

PROJECT : A CRM APPLICATION FOR LAPTOP RENTALS



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1. Project Overview

The CRM Application for Laptop Rentals is designed to streamline the process of renting laptops to customers while ensuring an excellent customer experience. The application leverages Salesforce's robust CRM capabilities to manage customer relationships, monitor inventory, and automate communications. By optimizing these processes, the application aims to improve operational efficiency and increase customer satisfaction. A key feature of this project is automated email communication with potential customers to enhance engagement and retention.

2.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 dashboard to 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:** Develop tabs for easy customer onboarding, rental requests, and staff access to relevant information.
7. **Comprehensive Reporting:** Generate detailed 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.

3.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 customer information.

Flows and Automation: Implemented automation for rental bookings, payment processing, and inventory updates to 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: Built dynamic dashboards and reports to provide real-time insights into rental trends, rental revenue etc.

4.Detailed Steps to SolutionDesign

Topic no.	Topic Name
1	Creating objects: <ul style="list-style-type: none">a. Create Total Laptops Objectb. Create consumer objectc. Create Laptop Bookings objectd. Create Billing process object
2	Create CustomTabs
3	Create Lightning App
4	Fields: <ul style="list-style-type: none">a. Creating The FieldIn Consumer Objectb. Creating The Field In Laptop Bookings Objectc. To Create A Fieldsand Relationship To Laptop Bookings And Total Laptops Objectd. Creation of Fields and Relationship For Billing Process Objecte. Creating The Field In Total Laptops Object
5	Validation Rule: Creating The Validation Rule For Phone Number Field In Consumer Object
6	Profiles: <ul style="list-style-type: none">a. Owner Profileb. Agent Profile
7	Roles And Hierarchy: Creating OwnerRole
8	Users: Create User

Topic no.	Topic Name
9	Flows: <ul style="list-style-type: none"> a. Create A Flow On Dell Laptop b. Creating Flow On 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: <ul style="list-style-type: none"> a. Create Report b. Sharing Report To Owner
12	Dashboards: <ul style="list-style-type: none"> a. Create Dashboard Folder b. Create Dashboard

1. Creating Objects

Objects in Salesforce are database tables that allow you to store data specific to your organization. Each object comprises records (rows) and fields (columns) that help organize and structure your data efficiently. 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 specific 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.

Custom Object Definition Edit

Custom Object Information

The singular and plural labels are used in tabs, page layouts, and records.

Label: Example: Account
Plural Label: Example: Accounts

Object Name: Example: Account

Description

Context-Sensitive Help Setting: Open the standard Salesforce.com Help & Training window
 Open a window using a Visualforce page

Content Name: None

Enter Record Name Label and Format

The Record Name appears in page layouts, key lists, related lists, and search results. For example, the Record Name for Account is "Account Name" and for Case it is "Case Number". Note that the Record Name field is always called "Name" when referenced via the API.

Record Name: Example: Account Name

Data Type: Text

Optional Features

- Allow Reports
- Allow Activities
- Track Field History

Object Classification

When these settings are enabled, this object is classified as an Enterprise Application object. When these settings are disabled, this object is classified as a Light Application object. [Learn more](#).

- Allow Sharing
- Allow Bulk API Access
- Allow Streaming API Access

Deployment Status

- In Development
- Deployed

Search Status

When this setting is enabled, your users can find records of this object type when they search. [Learn more](#).

Allow Search

Object Creation Options (Available only when custom object is first created)

- Add Notes and Attachments related list to default page layout
- Launch New Custom Tab Wizard after saving this custom object

Save **Save & New** **Cancel**

1. Click on Save.

1.1 Create Total Laptops Object

To Create an object:

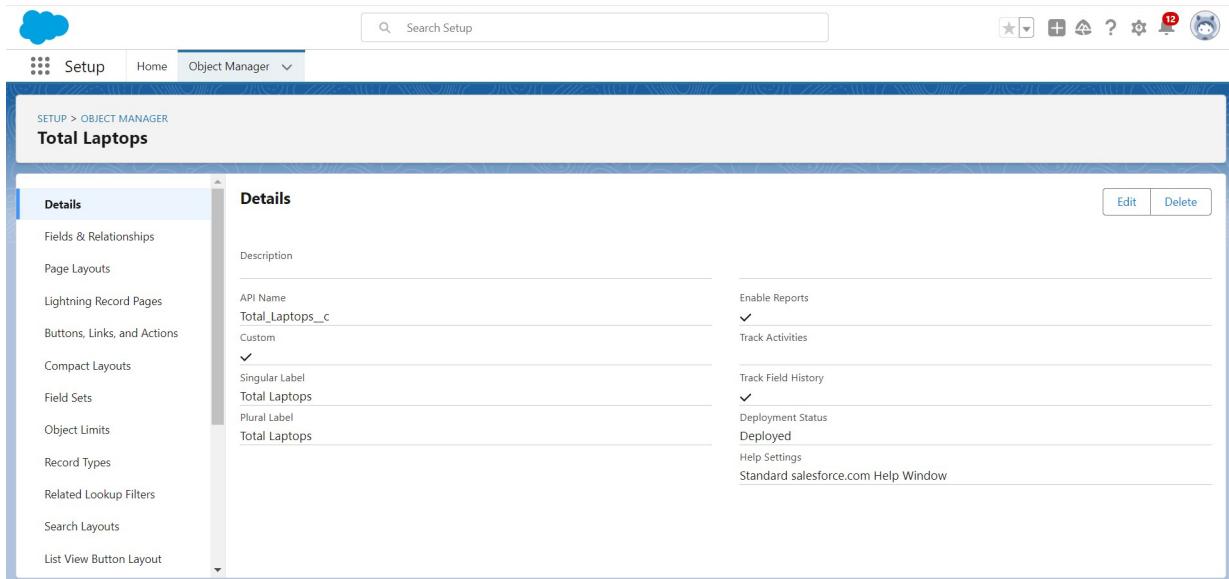
From the Setup page >>Click on Object Manager >>Click on create >> Click on Custom Object.

1. Enter the labelname >> Laptops
2. Plural label name >> Laptops
3. Enter Record Name 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

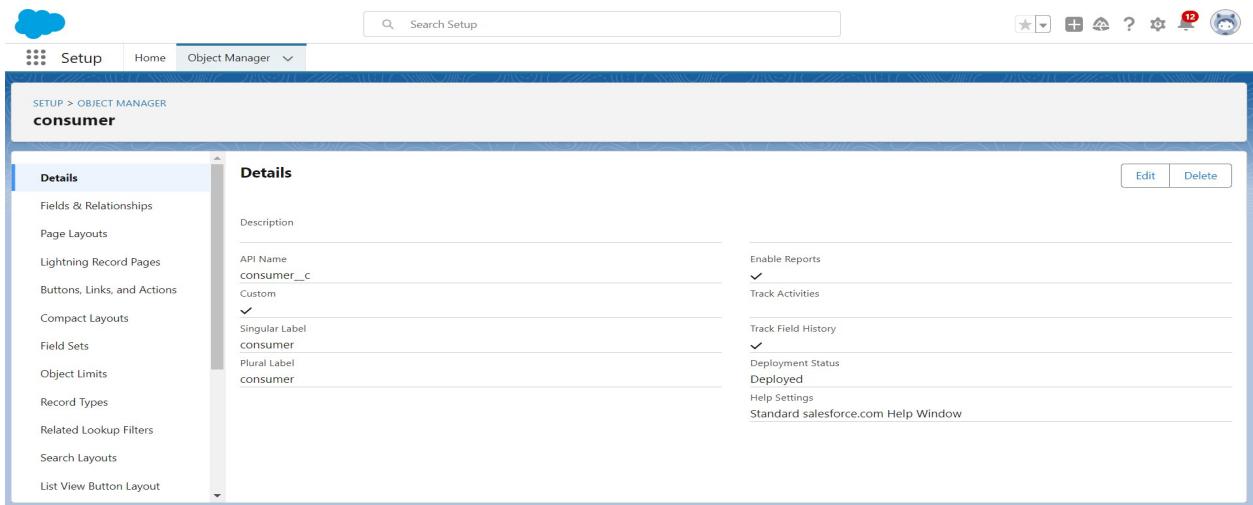


1.2 Create Consumer Object

To Create an object:

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

1. Enter the labelname >> 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

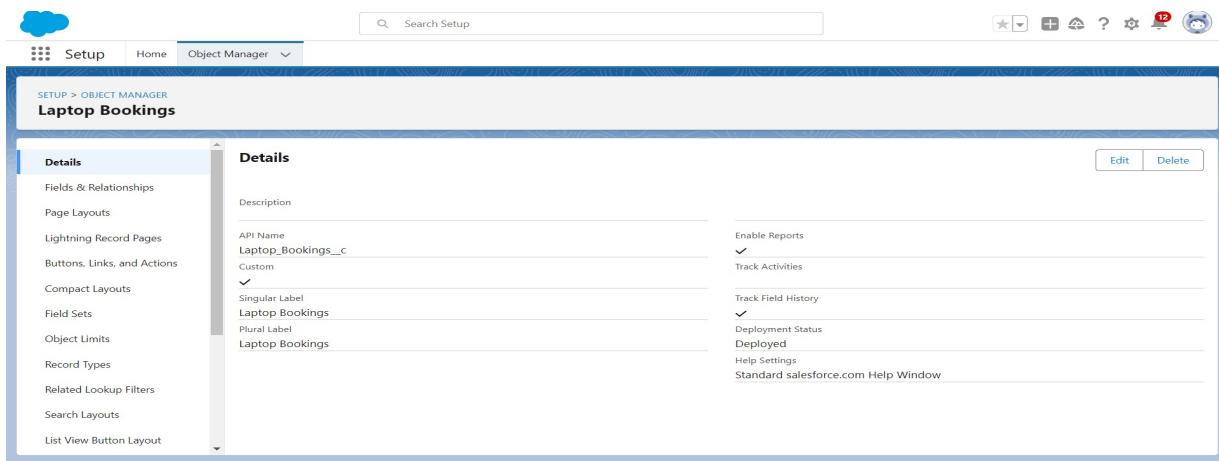


1.3 Create Laptop BookingsObject

To Createan object:

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

1. Enter the labelname >> 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.
- i. Allow search >>Save

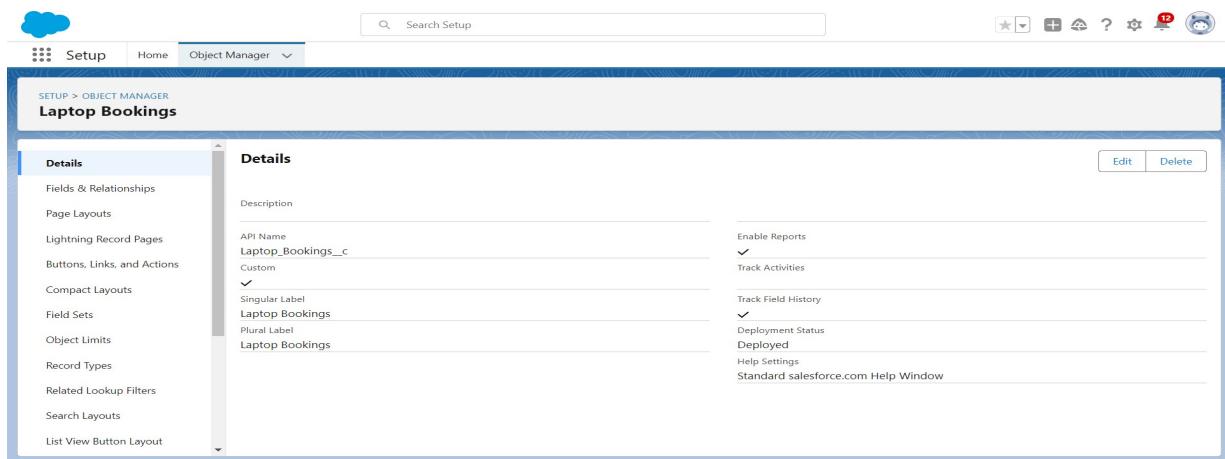


1.4 Create Billing ProcessObject

To Createan object:

- ii. From the Setup page >>Click on Object Manager >>Click on create
>> Click on Custom Object.

1. Enter the label name >> Billing Process
 2. Plural label name >> Billing Process
 3. Enter Record Name
Label and Format
Record Name >>
Billing
ProcessName Data
Type >> Name
- iii. Click on Allow reports, Allow search and Track Field History.
- iv. Allow search >> Save



2.Creating Tabs

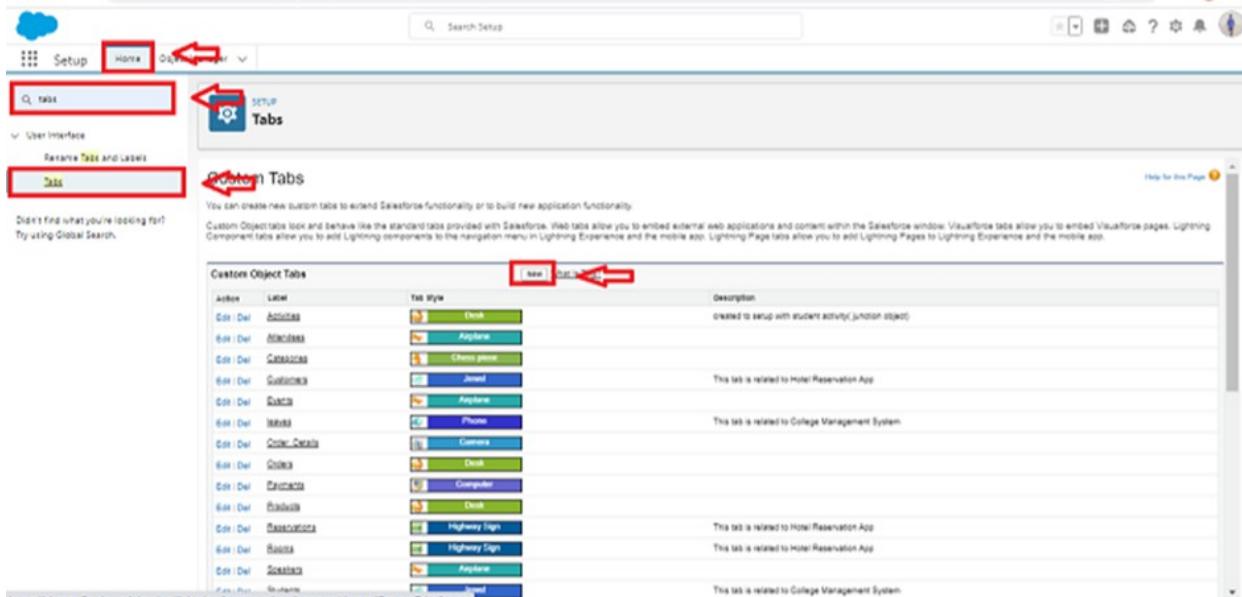
A **tab** is a user interface component that helps users organize, access, and manage records of different **objects** within the platform. Salesforce objects represent different types of data, such as Accounts, Contacts, Opportunities, or CustomObjects, and each

object has its own tab. Here's a more detailed explanation of what a tab is and how it functions.

2.1 Creating Total Laptops Tab:

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.

2.2 Creating Remaining tabs:

5. Now create the Tabs for the remaining Objects, they are “consumer,Laptop Booking,Billing process”.
6. Follow the same steps as 2.1 .

The screenshot shows the Salesforce Setup interface. The top navigation bar includes a cloud icon, 'Setup', 'Home', 'Object Manager', and a search bar labeled 'Search Setup'. On the far right are various icons for navigation and help. The main content area has a blue header 'SETUP Tabs'. On the left, a sidebar titled 'User Interface' has sections for 'Rename Tabs and Labels' and 'Tabs', with 'Tabs' currently selected. A message at the bottom of the sidebar says 'Didn't find what you're looking for? Try using Global Search.' The main content area is titled 'Custom Tabs' and contains a sub-section 'Custom Object Tabs'. It lists five tabs with their labels and styles:

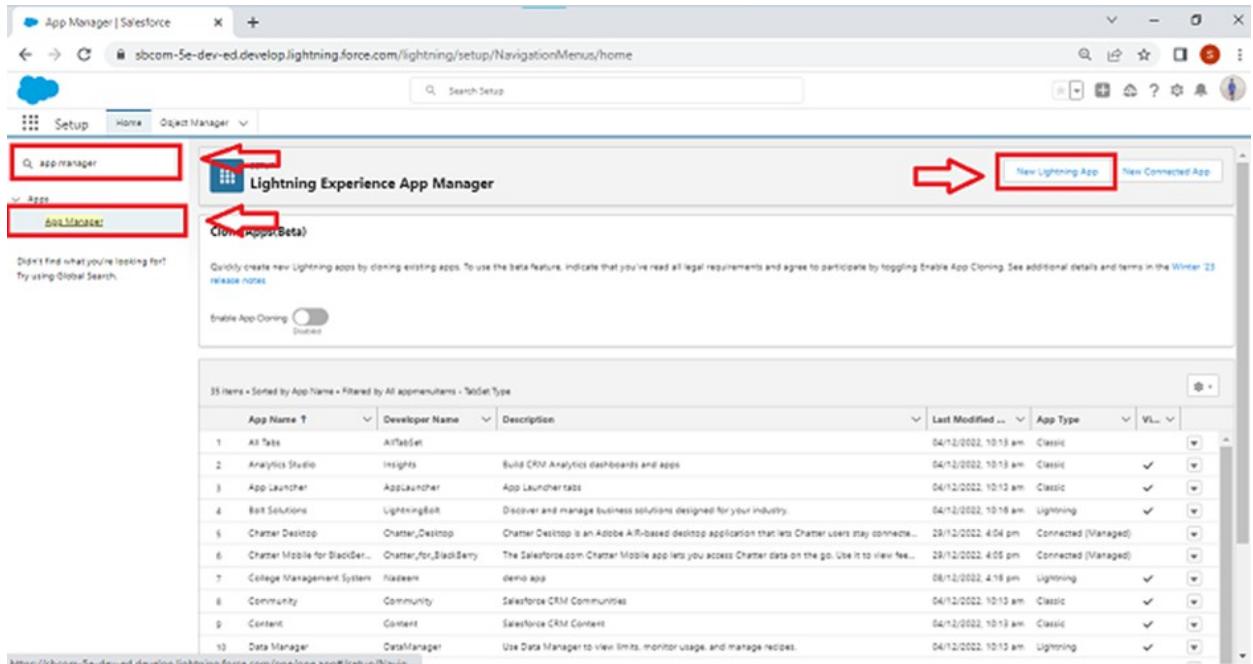
Action	Label	Tab Style	Description
Edit Del	Billing Process	Shopping Cart	
Edit Del	consumer	People	
Edit Del	Laptop Bookings	Presenter	
Edit Del	Total Laptops	Laptop	

Below this are sections for 'Web Tabs' (No Web Tabs have been defined) and 'Visualforce Tabs' (No Visualforce Tabs have been defined). Each section has 'New' and 'What Is This?' buttons.

3.Create Lightning App

To Create a 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 related to your app.
4. To Add Navigation Items:
Select the items(Total Laptops, consumer,Laptop Booking,Billing Process) from the searchbar and move it using the 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 specific 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 Fields In Consumer Object

The screenshot shows the Salesforce Object Manager interface for the 'consumer' object. The left sidebar lists various setup options like Page Layouts, Lightning Record Pages, Buttons, Links, and Actions, Compact Layouts, Field Sets, Object Limits, Record Types, Related Lookup Filters, Search Layouts, and List View Button Layout. The main content area is titled 'Fields & Relationships' and displays a table of existing fields. The table columns are FIELD LABEL, FIELD NAME, DATA TYPE, CONTROLLING FIELD, and INDEXED. The fields listed are:

FIELD LABEL	FIELD NAME	DATA TYPE	CONTROLLING FIELD	INDEXED
Address	Address_c	Text Area(255)		
consumer Status	consumer_Status_c	Picklist		
consumer_name	Name	Text(80)	✓	
Created By	CreatedBy	Lookup(User)		
Email	Email_c	Email		
Last Modified By	LastModifiedBy	Lookup(User)		
Owner	OwnerId	Lookup(User,Group)	✓	
Phone number	Phone_number_c	Phone		

1.Create Phone numberfield:

- Select Data Type as a “Phone” and click on next.
- Field Label: Phone number

- Field Name : gets auto generated
- Click the required option checkbox.

2.Create Email field:

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

3.Create Address field:

- Select Data Type as a “Text Area” and click on next.
- Field Label: Address
- Field Name : gets auto generated

4.Create Consumer status field:

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

4.2 Creating The Fields In LaptopBookings Object

1.Create Laptop Names field:

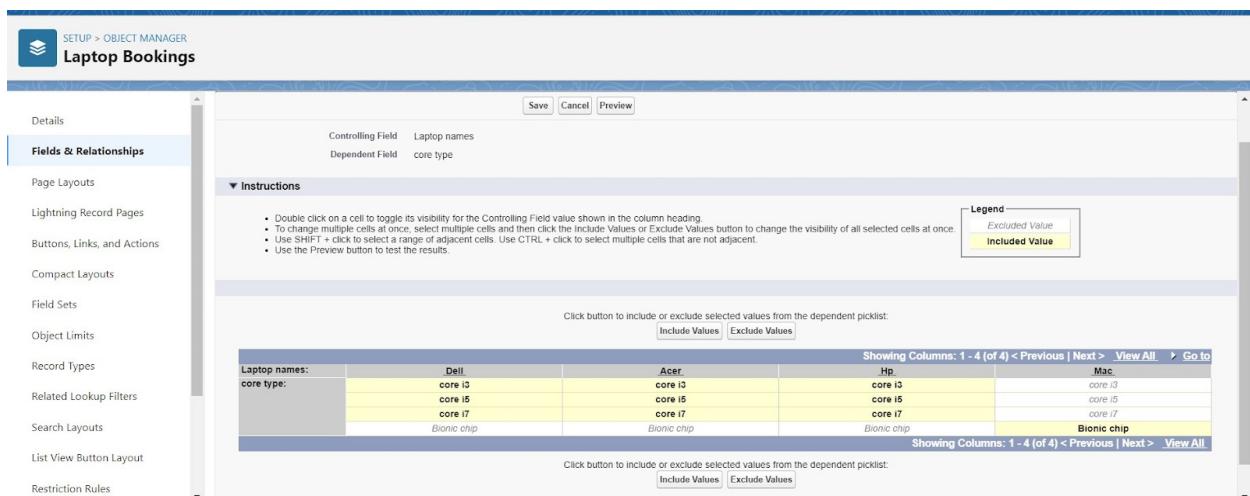
- Select Data Type as a “Picklist” and click on next.
- Field Label: Laptop Names
- Picklist values are: 1.Dell 2.Acer 3.Hp 4.Mac
- Field Name : gets auto generated

2.To create Core Type field:

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

3.To create field dependency in the Laptop Booking Object:

- Click field dependency and next.
- Select Controlling Field as Laptop Names and Dependent Field as Core Type
- 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:

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

object.

- Now click on “Fields & Relationships” >> New Select Data Type as a “Master-Detail Relationship” and Click on Next.
- Click on the Related to drop down and Select the “consumer” object and click on Next
- Fill the following:
 Change the Field
 Label: Consumer
 Field Name :It's gets auto generated
- Click on Next >> Next >> Save and new.

2. Create "Currency" field

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

3. Create relationship to "Total Laptops" object

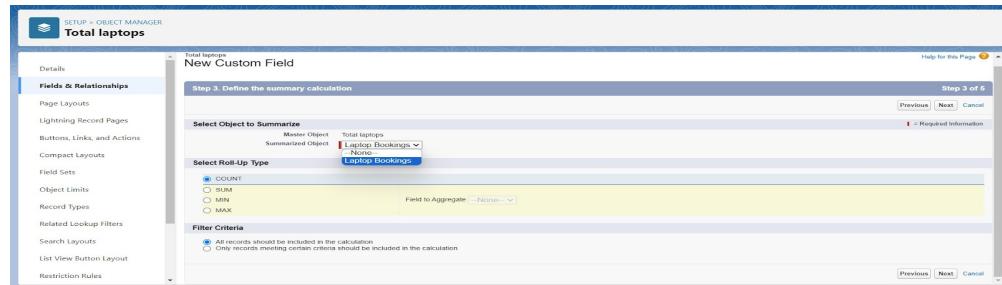
- Select Laptop booking object in the object manager.
- Now click on “Fields & Relationships” >> New
- Select Data Type as a “Lookup Relationship” and Click on Next
- Click on the Related to drop down and Select the “Total Laptops” object and click on Next
- Change the Field Label: Total No Of Laptops
- Field Name :It's gets auto generated
- Click on Next >> Next >> Save and new.

4. Create Email field in Laptop Bookings Object

5. Create "Rollup Summary" in Total Laptops Object

- Field Label: Laptops delivered
- 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



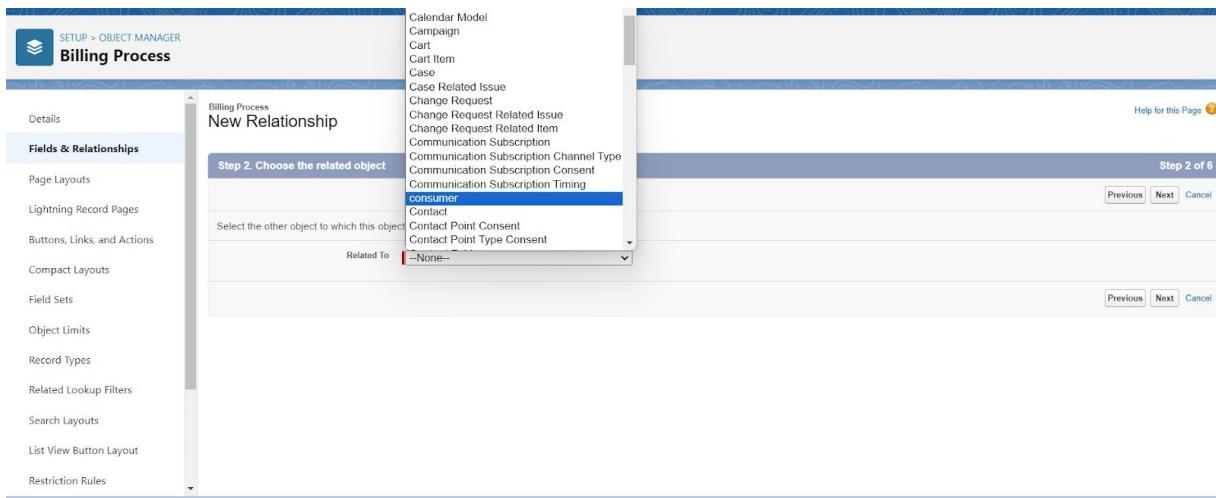
8. Create "Laptops Available" field:
 - Field Label: Laptops Available
 - FieldName : It's gets auto generated
 - Select the Formula Return Type as "Number"
 - Select the Decimal places as "0" and Click on Next
 - Click on the AdvancedFormula and Enter the value in formulabox "50 - Total_no_of_laptops_r.Laptops_delivered_c"
9. Create "how many months" field in Laptop Bookings object:
 - Label: how many months
 - Picklist values are: 1, 2, 3, 4, 5

4.4 Creation of Fields & Relationship for Billing ProcessObject

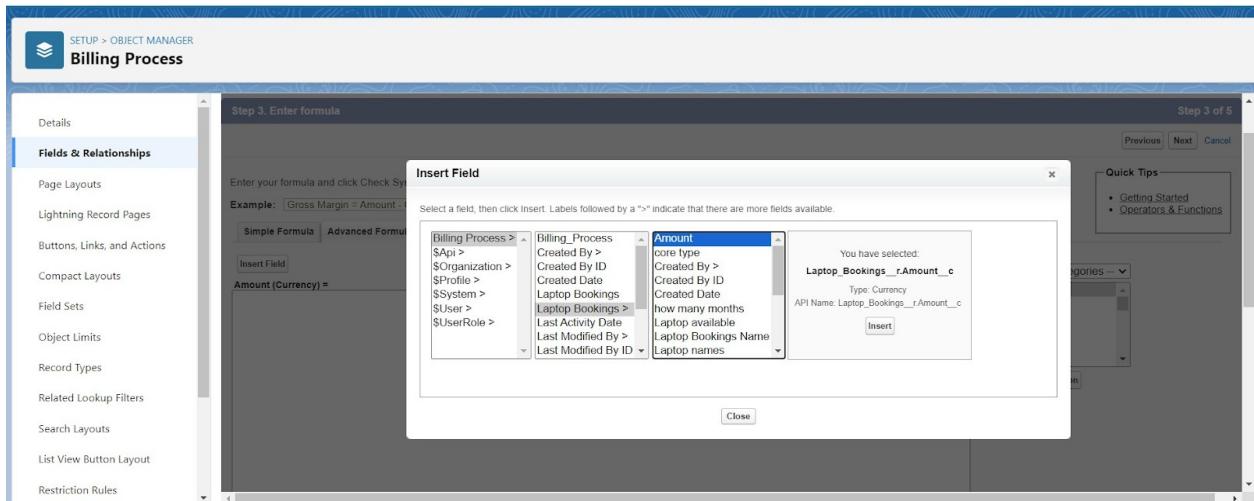
1. Create relationship for consumer object:
 - Now click on “Fields& Relationships” >>New in Billing Process object
 - Select Data Type as a “Master-detail Relationship”
 - Click on Next Click on the Related to drop down

and Select the consumer object and click on Next

- Click on the Relatedto drop down and Select the consumerobject and click on Next
- 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:
 - Select Data Type as a "Formula" and Click on Next
 - Enter the Field label:Amount



- formula: "Laptop_Booking__r.Amount__c"

4.5 Creating the field in Total Laptops object

- Go to setup >>click on Object Manager >>type object name(Total Laptops) in search bar >> click on the object.
- Now click on “Fields& Relationships” >>New Select Data type as a “Formula” and Click on Next
- Field Label:Laptops Available FieldName : It's gets auto generated Select the Formula Return Type as “Number”

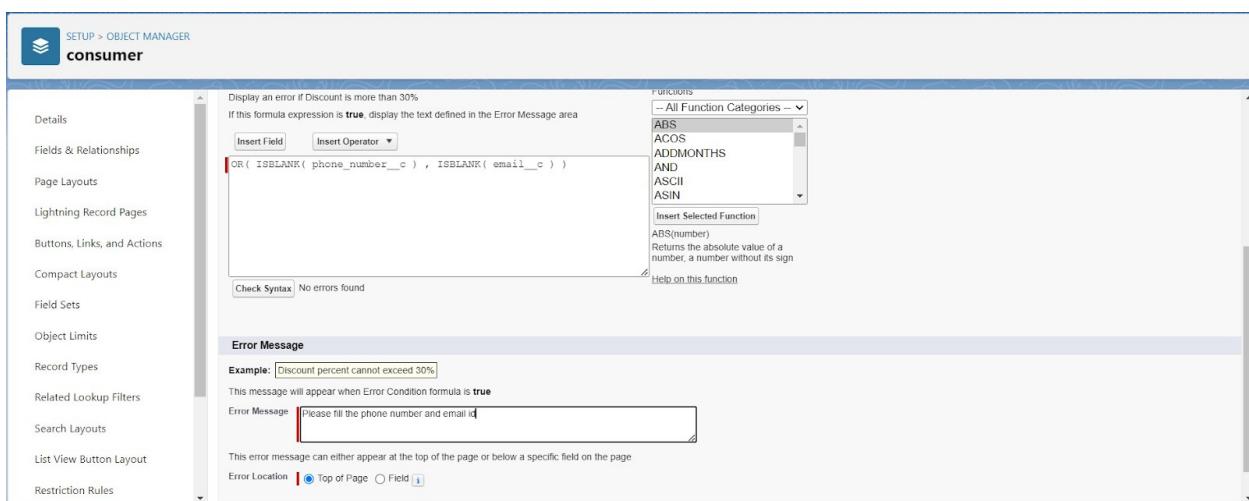
5. Validation Rule

Validation rules are applied when 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 triggers an error message and 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.

Click on the validation rule >> click New

1. Click on the validation rule >> click New.



2. Enter the Rule name as "Phonenumberoremailblankrule".
3. Enter the description as "phone number and email number should not be blank".
4. Enter the formula as "**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

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

The screenshot shows the Salesforce Setup interface. The top navigation bar includes 'Setup', 'Home', and 'Object Manager'. A search bar at the top right contains the text 'profiles'. The main content area has a sidebar with 'Users' and 'Profiles' selected. The main panel title is 'Profiles' with a sub-section 'owner'. It displays a list of permissions: 'Login IP Ranges', 'Enabled Apex Class Access', 'Enabled Visualforce Page Access', 'Enabled External Data Source Access', 'Enabled Named Credential Access', 'Enabled External Credential Principal Access', 'Enabled Custom Metadata Type Access', 'Enabled Custom Setting Definitions Access', 'Enabled Flow Access', and 'Enabled Service Presence Status Access'. Below this is a 'Profile Detail' section with fields: Name (owner), User License (Salesforce), Description (empty), Created By (Hima Meghana Siddi, 29/12/2024, 4:12 pm), Modified By (Hima Meghana Siddi, 29/12/2024, 6:16 pm), and a 'Custom Profile' checkbox which is checked. At the bottom, there's a 'Page Layouts' section showing standard object layouts for various objects like Global, Invoice, Email Application, Invoice Line, Home Page Layout, Lead, Account, Legal Entity, and Alternative Payment Method.

- ii. 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.

The screenshot shows the Salesforce Setup interface under the Profiles section. It displays a grid of custom object permissions. The columns represent basic access (Read, Create, Edit, Delete) and data administration (View All, Modify All). The rows include standard objects like Ideas, Images, Incidents, Individuals, and more, along with specific objects like Billing Process and consumer. Checkmarks indicate the permissions granted for each object.

Object	Basic Access				Data Administration	
	Read	Create	Edit	Delete	View All	Modify All
Gateway Provider Payment Method Types						
Guest User Anomaly Event Stores						
Ideas	✓	✓				
Images						
Incidents						
Individuals	✓	✓	✓	✓		
Inventory Reservations						
Invoices						
Work Orders						
Web Cart Documents						
Web Store Inventory Sources						
Work Plans						
Work Plan Templates						
Work Step Templates						
Work Types						
Work Type Groups						

6.2 Create Agent Profile

- iii. Go to setup>> type profiles in quick find box >> click on profiles>> clone the desired profile (Standard PlatformUser) >> enter profile name (Agent) >> Save.

iv

The screenshot shows the Salesforce Setup interface under the Profiles section. It displays a grid of custom object permissions. The columns represent basic access (Read, Create, Edit, Delete) and data administration (View All, Modify All). The rows include standard objects like Communication Subscriptions, Contacts, and more, along with specific objects like Billing Process and consumer. Checkmarks indicate the permissions granted for each object.

Object	Basic Access				Data Administration	
	Read	Create	Edit	Delete	View All	Modify All
Communication Subscriptions	✓	✓	✓	✓	□	□
Communication Subscription Channel Types	✓	✓	✓	✓	□	□
Communication Subscription Consents	✓	✓	✓	✓	□	□
Communication Subscription Timings	✓	✓	✓	✓	□	□
Contacts	✓	✓	✓	✓	□	□
Contact Point Addresses	□	□	□	□	□	□
Contact Point Consents	✓	✓	✓	✓	□	□
Contact Point Emails	✓	✓	✓	✓	□	□
Individuals	✓	✓	✓	✓	✓	✓
Labels	✓	✓	✓	✓	✓	✓
Locations	□					
Party Consents	✓	□	✓	□	□	□
Push Topics	✓	✓	✓	✓	✓	✓
Sellers	✓	✓	✓	✓	✓	✓
Streaming Channels	✓	✓	✓	✓	✓	✓
User External Credentials	✓	✓	✓	✓	✓	✓

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 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.

Steps:

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

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

7.1 Create Owner role

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

The screenshot shows the 'Role Edit' page for creating a new role. The 'Label' field is filled with 'owner'. The 'Role Name' field also displays 'owner'. The 'This role reports to' dropdown is set to 'CEO'. The 'Role Name as displayed on reports' field is empty. At the bottom, there are three buttons: 'Save', 'Save & New', and 'Cancel'.

2. Click and save it .

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.

The screenshot shows the Salesforce Setup interface with the 'Roles' page selected. The left sidebar shows navigation options like 'Users', 'Sales', 'Service', and 'Case Teams'. The main content area is titled 'Creating the Role Hierarchy' and displays a tree view of roles. The hierarchy starts with 'GVPC' at the top level, which has 'Add Role' and 'CEO' as children. 'CEO' has 'Add Role' and 'CFO' as children. 'CFO' has 'Add Role' and 'COO' as children. 'COO' has 'Add Role' and 'owner' as children. 'owner' has 'Add Role' and 'Agent' as children. 'Agent' has 'Add Role' and 'SVP.Customer.Service & Support' as children. 'SVP.Customer.Service & Support' has 'Add Role' and 'Customer.Support.International' as children. 'Customer.Support.International' has 'Add Role' and 'Customer.Support.North America' as children. 'Customer.Support.North America' has 'Add Role' and 'Installation & Repair Services' as children. Each role item includes 'Edit | Del | Assign' links.

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

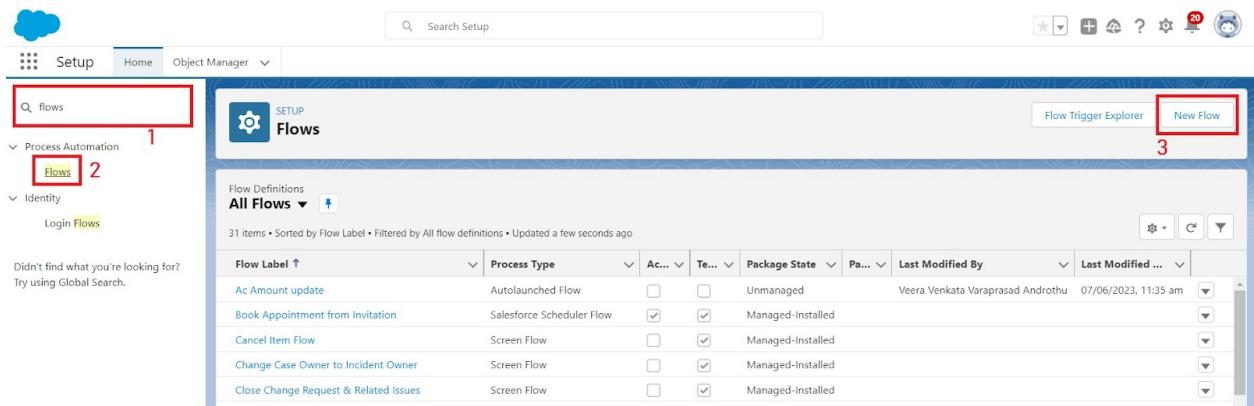
1. Go to setup - type users in quick find box - select users -click New user.
2. Fillin the fields
 - a. First Name : vicky
 - b. Last Name : y
 - c. Alias : Give a Alias Name
 - d. Email id : Give your PersonalEmail id
 - e. Username : Username shouldbe in this form: text@text.text
 - f. Nick Name : 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.Flow

"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.



- i. Select the Record-triggered flow and Click on Create.
- ii. Select the Object as a Laptop Booking in the Drop down list.
- iii. Select the TriggerFlow when: "A record is Created or Updated".
- iv. Select the Optimize the flow for: "Actions and Related Records" and Click on Done.

Configure Start

Select Object

Select the object whose records trigger the flow when they're created, updated, or deleted.

* Object
Laptop Bookings

Configure Trigger

* Trigger the Flow When:
 A record is created
 A record is updated
 A record is created or updated
 A record is deleted

Set Entry Conditions

Specify entry conditions to reduce the number of records that trigger the flow and the number of times the flow is executed. Minimizing unnecessary flow executions helps to conserve your org's resources.

If you create a flow that's triggered when a record is updated, we recommend first defining entry conditions. Then select the **Only when a record is updated to meet the condition requirements** option for When to Run the Flow for Updated Records.

Cancel Done

- Under the Record-triggered Flow Click on “+” Symbol and In the Drop down List select the “Decision Element”.
- Enter the Details Label: Field should be Update, API name: Gets Automatically Generated.
- 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 outcome as False
 - e. Click done.
- Beside dell there is a symbol ‘+’ click on that. Again select decision
- Enter the Details Label: Field should Update(any one u want), API name: Gets Automatically Generated.
- 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.

- Add the dell i5 and dell i7 outcome details in the similar way

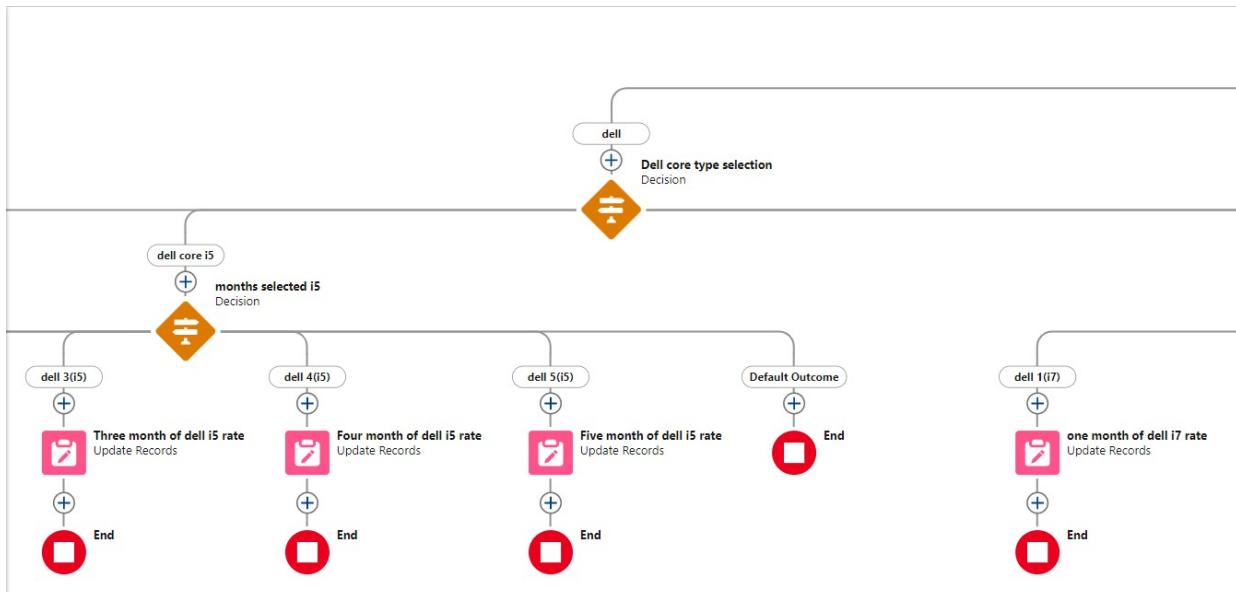
The screenshot shows the 'Edit Decision' screen. At the top, there are fields for 'Label' (set to 'field updated') and 'API Name' (set to 'field_updated'). Below this is a 'Description' field with some placeholder text. The main area is titled 'Outcomes' with the sub-instruction: 'For each path the flow can take, create an outcome. For each outcome, specify the conditions that must be met for the flow to take that path.' There is a table for outcomes:

OUTCOME ORDER	OUTCOME DETAILS	Actions
+ (highlighted)	*Label: dell core i3 *Outcome API Name: dellcore_i3 Condition Requirements to Execute Outcome: All Conditions Are Met (AND)	Delete Outcome
dell core i5		
dell core i7		

Below the outcomes is a 'Default Outcome' section. A dropdown menu is open over the 'dell core i3' row, showing the 'Default Outcome' option. At the bottom right are 'Cancel' and 'Done' buttons.

- Go to the flow page select '+' after core i3 then again select the decision.
- Enter the Details Label: months selected, API name: Gets Automatically Generated.
- Enter the Outcome Details Label: dell 1(i3) , Outcome API name: Gets Automatically Generated.
 - a. Resource: Select Record.how many months
 - b. Operator: Select Equals
 - c. Value: 1

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



9.2 Create A Flow on Acer Laptop

1.Enter the Details Label:Acer core type selection, API name:
Gets Automatically Generated.

2.Select the Outcome DetailsLabel: acer core i3 , Outcome API
name: Gets Automatically Generated.

- Resource: Select Record.core type.
- Operator: Select Equals.
- Value: Selectcore i3.

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

Edit Decision

Outcomes For each path the flow can take, create an outcome. For each outcome, specify the conditions that must be met for the flow to take that path.

OUTCOME ORDER	OUTCOME DETAILS	Condition Requirements to Execute Outcome	Action
+ acer core i3	*Label acer core i3 *Outcome API Name acer_core_i3	All Conditions Are Met (AND)	Delete Outcome
+ acer core i5			
+ acer core i7			

Default Outcome

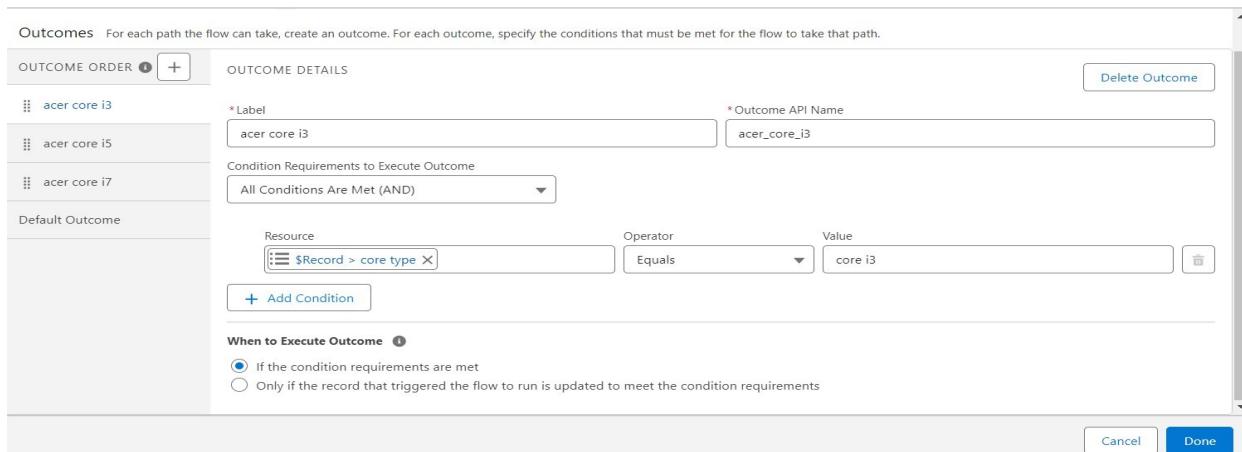
Resource: \$Record > core type, Operator: Equals, Value: core i3

+ Add Condition

When to Execute Outcome

If the condition requirements are met
 Only if the record that triggered the flow to run is updated to meet the condition requirements

Cancel Done



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

Edit Decision

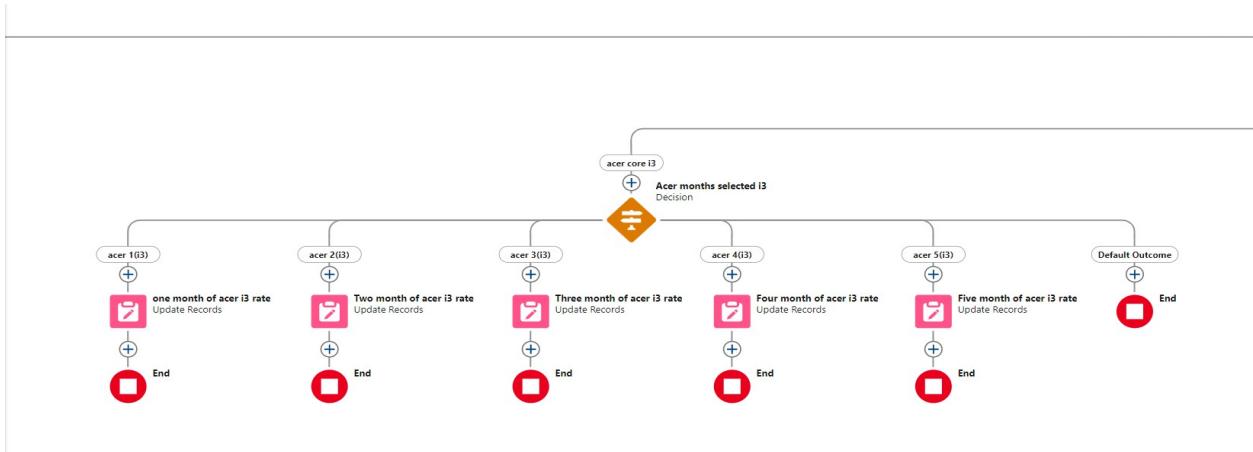
* Label	* API Name																			
acer months selected	acer_months_selected																			
Description																				
<pre>Outcomes For each path the flow can take, create an outcome. For each outcome, specify the conditions that must be met for the flow to take that path.</pre>																				
<table border="1"> <thead> <tr> <th>OUTCOME ORDER</th> <th>OUTCOME DETAILS</th> <th></th> </tr> </thead> <tbody> <tr> <td>acer 1(i3)</td> <td>* Label acer 1(i3)</td> <td>* Outcome API Name acer_1_i3</td> </tr> <tr> <td>acer 2(i3)</td> <td colspan="2">Condition Requirements to Execute Outcome All Conditions Are Met (AND)</td> </tr> <tr> <td>acer 3(i3)</td> <td colspan="2"></td> </tr> <tr> <td>acer 4(i3)</td> <td colspan="2"></td> </tr> <tr> <td>acer 5(i3)</td> <td>Resource \$Record > how many months</td> <td>Operator Equals</td> <td>Value 1</td> </tr> </tbody> </table>		OUTCOME ORDER	OUTCOME DETAILS		acer 1(i3)	* Label acer 1(i3)	* Outcome API Name acer_1_i3	acer 2(i3)	Condition Requirements to Execute Outcome All Conditions Are Met (AND)		acer 3(i3)			acer 4(i3)			acer 5(i3)	Resource \$Record > how many months	Operator Equals	Value 1
OUTCOME ORDER	OUTCOME DETAILS																			
acer 1(i3)	* Label acer 1(i3)	* Outcome API Name acer_1_i3																		
acer 2(i3)	Condition Requirements to Execute Outcome All Conditions Are Met (AND)																			
acer 3(i3)																				
acer 4(i3)																				
acer 5(i3)	Resource \$Record > how many months	Operator Equals	Value 1																	
<input type="button" value="Delete Outcome"/> <input type="button" value="Cancel"/> <input type="button" value="Done"/>																				

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

6. 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.

7. Perform these steps for core i5 and i7.

8. Click done.



9.3 Create A Flow On Hp Laptop

1. Go to flow page

2. Beside hp there is a symbol '+' click on that.
3. Enter the Details Label: HP core selection, API name: Gets Automatically Generated.
4. Select the Outcome Details Label: hp core i3 , Outcome API name: Gets Automatically Generated.
 - Resource: Select Record.core type.
 - Operator: Select Equals.
 - Value: Select hp i3.
5. Similarly create outcomes for hp core i5 and hp core i7 also.

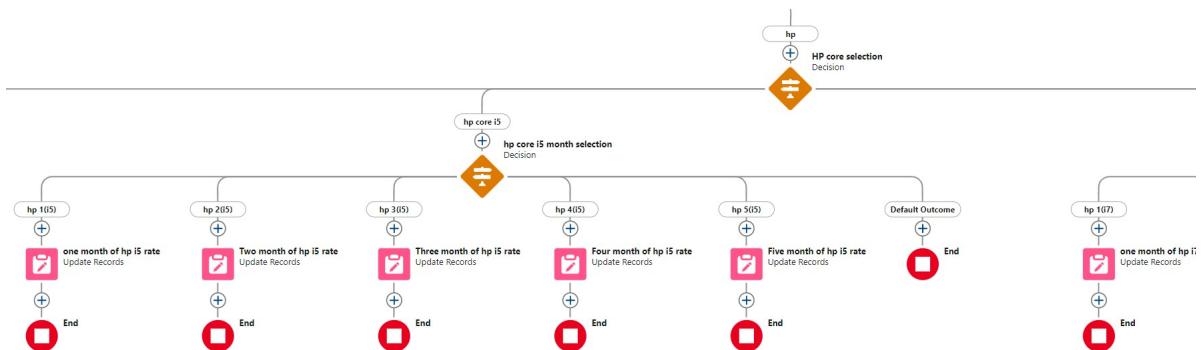
Edit Decision

Outcomes For each path the flow can take, create an outcome. For each outcome, specify the conditions that must be met for the flow to take that path.

OUTCOME ORDER	OUTCOME DETAILS		
hp core i3	*Label hp core i5	*Outcome API Name hp_core_i5	
hp core i5	Condition Requirements to Execute Outcome All Conditions Are Met (AND)		
hp core i7	Resource \$Record > core type	Operator Equals	Value core i5
Default Outcome	+ Add Condition		
<p>When to Execute Outcome</p> <p><input checked="" type="radio"/> If the condition requirements are met <input type="radio"/> Only if the record that triggered the flow to run is updated to meet the condition requirements</p>			
Cancel Done			

1. Beside hp there is a symbol '+' click on that.
2. Enter the Details Label: hp core i5 month selection , API name: Gets Automatically Generated. Enter the Outcome Details Label: hp 1(i3), Outcome API name: Gets Automatically Generated.
 1. Resource: Select Record.how many months.
 2. Operator: Select Equals.
 3. Value: 1.

3. Similarly Create Outcome DetailsLabels: hp 2(i3), hp 3(i3), hp 4(i3), hp 5(i3).
4. 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.
5. Perform these steps for othercore types.
6. Click done.



9.4 Creating A Flow on Mac laptop

- 1.Beside mac there is a symbol '+' click on that.
- 2.Enter the Details Label: mac should be Updated,API name: Gets Automatically Generated.
- 3.select the Outcome DetailsLabel: mac laptop, Outcome API name: Gets Automatically Generated.
 - Resource: Select Record.core type.
 - Operator: Select Equals.
 - Value: Select Bionic Chip.
 - i. Enter the Details Label:Macmonths selected , API name: Gets Automatically Generated.

4.Enter the Outcome DetailsLabel: mac bionicchip(1) ,
OutcomeAPI name: Gets Automatically Generated.

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

5.Similarly CreateOutcome Details Labels:mac bionic chip(2),mac bionic chip(3), mac bionic chip(4), mac bionic chip(5)

6.Enter the Details Label:one month of mac rate , API name:
Gets Automatically Generated.

8.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.

Edit Decision

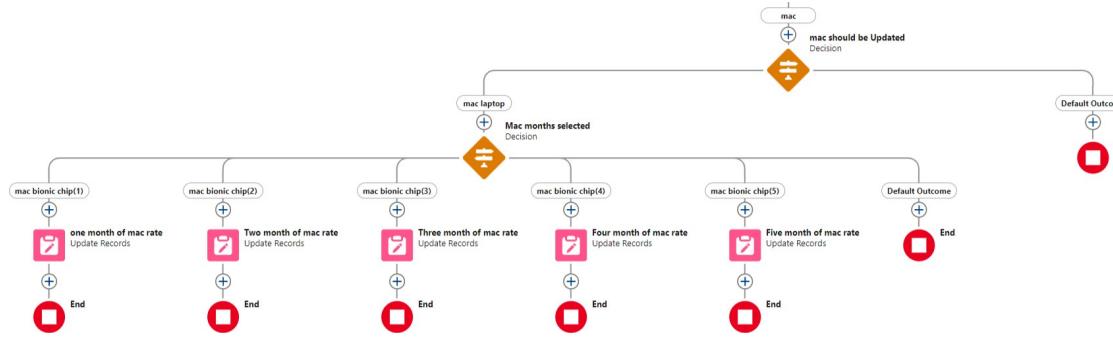
mac months selected (mac_months_selected)

Outcomes For each path the flow can take, create an outcome. For each outcome, specify the conditions that must be met for the flow to take that path.

OUTCOME ORDER	OUTCOME DETAILS	DELETE OUTCOME
mac bionic chip(1)	*Label: mac bionic chip(1) *Outcome API Name: mac_bionic_chip_1 Condition Requirements to Execute Outcome: All Conditions Are Met (AND)	
mac bionic chip(2)		
mac bionic chip(3)		
mac bionic chip(4)		
mac bionic chip(5)		
Default Outcome	Resource: \$Record > how many months Operator: Equals Value: 1 	

When to Execute Outcome

If the condition requirements are met
 Only if the record that triggered the flow to run is updated to meet the condition requirements



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

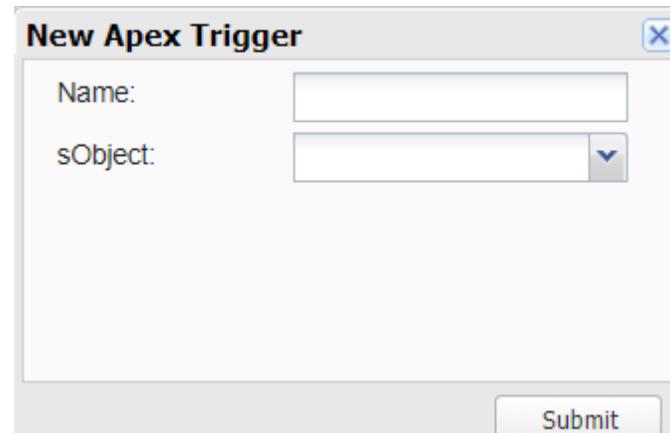
Manipulation Language) events. A DML event could be a variety of data processing tasks that include the standard insert, update, and delete commands. With Apex triggers, you can automate tasks that would otherwise be nearly impossible to accomplish using only the Salesforce user interface.

There are two Salesforce Apex trigger types:

1. Before Triggers
2. Aftertriggers

Create a new trigger:

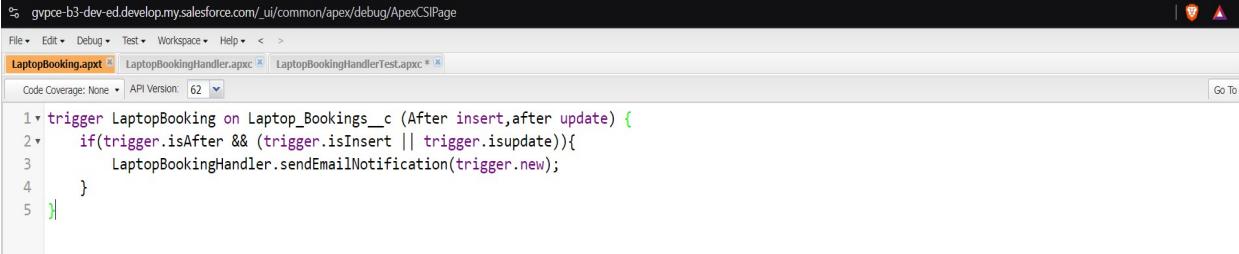
- a. Click on developer console and you will be navigated to a new console window.
- b. Click on the File menu in the toolbar, and click on new Trigger.
- c. Enter the triggername and the object to be triggered.



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:

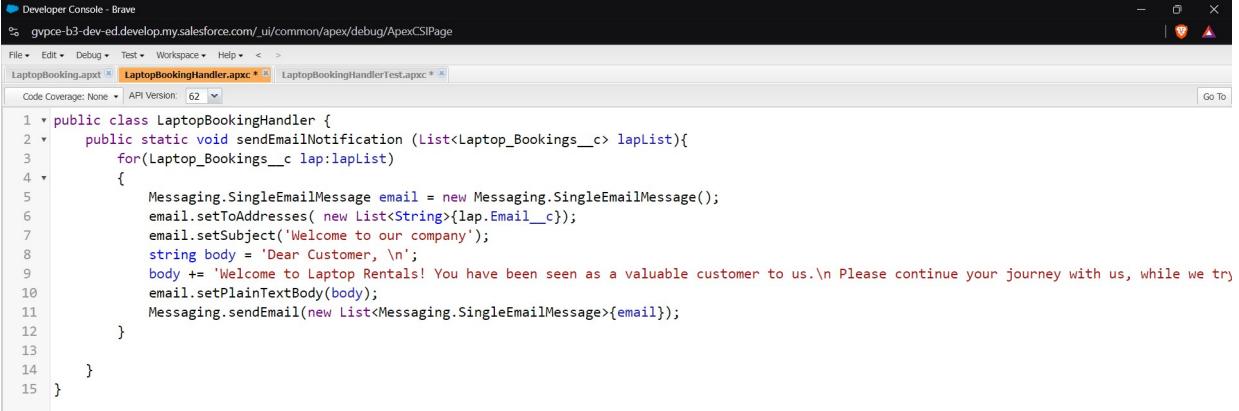


```
gpce-b3-dev-ed.develop.my.salesforce.com/_ui/common/apex/debug/ApexCSIPage
File ▾ Edit ▾ Debug ▾ Test ▾ Workspace ▾ Help ▾ < >
LaptopBooking.apxt [ ] LaptopBookingHandler.apxc [ ] LaptopBookingHandlerTest.apxc [ ]
Code Coverage: None ▾ API Version: 62 ▾ Go To
1 * trigger LaptopBooking on Laptop_Bookings__c (After insert,after update) {
2 *     if(trigger.isAfter && (trigger.isInsert || trigger.isupdate)){
3 *         LaptopBookingHandler.sendEmailNotification(trigger.new);
4 *     }
5 }
```

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:



```
Developer Console - Brave
gpce-b3-dev-ed.develop.my.salesforce.com/_ui/common/apex/debug/ApexCSIPage
File ▾ Edit ▾ Debug ▾ Test ▾ Workspace ▾ Help ▾ < >
LaptopBooking.apxt [ ] LaptopBookingHandler.apxc [ ] LaptopBookingHandlerTest.apxc [ ]
Code Coverage: None ▾ API Version: 62 ▾ Go To
1 * public class LaptopBookingHandler {
2 *     public static void sendEmailNotification (List<Laptop_Bookings__c> lapList){
3 *         for(Laptop_Bookings__c lap:lapList)
4 *         {
5 *             Messaging.SingleEmailMessage email = new Messaging.SingleEmailMessage();
6 *             email.setToAddresses( new List<String>{lap.Email__c});
7 *             email.setSubject('Welcome to our company');
8 *             string body = 'Dear Customer, \n';
9 *             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';
10 *             email.setPlainTextBody(body);
11 *             Messaging.sendEmail(new List<Messaging.SingleEmailMessage>{email});
12 *         }
13 *     }
14 * }
15 }
```

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

- Go to the app "Laptop Rentals".
- click on the reports tab and ClickNew Report.
- Select report type from category and click on start report.
- Create a simple tabular report
- Add fields from left pane, make sure that Amount field will be selected.
- Click the Amount column drop down and select bucketlist.

Edit Bucket Column

* Field	* Bucket Name		
Amount	X	types of versions	
	Range	Bucket	X
Add ►	<= 900	basic	X
Add ►	> 900 to 1500	intermediate	X
Add ►	> 1,500 to 10000	high	X
	> 10,000	very high	X

Treat empty Amount values in the report as zeros.

- Select Types of versionin Group By Rows to create a summary report.
- Click on Save & run it.

Report output:

Report: Total Laptops with Laptop Bookings and consumer Laptop Analytics						
Total Records	Total Amount	Total Laptops Available				
7	₹22,500	193				
<input type="checkbox"/> types of versions ↑ ▾	Laptop Bookings: Laptop Bookings Name ▾	consumer: consumer Name ▾	Amount ▾	Laptops Available ▾	Total Laptops: Total Laptops Name ▾	
<input type="checkbox"/> Intermediate (2)	Gayathri	Gayathri	₹1,500	49	3	
	Iakshmi	Lakshmi	₹1,000	47	5	
Subtotal			₹2,500	96		
<input type="checkbox"/> high (5)	Vamsi	VAMSI	₹2,000	49	2	
	Gayathri	Gayathri	₹6,000	48	1	
	Evelina	Evelina	₹6,000	47	5	
	srinu	srinu	₹2,000	47	5	
	Srinu	srinu	₹4,000	48	1	
Subtotal			₹20,000	144		
Total (7)			₹22,500	193		

11.2 Sharing Report To Owner

- Click edit drop down and select subscribe option

The screenshot shows a report titled "Report: Total Laptops with Laptop Bookings and consumer". The report displays the following data:

Total Records	Total Amount	Total Laptops Available
7	₹22,500	193
types of versions		
Intermediate (2)	Gayathri	Gayathri
	Lakshmi	Lakshmi
		₹1,000
Subtotal		49
high (5)	Vamsi	VAMSI
	Gayathri	Gayathri
	Evelina	Evelina
	sirnu	sirnu
	Srinu	sirnu
Subtotal		₹2,000
Total (7)		144
		₹22,500
		193

On the right side of the interface, there is a context menu with options: Enable Field Editing, Add Chart, Edit, Save As, Save, Subscribe, Export, Delete, and Add to Dashboard.

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

The "Edit Subscription" dialog box contains the following settings:

- Settings**
 - Frequency:** Daily (selected), Weekly, Monthly
 - Time:** 8:00 am
 - Attachment:** Attach File
- Recipients**
 - Send email to: Me
 - Edit Recipients
- Run Report As**
 - Me
 - Another Person

At the bottom right are "Cancel" and "Save" buttons.

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

- Click save.

The report being sent to mail looks like:

Welcome to our company Inbox x

Gayathri Betha
Dear Customer, Welcome to Laptop Rentals! You have been seen as a valuable customer to us. Please continue your journey with us, while we try to provide you with good quality resources.

Gayathri Betha via i15ahz9mnyquh7m.rwci2.qy-icghvma3.swe42.bnc.salesforce.com
to me ▾

Wed, Jan 1

Dear Customer,
Welcome to Laptop Rentals! You have been seen as a valuable customer to us.
Please continue your journey with us, while we try to provide you with good quality resources.
Laptop Amount = 6000
core type = Bionic Chip
Laptop type = Mac

12.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.

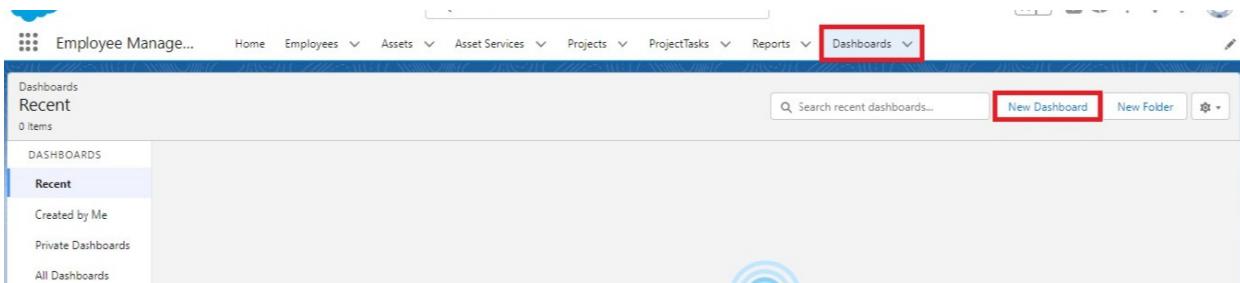
12.1 Create Dashboard folder

- Click on the app launcher and search for the dashboard.
- Click on the dashboard tab.
- Click the new folder, give the folder label as “totalrent amount”.

- Folder unique names will be auto populated.
- Click save.

Create Dashboard

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

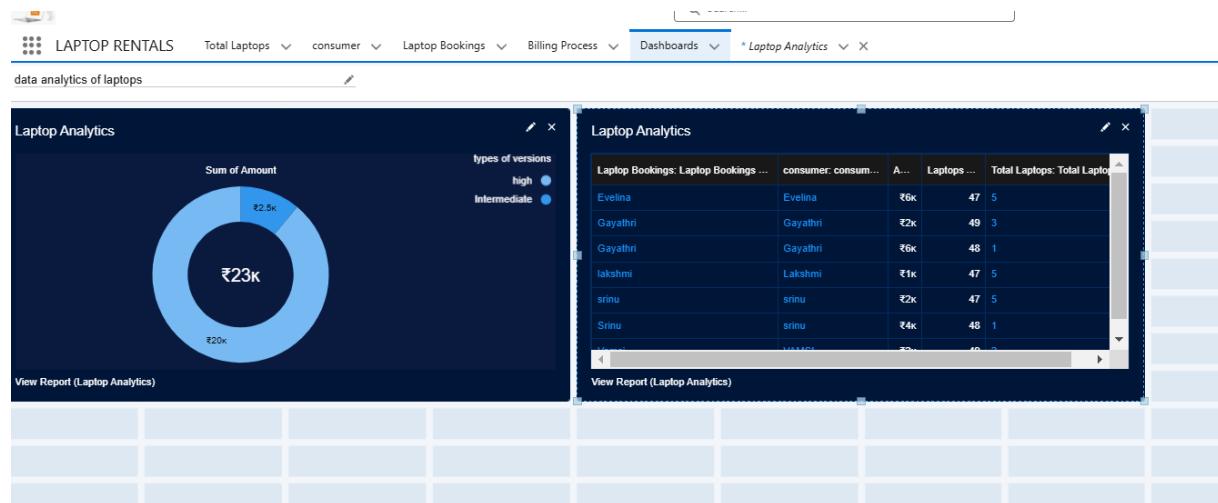


- Give a Name and select the folder that was created, and click on create.

The screenshot shows a 'New Dashboard' dialog box. It has fields for 'Name' (containing 'data analytics of laptops'), 'Description' (containing 'total amount of data in dashboards'), and 'Folder' (containing 'total rents amount'). There is also a 'Select Folder' button. At the bottom right are 'Cancel' and 'Create' buttons, with 'Create' being highlighted with a blue background.

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

Dashboard output:



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

- a. **Customer Relationship Management (CRM):** Salesforce handles managing and analyzing customer interactions and data, improving customer service and engagement.
- b. **Sales Process Automation:** It automates various sales processes, like tracking leads, opportunities, and performance, helping sales teams close deals faster.
- c. **Marketing Campaigns and Engagement:** Salesforce enables personalized marketing campaigns and provides tools for tracking and analyzing their effectiveness.
- d. **Service Management:** It supports case management, service cloud, and provides tools for customer support teams to resolve issues efficiently.
- e. **Analytics and Reporting:** Salesforce helps generate real-time reports and dashboards, providing insights into business operations and customer behavior.
- f. **Collaboration and Integration:** The platform integrates with other systems and fosters team collaboration, ensuring streamlined workflows and improved productivity.

6.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 taken a step toward optimizing the rental process, enhancing customer satisfaction, and increasing the profitability of the laptop rental business.