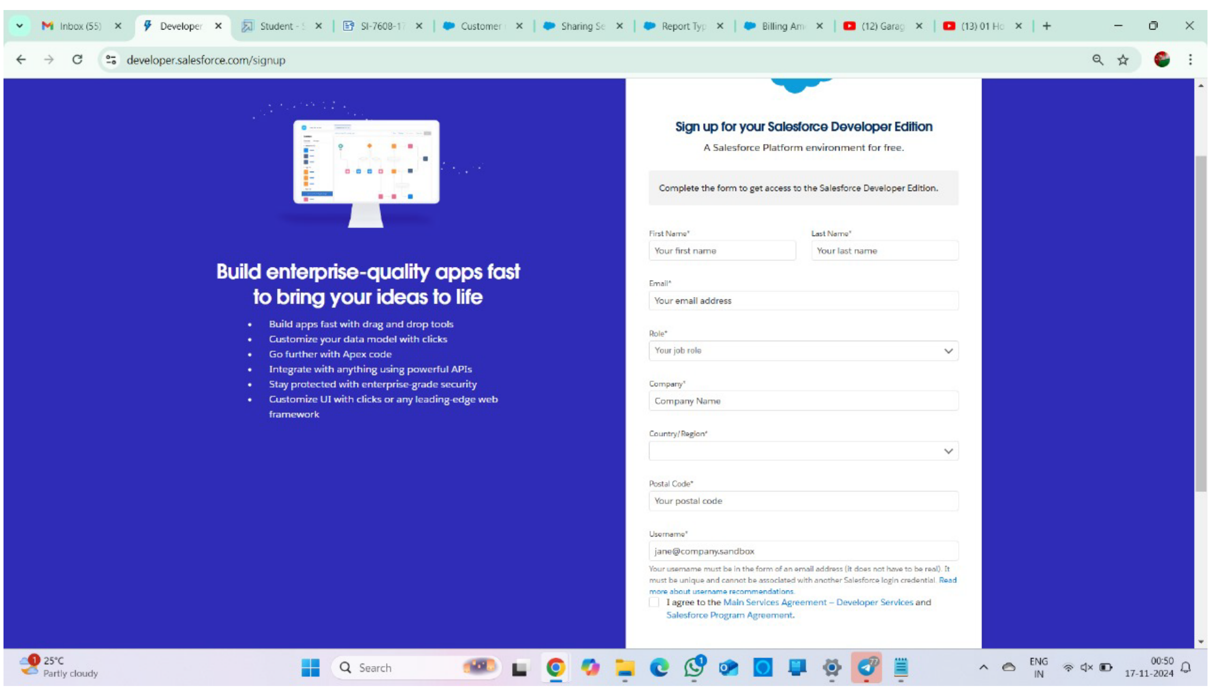
A CRM APPLICATION FOR LAPTOP RENTALS

CRM Application on Laptop rentals is about delivering the items to the customers by rental purpose. It leverages the power of customer relationship management (CRM) to enhance customer experiences, optimize store operations, and improve overall efficiency. Additionally to these, we also need to do an effective CRM i.e via communicating through email with the potential customers identified.

Salesforce:

Salesforce is your customer success platform, designed to help you sell, service, market, analyze, and connect with your customers. Salesforce has everything you need to run your business from anywhere. Using standard products and features, you can manage relationships with prospects and customers, collaborate and engage with employees and partners, and store your data securely in the cloud.



Object Creation:

What Is an Object?

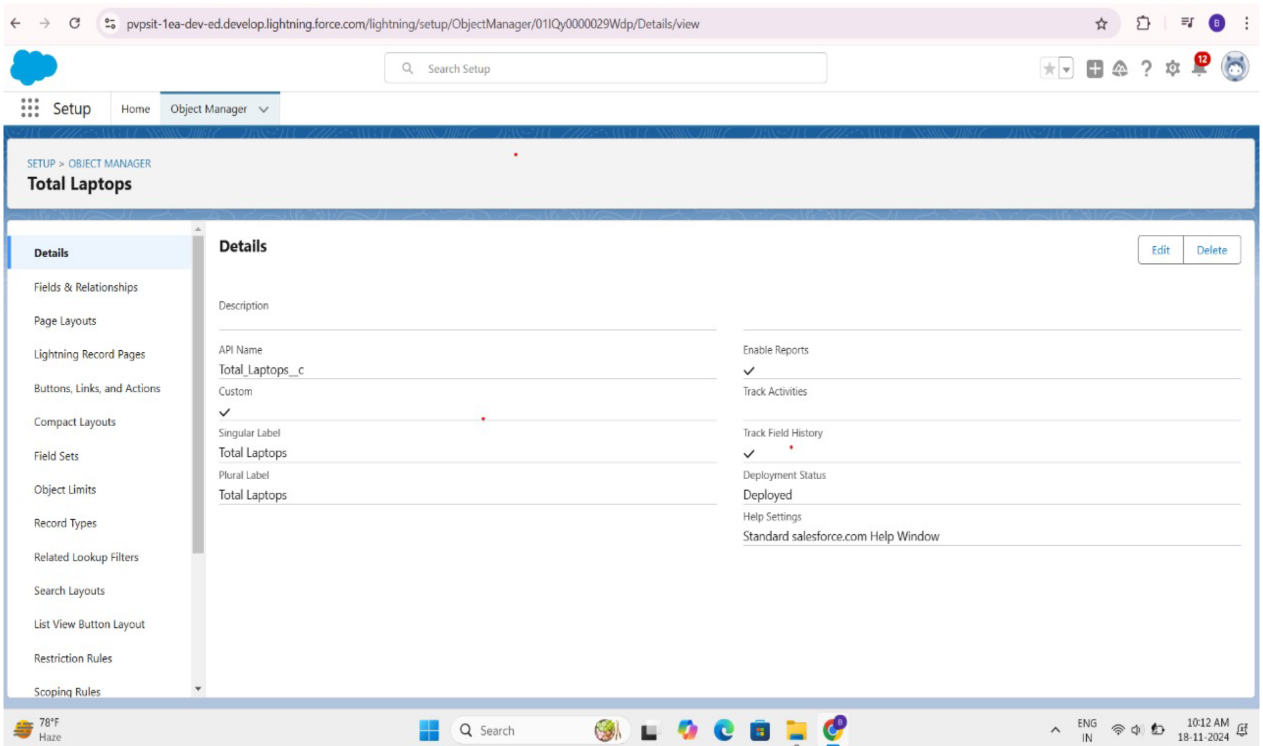
Salesforce objects are database tables that permit you to store data that is specific to an organization. What are the types of Salesforce objects

Salesforce objects are of two types:

1. Standard Objects: Standard objects are the kind of objects that are provided by
   salesforce.com such as users, contracts, reports, dashboards, etc.
2. Custom Objects: Custom objects are those objects that are created by users. They
   supply information that is unique and essential to their organization.
They are the
   heart of any application and provide a structure for sharing data.

Create Total Laptops Object:

- From the setup page >> Click on Object Manager >> Click on Create >> Click on Custom Object.
- Enter the label name>> Total Laptops
- Plural label name>> Total Laptops
- 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.

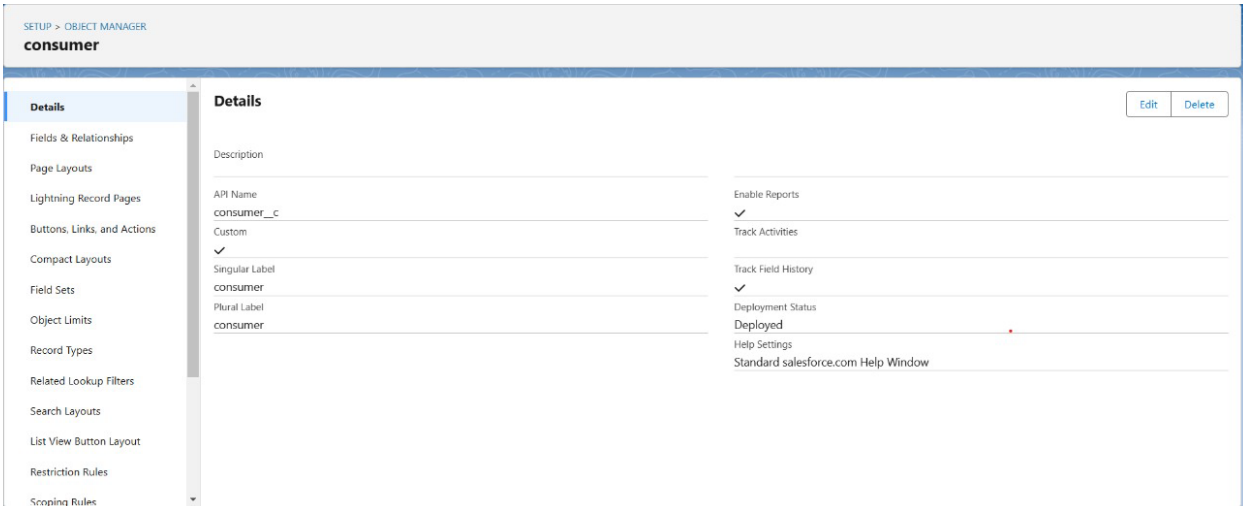


Create consumer Object

- From the setup page >> Click on Object Manager >> Click on Create >> Click on Custom Object.
- Enter the label name >> consumer
- Plural label name >> consumer
- Enter Record Name Label and Format

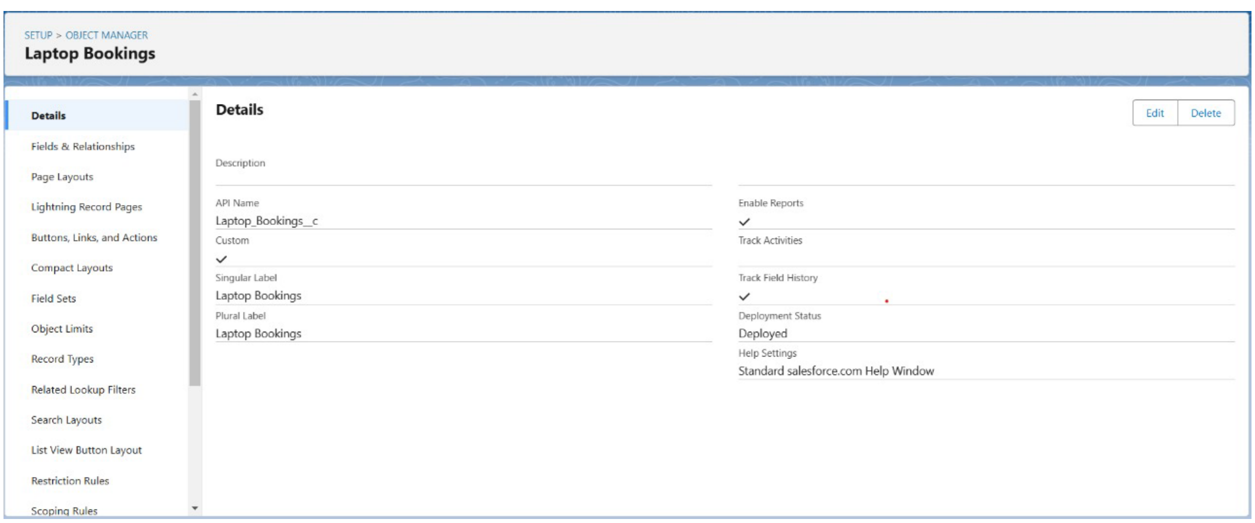
  Record Name >> consumer_name

  Data Type >> Name
- Click on Allow reports,Allow search and Track Field History,
- Allow search >> Save.



Create Laptop Bookings Object

- From the setup page >> Click on Object Manager >> Click on Create >> Click on
  Custom Object.
- Plural label name >> Laptop Bookings
- Enter Record Name Label and Format
  Record Name >> Laptop Bookings
  Data Type >> Name
- Click on Allow reports,Allow search and Track Field History,
- Allow search >> Save.



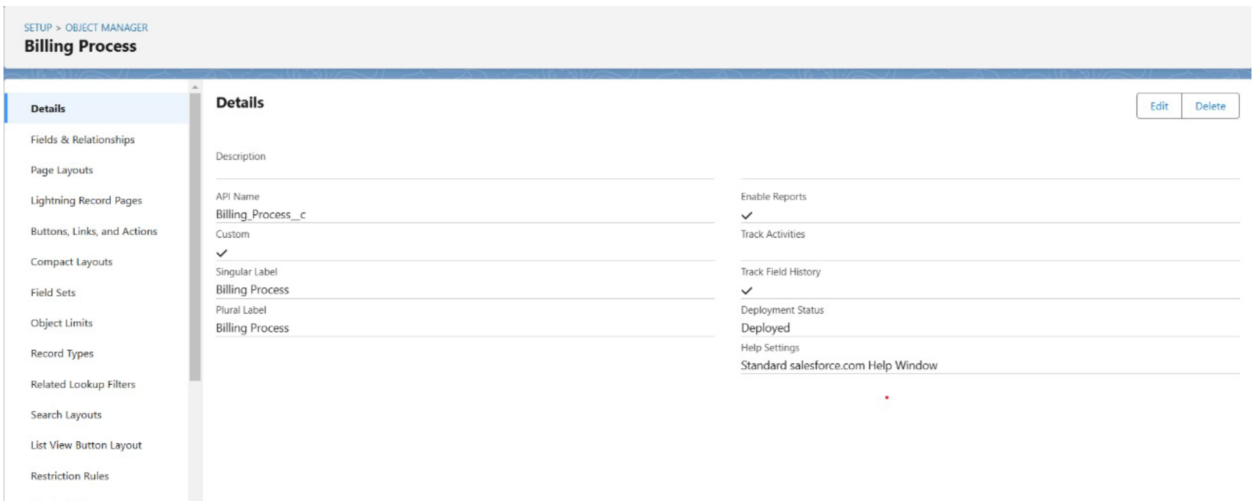
Create Billing Process Object

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

- Enter the label name >> Billing Process
- Plural label name >> Billing Process
- Enter Record Name Label and Format

  Record Name >> Billing ProcessName

  Data Type >> Name
- Click on Allow reports,Allow search and Track Field History,
- Allow search >> Save.



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.

Types of Tabs:

- **Custom Tabs:** Custom object tabs are the user interface for custom applications that you build in salesforce.com. They look and behave like standard salesforce.com tabs such as accounts, contacts, and opportunities.
- **Web Tabs:** Web Tabs are custom tabs that display web content or applications embeddedin the salesforce.com window. Web tabs make it easierfor your usersto quickly access content and applications

they frequently use without leaving the salesforce.com application.

➤ **Visualforce Tabs:** Visualforce Tabs are custom tabs that display a Visualforce page. Visualforce tabs look and behave like standard salesforce.com tabs such asaccounts, contacts, and opportunities.

➤ **Lightning Component Tabs:** Lightning Component tabs allow you to add Lightning components to the navigation menu in Lightning Experience and the mobileapp.

Creating a CustomTab

To create a Tab:

➤ Go to setup page >>Type Tabs in Quick Find bar >>click on tabs >> New (under customobject tab)

➤ Select Object(Total Laptops) >> Selectthe 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' existingpersonal customizations is checked.

➤ Click save.

The Lightning App

An app is a collection of items that work together to serve a particular function.In Lightning Experience, Lightning apps give your users access to sets of objects, tabs, and other items all in one convenient bundle in the navigation bar.

Lightning apps let you brand your apps with a custom color and logo. You can even include a utility bar and Lightning page tabs in your Lightning app. Members of your org can work more efficiently by easily switching between apps.

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 >> (UtilityItems) keep it as default>> Next.
- ➤Upload a photothat is relatedto your app.
- ➤ To Add Navigation Items: Select the items (Total Laptops,consumer,Laptop Booking,Billing Process)from the searchbar and move it usingthe arrow button >> Next.
- ➤ To Add User Profiles: Search profiles (System administrator) in the search bar >> clickon the arrow button >>save & finish.

Fields

When we talk about Salesforce, Fields represent the data stored in the columns of a relational database. It can also hold any valuable information that you require fora specific object.Hence, the overall searching, deletion, and editing of the recordsbecome simplerand quicker.

Types of Fields

1. Standard Fields
2. Custom Fields

Standard Fields:

As the name suggests, the Standard Fields are the predefined fields in Salesforce that perform a standard task. The main point is that you can’t simplydelete a StandardField until it is a non-required standardfield. Otherwise, users have the option to delete themat any point from the application freely. Moreover, we have some fields that you will find common in every Salesforce application. They are,

>>Created By

>>Owner

>> Last Modified

>> Field Made During object Creation

Custom Fields:

On the other side of the coin, Custom Fields are highly flexible, and users can change them according to requirements. Moreover, each organizer or company can use them if necessary. It means you need not always include them in the records, unlike Standardfields. Hence, the final decision depends on the user, and he can add/remove Custom Fields of any givenform.

Creating the field in consumer object

To create fields in an object:

1. Go to setup >>click on ObjectManager >> type object name(consumer) in searchbar >> click on theobject.
2. Now click on "Fields& Relationships" >>New
3. Select Data Type as a "Phone"
4. Click on next

To create another fields in an object:

1. Go to setup >> click on Object Manager >> type object name(consumer) in searchbar >>click on the object.
2. Now click on "Fields& Relationships" >>New
3. Select Data type as a "Email" and Click on Next

Creating the field in Laptops Bookings object

To create fields in an object:

1. Go to setup >> click on Object Manager >> type object name(Laptop Booking) inthe search bar >> click on the object.
2. Now click on "Fields& Relationships" >>New
3. Select Data Type as a "Picklist"

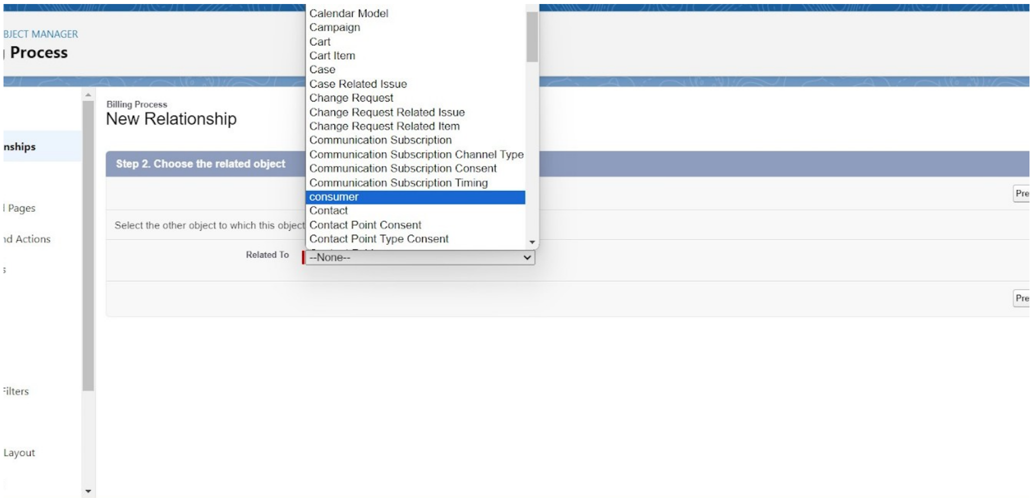
4. Picklist values are:-1.Dell 2. Acer 3.Hp 4.Mac
5. Select required
6. Click on Next >>Next >> Save and new

To Create a Fields & Relationship to an LaptopBooking ObjectTo create fields& relationship to an object:

1. Go to setup >> click on Object Manager >> type object name(Laptop Booking) inthe search bar >> click on the object.
2. Now click on "Fields& Relationships" >>New
3. Select Data Type as a "Picklist"
4. Picklist values are:-1.core i3 2. Core i5 3. Core i7 .
5. Select required
6. Click on Next >>Next >> Save and new
7. Go to setup >> click on Object Manager >> type object name(Laptop Booking) inthe search bar >> click on the object.
8. click field dependency and next
9. Click the include value for dell-corei3,i5,i7 and for acer i3,i4,i5and for hp i3,i4,i5 andalso for mac bionicchip include the values for it.

To Create a Fields & Relationship for Billing Process Object

1. Go to setup >>click on Object Manager >>type object name(Billing Process) in thesearch bar >> clickon 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 consumerobject and click on Next
6. Change the Field Label: Name
7. click on Next >> Next >> Save and new.



Creation of another fields for the billing process object

To create fields in an object:

1. Go to setup >>click on Object Manager >>type object name(Billing Process) in thesearch bar >> clickon the object.
2. Now click on “Fields& Relationships” >>New
3. Select Data Type as a “Picklist”
4. Fill the Above as following: Field Label: Payment Mode

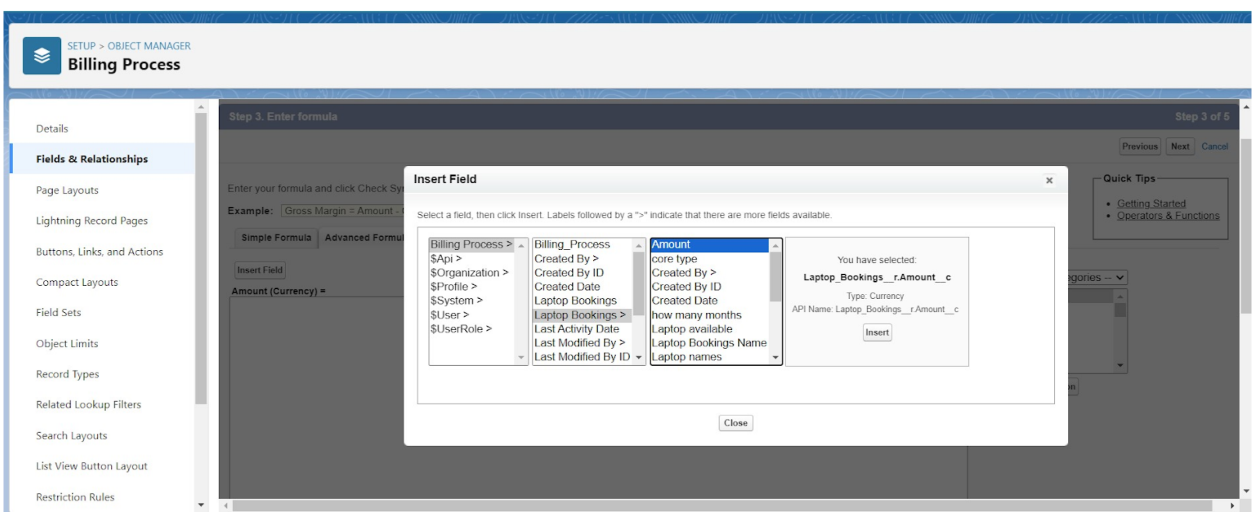
- Value >> Select enter values with each value separated by a new line
    1. Cash
    2. Check
    3. Credit card
    4. Debit card
    5. UPI
    6. Phonepe
    7. Gpay
    8. Paytm

Select required

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

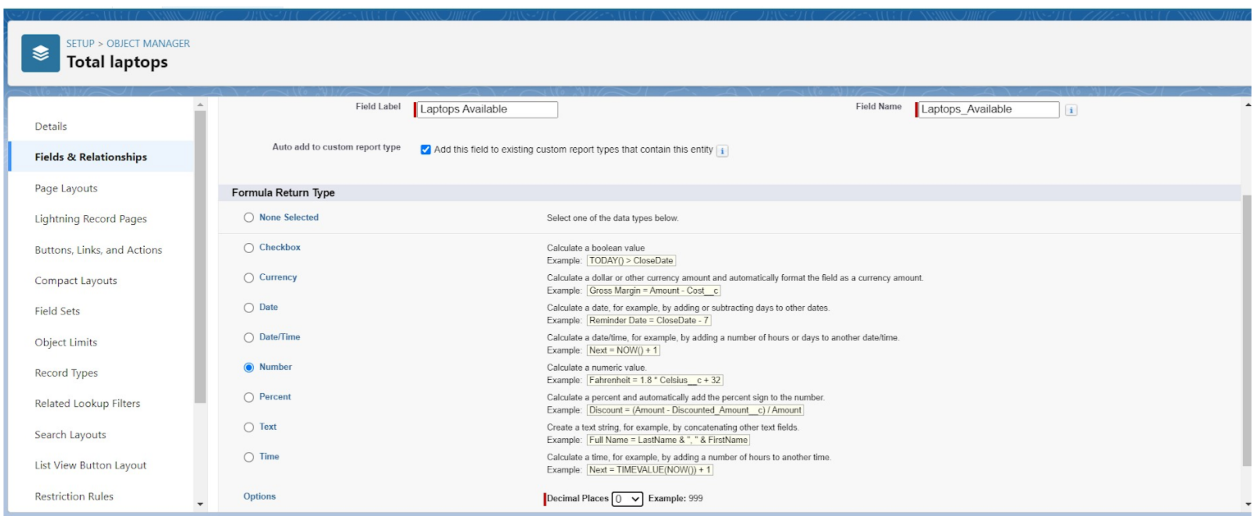
Create a Cross object formula Field in billing process Object

1. Go to setup >>click on Object Manager >>type object name(Billing Process) in thesearch bar >> clickon the object.
2. Now click on “Fields& Relationships” >>New
3. Select Data Type as a “Formula”
4. Click on Next
5. Enter the Field label: Amount, the Field name gets auto generated and click on Next.(Formula return type Number).
6. Inthe Advanced FormulaClick on the Insert field in the popup ScreenSelect the BillingProcess and in the seconddrop down select the LaptopBooking and in thethreedrop down select the Amount field and click on Insert
7. “ Laptop_Booking__r.Amount__c ”.
8. Click on the Check syntax: No syntax errors in merge fields



Creating the field in Total Laptops object

1. Go to setup >>click on ObjectManager >> type object name(Total Laptops) insearchbar >> click on the object.
2. Now click on “Fields& Relationships” >>New
3. Select Data type as a “Formula”and Click on Next
4. Fill the Above as following:
5. Field Label: Laptops Available
6. Field Name : It’s gets auto generated
7. Select the FormulaReturn Type as “Number”
8. Select the Decimalplaces as “0” and Clickon Next



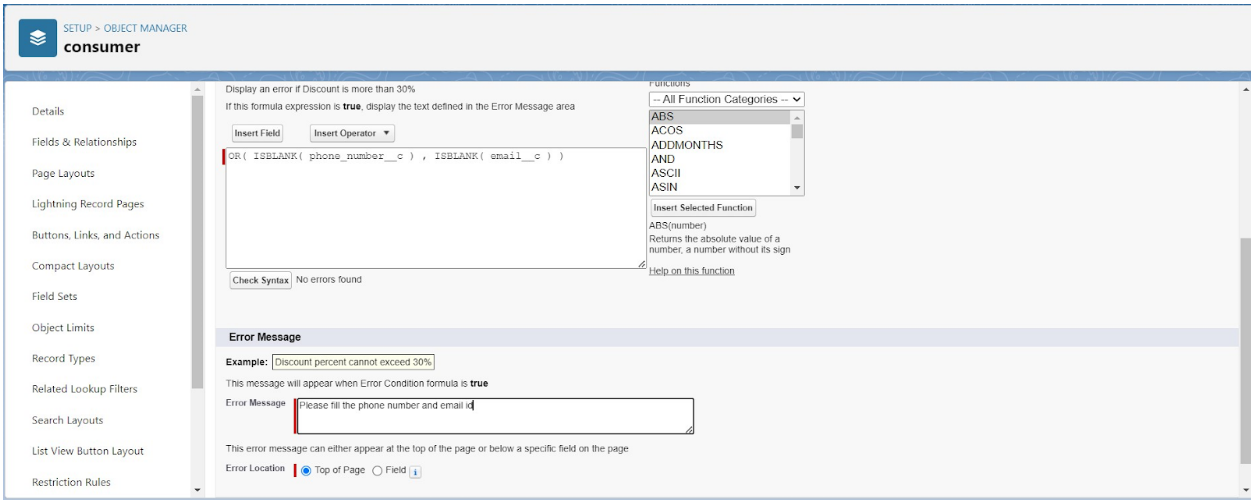
Validation rule

Validation rules are applied when a user tries to save a record and are used to checkif the data meets specified criteria.If the criteria are not met, the validation rule triggers an errormessageand prevents the user from saving the record untilthe issues are resolved.

Improve the quality of your data using validation rules. Validation rules verify that the data a user enters in a record meets the standards you specify before the user can save the record. A validation rule can contain a formula or expression that evaluates the data in oneor more fields and returns a value of “True” or “False”. Validation rules also include an error message to display to the user when the rule returns a value of “True” due to an invalid value.

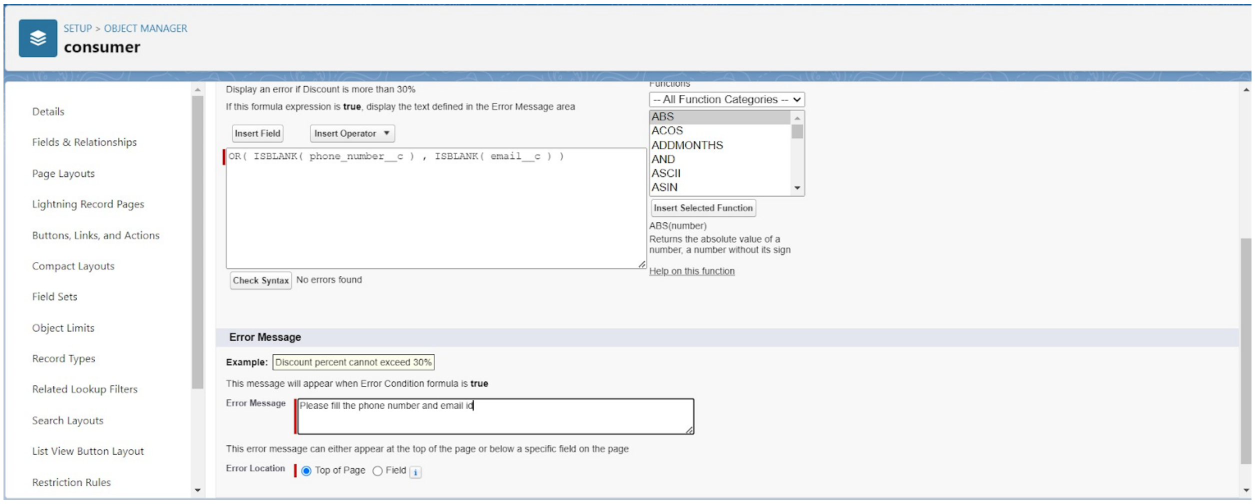
Creating the validation rule for phone number field in consumer object

1. Goto the setup page - click on object manager- From drop down click edit forconsumer object.
2. Click on the validation rule - clickNew.
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.



Creating the validation rule for phonenumber field in consumer object

1. Go to the setup page >> click on object manager >> From drop down click edit forconsumer 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.



Profiles

A profile is a group/collection of settings and permissions that define what a user can doin 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. You can define profiles by the user's job function. For example System Administrator, Developer, Sales Representative.

Types of profiles in salesforce

1. Standard profiles:

   By default salesforce provides below standard profiles.

- Contract Manager
- Read Only
- Marketing User
- Solutions Manager
- Standard User
- System Administrator.

  We cannot deleted standard ones

  Each of thesestandard ones includesa default set of permissions for all of thestandard objectsavailable on the platform.

2. Custom Profiles:

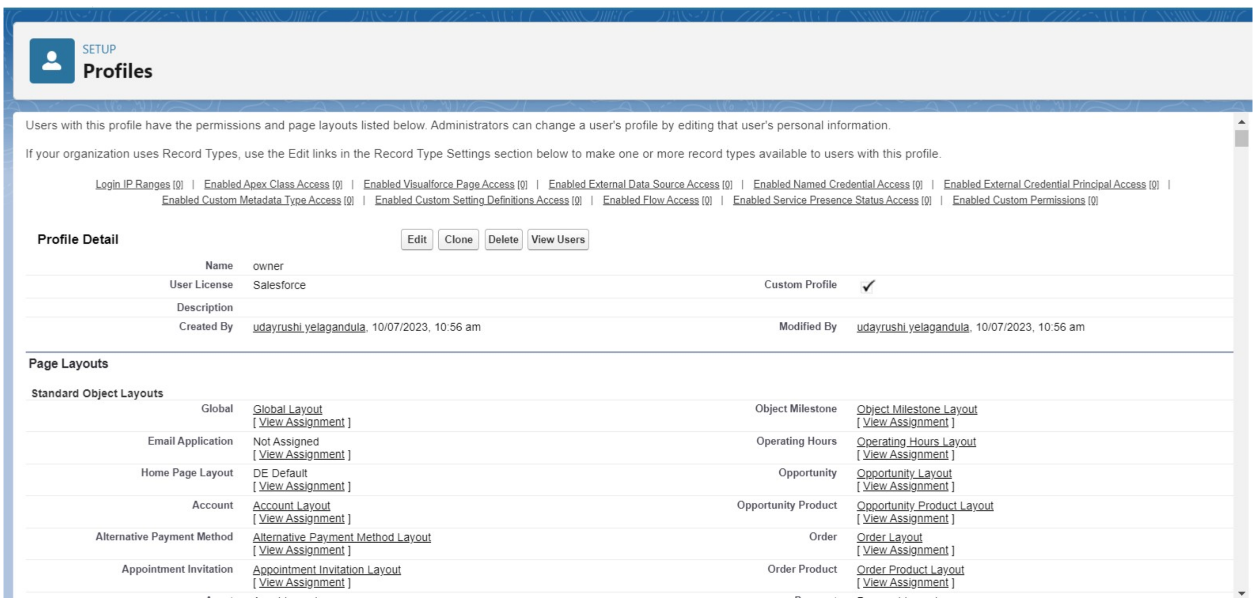
Custom ones defined by us.

They can be deletedif there are no usersassigned with that particular one.

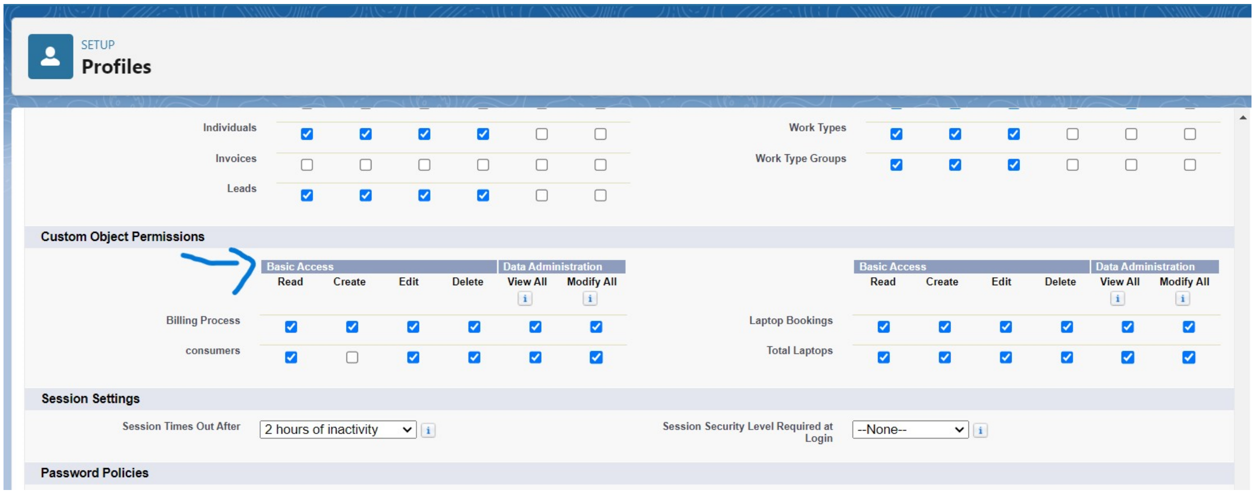
Owner Profile

To create a new profile:

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



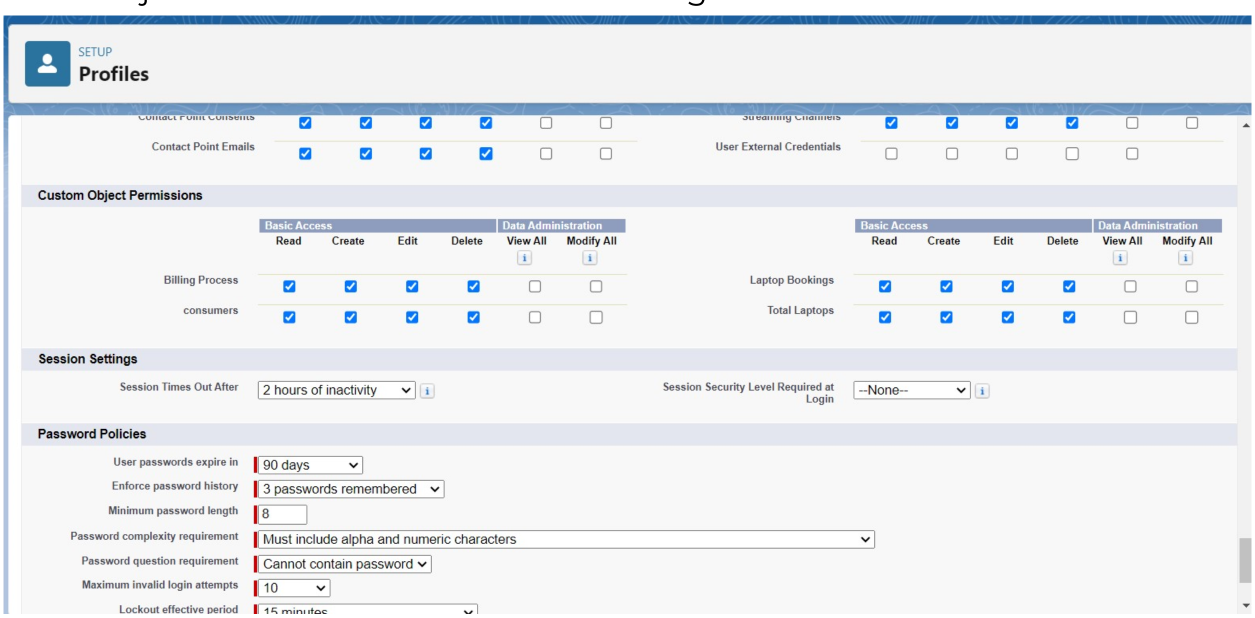
Scroll down to Custom Object Permissions and Give accesspermissions for TotalLaptops,consumers , Laptop Booking and Billing Process objects as mentioned in the below diagram.



3. Give Access and Save it.

Agent Profile

1. Go to setup >> type profiles in quick find box >> click on profiles >> clone thedesired profile (Standard PlatformUser) >> enterprofile name (Agent)>>Save.
2. While still on the profilepage, then click Edit.
3. Scroll down to Custom ObjectPermissions and Give access permissions for Total Laptops, consumer , Laptop Bookings and BillingProcess objects as mentioned inthe belowdiagram.



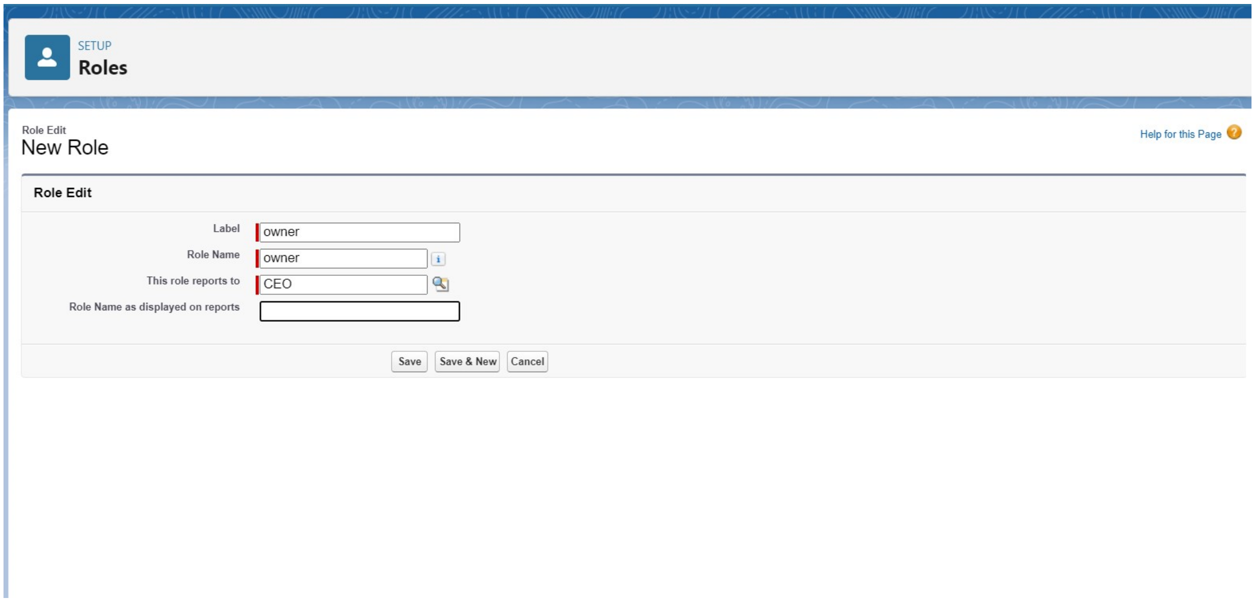
Roles and Hierarchy

A role in Salesforce defines a user's visibility access at the record level. Roles may be used to specify the types of access that people in your Salesforce organization can have to data.Simply put, it describeswhat a user could see within the Salesforce organization.

Creating owner Role:

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

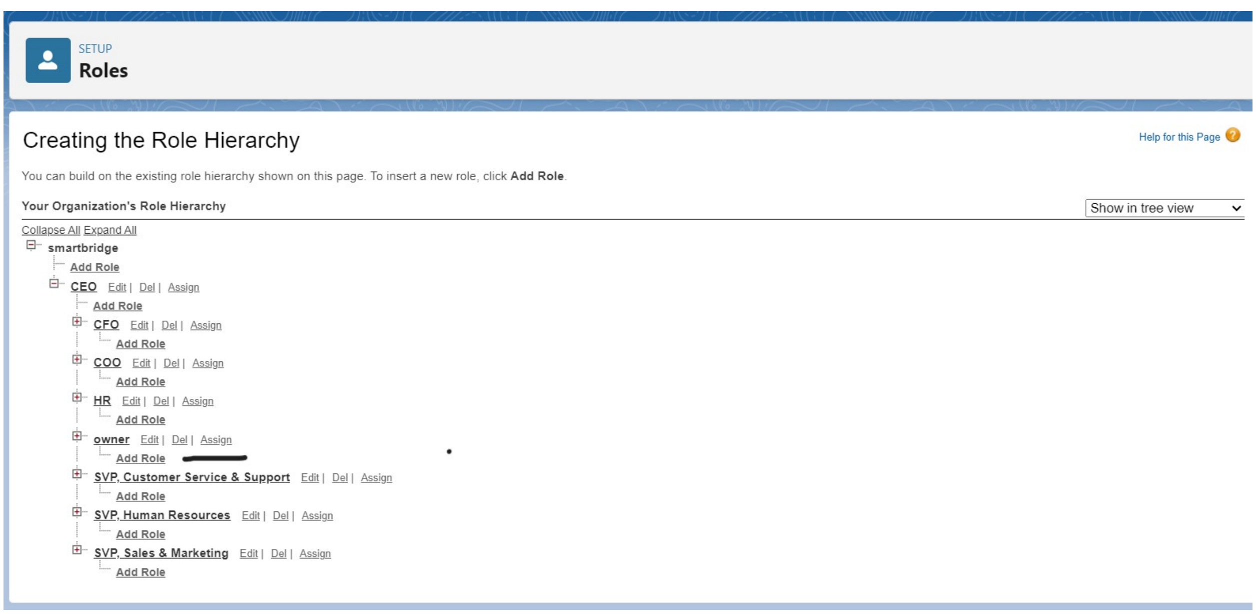


2. Click and save it.

Activity 2: Creating Agent roles

Creating another two roles under manager

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



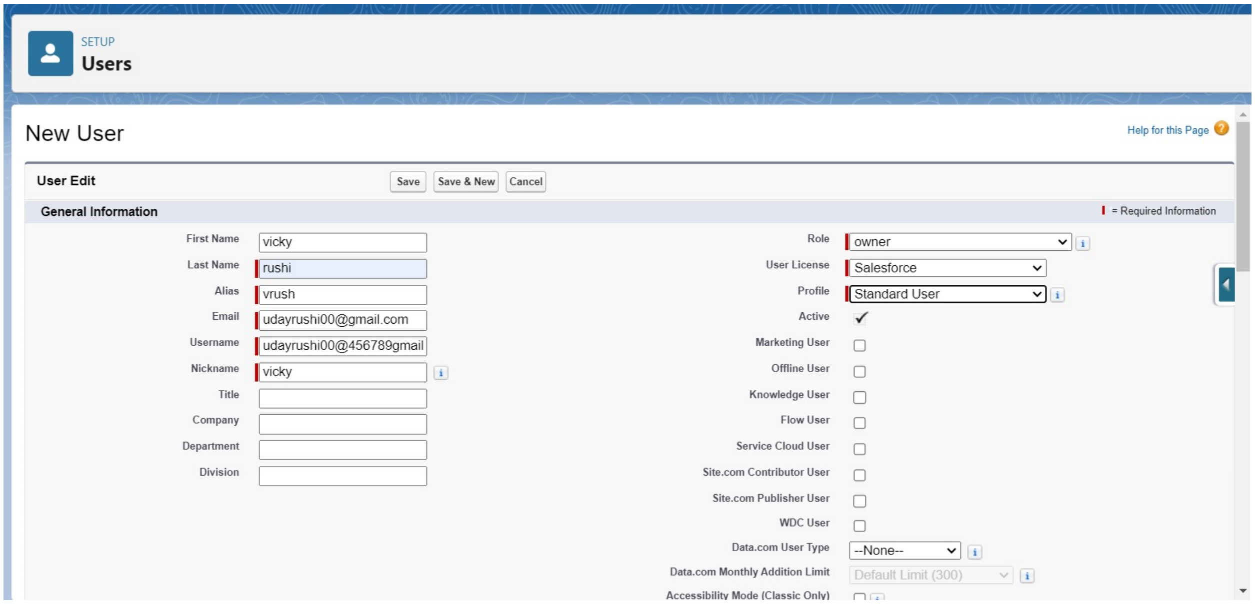
4. Give Label as “Agent” and Role name gets auto populated. Then click on Save.

Users

A user is anyone who logs in to Salesforce. Users are employeesat your company, such assales reps, managers, and IT specialists, who need access to the company's records. Everyuser in Salesforce has a user account. The user accountidentifies the user, and the user account settingsdetermine what featuresand records the user can access.

Create User

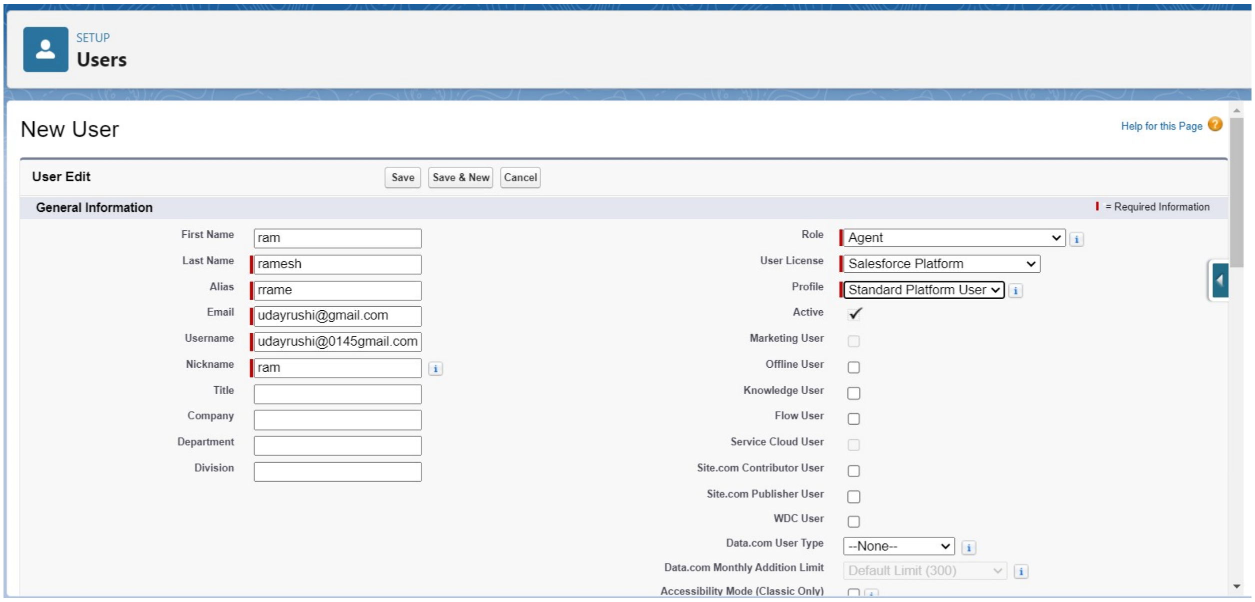
1. Go to setup - type users in quick findbox - select users -click New user.
2. Fill in the fields
3. First Name : vicky
4. Last Name : y
5. Alias : Give a Alias Name
6. Email id : Give your Personal Email id
7. Username : Username should be in this form: text@text.text
8. Nick Name : Give a Nickname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



Save it.

Activity2: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 Emailid
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 : standard platform user



Save it.

Flows

In Salesforce, a flow is a powerful tool that allows you to automate business processes, collect and update data, and guide users through a series of screens or steps. Flowsarebuilt usinga visual interface and can be created withoutany coding knowledge.

In Salesforce, "flows" typically refer to Salesforce Flow, which is a powerfulautomation toolthat allows you to create custom, automated processes in your Salesforce org without

writing code. Salesforce Flow is a point-and-click tool that enablesyou to design and automate complex business processes,collect data, and interact with users in a visualinterface. There are different types of flows in Salesforce, including:

Screen Flows: These are used to guide users through a series of screens to collect or display information. Screen Flows are often used for data entry and updates.

Autolaunched Flows: These are flows that are triggered by events, such as when a record is createdor updated. They don't requireuser interaction and can be used for backgroundautomation.

Flow Builder: Flow Builder is the visual interface used to create flows. It allows you to design flows by adding elements, like screens, logic,and actions, usinga drag-and-dropapproach.

Flow Templates: Salesforce provides a library of pre-built flow templates that you can use as a starting point for your own flows. These templates cover a variety of use cases, from simple to complex.

Create a Flow on dell laptop

1. Go to Setup and type "Flow" in the Quick Find box.
2. Select "Flow" and click"New Flow".
3. Choose "Record-Triggered Flow" and click "Create".
4. Select "Laptop Booking" from the object dropdown.
5. Set the trigger as "A record is Created or Updated".
6. Optimize the flow for "Actions and Related Records".
7. Click "+" under the flow canvas and select "Decision".
8. Set the label to "Update" (API name auto-generates).
9. Add outcomes for Dell, Acer, HP, and Mac.
10. After the laptop model decision, add another decision for core type (i3, i5, i7).
11. Define conditions for core types (e.g., "core type equals i3").
12. Add outcomesfor Dell core types (i3, i5, i7).
13. After core type decision,add another decision for months (1-5).
14. Set conditionsfor months (e.g., "how many months equals 1").
15. Add outcomesfor months selected(1, 2, 3, 4, 5).
16. Add an "Update Record" action based on month selection.
17. Set Amount__c values for Dell i3 (1000, 2000, etc.).

18. Repeat the process for Dell i5 and i7 with corresponding amounts.
19. Connect outcomes to the appropriate update record actions.
20. Save and activate the flow.

**Similarly we did for remaining laptops also

Creating Classes :

Apex classes are modeled on their counterparts in Java. You'll define, instantiate, and extend classes, and you'll work with interfaces, Apex class versions, properties, and otherrelated classconcepts.

1. Class:
2. As in Java, you can create classesin Apex. A class is a templateor blueprint fromwhich objectsare created. An object is an instanceof a class.

3. Object

   Object is an instance of a class, where it can access all the properties thatare presentin a class i.e, variablesand methods.

Steps to create a class in APEX:

1. Login to the trailhead account and navigateto the gear account in the top rightcorner.
2. Then we can see the Developerconsole. Click on the developerconsole and youwill navigateto a new console window.
3. Then you can see many tools in the Toolbar of the new console window.Click onFile,New and ApexClass.
4. Enter the name of the class to createa new class file.

Trigger code:

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


if(trigger.isAfter && ( trigger.isInsert || trigger.isupdate)){


            LaptopBookingHandler.sendEmailNotification(trigger.new);
    }


}
```

1. LaptopBooking - trigger name
2. Laptop_Bookings_c -as per your org(go to laptop bookings object and copy from thatobject api name).

```
public class LaptopBookingHandler {
  public static void sendEmailNotification (List<Laptop_Bookings__
    c> lapList){ for(Laptop_Bookings__c lap:lapList)
    {
      Messaging.SingleEmailMessage email = new
        Messaging.SingleEmailMessage(); email.setToAddresses( new
        List<String>{lap.Email__c}); email.setSubject('Welcome to our
        company');
      string body ='Dear ' +lap.Name +', \n';
        body += 'Welcome to Laptop Rentals! You have been seen as a
valuable customer 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_c +'
\n Laptop type =
      '+lap.Laptop_type_____c;
```

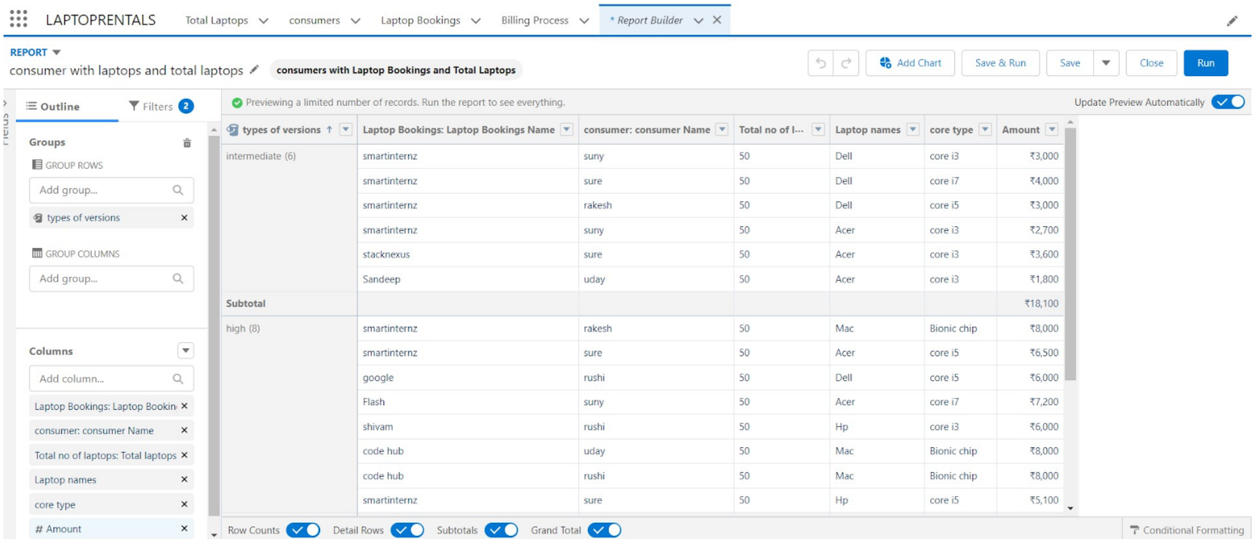
```
        email.setPlainTextBody
        (body);
          Messaging.sendEmail(new
          List<Messaging.SingleEmailMessage>{email});

      }
   }
}
```

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 getexecuted.

Create Report

a. Go to the app -click on the reportstab
b. Click New Report.
c. Select report type from category or from report type panel or from search panel"consumer with Laptop Bookingsand total laptops">> click on start report.
d. Customize your report
e. Add fields from left pane as shown below



1. Click the column drop down and select bucket list.

2. Click apply it.

Create Dashboard Folder

1. Click on the app launcherand 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.

Dashboard

data analytics of laptops

total amount of data in dashboards

As of 18-Nov-2024, 4:14 pm·Viewing as Bala Nireekshan

consumer with laptops and total laptops

View Report (consumer with laptops and total laptops)