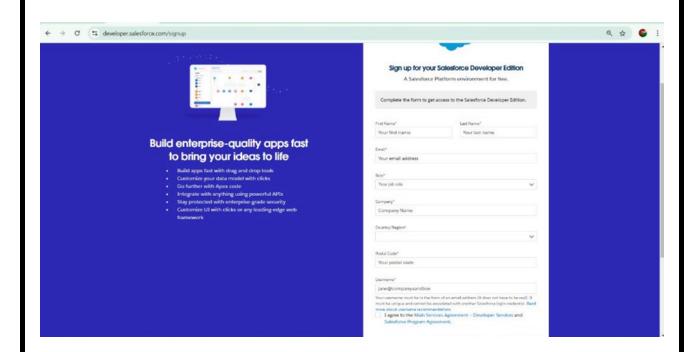
A CRM APPLICATION FOR LAPTOP RENTALS CRM

Application on Laptop rentals is about delivering the items to the customers by rental purpose. It leverages the power of customerrelationship 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?

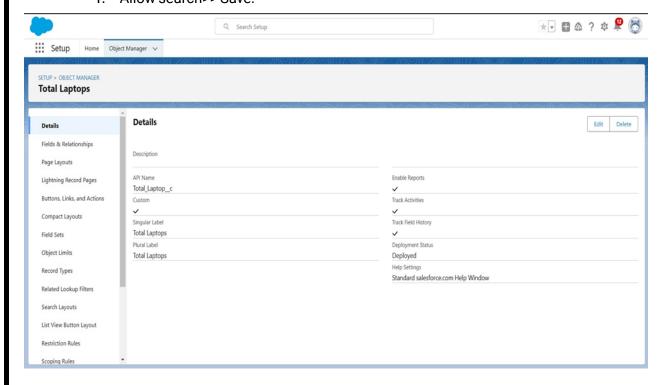
>> Text

Salesforce objects are databasetables that permit you to store data that is specific to an organization. Salesforce objects are of two types:

- 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.

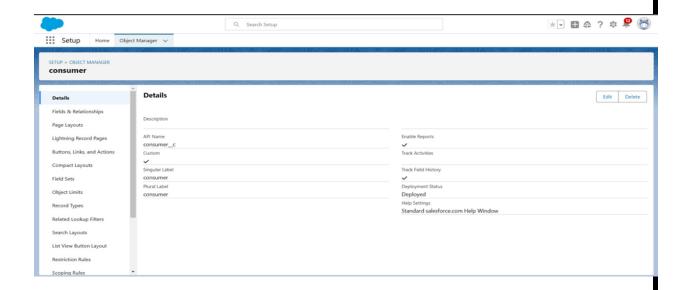
Create Total Laptops Object

- a. From the setup page >> Click on Object Manager >> Click on Create >> Click on Custom Object.
- b. Enter the label name>> Total Laptops
- c. Plural label name>> Total Laptops
- d. Enter Record Name Label and Format Record Name >> Total Laptops Data Type
- e. Click on Allow reports, Allow searchand Track Field History
- f. Allow search>> Save.



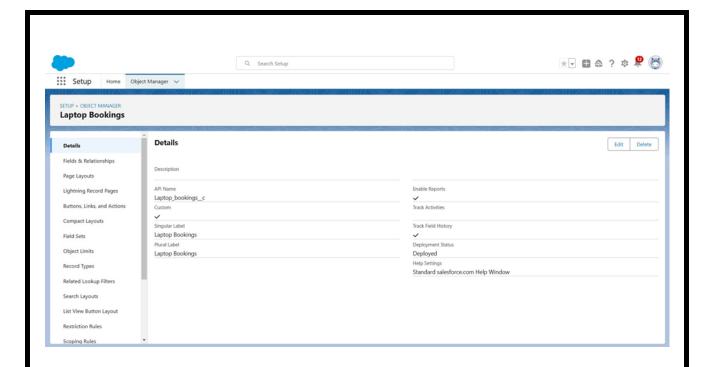
Create consumer Object

- g. From the setup page >> Click on Object Manager >> Click on Create >> Click on Custom Object.
- h. Enter the label name >> consumer
- i. Plural label name >>consumer
- j. Enter Record Name Label and Format Record Name >> consumer_nameData Type >> Name
- k. Click on Allow reports, Allow searchand Track Field History,
- I. Allow search>> Save.



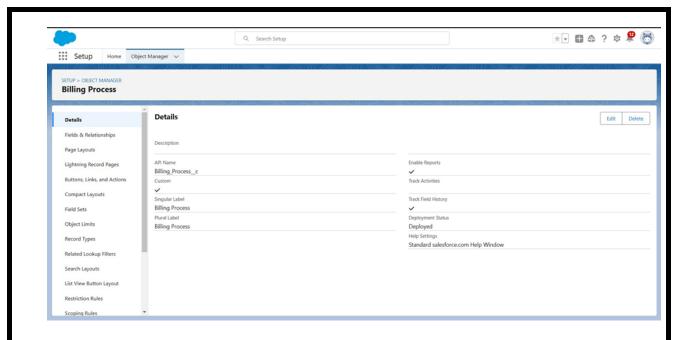
Create Laptop Bookings Object

- m. From the setup page >> Clickon Object Manager>> Click on Create >> Click on Custom Object.
- n. Enter the label name >> Laptop bookings
- o. Plural label name >> Laptop bookings
- p. Enter Record Name Label and Format Record Name >> consumer_name Data Type >> Name
- q. Click on Allow reports, Allow searchand Track Field History,
- r. Allow search>> Save.



Create Billing Process Object

- s. From the setup page >> Clickon Object Manager>> Click on Create >> Click on Custom Object.
- t. Enter the label name >> Billing process
- u. Plural label name >>Billing process
- v. Enter Record Name Label and Format Record Name >> consumer_name Data Type >> Name
- w. Click on Allow reports, Allow searchand Track Field History,
- x. Allow search>> Save.



Tabs

What is Tab: A tab is like a user interface that is used to buildrecords for objects and to view the records in the objects.

TypesofTabs:

- 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.
- ii. **Web Tabs:** Web Tabs are custom tabs that display web content or applications embedded in the salesforce.com window. Web tabs make it easier for your users to quickly access content and applications they frequently use without leaving the salesforce.com application.
- iii. **Visualforce Tabs:** Visualforce Tabs are customtabs that displaya Visualforce

page. Visualforce tabs look and behave like standard salesforce.com tabs such as accounts, contacts, and opportunities.

iv. Lightning Component Tabs: Lightning Componenttabs allow you to add

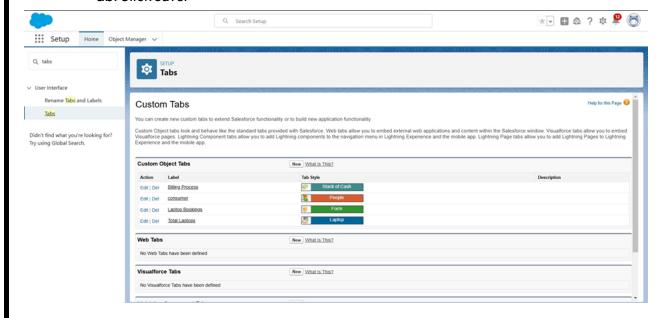
Lightning components to the navigation menu in Lightning Experience and the mobile app.

v. **Lightning Page Tabs:** Lightning Page Tabs let you add Lightning Pages to the

mobile app navigation menu. Lightning Page tabs don't work like other custom tabs. Once created, they don't show up on the All Tabs page when you click the Plus icon that appears to the right of your currenttabs. Lightning Page tabs also don't show up in the Available Tabs list when you customize the tabs for your apps.

Creatinga Custom TabTo create aTab:

- y. Goto setup page >> Type Tabs in Quick Find bar >> click on tabs >> New (under custom object tab)
- z. Select Object(Total Laptops) >>Select the tab style >> Next (Add to proles page) keep it as default >> Next (Add to Custom App) uncheck the include tab.
- aa. Make sure that the Append tab to users' existing personal customizations is checked.
- ab. Click save.



The Lightning App

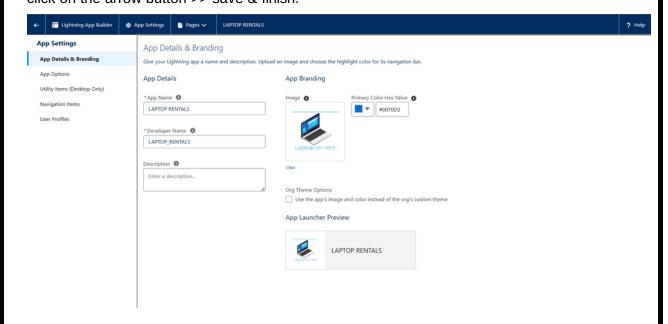
An app is a collection of items that work together to serve a particular function. In Lightning Experience, Lightning apps give your users access to sets of objects, tabs, and other items all in one convenient bundle in the navigation bar.

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 efciently by easily switching between apps.

Create a LightningApp To create a lightningapp page:

ac. Go to setup page >>search "app manager" in quick nd >> select "app manager" >> click on New lightning App.

- ad. 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.
- ae. Upload a photo that is related to your app.
- af. 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.
- ag. To Add User Proles:Search proles (Systemadministrator) in the search bar >> click on the arrow button >> save & finish.



Fields

When we talk about Salesforce, Fields represent the data storedin the columns of a relational database. It can also hold any valuableinformation that you require for a specic object. Hence, the overallsearching, deletion, and editing of the records become simplerand quicker. Types of Fields:

1. **Standard Fields:** As the name suggests, the Standard Fieldsare the predened elds in Salesforce that perform a standard task. The main point is that you can't simply

delete a Standard Fielduntil it is a non-required standard eld. Otherwise, users have the option to delete them at any point from the application freely.

Moreover, we have some elds that you will nd common in every Salesforce application. They are,

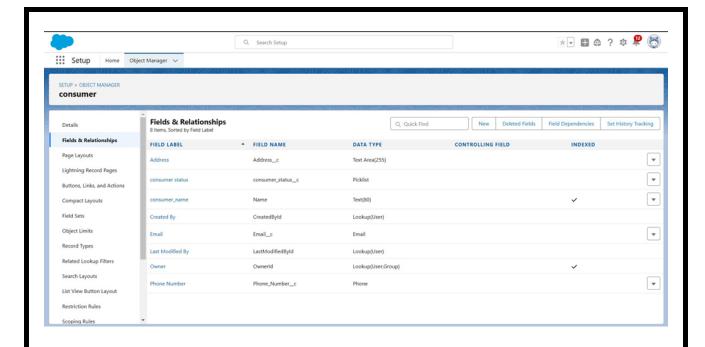
- >>Created By
- >>Owner
- >> Last Modfied
- >> Field Made During object Creation
 - 2. Custom Fields: On the otherside of the coin, CustomFields are highlyexible, and users can change them according to requirements. Moreover, each organizer or company can use them if necessary. It means you need not always include them in the records, unlike Standard elds. Hence, the nal decision depends on the user, and he can add/remove Custom Fields of any given form.

Creating the field in consumer object To create fields in an object:

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

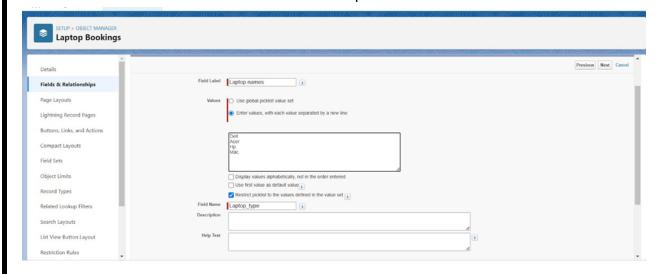
To createanother fields in an object:

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



Creatingthe field in Laptops Bookingsobject To create fields in an object:

- a. Goto 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
- c. Select Data Type as a "Picklist"
- d. Picklist values are:-1.Dell 2.Acer 3.Hp 4.Mac

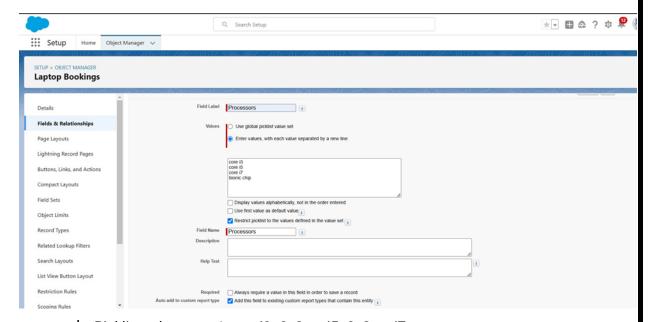


- e. Select required
- f. Click on Next >> Next >> Save and new

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

To create fields& relationship to an object:

- a. Goto 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
- c. Select Data Type as a "Picklist"



- d. Picklist values are:-1.core i3 2. Core i5 3. Core i7.
- e. Select required
- f. 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:

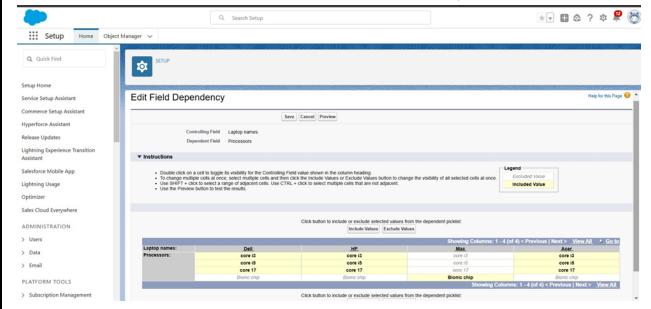
1. By using the field dependency we can get the different Values by selecting the different Picklist.

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. click field dependency and next
- 3. Click the includevalue for dell-core i3,i5,i7 and for acer i3,i4,i5and for hp i3,i4,i5 and also for mac bionic chip include the values for it.

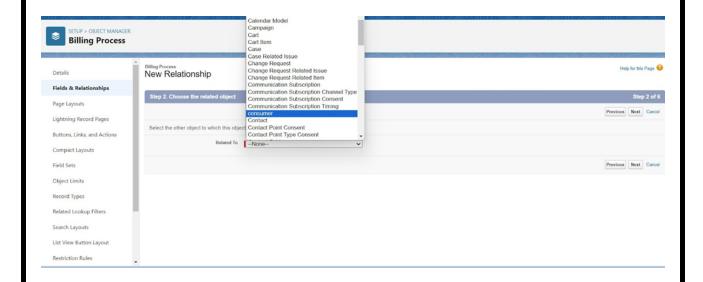
To Create a Fields & Relationship for Billing Process Object

- 1. Goto setup >>click on Object Manager >>type object name(Billing Process) 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 Selectthe consumer objectand click on



Next

- 6. Change the FieldLabel: Name
- 7. click on Next >> Next >> Save and new



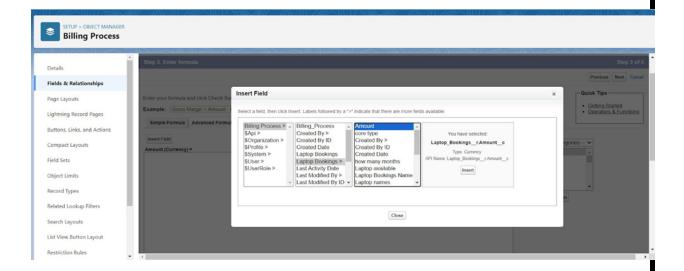
Creation of another fields for the billing process object To create fields in an object:

- 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:
 - i. Field Label: PaymentMode
 - ii. 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

- iii. Select required
- iv. Click on Next >> Next >> Save and new.

Create a Cross object formulaField in billingprocess Object

- 1. Go to setup >> click on Object Manager >> type object name(Billing Process) in the search bar >> click on 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).
- In the Advanced FormulaClick on the Insert fieldin 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
- 7. "Laptop_Booking__r.Amount__c".



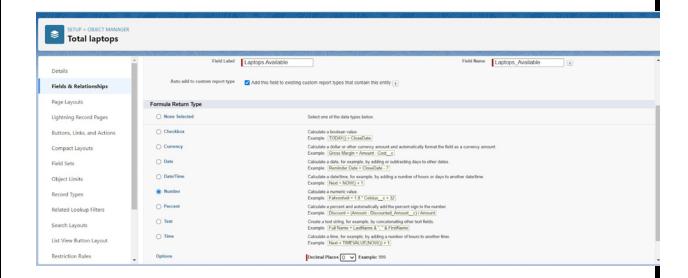


8. Click on the Check syntax: No syntax errors in merge fields

Creating the field in Total Laptopsobject

1. To create fields in an 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
- 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 Formula ReturnType as "Number"



8. Select the Decimalplaces as "0" and Click on 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 error message and prevents the user from saving the record until the issues are resolved.

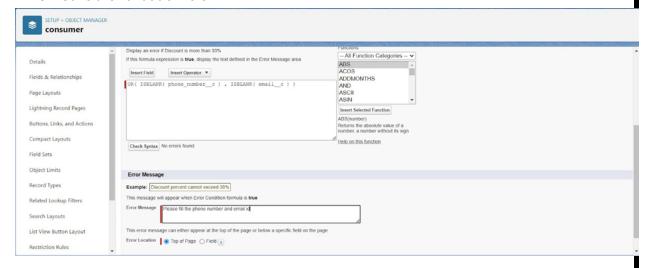
Improve the quality of your data using validation rules. Validation rules verify that the data a user enters in a recordmeets the standards you specify beforethe user can save the record. A validation rule can contain a formula or expression that

evaluates the data in one or more fields and returns a value of "True" or "False". Validation rules also includean error messageto 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

- 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".
- 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 do in salesforce. Profile controls "Object permissions, Field permissions, User permissions, Tab settings, App settings, Apex class access, Visualforce page access,

Pagelayouts, 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 standardprofiles.

- a. Contract Manager
- b. Read Only
- c. Marketing User
- d. Solutions Manager
- e. Standard User
- f. System Administrator.

We cannot deletedstandard ones

Each of thesestandard ones includes adefault set of permissions for all of the standard objects available on the platform.

2. Custom Profiles:

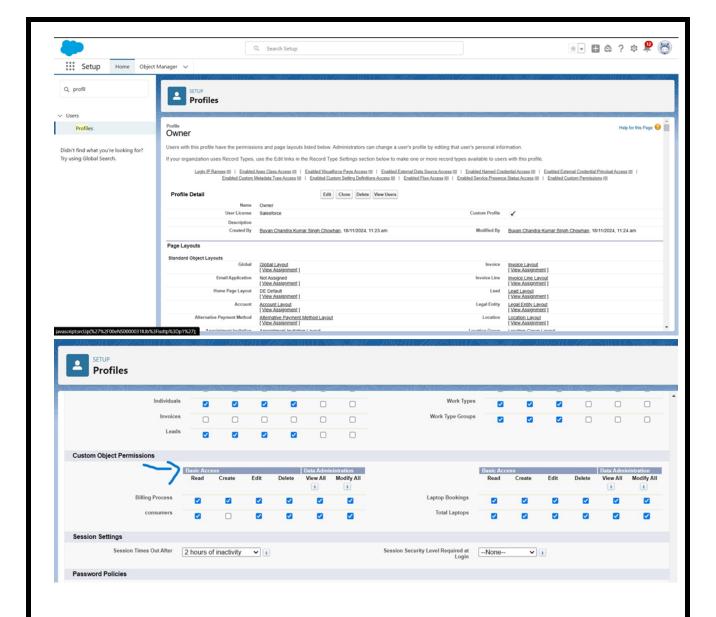
Custom ones definedby us.

They can be deleted if there are no users assigned with that particular one.

Owner Profile

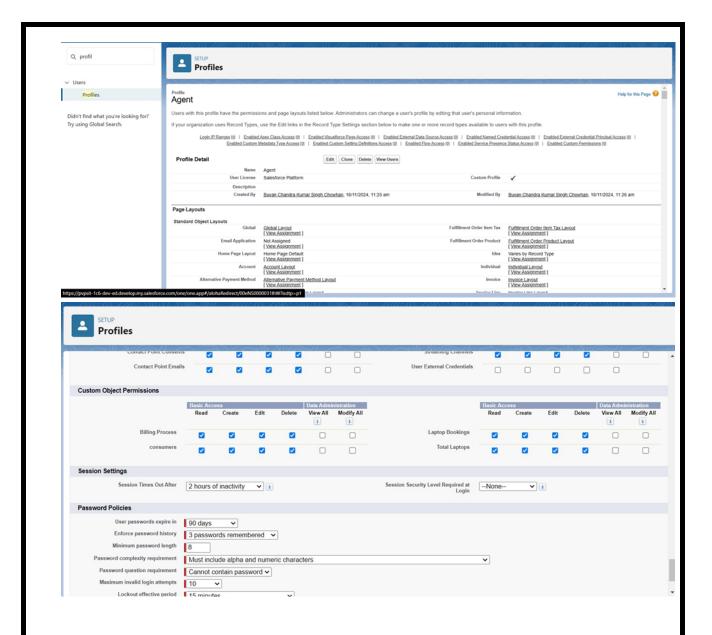
To create a new profile:

- 1. Go to setup >> type profiles in quick find box >> click on profiles >> clone the desired profile (Standard User) >> enter profile name (owner) >> Save.
- Scroll down to Custom Object Permissions and Give access permissions for Total Laptops, consumers, Laptop Bookingand Billing Processobjects as mentioned in the below diagram.
- 3. Give access and save



Agent Profile

- 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



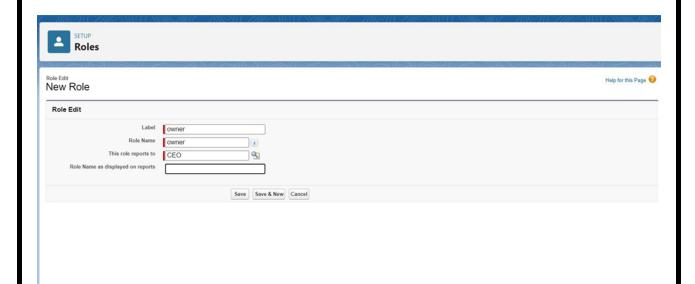
Roles and Hierarchy

A role in Salesforce defines 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 describes what a user could see within the Salesforce organization.

Creating ownerRole

Creating owner Role:

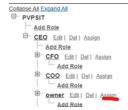
- 1. Go to quick find >> Search for Roles >> click on set up roles.
- 2. Click on Expand All and click on add role under whom this role works.
- 3. Give Labelas "owner" and Role name gets auto populated. Then click on Save.



Creating agentRole

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.
- 3. 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 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 accountidentifies the user, and the user account settings determine what features and records the user can access.

Create User

Creating Owner User

a. Go to setup - type users in quick find box - selectusers -click New user.

b. Fill in the fields

c. First Name: vicky

d. Last Name: shah

e. Alias : Give a Alias Name

f. Email id: Give your PersonalEmail id

g. Username: Username should be in this form: text@text.text

h. Nick Name: Give a Nickname

i. Role: owner

j. User license: Salesforce

k. Profiles: owner.

Creating Agent User

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: sharma

5. Alias: Give a Alias Name

6. Email id: Give your PersonalEmail id

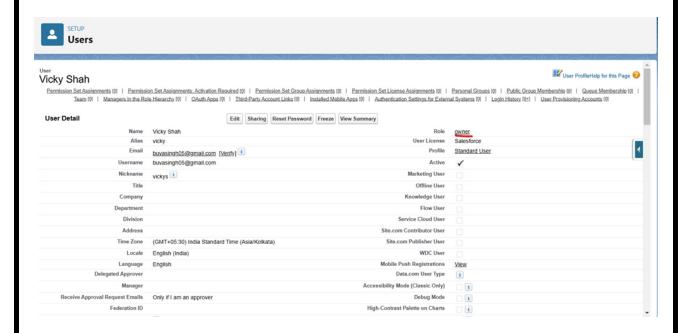
7. Username: Username should be in this form: text@text.text

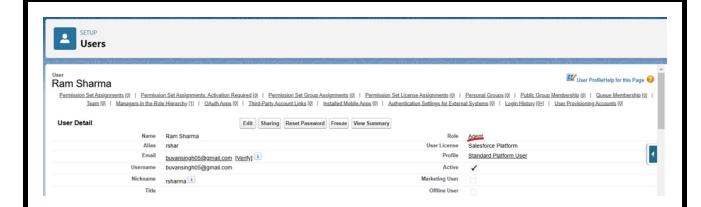
8. Nick Name: Give a Nickname

9. Role: Agent

10. User license: Salesforce platform

11. Profiles: standardplatform user.





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. Flows are built using a visual interfaceand can be created withoutany coding knowledge.

In Salesforce, "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 writing code. Salesforce Flow is a point-and-click tool that enables you to design and automatecomplex business processes, collect data, and interact with users in a visual interface.

Thereare 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 usedfor data entryand updates.

Autolaunched Flows: These are flows that are triggered by events, such as when a record is created or updated. They don't require user interaction and can be used for background automation.

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, using a drag- and-drop approach.

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

Scheduled Flows:These are flows that you can scheduleto run at specific times or intervals. They are often used for automating recurring tasks.

Flow Elements: Flow Builder offers various elements that you can use to create flows,

such as variables, decisions, loops, and more. These elements allowyou to build sophisticated logic into your flows.

Subflows: Subflows are reusable flow elements that you can incorporate into multiple flows, making it easier to manage and maintain complex processes. **Record-**

TriggeredFlows: Theseare flows that are triggered when records meet specified criteria. They are often used for automating record updates and related actions.

Why do we need to createa flow:

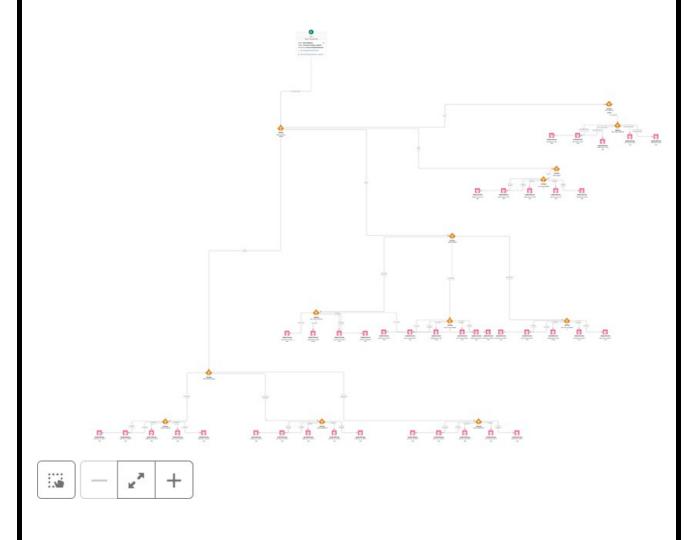
To get the Amount Field automatic by the selection of laptop types the Amount is generated Automatically in the amount field.

Create a Flow on dell laptop

- 1. Go to Setup and type "Flow" in the Quick Find box.
- 2. Select "Flow" and click "NewFlow".
- 3. Choose "Record-Triggered Flow" and click "Create".
- 4. Select "Laptop Booking" from the objectdropdown.
- 5. Set the trigger as "Arecord is Createdor Updated".
- 6. Optimize the ow for "Actions and Related Records".
- 7. Click "+" underthe ow 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 laptopmodel decision, add another decision for core type (i3, i5, i7).
- 11. Dene conditions for core types (e.g., "core type equals i3").
- 12. Add outcomes for Dell core types (i3, i5, i7).
- 13. After core type decision, add another decision for months (1-5).
- 14. Set conditions for months (e.g., "how many months equals1").
- 15. Add outcomes for 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.
- 1. Save and activate the flow.

Similarly we did for remaining laptops also Final Flow:



Apex

CreatingClasses:

Apex classes are modeled on their counterparts in Java. You'll dene, instantiate, and extend

classes, and you'll work with interfaces, Apex class versions, properties, and other related class concepts.

a. Class: As in Java, you can create classesin Apex. A class is a templateor blueprint

from which objects are created. An object is an instance of a class.

- b. **Object:** Object is an instance of a class, where it can access all the properties that are presentin a class i.e, variablesand methods. Steps to create a class in APEX:
- 1. Login to the trailhead accountand navigate to the gear account in the top right corner.
- 2. Then we can see the Developerconsole. Click on the developerconsole and you will navigate to a new console window.
- 3. Then you can see many tools in the Toolbarof the new console window. Click on File, New and Apex Class.
- 4. Enter the name of the class to create a new classle.

ApexTrigger code:

Laptop_Bookings_c-as per your org(go to laptop bookingsobject and copy from that object api name).

Apex Class

```
public class LaptopBookingHandler {
  public staticvoid 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 Pleasecontinue your journeywith us, whilewe try to provide you withgood quality
resources. \n Laptop Amount= ' + lap.Amount_c + ' \n core type
= '+lap.Processors_c +' \n Laptop type = '+lap.Laptop_names_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 bookingobject and copy from that).
- core_c (as per your org go to laptop bookingobject and copy from that).
 4.Laptop_type_c.(as per your org go to laptop bookingobject 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

Reportsgive you accessto your Salesforce data. You can examine your Salesforce data in almost infinite combinations, display it in easy-to-understand formats, and share the resulting insights with others. Before building, reading, and sharing reports, review these reporting basics.

In Salesforce.com we can easilygenerate reports in different styles. And can create reports in a very short time and also schedule the reports. Salesforce provides a powerful suit of analytic tools to help you organize, view and analyze your data.

Types of Reports in Salesforce:

1. **Tabula Reports:**Simple listing of data without any subtotals. This type of reports provide you most basicallyto look at your data. Use tabularreports when you want a simple list or a list of items with a grand total.

Example: This type of reports are used to list all accounts, List of contacts, List of opportunities.....etc.....

2. **Summary Reports:** This type of reports providea listing of data with groupings

and sub totals. Use summary reports when you want subtotals based on the value of a particular field or when you want to create a hierarchically grouped report, such as sales organized by year and then by quarter.

Example: All opportunities for your team sub totaledby Sales Stageand Owner.

3. **Matrix Reports:** This type of reports allow you to group records both by row and by column. A comparison of related totals, with totals by both row and column. Use matrix reports when you want to see databy two different dimensions that aren't related, such as date and product.

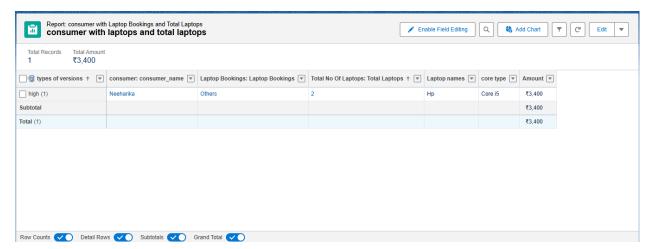
Example: Summarize opportunities by month vertically and by accounthorizontally.

4. **Joined Reports:** Blocks of related information in a singlereport. This type of reports enable you to adopt five differentblocks to displaydifferent types of related data. Each block can own unique columns, summary fields, formulas, filters and sort order. Use joined reports to group and show data from multiple report types in different views.

Example: You can build a report to show opportunity, case and activitydata for your accounts.

Create Report

- a. Go to the app -click on the reports tab
- b. Click New Report.
- c. Select reporttype from categoryor from reporttype panel or from search panel "consumer with Laptop Bookings and total laptops">> click on start report.
- d. Customize your report
- e. Add fields from left pane as shown below
- f. Click the column drop down and select bucketlist.
- g. Follow the picture and save or run it.

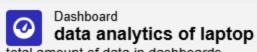


Dashboards

Dashboards help you visually understand changing business conditions so you can make decisions based on the real-time data you've gathered with reports. Use dashboards to help users identify trends, sort out quantities, and measure the impact of their activities. Before building, reading, and sharing dashboards, review these dashboard basics.

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 folderlabel as "totalrent amount".
- 4. Folder unique names will be auto populated.
- 5. Click save.



total amount of data in dashboards

As of 20-Nov-2024, 4:43 pm·Viewing as Shree Harsha Gedela

