Field Name :It’s gets auto generated
6. Select the Laptop Bookings in the Summarized Object
7. Select the count Radio button in the select Roll-up Type

8. Create "Laptops Available" field:
    a. Field Label: Laptops Available
    b. FieldName : It’s gets auto generated
    c. Select the Formula Return Type as “Number”
    d. Select the Decimal placesas “0” and Click on Next
    e. Click on the AdvancedFormula and Enter the value in

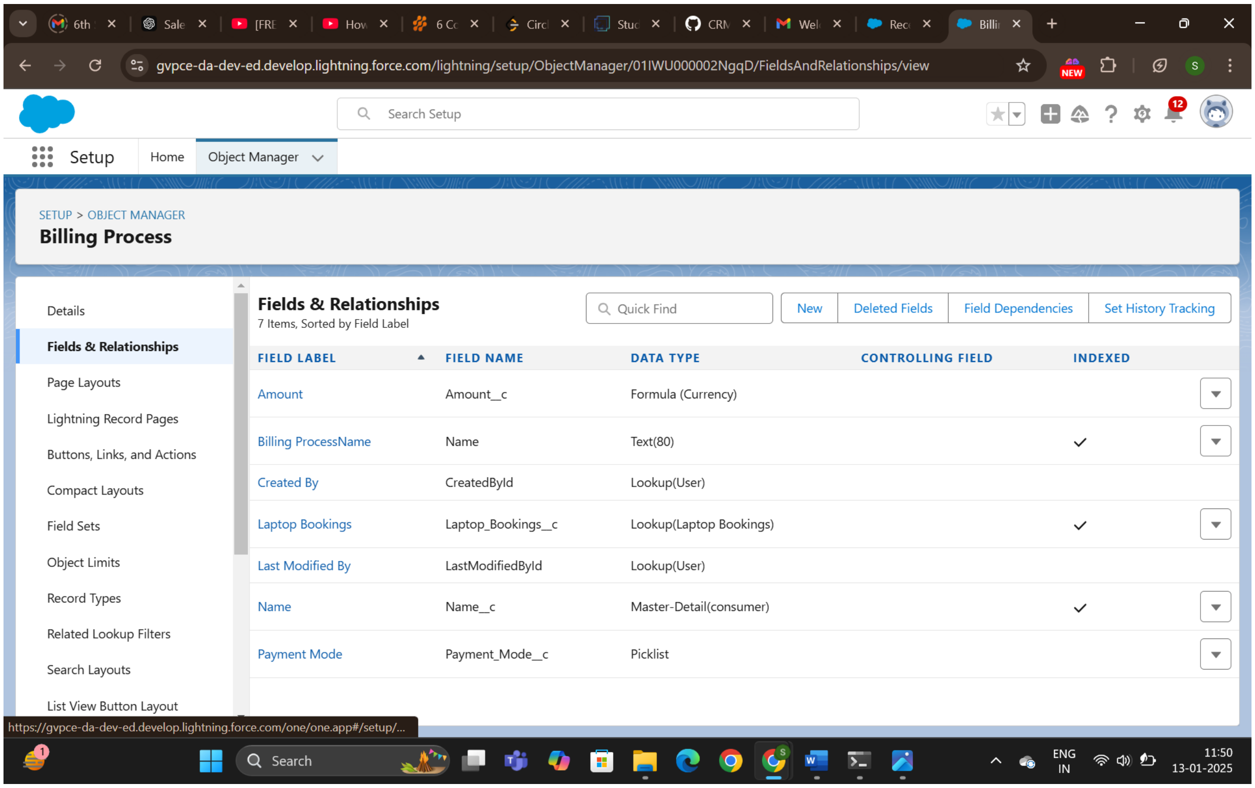
formulabox "50 - Total_no_of_laptops_
r.Laptops_delivered_c"

9. Create "how many months" field in Laptop Bookings object:
    a. Label: how many months
    b. Picklist values are: 1, 2, 3, 4, 5

4.4 Creation of Fields & Relationship for Billing ProcessObject

1. Create relationship for consumer object:
    a. Now click on “Fields& Relationships” >>New in Billing Process object
    b. Select Data Type as a “Master-detail Relationship”
    c. Click on Next Click on the Related to drop down and Select the consumer object and click on Next
    d. Click on the Relatedto drop down and Select the consumerobject and click on Next
    e. Change the Field Label:Name and clickon save and new

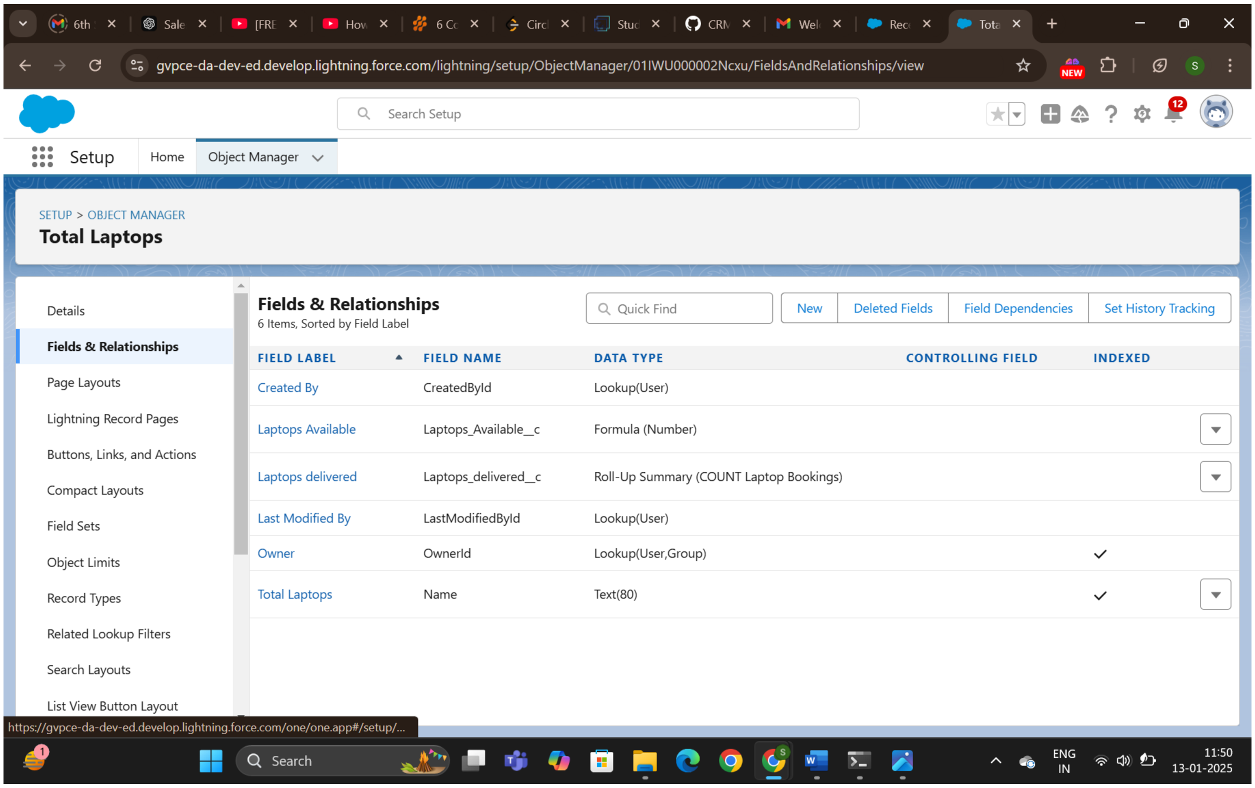
2. Create "Lookup Relationship" in Laptop Booking object
3. Create "Payment Mode" as picklist values (Cash, Check, Credit card, Debit card, UPI, Phonepe, Gpay, Paytm)
4. Create a Cross objectformula Field in billing processObject:
    a. Select Data Type as a “Formula” and Click on Next
    b. Enter the Field label:Amount



c. formula: “ Laptop_Booking__r.Amount__c ”

4.5 Creating the field in Total Laptops object

1. Go to setup >>click on Object Manager >>type object name(Total Laptops) in search bar >> click on the object.
2. Now click on “Fields& Relationships” >>New Select Data type as a “Formula” and Click on Next
3. Field Label:Laptops Available FieldName : It’s gets auto generated Select the Formula Return Type as “Number”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SETUP > OBJECT MANAGER
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Details
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Page Layouts
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Compact Layouts
Field Sets
Object Limits
Record Types
Related Lookup Filters
Search Layouts
List View Button Layout
Fields & Relationships
6 Items, Sorted by Field Label
Quick Find
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)
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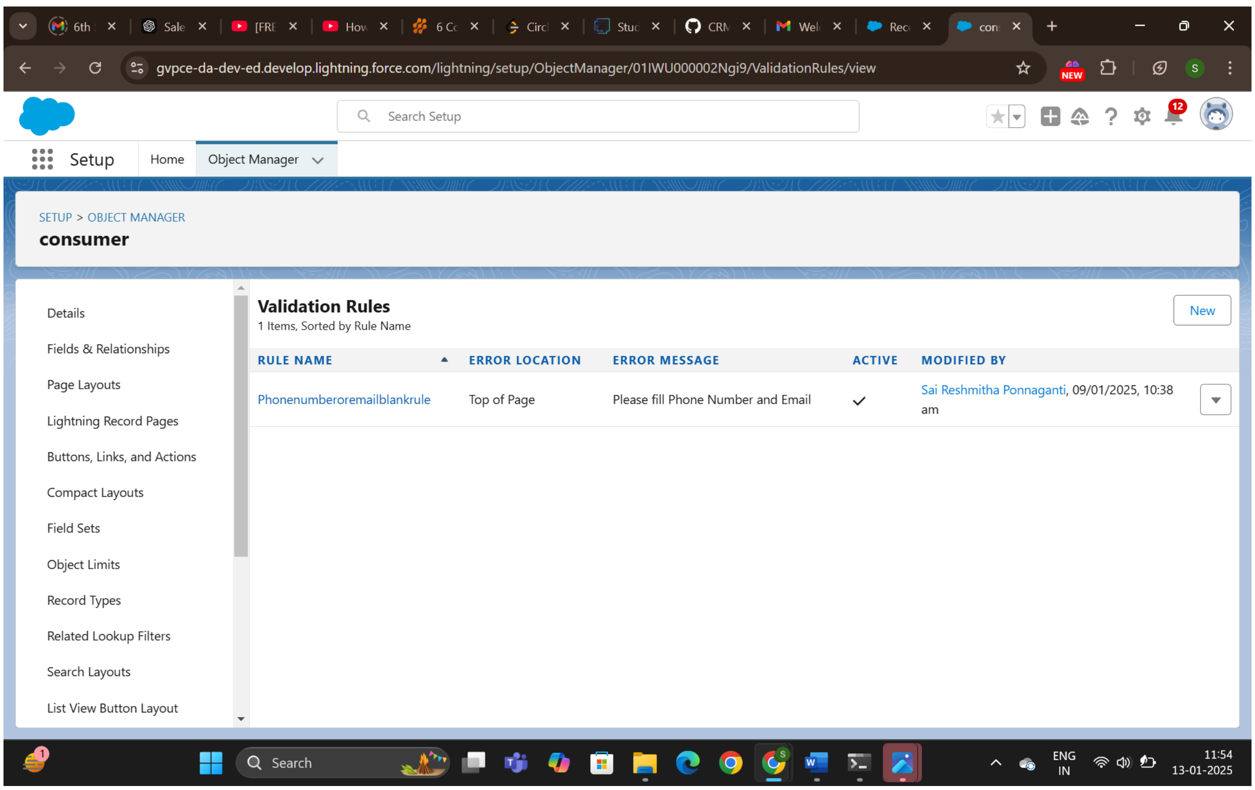
5. ValidationRules

Validationrules are appliedwhen a user tries to save a record and are used to check if the data meets **specified criteria**. If the criteria are not met, the validation rule triggersan error messageand prevents the user from saving the record until the issues are resolved.

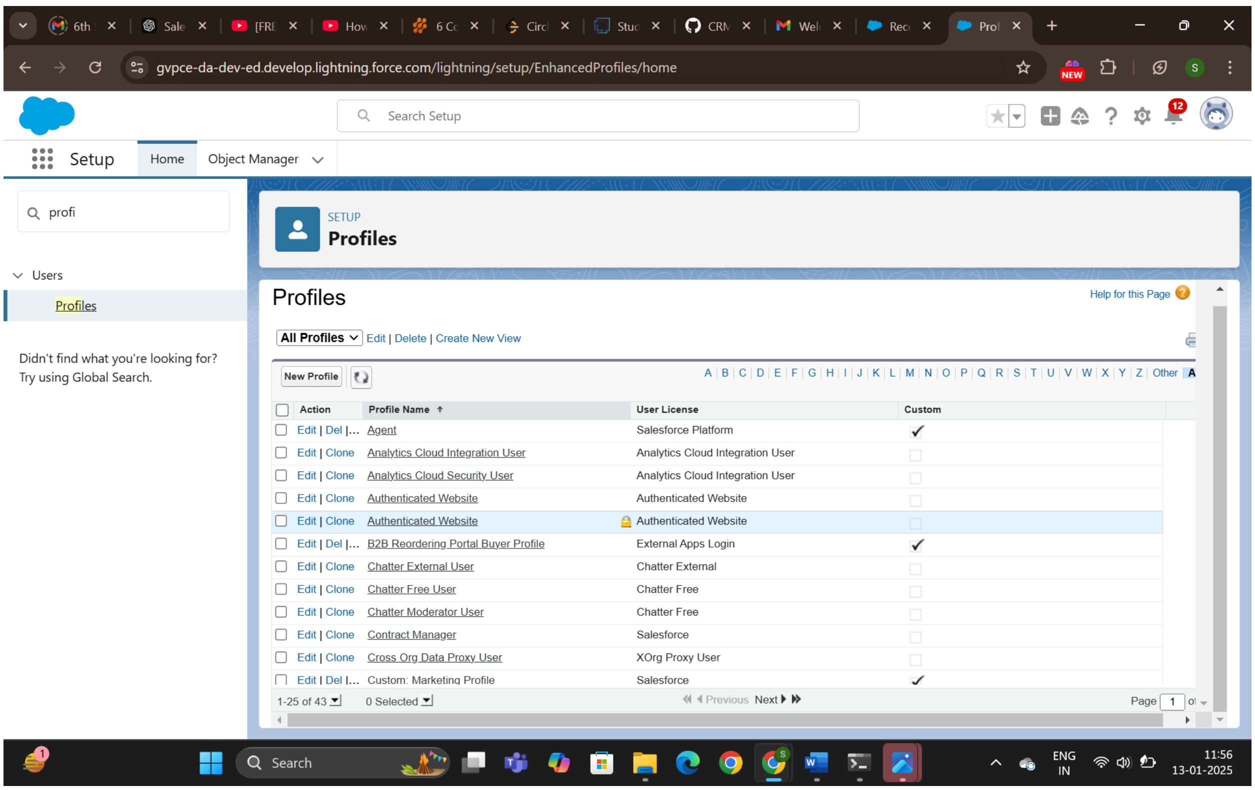
1. Go to the setup page >> click on object manager >>From drop down click edit for consumer object.
2. Clickon the validation rule >>click New.



3. Enter the Rule name as “Phonenumberoremailblankrule ”.
4. Enter the description as “phone number and email number should not be blank”.
5. Enter the formulaas “**OR(ISBLANK(phone_number__c) , ISBLANK(email__c))**” and check the syntax.

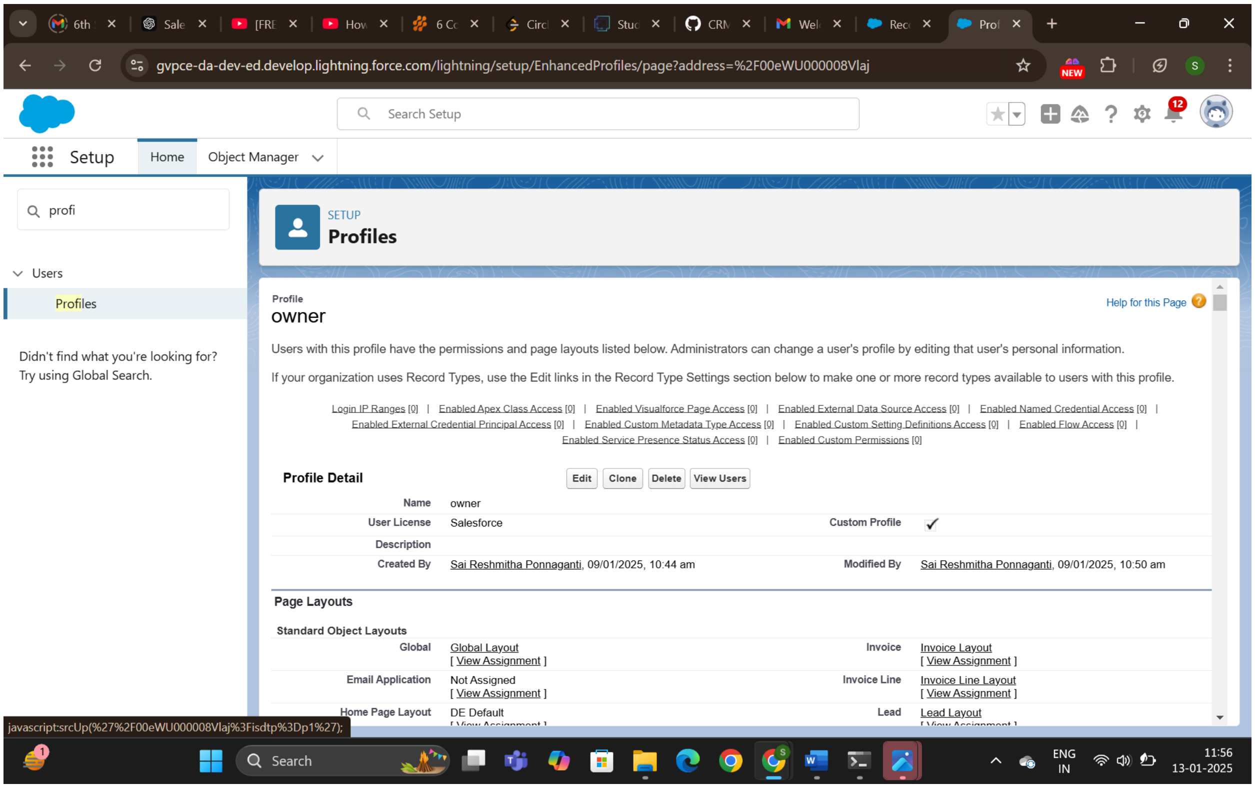
6. Profiles

A profile is a group/collection of settings and **permissions** that define what a **user** can do in salesforce. Profile controls "Object permissions, Field permissions, User permissions, Tab settings, App settings, Apex class access, Visualforce page access, Page layouts, Record Types, Login hours & Login IP ranges.



6.1 Create Owner Profile

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

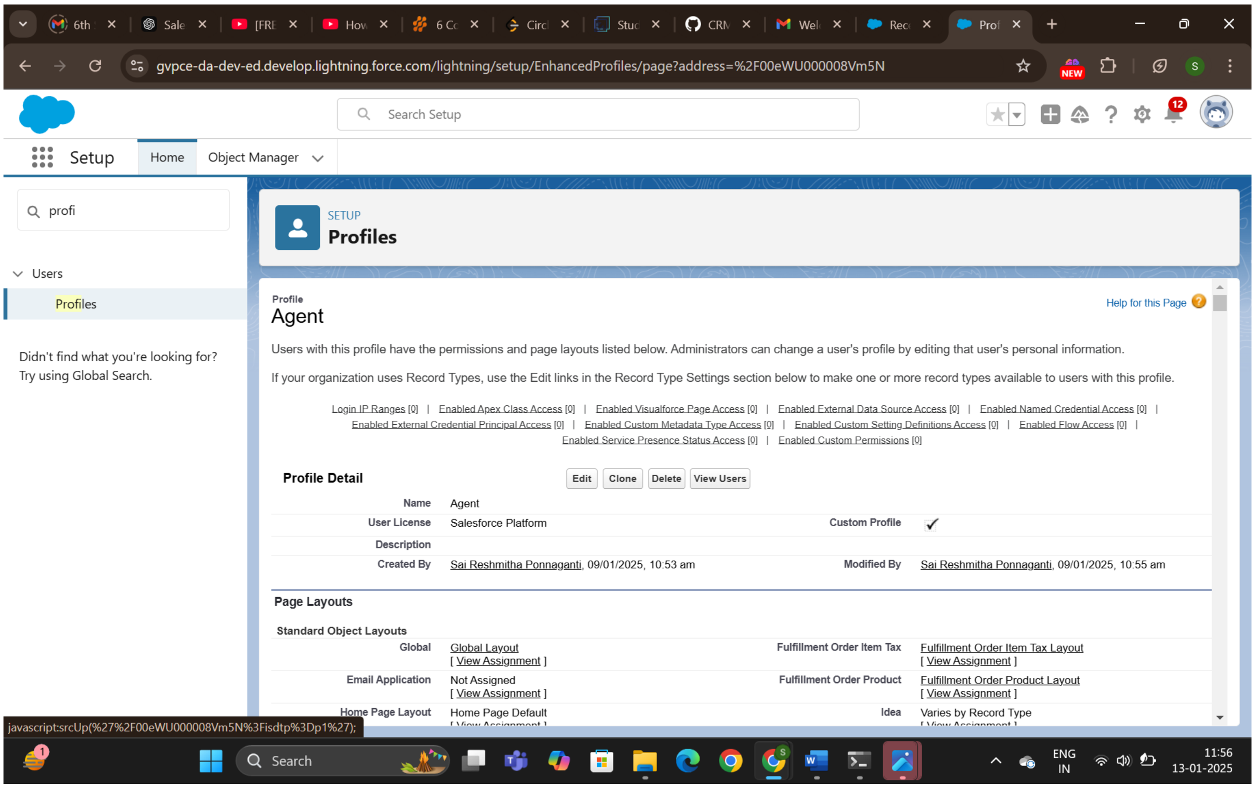


- Scroll down to Custom Object Permissions and Given access permissions for Total Laptops, consumers, Laptop Booking and Billing Process objects as mentioned in the below diagram.

6.2 Create Agent Profile

- Go to setup>> type profilesin quick find box >>click on profiles>> clone the desiredprofile (Standard PlatformUser) >> enterprofile name (Agent) >>Save.
- Scroll down to Custom Object Permissions

and Given access permissions for Total Laptops,consumer , LaptopBookings and Billing Process objects as mentioned in the below diagram.



7. Roles and Hierarchy

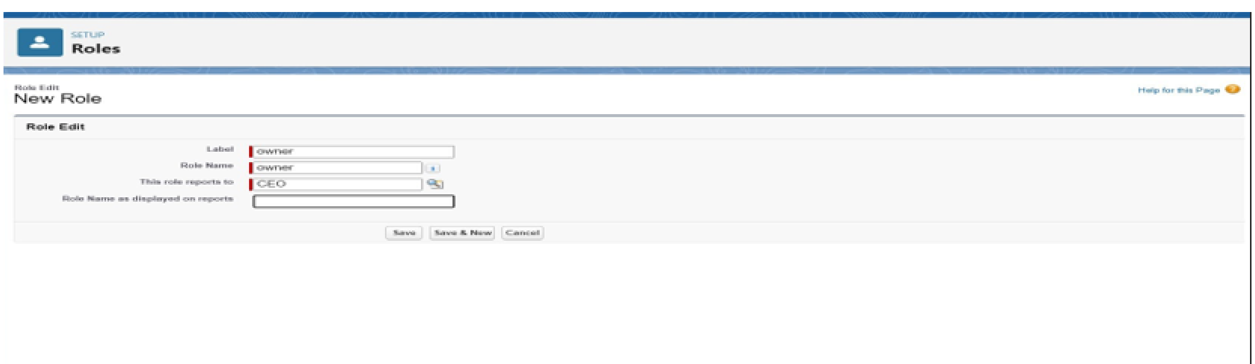
A role in Salesforce definesa **user's visibility access**at the recordlevel. Roles may be used to specify the types of access that people in your Salesforce organization can have to data.

Steps:

1. Goto quick find >> Searchfor Roles >>click on set up roles.
2. Clickon Expand All and click on add role under whom this role works.

7.1 Create Owner Role

i. Give Label as "owner" and Role name gets auto populated. Then click on Save.

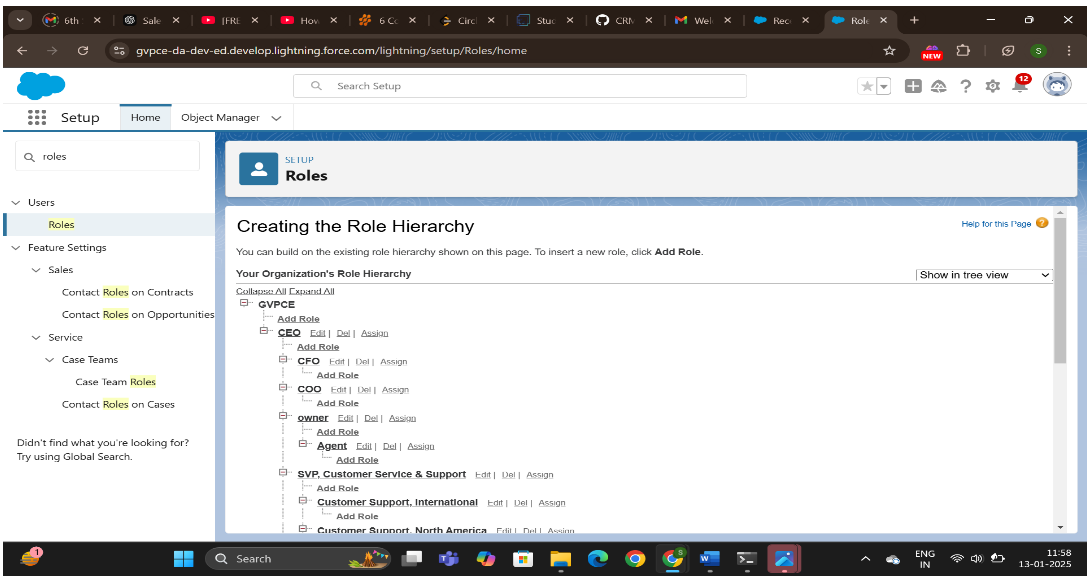


7.2 Create Agent Role

i. Go to quick find - Search for Roles - click on set up roles.

ii. Click plus on CEO role, and click add role underowner.

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



8. Users

A user is anyone who **logs in** to Salesforce. Users are employees at your company, such as sales reps, managers, and IT specialists, who need access to the company's records. Every user in Salesforce has a user account. The user account identifies the user, and the user account settings determine what **features** and **records** the user **can access**.

Create User

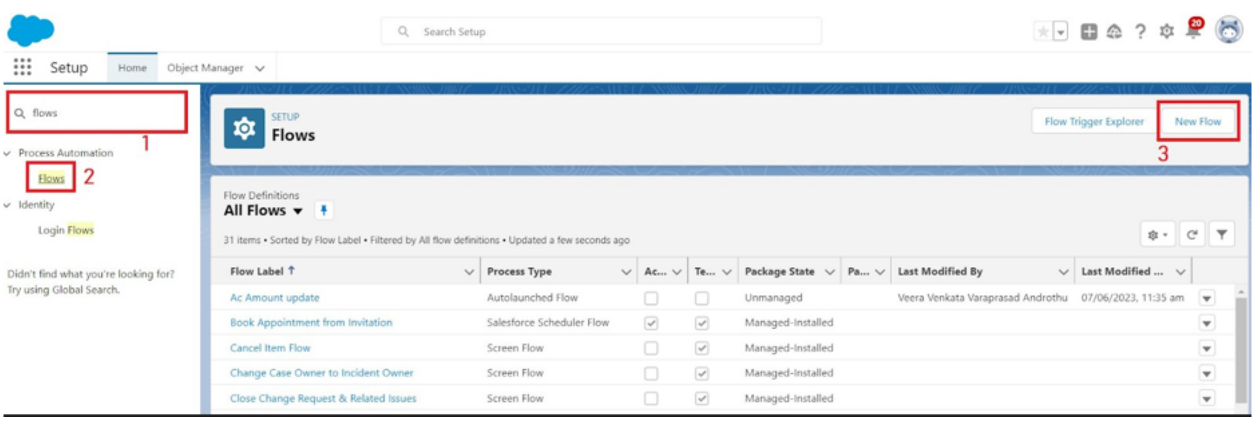
1. Go to setup - type users in quick find box - select users -click New user.
2. Fillin the fields
    a. First Name : vicky
    b. Last Name : y
    c. Alias : Give a Alias Name
    d. Email id : Give your PersonalEmail id
    e. Username : Username shouldbe in this form: text@text.text
    f. Nick Name : Give a Nickname
    g. User license: Salesforce
3. If the user is
    a. "owner": Set the profiles and role field to owner
    b. "Agent": Set the profiles and role field to Agent

9. Flows

"Flows" typically refer to Salesforce Flow,which is a powerful automation tool that allows you to create **custom**, **automated** processes in your Salesforce org without writingcode. Flow is a point-and-click tool that enables you to designand automate **complex businessprocesses**, collect data, and interact with users in a visual interface.

9.1 Create a Flow on dell laptop

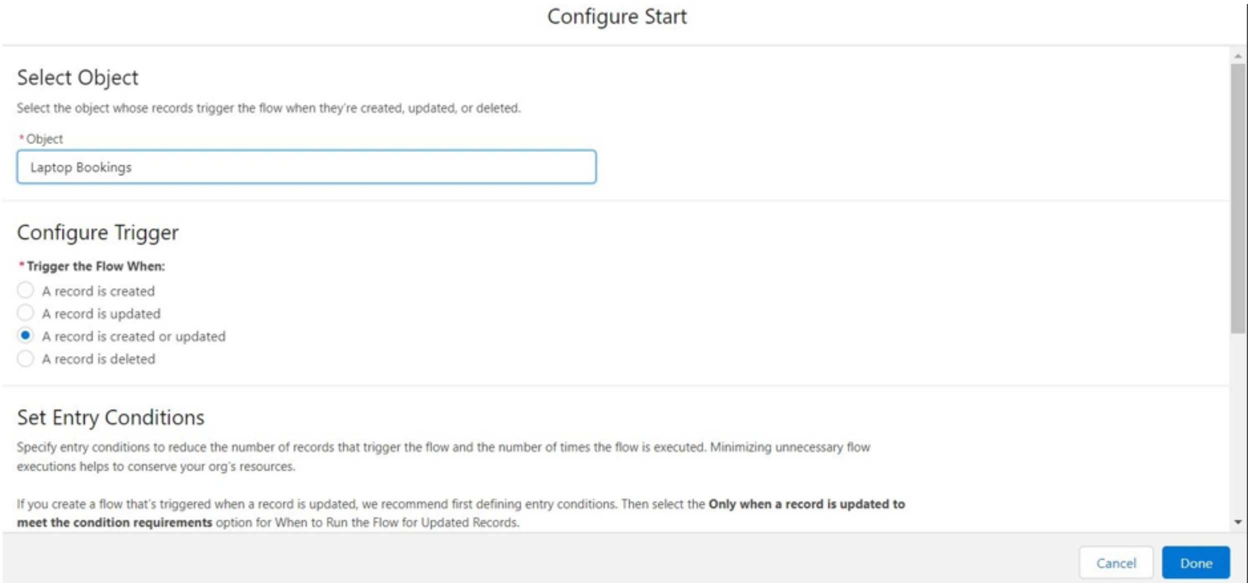
- Go to setup >>type Flow in quick find box >> Click on the Flow and Select the New Flow.



- Select the Record-triggered flow and Click on Create.
- Select the Objectas a Laptop Booking in the Drop down list.

- Select the TriggerFlow when: “A record is Created or Updated”.

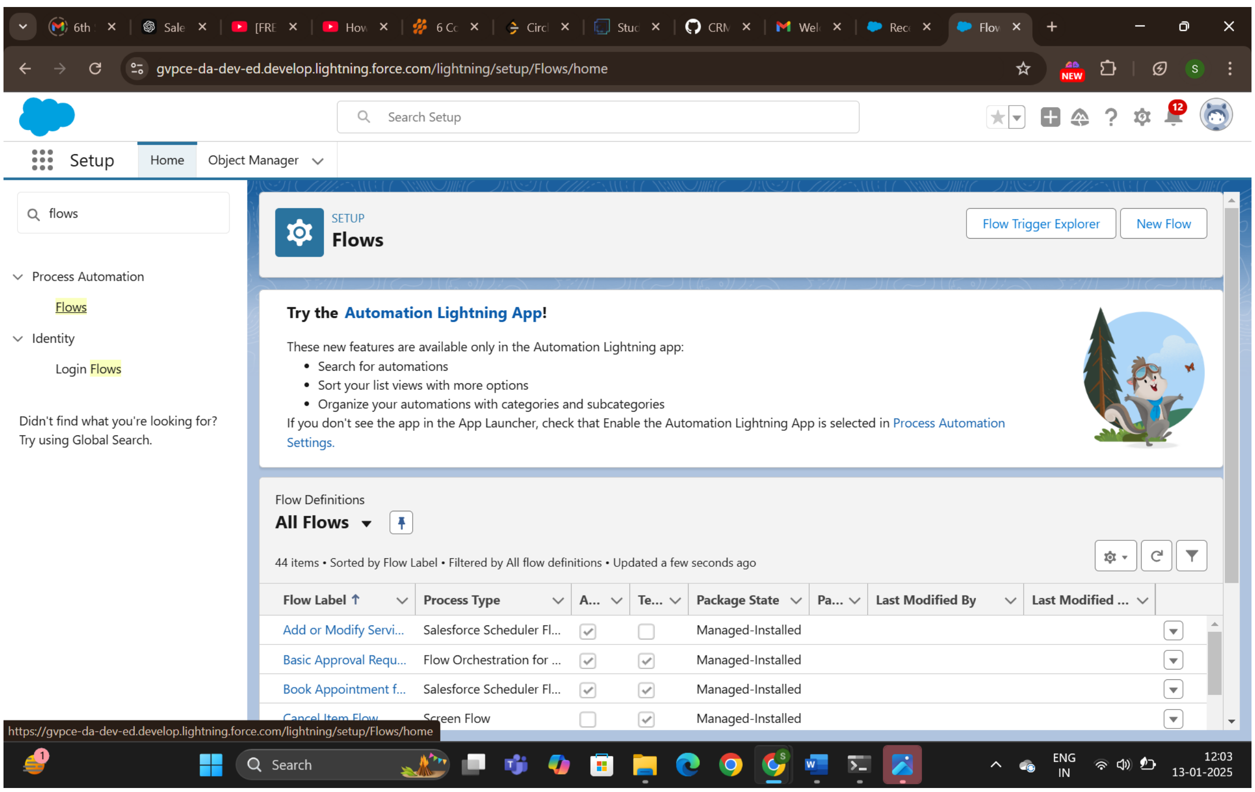
- Select the Optimize the flow for: “Actions and Related Records”and Click on Done.



1. Under the Record-triggered Flow Click on “+” Symboland In the Drop down List select the “Decision Element”.
2. Enter the Details Label:Field should be Update, API name: Gets Automatically Generated.
3. Enter the Outcome DetailsLabel: dell , Outcome API name: Gets Automatically Generated.
    a. Resource: Select $Record.Laptop_name_c.
    b. Operator: Select Equals.
    c. Value: Select dell Add the same outcome order to acer , hp, mac.
    d. Rename Default outcomeas False
    e. Click done.
4. Beside dell thereis a symbol ‘+’ click on that. Again selectdecision

5. Enter the Details Label: Field should Update(any one u want), API name: Gets Automatically Generated.
6. Select the Outcome DetailsLabel: dell core i3 , Outcome API name:

   Gets Automatically Generated. Resource: Select {!$Record.core_type_c}. Operator: Select Equals. Value: Select core i3.
7. Add the dell i5 and dell i7 outcomedetails in the similar way



8. Sogo to the flow page select ‘+’ after core i3 then again selectthe decision.
9. Enter the Details Label: months selected, API name: Gets Automatically Generated.
10. Enter the Outcome DetailsLabel: dell 1(i3) , OutcomeAPI name: Gets Automatically Generated.

a. Resource: Select Record.how many months

b. Operator: Select Equals

c. Value: 1

11. Similarly Enter the OutcomeDetails as
    a. dell 2(i3) -> resource: Record.how many months , value: 2
    b. dell 3(i3) -> resource: Record.how many months , value: 3
    c. dell 4(i3) -> resource: Record.how many months , value: 4
    d. dell 5(i3) -> resource: Record.how many months , value: 5

12. Enter the Details Label: one month of dell i3 rate , API name: Gets AutomaticallyGenerated. Enter labelname in a similar way for other update records.
13. 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.
14. Perform these steps for core i5 and i7.
15. Click done.

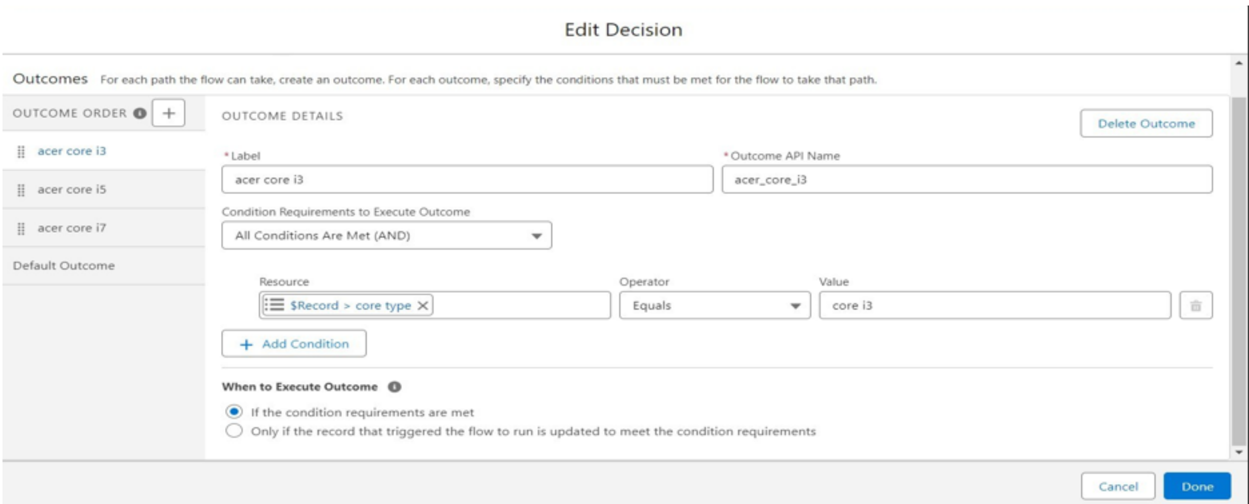
9.2 Create A Flow on Acer Laptop

- Enter the Details Label:Acer core type selection, API name: Gets Automatically Generated.
- Select the Outcome DetailsLabel: acer core i3 , Outcome API name: Gets Automatically Generated.

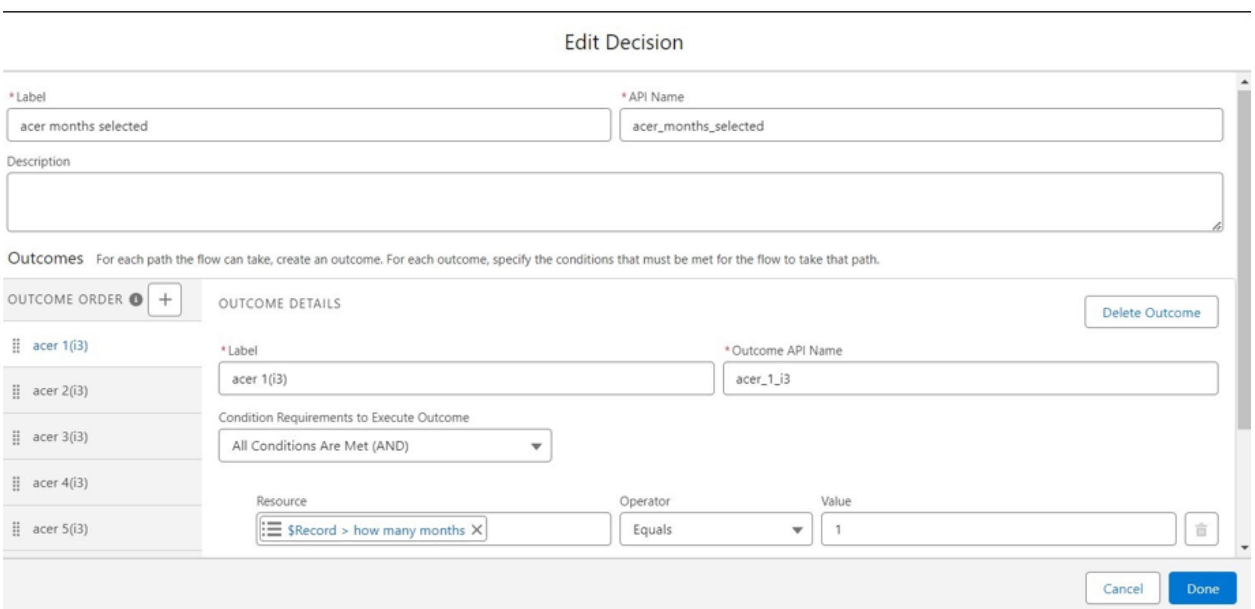
1. Resource: Select Record.core type.

2. Operator: Select Equals.
3. Value: Selectcore i3.

- Similarly create outcomesfor acer core i5 and acer core i7 also.

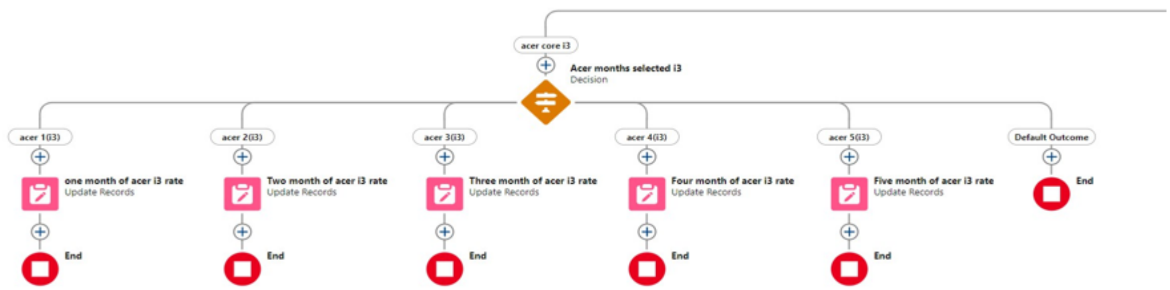


- Create OutcomeDetails Labels: acer 1(i3), acer 2(i3), acer 3(i3), acer 4(i3), acer 5(i3)



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

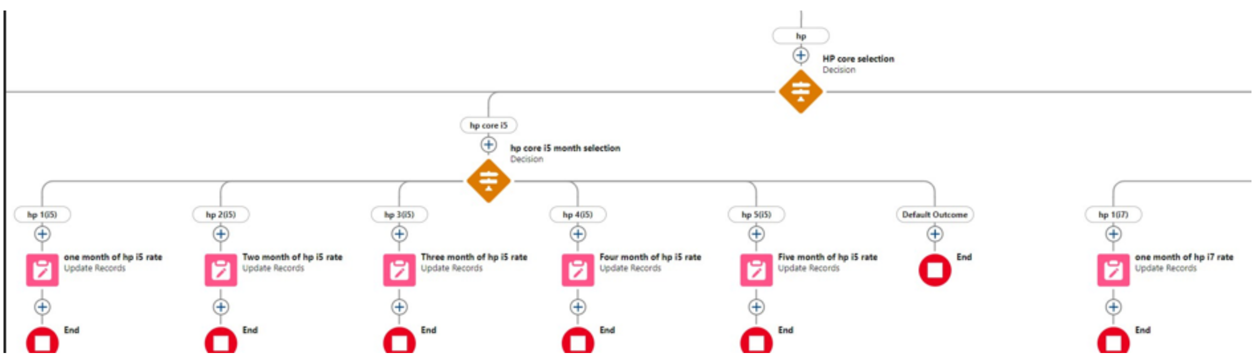
- Field:- Amount_c , value:- for acer 1(i3)-900, acer 2(i3)-1800, acer 3(i3)-2700, acer 4(i3)-3600, acer 5(i3)-4800.
- Perform these steps for core i5 and i7.
- Click done.



9.3 Create A Flow On Hp Laptop

1. Go to flow page
2. Beside hp thereis a symbol ‘+’ clickon that.
3. Enter the Details Label: HP core selection, API name: Gets Automatically Generated.
4. Select the Outcome DetailsLabel: hp core i3 , Outcome API name: Gets Automatically Generated.

1. Resource: Select Record.core type.
2. Operator: Select Equals.
3. Value: Select hp i3.
5. Similarly create outcomesfor hp core i5 and hp core i7 also.



6. Beside hp thereis a symbol '+' clickon that.
7. Enter the Details Label:hp core i5 month selection , API name:Gets Automatically Generated. Enterthe Outcome DetailsLabel: hp 1(i3), Outcome API name: Gets Automatically Generated.
1. Resource: Select Record.how many months.

2. Operator: Select Equals.
3. Value: 1.
8. Similarly Create Outcome DetailsLabels: hp 2(i3), hp 3(i3), hp 4(i3), hp 5(i3).
9. 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.
10. Perform these steps for othercore types.
11. Click done.

9.4 Creating A Flow on Mac laptop

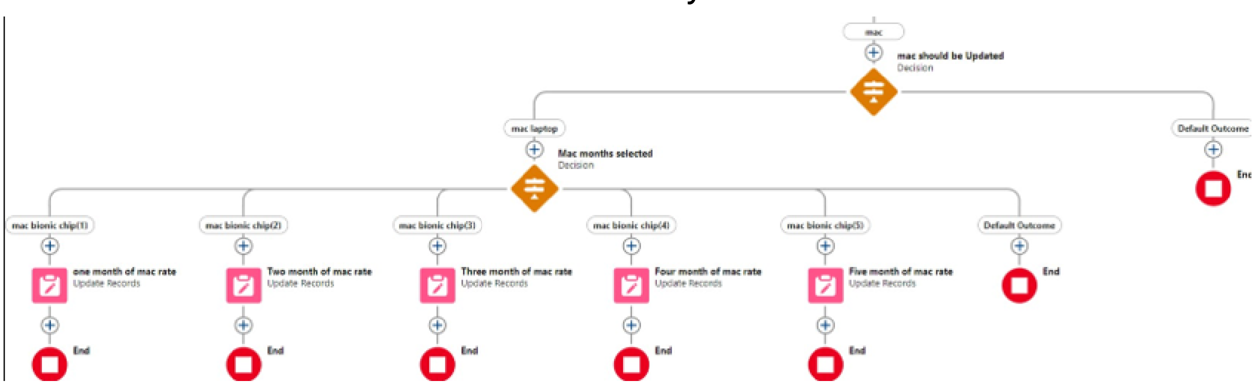
- Beside mac there is a symbol '+' click on that.
- Enter the Details Label: mac should be Updated,API name: Gets Automatically Generated.
- Select the Outcome DetailsLabel: mac laptop, Outcome API name: Gets Automatically Generated.

1. Resource: Select Record.core type.
2. Operator: Select Equals.
3. Value: Select Bionic Chip.

- Enter the Details Label:Macmonths selected , API name: Gets Automatically Generated.
- Enter the Outcome DetailsLabel: mac bionicchip(1) , OutcomeAPI name: Gets Automatically Generated.

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

- Similarly CreateOutcome Details Labels:mac bionic chip(2),mac bionic chip(3), mac bionic chip(4), mac bionic chip(5)
- Enter the Details Label:one month of mac rate , API name: Gets Automatically Generated.
- 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 finallyand click done.



10.Apex Trigger and Handler Class

Apex

Apex is a strongly typed, object-oriented programming language that allows developers to **execute flow** and **transaction control statements** on the Lightning platform serverin conjunction with calls to the LightningPlatform API. It is as similar as java i.e, it also supports OOP(Object oriented programming) like Classes, objects, methods.

Trigger

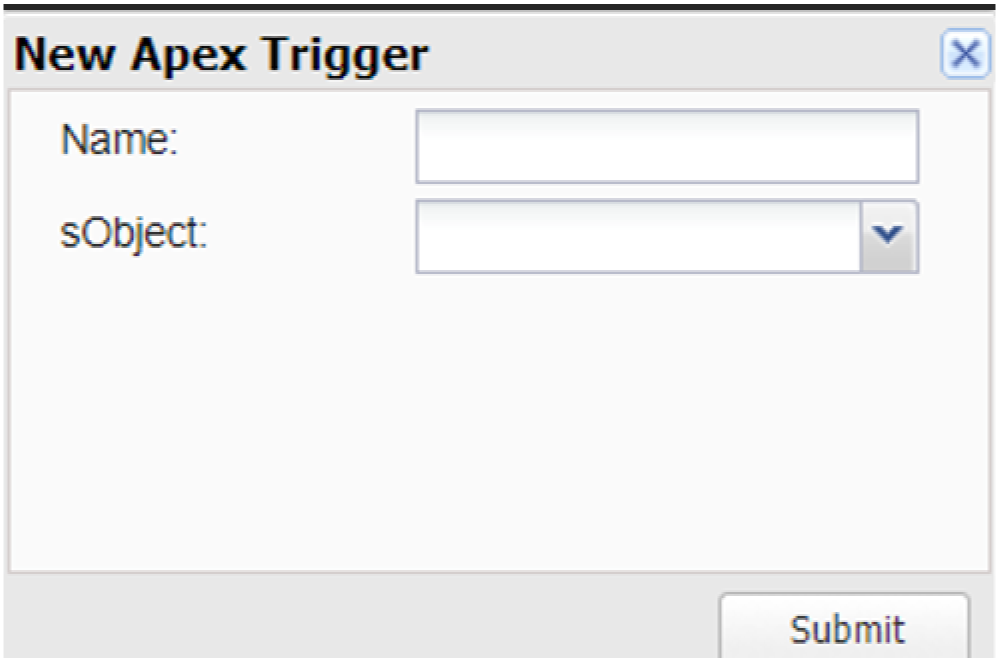
A trigger is a set of Apex code that runs before or after DML(Data Manipulation Language) events. A DML event could be a variety of data processing tasks that include the standard insert, update, and delete commands. With Apex triggers, you can automate tasks that would otherwise be nearly impossible to accomplish using only the Salesforce user interface.
There are two Salesforce Apex trigger types:

1. Before Triggers 2. Aftertriggers

Create a new trigger:

a. Click on developer console and you will be navigated to a new console window.
b. Click on the File menu in the toolbar,and click on new Trigger.

c. Enter the triggername and the object to be triggered.



10.1 To Create LaptopBooking Trigger

Purpose: This 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.

Trigger Code:

10.2 Create Handler Class

Purpose: In LaptopBookingHandler class,sendEmailNotification method is defined which automates sending email with the details like laptop type, core type, amount when a customer books laptops

Code:

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

    }
}
```

11.Reports

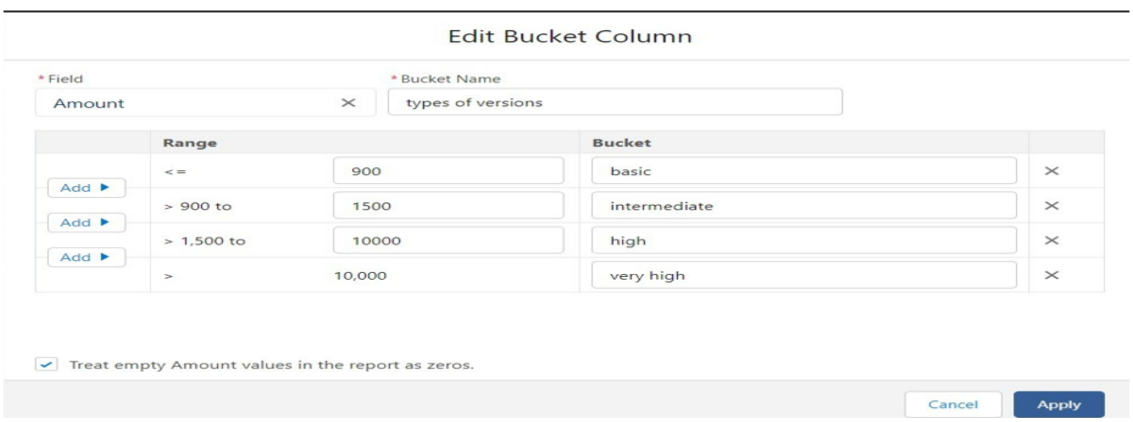
Reports give you access to your Salesforce data. It displays it in easy-to- understand formats, and share the resulting insights with others. Before building, reading, and sharing reports,review these reporting basics.

Types of Reports in Salesforce:

1. Tabular
2. Summary
3. Matrix
4. Joined Reports

11.1 Create Report

i. Go to the app "Laptop Rentals".
ii. click on the reports tab and ClickNew Report.
iii. Select report type from categoryand click on start report.
iv. Create a simpletabular report
v. Add fields from left pane, make sure that Amount field will be selected.
vi. Click the Amount columndrop down and select bucketlist.



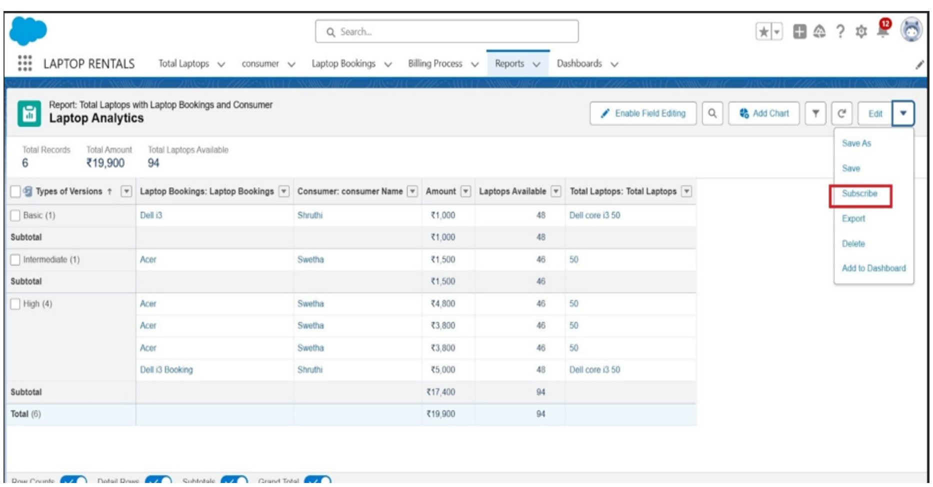
vii. Select Types of versionin Group By Rows to create a summary report.

viii. Click on Save & run it.

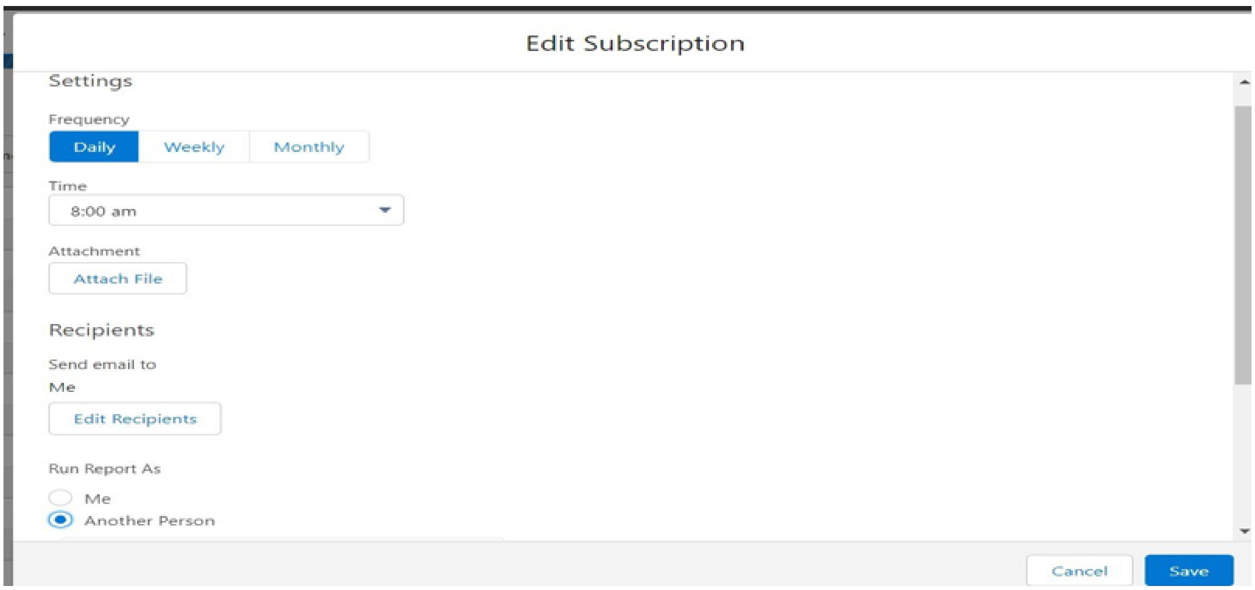
Report output:

11.2 Sharing Report To Owner

i.Click edit drop down and select subscribe option



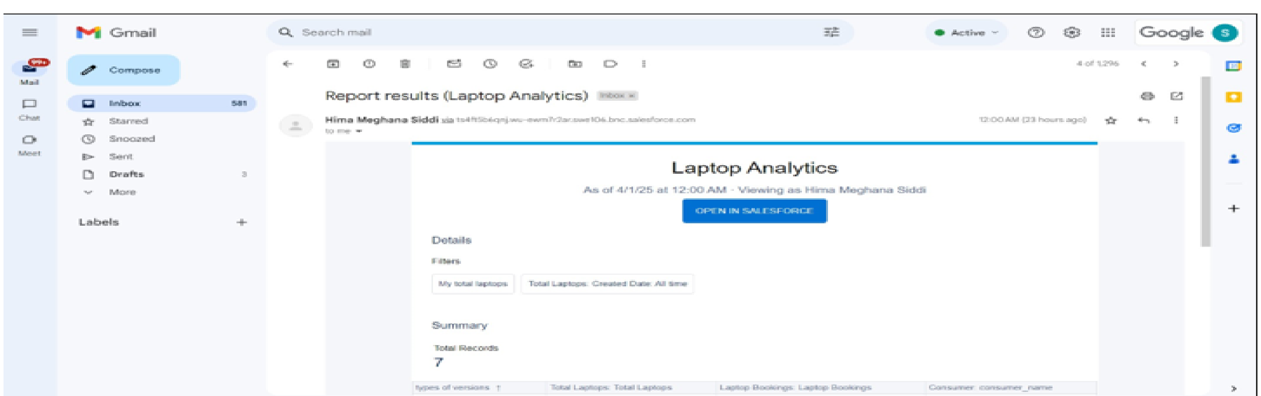
ii.Fill the details like frequency, time, mail to whom the report has to be sent.



iii.After selecting the run report as a “anotherperson” select your personal account or whom you want to send that mail to.

iv.Click save.

The reportbeing sent to mail looks like:



12.Dashboards

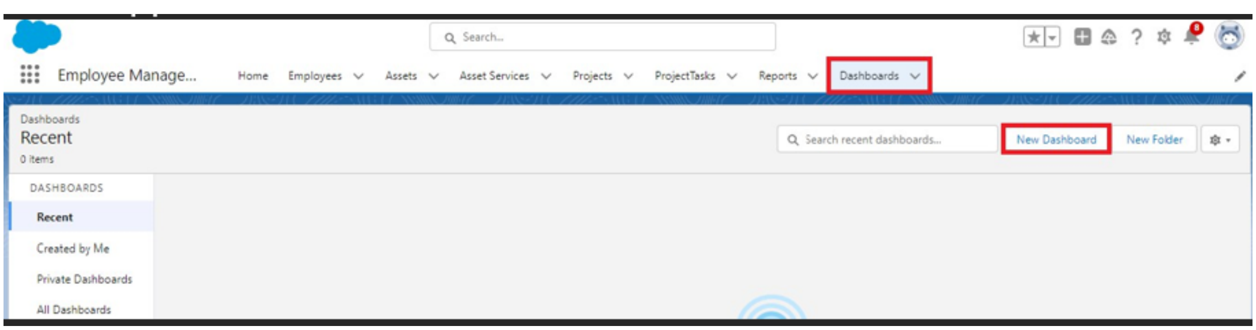
Dashboards help you visually understand changing business conditions so you can make decisionsbased on the real-time data you've gatheredwith reports. Use dashboards to help users **identify trends**, sort out quantities, and measure the impact of their activities.

12.1 Create Dashboard folder

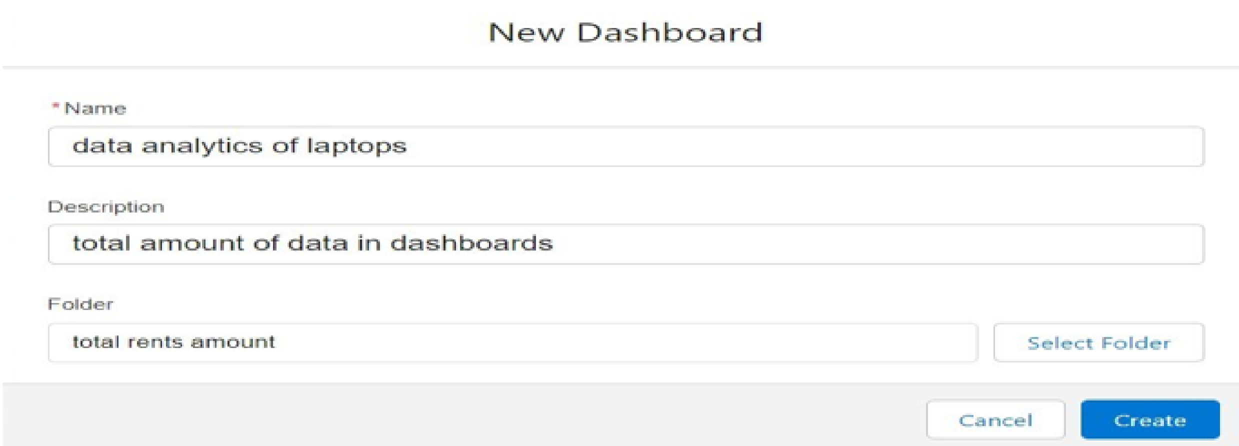
- Click on the app launcherand search for the dashboard.
- Click on the dashboard tab.
- Click the new folder, give the folderlabel as "totalrent amount".
- Folder unique nameswill be auto populated.
- Click save.

12.2Create Dashboard

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



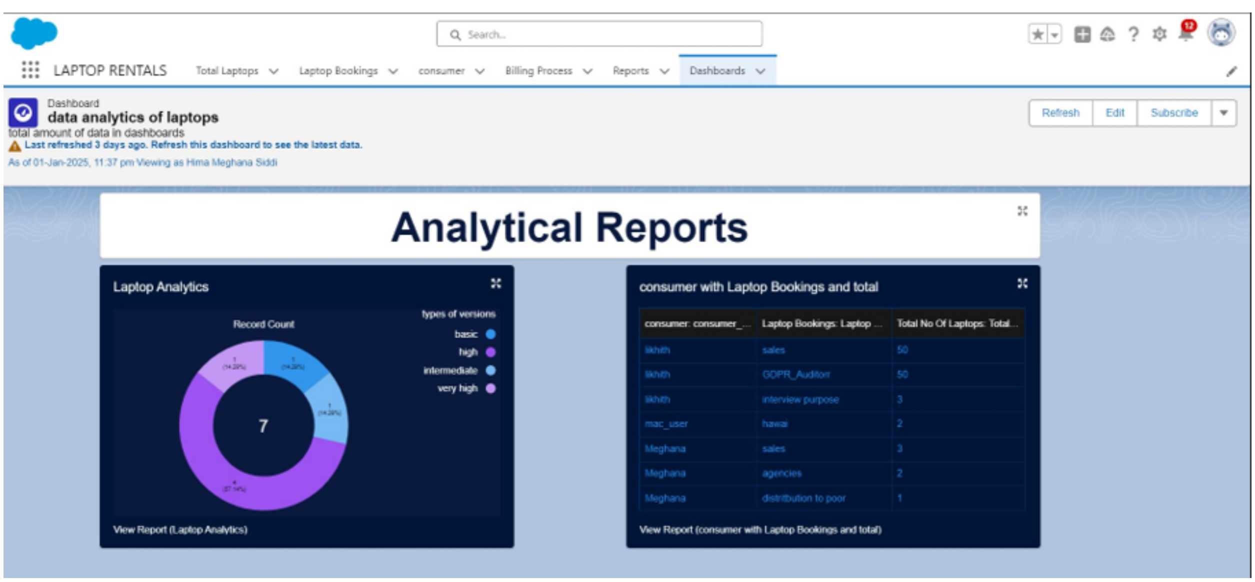
- Give a Name and select the folder that was created,and click on create.



○

- Select add component.
- Select a Reportand click on select.
- Select the dark component and add to the dashboards.
- Save it and Click done.

Dashboard output:

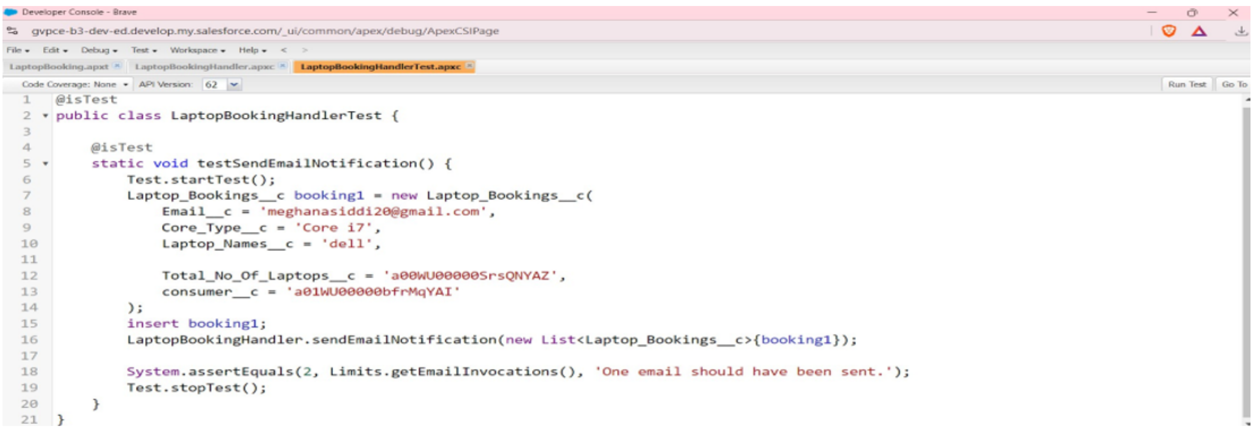


Testing and Validation

Unit Testing

Testing the Laptop Booking Handler class

LaptopBookingHandlerTest.apxc code snippet:



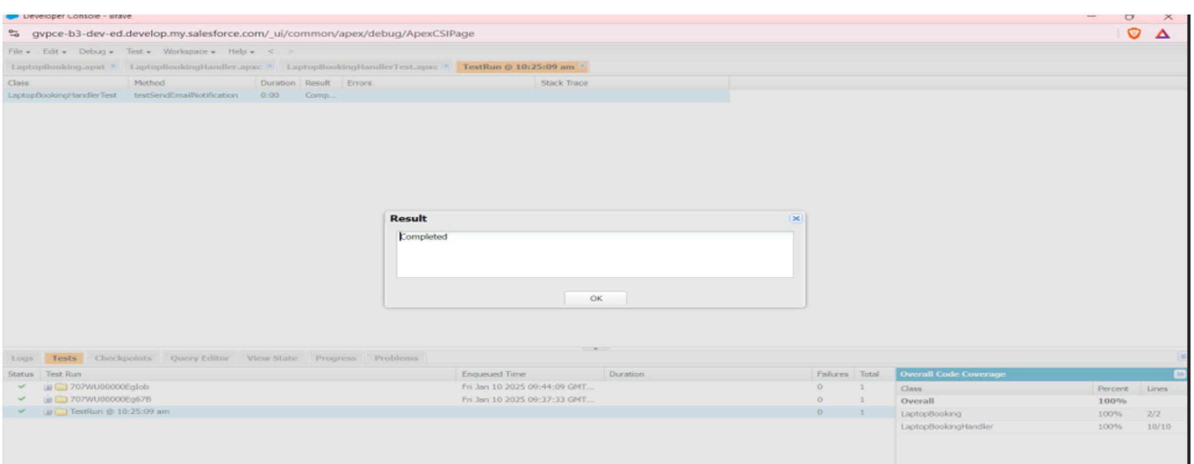
```
@isTest
public class LaptopBookingHandlerTest {

    @isTest
    static void testSendEmailNotification() {
        Test.startTest();
        Laptop_Bookings__c booking1 = new Laptop_Bookings__c(
            Email__c = 'meghanasiddi20@gmail.com',
            Core_Type__c = 'Core i7',
            Laptop_Names__c = 'dell',

            Total_No_Of_Laptops__c = 'a00WU00000SrsQNYAZ',
            consumer__c = 'a01WU00000bfrMqYAI'
        );
        insert booking1;
        LaptopBookingHandler.sendEmailNotification(new List<Laptop_Bookings__c>{booking1});

        System.assertEquals(2, Limits.getEmailInvocations(), 'One email should have been sent.');
        Test.stopTest();
    }
}
```

Output:



Overall code coverage is 100%

Explanation:

"**System.assertEquals**" is a method in Salesforce's Apex programming language, used for unit testing. It helps verify that the expected value matches the actual value produced by your code

apex Copy code

```apex
System.assertEquals(Object expected, Object actual, String message);
```

This test is successfully completed indicating all functionalities working good.

a. Validation

I observedthat

i. In Consumer,Laptopbookings, Total Laptopsobjects, the required fields are set up and if when creatingrecords, if any required fieldis not entered, then it throws an error like

javascript Copy code

```javascript
Required fields are missing: <Field Name>
```

ii. It is verified when creating Laptopbookings object and missed a field, then the output is

iii. The validation rule "Phonenumberoremailblankrule" in consumer object ensures that at least one of the fields, phone_number__c or email__c, is filled when creating or updating a record in the Consumer object.

If both fields are left blank, the rule prevents the record from being saved and displays an error message.
It displayed the message “phone number and email number should not be blank”

2. Key Scenarios Addressed by Salesforce in Implementation Of The Project

- **Customer Relationship Management (CRM)**: Salesforce handles managing and analyzing customer interactions and data, improving customer service and engagement.
- **Sales Process Automation**: It automates various sales processes, like tracking leads, opportunities, and performance, helping sales teams close deals faster.
- **Marketing Campaigns and Engagement**: Salesforce enables personalized marketing campaigns and provides tools for tracking and analyzing their effectiveness.
- **Service Management**: It supports case management, service cloud, and provides tools for customer support teams to resolve issues eciently.
- **Analytics and Reporting**: Salesforce helps generate real-time reports and dashboards, providing insights into business operations and customer behavior.

- **Collaboration and Integration**: The platform ensuresstreamlined workflows and improved productivity.

3. Conclusion

The **Laptop Rental CRM** has successfully created a digital platform to streamline the entire laptop rental process. By implementing real-time tracking, efficient coordination of rentals, and a user-friendly interface, the CRM has improved the efficiency and effectiveness of laptop rental operations. Key milestones include integrating online booking,automating payment processing, and developing tools for inventory management and customer relationship management. With this project,we have takena step toward optimizing the rental process,enhancing customer satisfaction, and increasing the profitability of the laptop rental business.