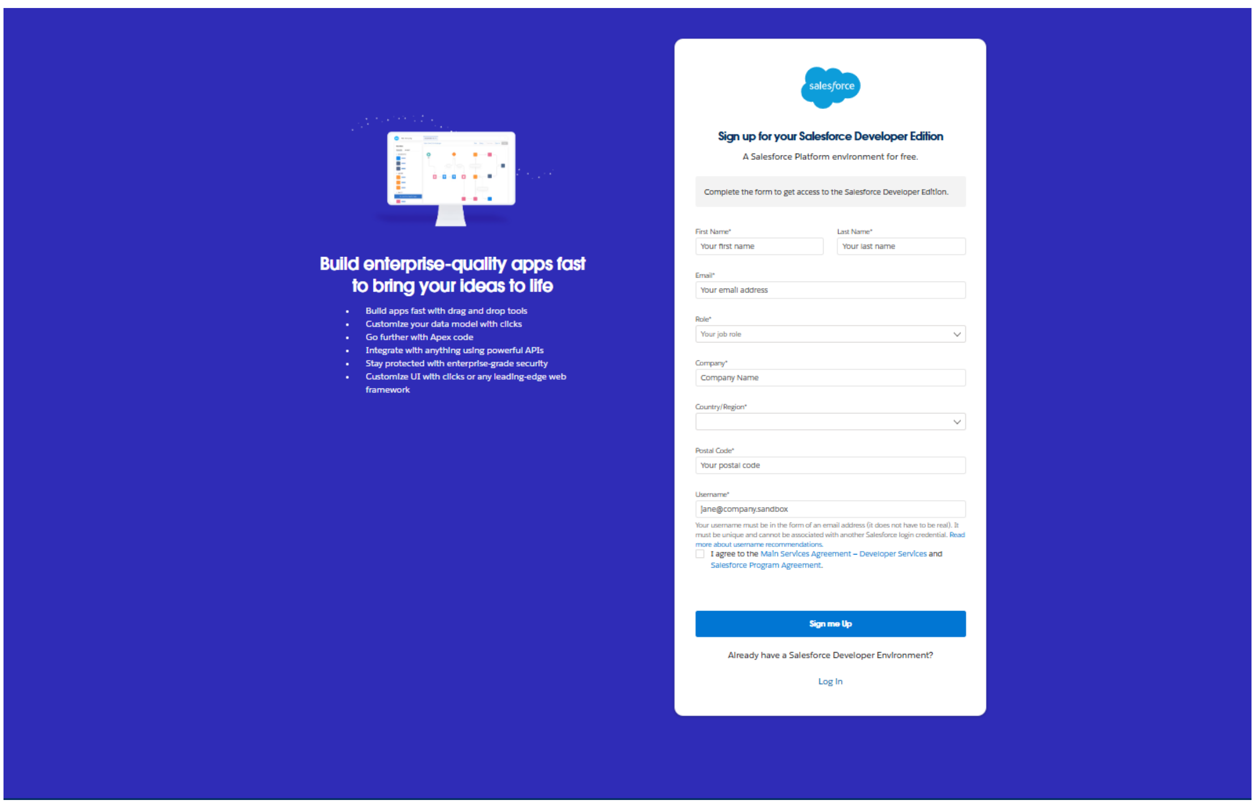
A CRM APPLICATION FOR LAPTOP RENTALS CRM

The application for Laptop Rentals focuses on present rental items to customers, emphasizing the importance of customer relationship management (CRM) to enhance their overall go through. It aims to optimize store operations, streamline workflows, and boost efficiency. in addition, effective CRM strategies will be implemented by maintaining communication through email with potential customers, ensuring a strong connection with identified prospects.

Salesforce :



Salesforce serves as a comprehensive customer success platform designed to support businesses in selling, servicing, marketing, analyzing, and engaging with their customers. It provides all the tools essential to operate efficiently from any location. With its robust suite of standard products and features, Salesforce enables businesses to manage relationships with prospects and customers, foster collaboration among employees and partners, and securely store their data in the cloud.

Object Creation:

What is an Object?

Salesforce objects are database tables designed to store data specific to an organization.

Types of Salesforce Objects

Salesforce objects are categorized into two types:

1. Standard Objects:
   Standard objects are pre-defined by Salesforce, such as Users, Contracts, Reports, Dashboards, and more.
2. Custom Objects:
   Custom objects are created by users to store information unique and essential to their organization. They form the core of any application, providing a framework for data sharing.

Create Total Laptops Object

➤ From the Setup page, navigate to Object Manager.

➤ Click on Create and select Custom Object.

➤ Enter the following details:

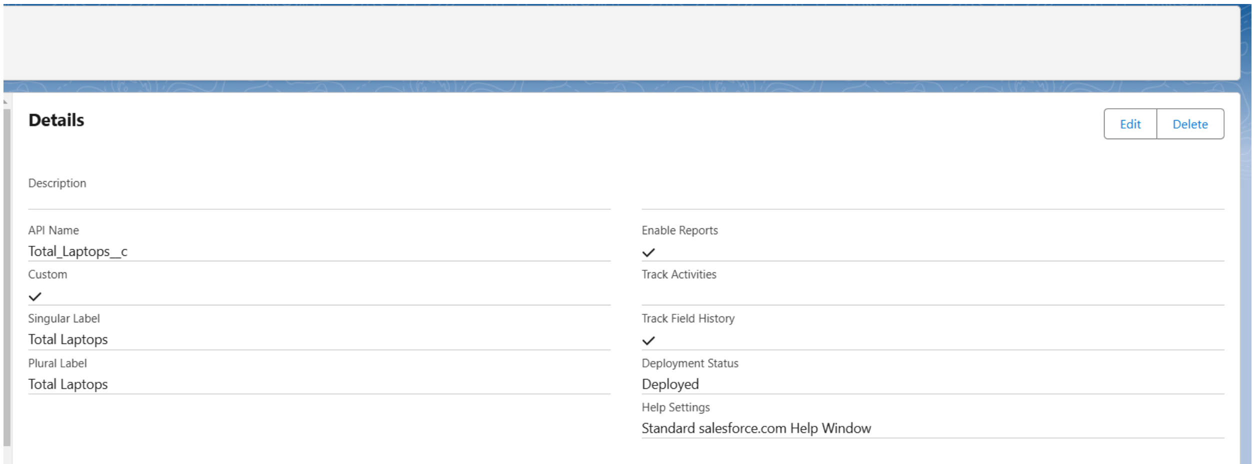
- Label Name: Total Laptops
- Plural Label Name: Total Laptops

  ➤ Define the Record Name Label and Format:

- Record Name: Total Laptops
- Data Type: Text

  ➤ Enable the following options:

- Allow Reports
- Allow Search
- Track Field History
  - ➤ Click on Save.



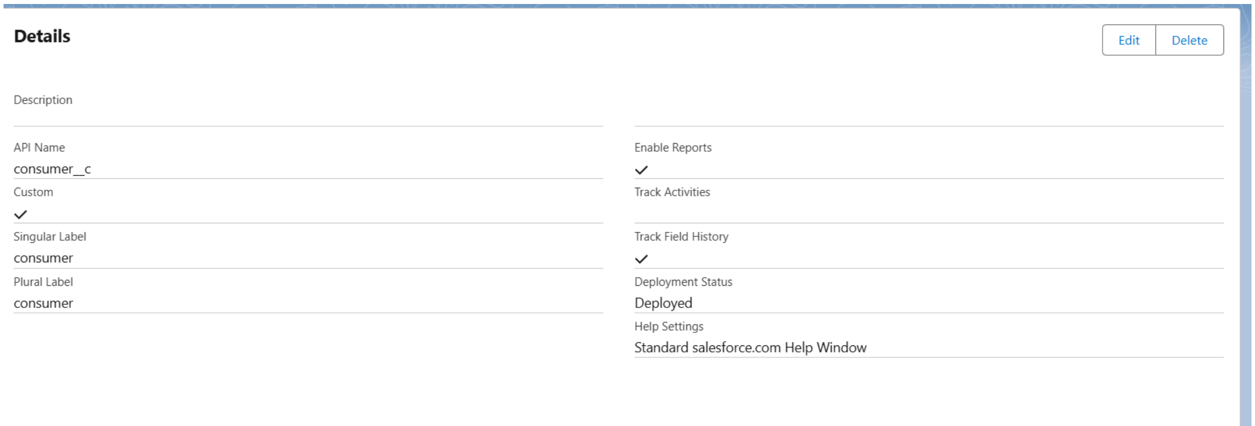
Create Consumer Object

➤ From the Setup page, navigate to Object Manager.

➤ Click on Create and select Custom Object.

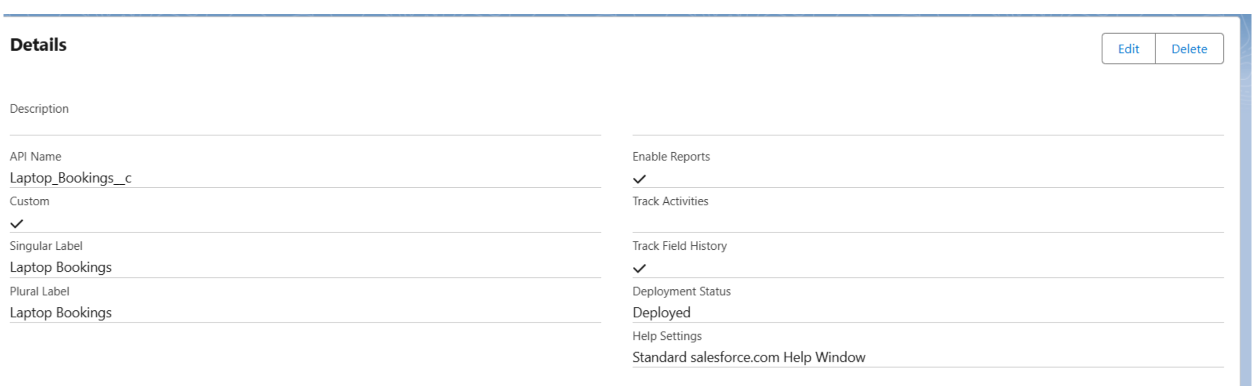
➤ Enter the following details:

- Label Name: Consumer
- Plural Label Name: Consumer
  - ➤ Define the Record Name Label and Format:
- Record Name: consumer_name
- Data Type: Name
  - ➤ Enable the following options:
- Allow Reports
- Allow Search
- Track Field History
  - ➤ Click on Save.



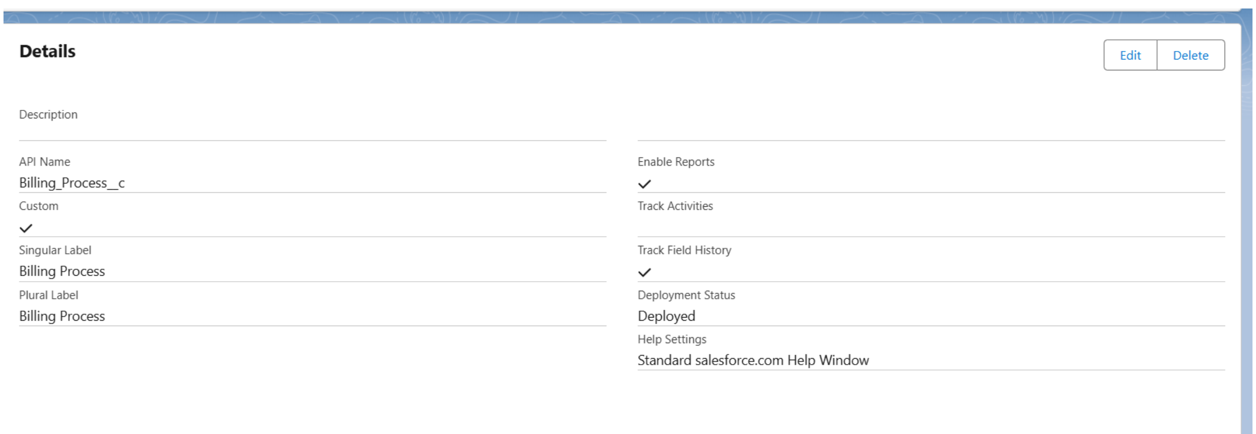
Create Laptop Bookings Object

- From the Setup page, navigate to Object Manager.
- Click on Create and select Custom Object.
- Enter the following details:
  - Label Name: Laptop Bookings
  - Plural Label Name: Laptop Bookings
    - Define the Record Name Label and Format:
  - Record Name: Laptop Bookings
  - Data Type: Name
    - Enable the following options:
  - Allow Reports
  - Allow Search
  - Track Field History
    - Click on Save.



Create Billing Process Object

- From the Setup page, navigate to Object Manager.
- Click on Create and select Custom Object.
- Enter the following details:
  - Label Name: Billing Process
  - Plural Label Name: Billing Process
    - Define the Record Name Label and Format:
  - Record Name: Billing Process
  - Data Type: Name
    - Enable the following options:
  - Allow Reports
  - Allow Search
  - Track Field History
    - Click on Save.



Tabs

What is a Tab:

A tab serves as a user interface element used to create and view records for objects in Salesforce.

Types of Tabs:

- **Custom Tabs:**

Custom tabs provide a user interface for custom applications built in Salesforce. They function similarly to standard Salesforce tabs, such as Accounts, Contacts, and Opportunities.

- **Web Tabs:**

Web tabs display web content or embedded applications within the Salesforce window. They enable users to quickly access frequently used content and applications without leaving the Salesforce environment.

- **Visual force Tabs:**

Visual force tabs are custom tabs that display a Visual force page. These tabs function like standard Salesforce tabs, including Accounts, Contacts, and Opportunities.

- **Lightning Component Tabs:**

Lightning Component tabs allow the addition of Lightning components to the navigation menu in Lightning Experience and the mobile app, enhancing user accessibility and functionality.

- **Lightning Page Tabs:**

Lightning Page tabs enable the inclusion of Lightning Pages in the mobile app navigation menu. Unlike other custom tabs, Lightning Page tabs do not appear on the All Tabs page when clicking the Plus icon. Additionally, they are not listed in the Available Tabs section when customizing app tabs.

Creating a Custom Tab

To create a Tab:

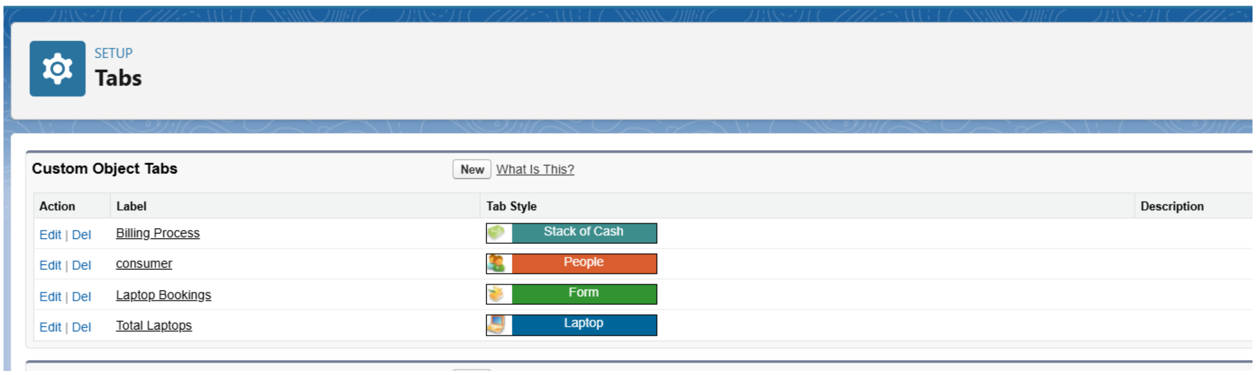
➤ Go to Setup Page >> Type Tabs in the Quick Find bar >> Click on Tabs >> Click New (under Custom Object Tabs).

➤ Select Object (Total Laptops) >> Select the Tab Style >> Click Next (Add to Profiles page) and keep it as default.

➤ On the next page (Add to Custom App), uncheck the Include Tab option.

➤ Ensure that Append tab to users' existing personal customizations is checked.

➤ Click Save.



The Lightning App

An app is a collection of components working together for a specific purpose. In Lightning Experience, Lightning Apps provide users access to objects, tabs, and other items bundled together in the navigation bar.
Lightning Apps also allow customization through colors, logos, utility bars, and Lightning page tabs, enabling efficient app switching for users.

Create a Lightning App

To create a Lightning App page:

➤ Go to Setup Page >> Search App Manager in the Quick Find bar >> Select App Manager >> Click on New Lightning App.

➤ Fill in the App Name under App Details as LAPTOP RENTALS >> Click Next.

➤ On the App Options page, keep it as default >> Click Next.

➤ On the Utility Items page, keep it as default >> Click Next.

➤ Upload a relevant Photo for your app.

➤ To Add Navigation Items, search and select the following items: Total Laptops, Consumer, Laptop Booking, Billing Process >> Use the arrow button to move them >> Click Next.

➤ To Add User Profiles, search for System Administrator in the search bar >> Use the arrow button to add >> Click Save & Finish.

Fields

In Salesforce, **Fields** represent the data stored in the columns of a relational database. They hold valuable information required for specific objects, simplifying the process of searching, editing, and deleting records.

Types of Fields

1. **Standard Fields:**
   Predefined fields in Salesforce that perform standard tasks. They can’t be deleted unless non-required. Common fields include:
   - Created By
   - Owner
   - Last Modified
   - Field made during object creation
2. **Custom Fields:**
   Customizable fields that users can modify based on organizational needs. They offer flexibleness, allowing users to add or remove them as essential.

Creating Fields in Consumer Object

To create a Phone field:

1. Go to Setup >> Click on Object Manager >> Type Consumer in the search bar >> Click on the object.
2. Click on Fields & Relationships >> Click New.
3. Select Data Type as Phone.
4. Click Next.

To create an Email field:

1. Repeat steps above.
2. Select Data Type as Email.
3. Click Next.

Creating Fields in Laptop Bookings Object

To create a Picklist field for Laptop Models:

1. Go to Setup >> Click on Object Manager >> Type Laptop Booking in the search bar >> Click on the object.
2. Click on Fields & Relationships >> Click New.
3. Select Data Type as Picklist.
4. Add Picklist values:
    - Dell
    - Acer
    - HP
    - Mac
5. Select Required.
6. Click Next >> Next >> Save & New.

To create a Picklist field for Processor Types:

1. Repeat the steps above.
2. Add Picklist values:

- Core i3
- Core i5
- Core i7

3. Select Required.
4. Click Next >> Next >> Save & New.

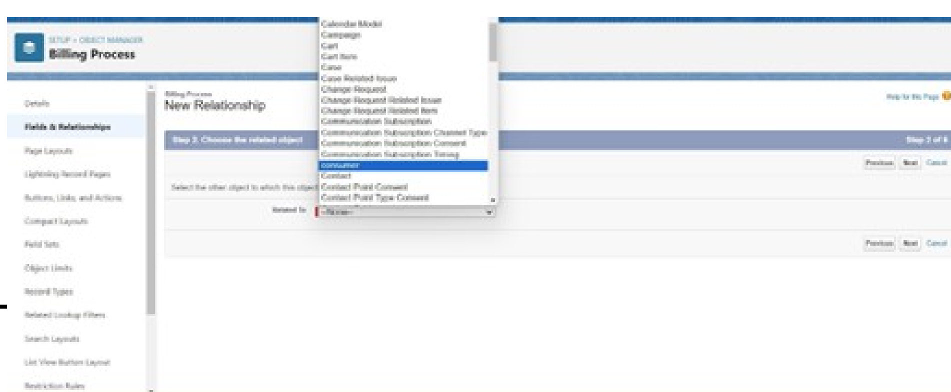
To set field dependence:

1. Go to Setup >> Click on Object Manager >> Type Laptop Booking in the search bar >> Click on the object.
2. Click Field Dependencies >> Click Next.
3. Include values for specific dependence:
    - Dell: Core i3, i5, i7
    - Acer: Core i3, i4, i5
    - HP: Core i3, i4, i5
    - Mac: Bionic Chip

Creating Fields in Billing Process Object

To create a Master-Detail Relationship field:

1. Go to Setup >> Click on Object Manager >> Type Billing Process in the search bar >> Click on the object.
2. Click on Fields & Relationships >> Click New.
3. Select Data Type as Master-Detail Relationship.
4. Click Next.
5. From the Related To dropdown, select Consumer Object.
6. Change the Field Label to Name.
7. Click Next >> Next >> Save & New.



Creating Additional Fields for the Billing Process Object

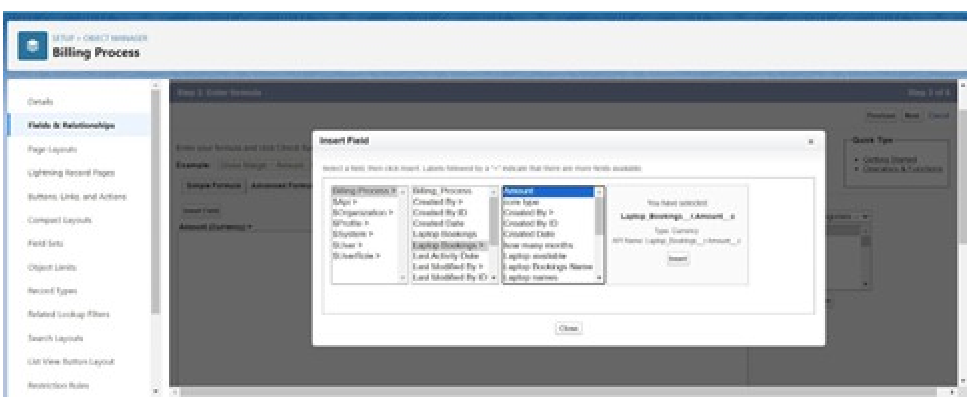
To create a Picklist field:

1. Go to Setup >> Click on Object Manager >> Type Billing Process in the search bar >> Click on the object.
2. Click on Fields & Relationships >> Click New.
3. Select Data Type as Picklist.
4. Fill in the following details:
    - Field Label: Payment Mode
    - Values: Enter the following values, each on a new line:
        - Cash
        - Check
        - Credit card
        - Debit card
        - UPI
        - PhonePe
        - GPay
        - Payment
    - Select Required.
5. Click Next >> Next >> Save & New.

Creating a Cross-Object Formula Field in Billing Process Object

1. Go to Setup >> Click on Object Manager >> Type Billing Process in the search bar >> Click on the object.
2. Click on Fields & Relationships >> Click New.

3. Select Data Type as Formula.
4. Click Next.
5. Enter the Field Label as Amount (Field Name auto-generates) and click Next.
6. Set Formula Return Type as Number.
7. In Advanced Formula, click Insert Field.
   - In the popup, select Billing Process from the first dropdown,
   - Select Laptop Booking from the second dropdown,
   - Select the Amount field from the third dropdown, then click Insert.
8. The formula should look like:
9. Laptop_Booking__r.Amount__c
10. Click Check Syntax to ensure no errors.
11. Click Next >> Save.



Creating a Formula Field in Total Laptops Object

1. Go to Setup >> Click on Object Manager >> Type Total Laptops in the search bar >> Click on the object.
2. Click on Fields & Relationships >> Click New.
3. Select Data Type as Formula >> Click Next.
4. Fill in the following details:

- Field Label: Laptops useable
- Field Name: Auto-render
- Formula Return Type: Number
- Decimal Places: 0

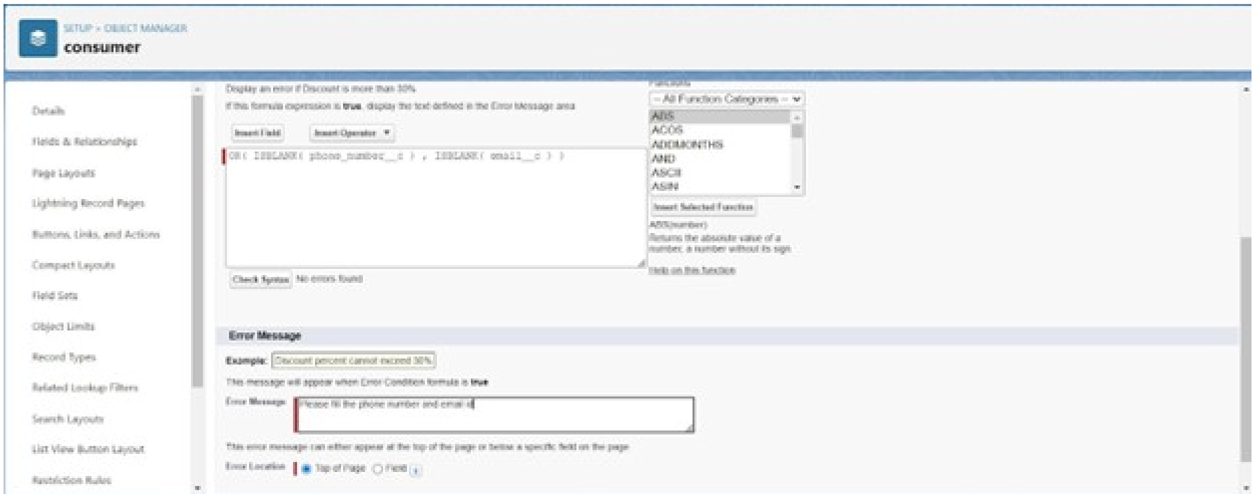
5. Click Next >> Save.

Validation Rule

proof rules ensure that data entered into Salesforce meets specific measure. They trigger error messages when the measure are not met, preventing users from saving invalid data. This helps maintain data quality by enforcing standards during data entry.

Creating a Validation Rule for the Phone Number Field in Consumer Object:

1. Go to Setup >> Click on Object Manager >> Select Consumer Object.
2. Click on Validation Rules >> Click New.
3. Fill in the following details:
    - Rule Name: Phonenumberoremailblankrule
    - Description: Phone number and email should not be blank.
    - Formula:
    - OR(ISBLANK(phone_number__c), ISBLANK(email__c))
4. Click Check Syntax to ensure there are no errors.
5. Save the validation rule.


SETUP > OBJECT MANAGER
consumer
Details
Fields & Relationships
Page Layouts
Lightning Record Pages
Buttons, Links, and Actions
Compact Layouts
Field Sets
Object Limits
Record Types
Related Lookup Filters
Search Layouts
List View Button Layout
Restriction Rules
Display an error if Discount is more than 30%
If this formula expression is true, display the text defined in the Error Message area
Insert Field
Insert Operator
OR(ISBLANK(phone_number__c) , ISBLANK(email__c))
Check Syntax
No errors found
-- All Function Categories --
ABS
ACOS
ADDMONTHS
AND
ASCII
ASIN
Insert Selected Function
ABS(number)
Returns the absolute value of a number, a number without its sign
Help on this function
Error Message
Example:
Discount percent cannot exceed 30%
This message will appear when Error Condition formula is true
Error Message
Please fill the phone number and email id
This error message can either appear at the top of the page or below a specific field on the page
Error Location
Top of Page
Field

Profiles

A profile is a collection of settings and permissions that define what a user can do within Salesforce. Profiles control access to the following:

- 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

Profiles can be defined based on the user’s role or job function. Examples include System Administrator, Developer, and Sales Representative.

Types of Profiles in Salesforce

1. Standard Profiles:

Salesforce provides several standard profiles by default:

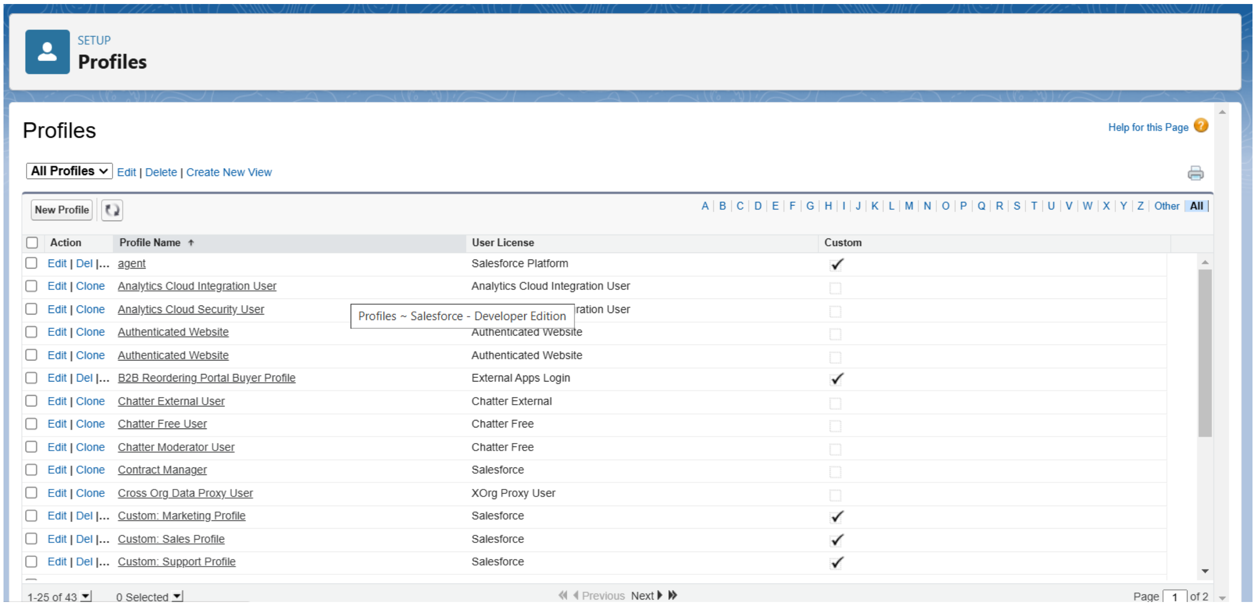
- Contract Manager
- Read Only
- Marketing User
- Solutions Manager
- Standard User
- System Administrator

Standard profiles come with a predefined set of permissions for all standard objects. These profiles cannot be deleted.

2. Custom Profiles:

Custom profiles are created by users and can be tailored to specific needs.

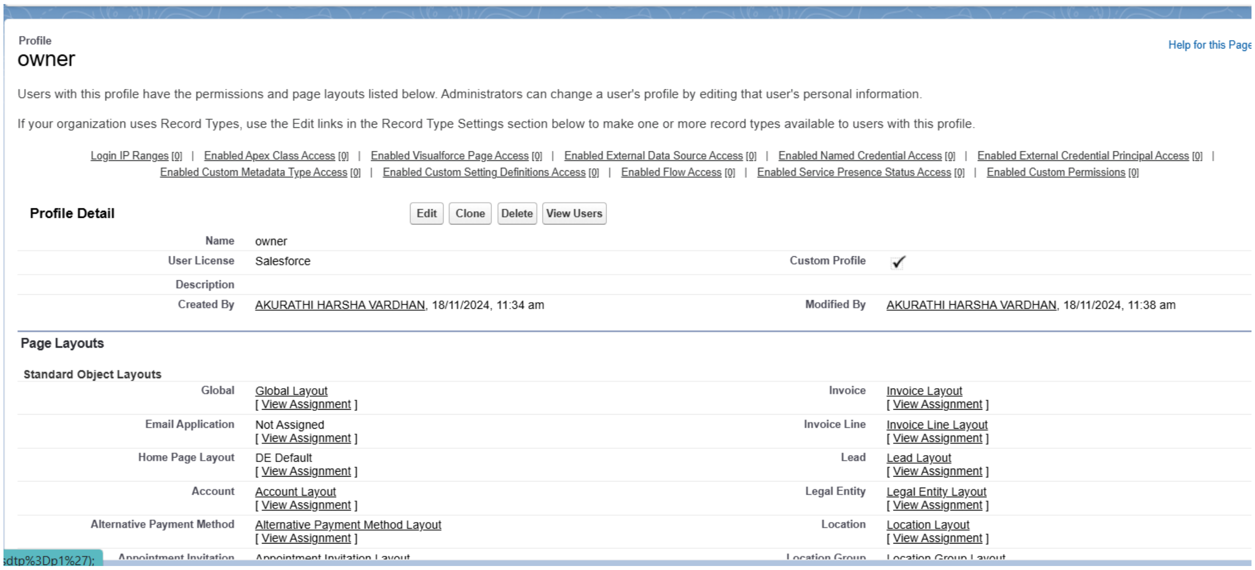
Unlike standard profiles, they can be deleted if no users are assigned to them.



Owner Profile

To create a new profile:

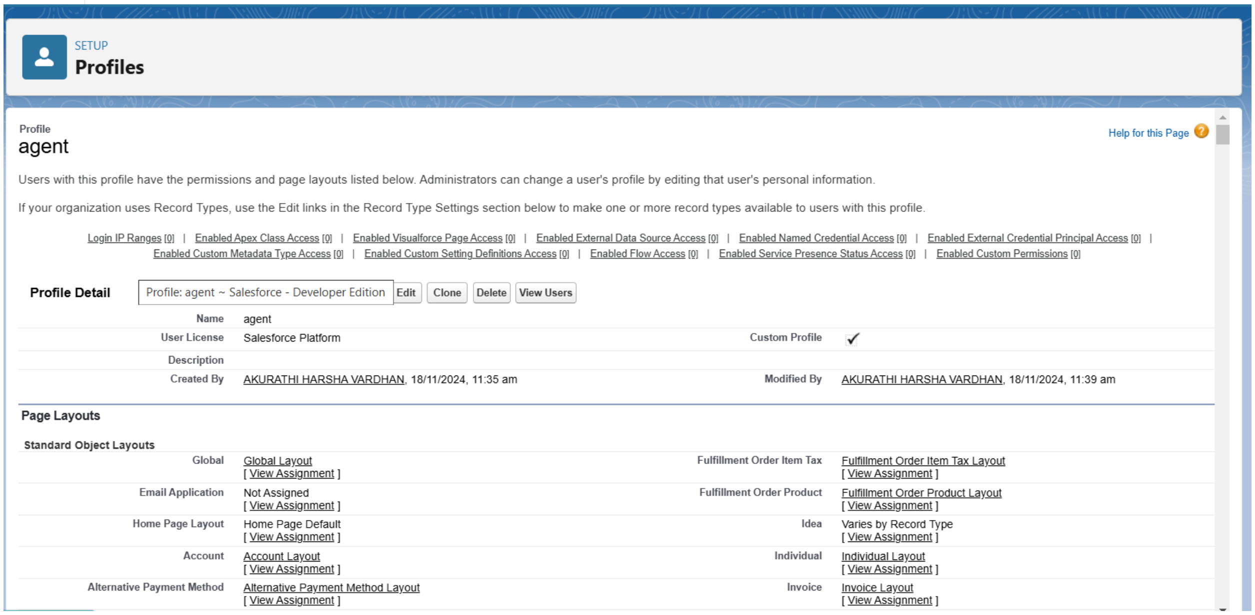
1. Go to Setup >> Type Profiles in the Quick Find box >> Click on Profiles.
2. Clone the desired profile (Standard User) >> Enter Profile Name as Owner >> Click Save.
3. Scroll down to Custom Object Permissions.
4. Assign the suited access permissions for the following objects:
   - Total Laptops
   - Consumers
   - Laptop Bookings
   - Billing Process
5. Click Save.



Agent Profile

To create an Agent profile:

1. Go to Setup >> Type Profiles in the Quick Find box >> Click on Profiles.
2. Clone the desired profile (Standard Platform User) >> Enter Profile Name as Agent >> Click Save.
3. While still on the profile page, click Edit.
4. Scroll down to Custom Object Permissions.
5. Assign the suited access permissions for the following objects:
    - Total Laptops
    - Consumers
    - Laptop Bookings
    - Billing Process
6. Click Save.



Roles and Hierarchy

A role in Salesforce defines a user's visibleness and access at the record level. Roles determine what data users can view within the Salesforce system.

Creating an Owner Role:

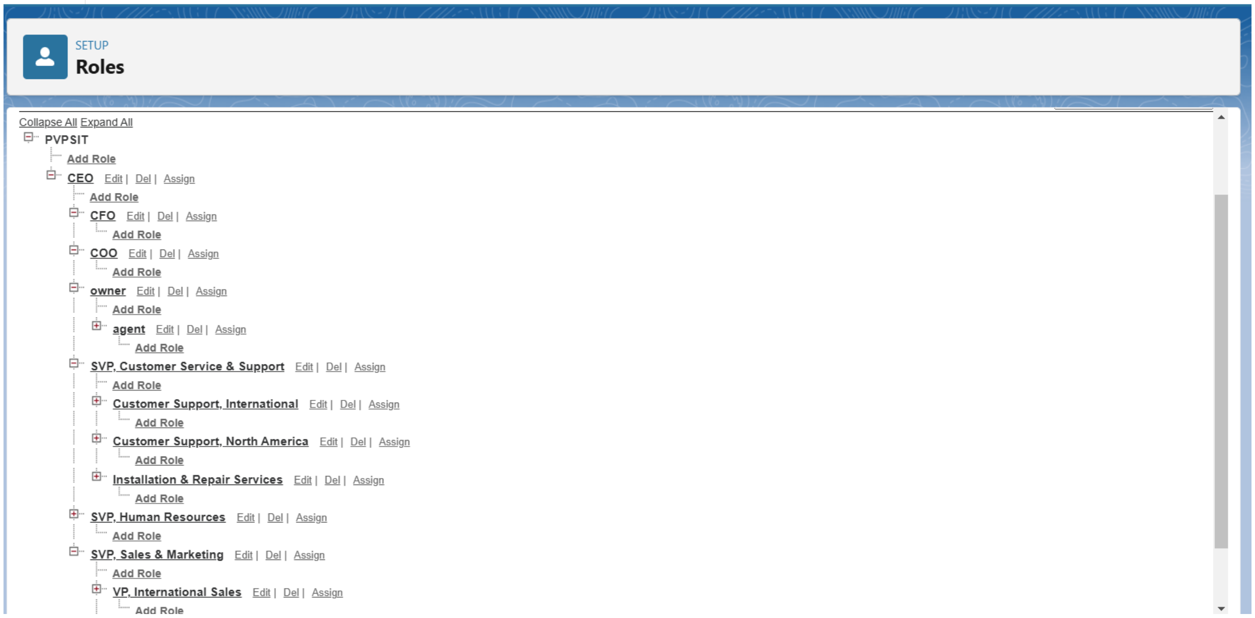
1. Go to Quick Find >> Search for Roles >> Click on Set Up Roles.
2. Click Expand All and then Add Role under the suited superior role.
3. Enter the following details:
   - Label: Owner
   - Role Name: Auto-populated
4. Click Save.

Activity 2: Creating Agent Roles

Creating another two roles under Manager:

1. Go to Quick Find >> Search for Roles >> Click on Set Up Roles.
2. Click the plus icon next to the CEO Role, then click Add Role under Owner.

3. Enter the following details:
   - Label: Agent
   - Role Name: Auto-populated
4. Click Save.



Users

A user in Salesforce is anyone who logs in to the platform. These users can be employees like sales representatives, managers, or IT specialists who require access to organizational records. Each user in Salesforce has a user account that determines their access to features and records.

Create User

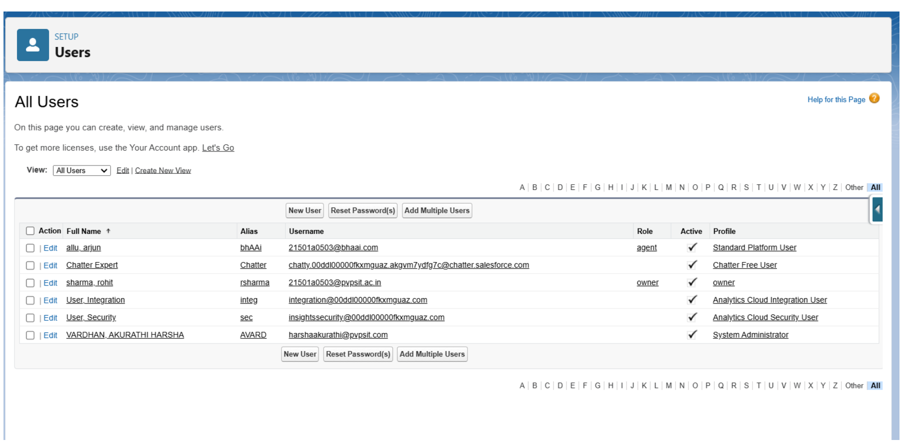
1. Go to Setup >> Type Users in the Quick Find box >> Select Users >> Click New User.
2. Fill in the fields as follows(for sample):
   - First Name: Vicky
   - Last Name: Y
   - Alias: Provide an alias name.
   - Email ID: Provide your personal email.

- Username: Should be in this format: *text@text.text*.
- Nickname: Provide a nickname.
- Role: Owner
- User License: Salesforce
- Profile: Owner

3. Click Save.

Activity 2: Creating Another User

1. Go to Setup >> Type Users in the Quick Find box >> Select Users >> Click New User.
2. Fill in the fields as follows(for sample):
   - First Name: Ram
   - Last Name: Ram
   - Alias: Provide an alias name.
   - Email ID: Provide your personal email.
   - Username: Should be in this format: *text@text.text*.
   - Nickname: Provide a nickname.
   - Role: Agent
   - User License: Salesforce Platform
   - Profile: Standard Platform User
3. Click Save.



Flows

Flows in Salesforce are a powerful automation tool that allows users to streamline business processes, collect and update data, and guide users through steps or screens. Flows can be built visually and do not require coding expertise.

Types of Flows in Salesforce

1. **Screen Flows**
   - Guide users through screens to collect or display data.
   - Commonly used for data entry and updates.
2. **Auto launched Flows**
   - Triggered automatically by events (e.g., when a record is created or updated).
   - Operate in the background without user interaction.
3. **Flow Builder**
   - A drag-and-drop visual interface used to design flows.
4. **Flow Templates**
   - Pre-built flow templates provided by Salesforce.

Create a Flow on Dell Laptop

1. Go to Setup >> Type Flow in the Quick Find box >> Select Flow >> Click New Flow.
2. Choose Record-Triggered Flow >> Click Create.
3. Select Laptop Booking from the object dropdown.
4. Set the trigger as A record is Created or Updated.
5. Optimize the flow for Actions and Related Records.
6. Click + under the flow canvas and select Decision.
7. Set the label as Update (API name auto-generates).
8. Add outcomes for Dell, Acer, HP, and Mac.
9. Add a second decision for Core Type (i3, i5, i7).
10. Define conditions for core types (e.g., "Core Type equals i3").

11. Add outcomes for Dell core types (i3, i5, i7).
12. Add another decision for Months (1-5).
13. Set conditions for months (e.g., "How many months equals 1").
14. Add outcomes for month selections (1, 2, 3, 4, 5).
15. Add an Update Record action based on month selection.
16. Set Amount__c values for Dell i3 (e.g., 1000, 2000).
17. Repeat the process for Dell i5 and i7 with corresponding amounts.
18. Connect outcomes to the appropriate Update Record actions.
19. Save and activate the flow.

Similarly, we did for the remaining laptops also

Creating Classes in Apex

Apex classes in Salesforce resemble Java classes, serving as blueprints for creating objects. Objects, in turn, allow you to access the properties and methods defined within their corresponding classes.

Steps to Create a Class in Apex:

1. Login to your Trail head account and navigate to the gear icon in the top-right corner.
2. Open the Developer Console by clicking on it.
3. In the Developer Console, go to the Toolbar.
4. Click File >> New >> Apex Class.
5. Enter the class name to create a new class file.

Trigger Code

apex

```
trigger LaptopBooking on Laptop_Bookings__c (after insert, after update) {
    if (trigger.isAfter && (trigger.isInsert || trigger.isUpdate)) {
        LaptopBookingHandler.sendEmailNotification(trigger.new);
    }
}
```

1. **Trigger Name:**LaptopBooking
2. **Object API Name:**Laptop_Bookings__c (from Laptop Bookings object).

Apex Class Code

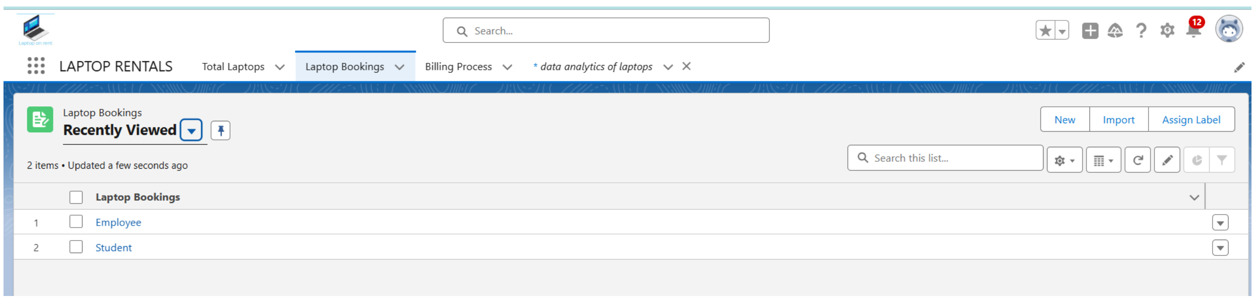
```
apex

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';
            body += 'Please continue your journey with us, while we try to
provide you with good quality resources. \n';
            body += 'Laptop Amount = ' + lap.Amount__c + '\n';
            body += 'Core Type =' + lap.Core__c + '\n';
            body += 'Laptop Type =' + lap.Laptop_Type__c;

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

1. **Class Name:**LaptopBookingHandler
2. **API Names:**
    - Laptop_Bookings__c
    - Core__c
    - Laptop_Type__c

This trigger sends an email notification whenever the sum of a specific record meets or exceeds the threshold set by business requirements.

Create a Report

1. Go to the App >> Click on the Reports tab.
2. Click New Report.
3. Select the report type: Consumer with Laptop Bookings and Total Laptops >> Click Start Report.
4. Customize the report:
   - Add fields from the left pane.
   - Use the column dropdown to select a bucket list.
   - Apply changes.



Create Dashboard Folder

1. Open the App Launcher and search for Dashboard.
2. Click on the Dashboard tab.
3. Click New Folder, and label it as Total Rent Amount.
4. The folder's unique name will auto-populate.
5. Click Save.