



A CRM APPLICATION FOR SCHOOLS/COLLEGES

Project Based Experiential Learning Program

Creation of an Application for school Management.

This Project helps you to maintain and manage the school related problems which further can be modified based on the requirements.

Project Description

The project aim is to provide real-time knowledge for all the students who have basic knowledge of Salesforce and Looking for a real-time project. This project will also help those professionals who are in cross-technology and want to switch to Salesforce. With the help of this project they will gain knowledge and can include it into their resume as well.

What you'll learn

1. Real Time Salesforce Project
2. Object & Relationship in Salesforce
3. Profile
4. Users
5. Reports
6. Permission sets
7. Reports

Creation Salesforce Org:

Milestone-1:

Introduction

Are you new to Salesforce? Not sure exactly what it is, or how to use it? Don't know where you should start on your learning journey? If you've answered yes to any of these questions, then you're in the right place. This module is for you.

Welcome to Salesforce! Salesforce is game-changing technology, with a host of productivity-boosting features, that will help you sell smarter and faster. As you work toward your badge for this module, we'll take you through these features and answer the question, "What is Salesforce, anyway?"

What Is 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.

So what does that really mean? Well, before Salesforce, your contacts, emails, follow-up tasks, and prospective deals might have been organized something like this:

<https://youtu.be/r9EX3lGde5k>

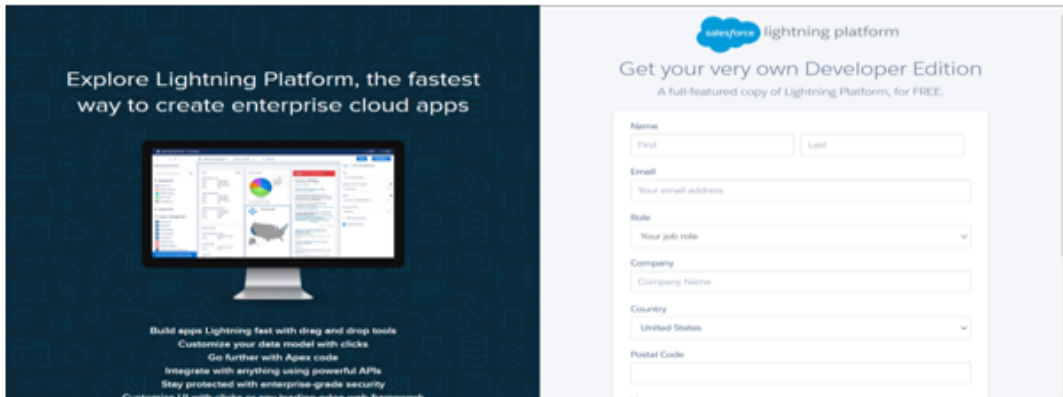
Activity :Creating Developer Account

Creating Developer Account

Creating a developer org in salesforce.

1. Go to developers.salesforce.com/
2. Click on sign up.
3. On the sign up form, enter the following details :
 - a. First name & Last name
 - a. Email
 - b. Role : Developer
 - c. Company : College Name
 - d. County : India
 - e. Postal Code : pin code
 - f. Username : should be a combination of your name and company
This need not be an actual email id, you can give anything in the format :
username@organization.com

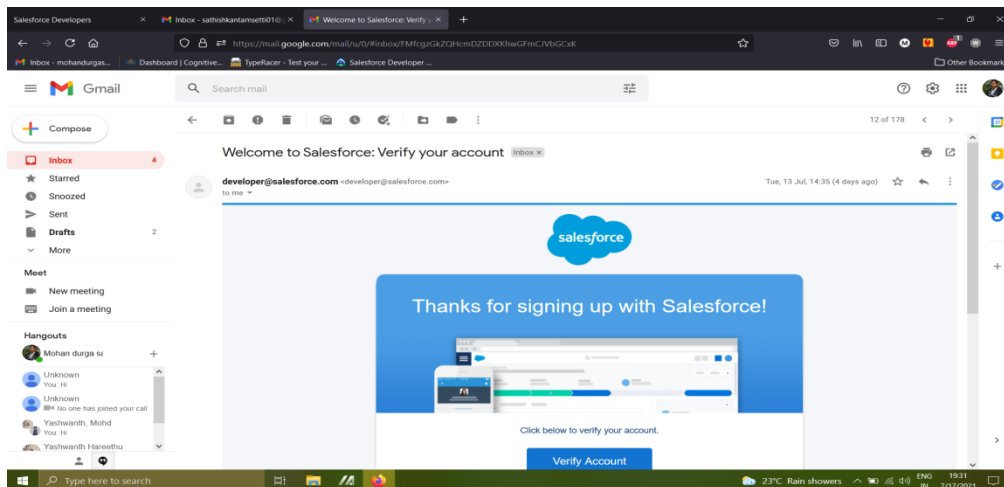
Click on sign up after filling these.



The image shows a two-part sign-up interface for the Salesforce Lightning Platform. The left part is a dark blue banner with the text "Explore Lightning Platform, the fastest way to create enterprise cloud apps" and a monitor displaying a dashboard. The right part is a white form titled "Get your very own Developer Edition" with the subtitle "A full-featured copy of Lightning Platform, for FREE." The form includes fields for Name (First and Last), Email (Your email address), Role (Your job role), Company (Company Name), Country (United States), and Postal Code.

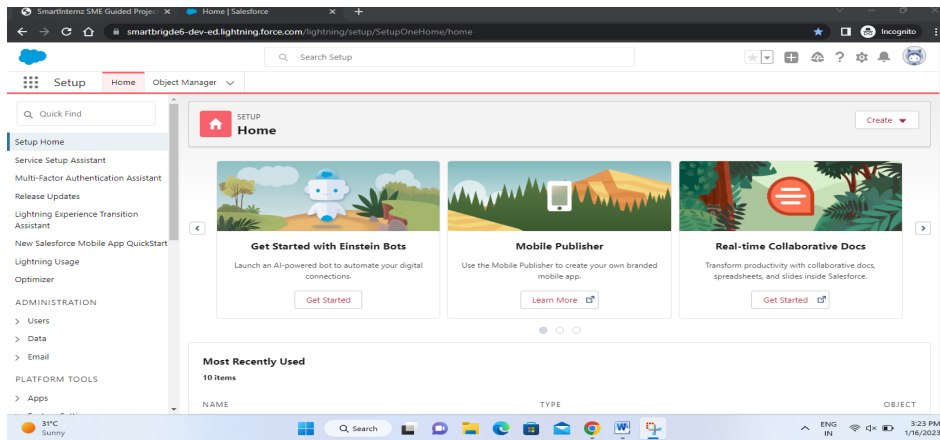
Account Activation

Go to the inbox of the email that you used while signing up. Click on the verify account to activate your account. The email may take 5-10mins, as



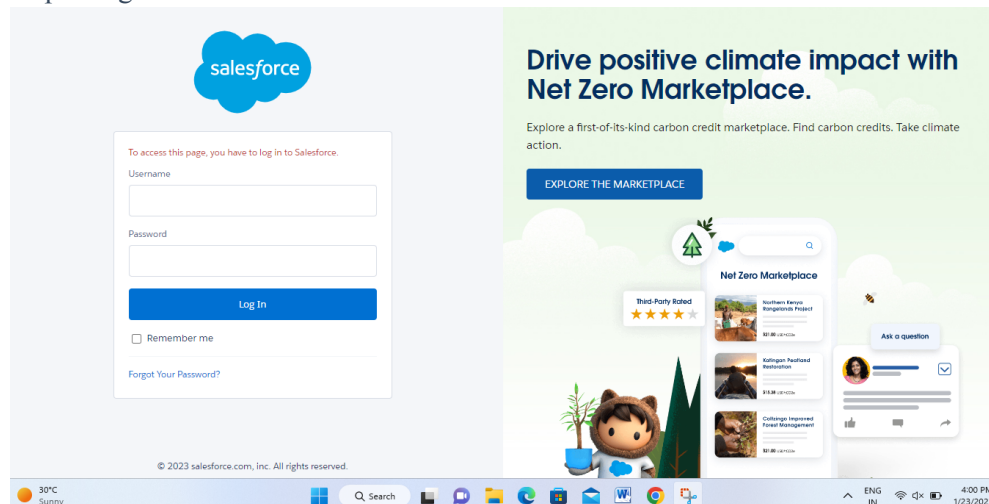
Login To Your Salesforce Account

1. Go to salesforce.com and click on login.
2. Enter the username and password that you just created.
3. After login this is the home page which you will see.



Salesforce Login

<https://login.salesforce.com>



Milestone-2:Object

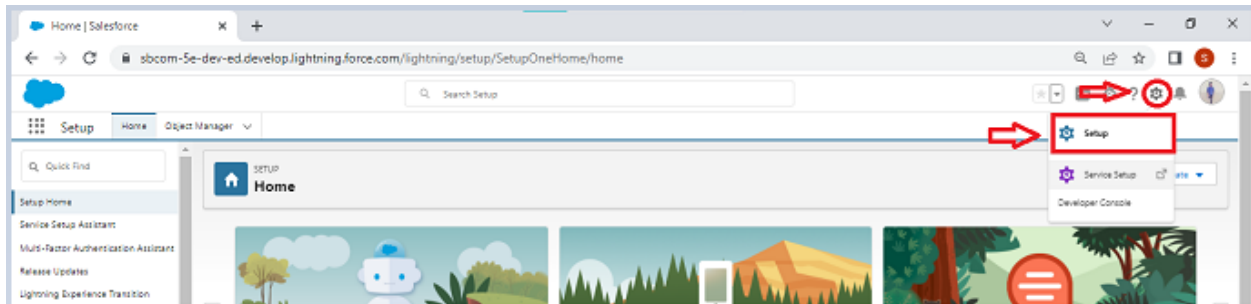
Salesforce objects are **database tables that permit you to store data that is specific to an organization**. Salesforce objects are of two types: Standard Objects: Standard objects are the kind of objects that are provided by salesforce.com such as users, contracts, reports, dashboards, etc.

Activity-1: Creation of School Object

Creation of Objects for School Management:

For this school management we need to create 3 objects i.e school, parents and students. The below steps will assist you in creating those objects.

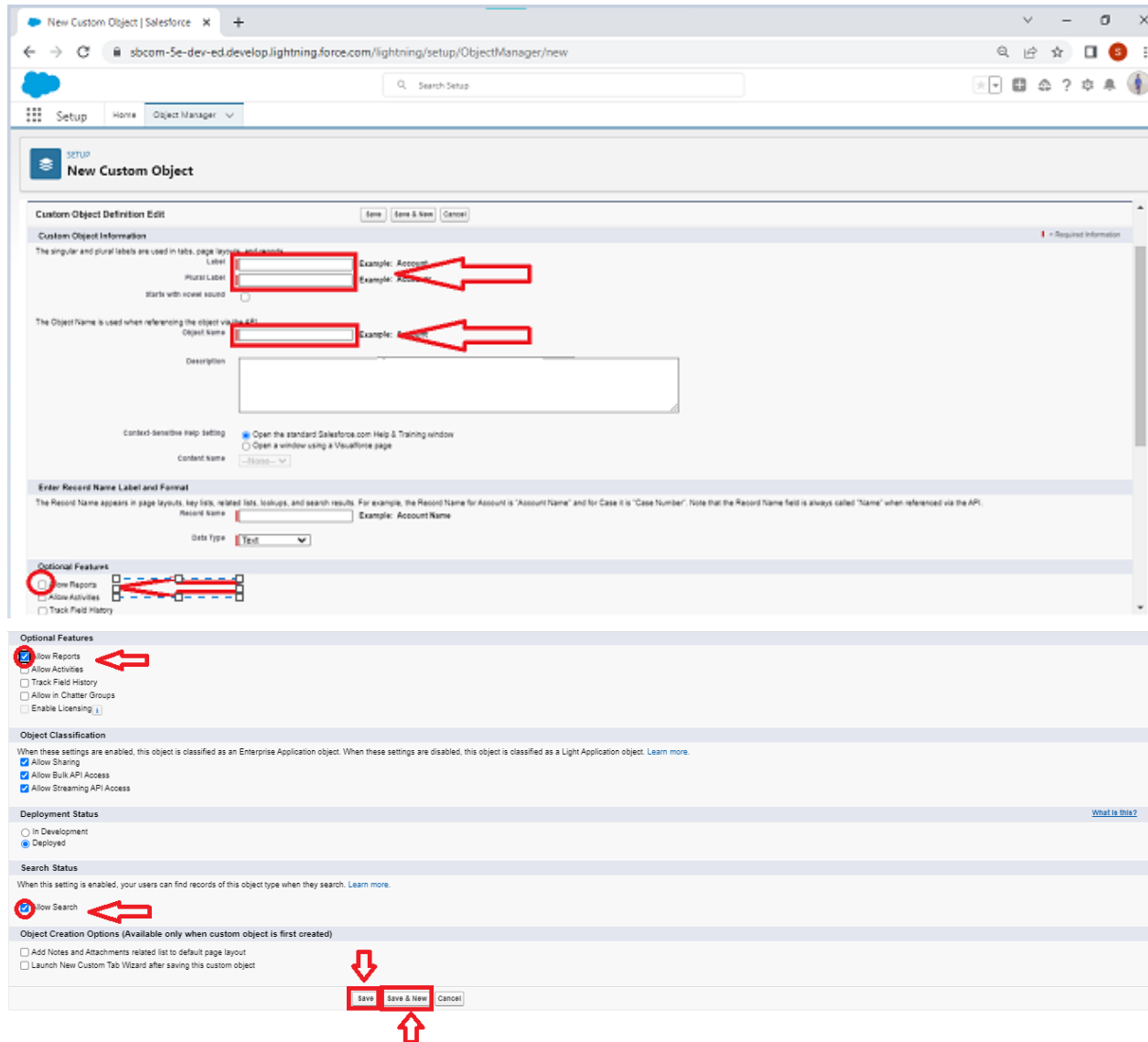
1. Click on the gear icon and then select Setup.



2. Click on the object manager tab just beside the home tab.
3. After the above steps, have a look on the extreme right you will find a Create Dropdown click on that and select Custom Object.

- On the Custom Object Definition page, create the object as follows:
- Label: School
- Plural Label: Schools
- Record Name: School Name
- Check the Allow Reports checkbox
- Check the Allow Search checkbox
- Click Save.



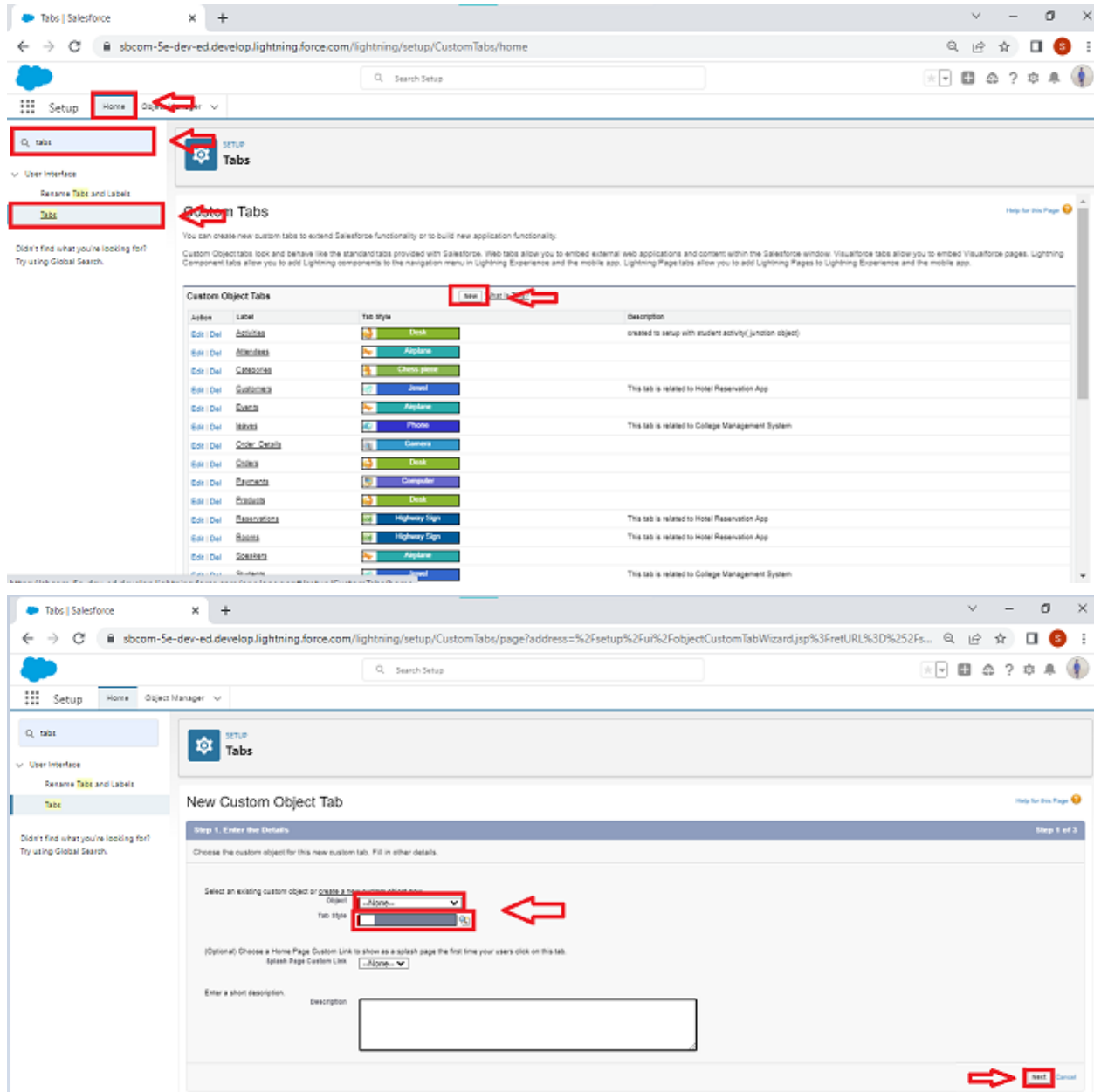


The screenshot shows the 'New Custom Object' setup page in Salesforce. Red annotations highlight the following fields and options:

- Custom Object Information:**
 - Label:** A text field with an example of 'Account'.
 - Plural Label:** A text field with an example of 'Accounts'.
 - Object Name:** A text field with an example of 'Account'.
- Optional Features:**
 - Allow Reports:** A checkbox that is checked.
- Search Status:**
 - Allow Search:** A checkbox that is checked.
- Object Creation Options:**
 - Save:** A button.
 - Save & New:** A button.

Now create a custom tab. Click the Home tab, enter Tabs in Quick Find and select Tabs. Under Custom Object Tabs, click New.

1. For Object, select School.
2. For Tab Style, select any icon.
3. Leave all defaults as is. Click Next, Next, and Save.



The first screenshot shows the Salesforce Setup page for Custom Tabs. The 'Setup' tab is selected, and the 'Custom Tabs' section is visible. A red box highlights the 'New' button in the top right corner of the 'Custom Tabs' section.

The second screenshot shows the 'New Custom Object Tab' wizard. The 'Object' dropdown is set to 'None', and the 'Next' button is highlighted in the bottom right corner.

In the same way create other objects such as students and parents.

Activity 2: Create student object

1. Click on the gear icon and then select Setup.
2. Click on the object manager tab just beside the home tab.
3. After the above steps, have a look on the extreme right you will find a Create Dropdown click on that and select Custom Object.
 - On the Custom Object Definition page, create the object as follows:

- Label: Students
- Plural Label: Students
- Record Name: Student Name
- Check the Allow Reports checkbox
- Check the Allow Search checkbox
- Click Save.

Now create a custom tab. Click the Home tab, enter Tabs in Quick Find and select Tabs.

Under Custom Object Tabs, click New.

1. For Object, select Students.
2. For Tab Style, select any icon.
3. Leave all defaults as is. Click Next, Next, and Save.

Activity 3: Create parent object

1. Click on the gear icon and then select Setup.
2. Click on the object manager tab just beside the home tab.
3. After the above steps, have a look on the extreme right you will find a Create Dropdown click on that and select Custom Object.
 - On the Custom Object Definition page, create the object as follows:
 - Label: Parent
 - Plural Label: Parents
 - Record Name: Parent Name
 - Check the Allow Reports checkbox
 - Check the Allow Search checkbox
 - Click Save.

Now create a custom tab. Click the Home tab, enter Tabs in Quick Find and select Tabs.

Under Custom Object Tabs, click New.

1. For Object, select Parents.
2. For Tab Style, select any icon.
3. Leave all defaults as is. Click Next, Next, and Save.

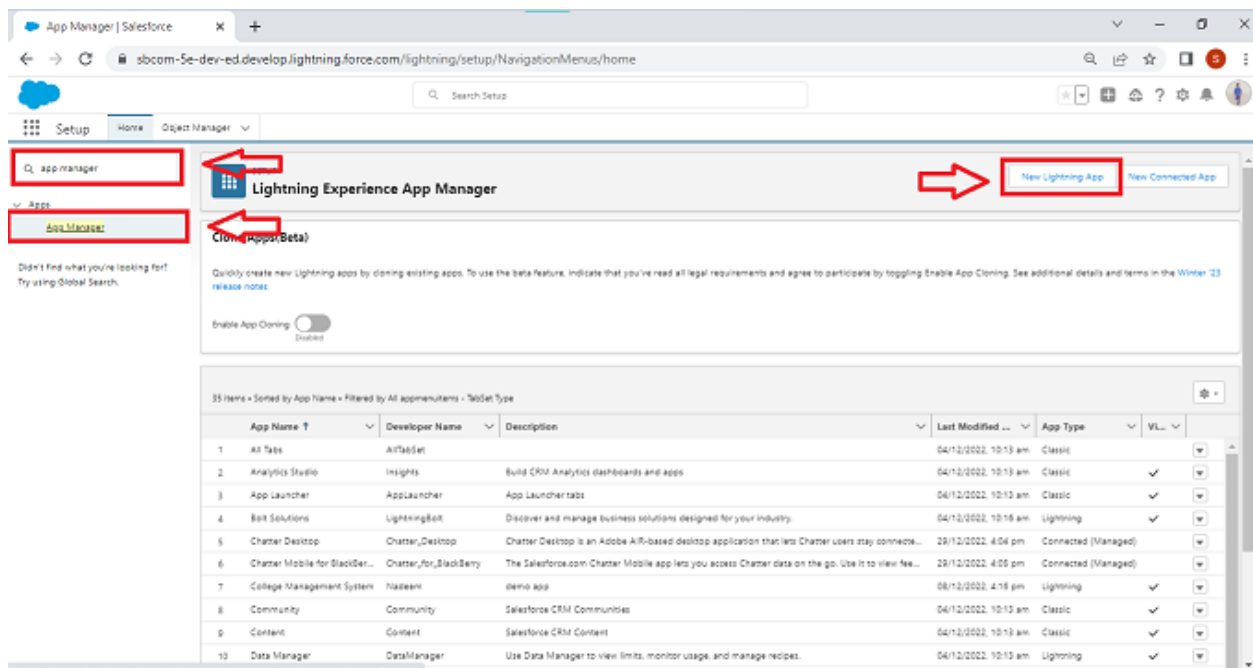
Milestone-3:Lightning App

Apps in Salesforce are a group of tabs that help the application function by working together as a unit. It has a name, a logo, and a particular set of tabs. The simplest app usually has just two tabs

Activity:

Create the School Management app

- From Setup, enter App Manager in the Quick Find and select App Manager.



Lightning Experience App Manager

Cloning Apps (Beta)

Enable App Cloning: ☐ Disabled

35 Items • Sorted by App Name • Filtered by All app namespaces • Select Type

| | App Name ↑ | Developer Name | Description | Last Modified | App Type | VL |
|----|-------------------------------|------------------------|-----------------------------------------------------------------------------------------------------|----------------------|---------------------|----|
| 1 | All Tabs | AllTabSet | | 04/12/2022, 10:13 am | Classic | |
| 2 | Analytics Studio | insights | Build CRM Analytics dashboards and apps | 04/12/2022, 10:13 am | Classic | ✓ |
| 3 | App Launcher | AppLauncher | App Launcher tabs | 04/12/2022, 10:13 am | Classic | ✓ |
| 4 | Beit Solutions | LightningBeit | Discover and manage business solutions designed for your industry. | 04/12/2022, 10:16 am | Lightning | ✓ |
| 5 | Chatter Desktop | Chatter_Desktop | Chatter Desktop is an Adobe AIR-based desktop application that lets Chatter users stay connect... | 29/12/2022, 4:04 pm | Connected (Managed) | |
| 6 | Chatter Mobile for BlackBerry | Chatter_for_BlackBerry | The Salesforce.com Chatter Mobile app lets you access Chatter data on the go. Use it to view fee... | 29/12/2022, 4:05 pm | Connected (Managed) | |
| 7 | College Management System | naaleem | demo app | 08/12/2022, 4:16 pm | Lightning | ✓ |
| 8 | Community | Community | Salesforce CRM Communities | 04/12/2022, 10:13 am | Classic | ✓ |
| 9 | Content | Content | Salesforce CRM Content | 04/12/2022, 10:13 am | Classic | ✓ |
| 10 | Data Manager | DataManager | Use Data Manager to view limits, monitor usage, and manage recipes. | 04/12/2022, 10:13 am | Lightning | ✓ |

- Click New Lightning App. Enter School Management as the App Name, then click Next

New Lightning App

App Details & Branding

Give your Lightning app a name and description. Upload an image and choose the highlight color for its navigation bar.

App Details

* App Name ⓘ
Name your app...

* Developer Name ⓘ
Enter a developer name...

Description ⓘ
Enter a description...

App Branding

Image ⓘ
Upload

Primary Color Hex Value ⓘ
#0070D2

Org Theme Options
☐ Use the app's image and color instead of the org's custom theme

App Launcher Preview

Next

- Under App Options, leave the default selections and click Next.
- Under Utility Items, leave as is and click Next.
- From Available Items, select Schools, Students, Parents, Reports, and Dashboards and move them to Selected Items. Click Next.

New Lightning App

Navigation Items

Choose the items to include in the app, and arrange the order in which they appear. Users can personalize the navigation to add or move items, but users can't remove or rename the items that you add. Some navigation items are available only for phone or only for desktop. These items are dropped from the navigation bar when the app is viewed in a format that the item doesn't support.

Available Items

Create

Type to filter list...

- Accounts
- Activities
- Alert Settings
- All Sites
- Alternative Payment Methods
- App Launcher
- Appointment Invitations

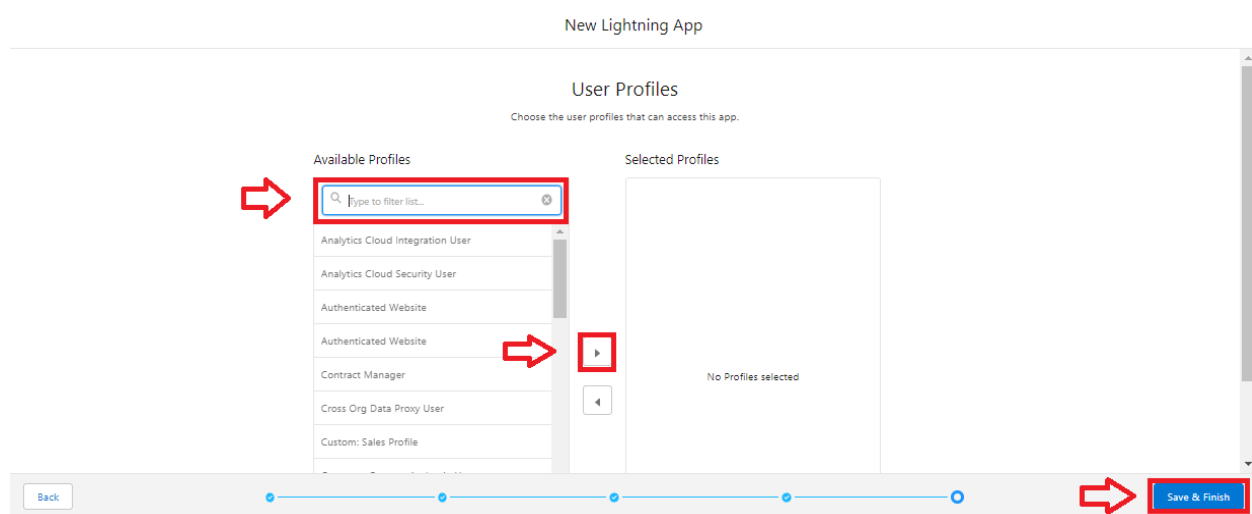
Selected Items

No items selected

Back

Next

- From Available Profiles, select System Administrator and move it to Selected Profiles. Click Save & Finish.



- To verify your changes, click the App Launcher, type School Management and select the School Management app.

Note:

1. App Launcher-Displays available apps.
2. App Name-Displays the current selected app.
3. Navigation menu-Displays the tabs available inside the app.

Milestone -4:Fields and Relationship

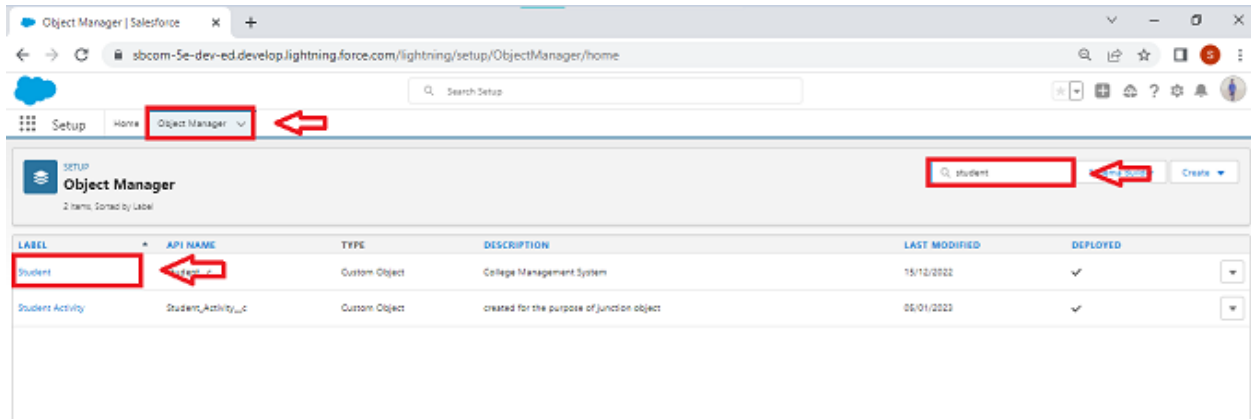
An object relationship in Salesforce is a **two-way association between two objects**.

Relationships are created by creating custom relationship fields on an object. This is done so that when users view records, they can also see and access related data.

Activity-1:

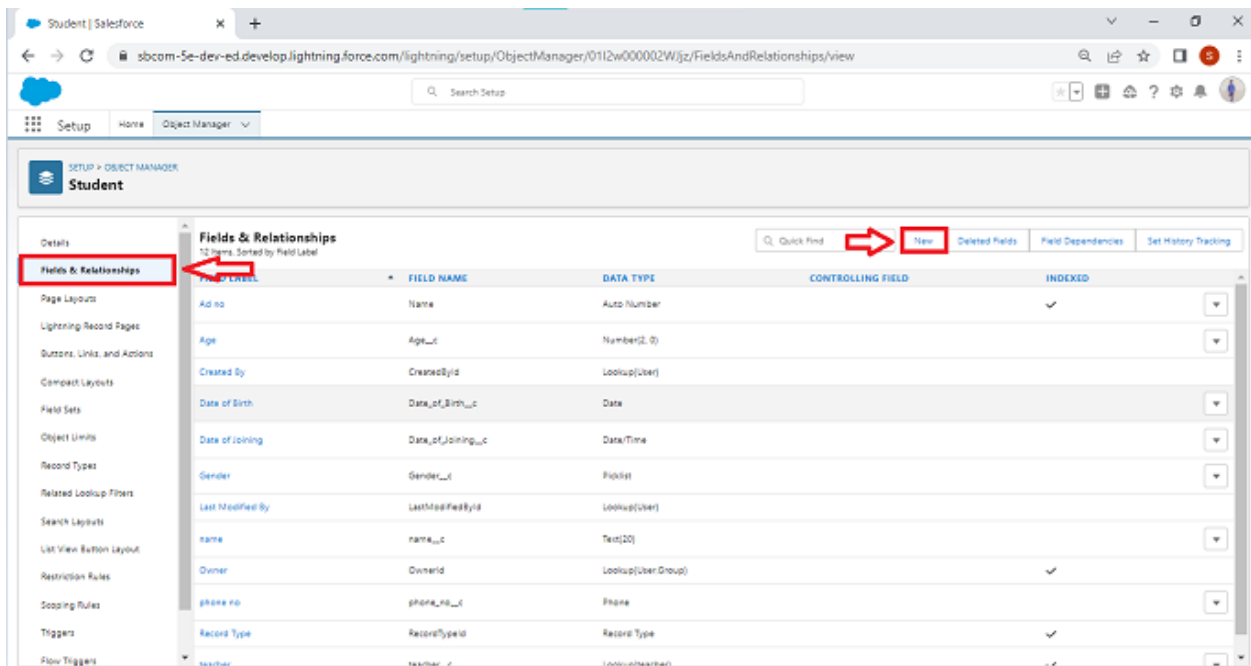
Creation of fields for the School objects:

1. click the gear icon and select Setup. This launches Setup in a new tab.
2. Click the Object Manager tab next to Home.



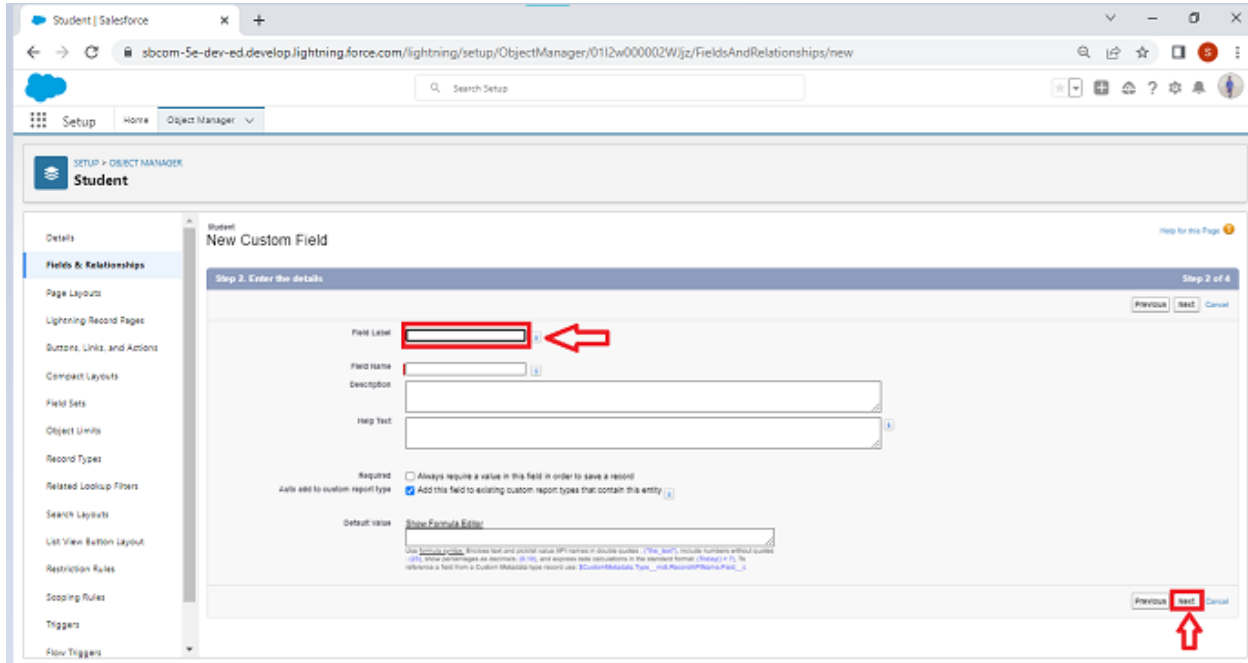
3. Select School.

4. Select Fields & Relationships from the left navigation, and click New



Now we're ready to make a custom field. Let's do this!

1. Select the Text Area as the Data Type, then click Next.
2. For Field Label, enter Address.
3. Click Next, Next, then Save & New.
4. Follow steps 1 through 3 and create two more text areas with District, State and School websites as the field labels.



Now let's create the other fields and we must choose the data types of the fields carefully .Let's have a look at it.

For example, a phone number is a number field. For that we need to select the phone as data type

Lets see this

1. Select the Phone as the Data Type, then click Next.
2. For Field Label, enter Phone Number.
3. Click Next, Next, then Save & New.

Lets create Roll-up summary fields to calculate the number of students

1. From Setup, click Object Manager and select School.
2. Click Fields & Relationships, then New.
3. Select the Roll-up summary field as data type
4. Enter the field label as Number of students
5. Click Next
6. Then select the master object summarized as students and then select count as roll-up and then click Next,Next and save.

1. From Setup, click Object Manager and select School.
2. Click Fields & Relationships, then New.
3. Select the Roll-up summary field as data type

4. Enter the field label as Highest Marks
5. Click Next
6. Then select the master object summarized as students and then select Max as roll-up and then select Marks as field to aggregate.click Next,Next and save.

Activity-2:

Creation of fields for the Student objects:

1. Select the Phone as the Data Type, then click Next.
2. For Field Label, enter Phone Number.
3. Click Next, Next, then Save & New

Let's create a master-detail relationship with school object

1. Select Master-Detail Relationship as the Data Type and click Next.
2. For Related to, enter School.
3. Click Next.
4. For Field Label, enter School.
5. Click Next, Next, Next and Save.

Lets create a Pick-List field:

1. From Setup, click Object Manager and select Student.
2. Click Fields & Relationships, then New.
3. Select Picklist as the Data Type and click Next.
4. For Field Label enter Results.
5. Select Enter values, with each value separated by a new line and enter these values:
6. Pass
7. Fail
8. Click Next, Next, then Save & New

Lets create a Number field:

1. Select the Number as the Data Type, then click Next.
2. For Field Label, enter Class.
3. Click Next, Next, then Save & New
4. Follow steps 1 through 3 and create one more number field with Marks as the field labels.

Activity-3:

Creation of fields for the Parent objects:

1. Select the Text Area as the Data Type, then click Next.
2. For Field Label, enter Parent Address.
3. Click Next, Next, then Save & New.
4. Select the Phone as the Data Type, then click Next.
5. For Field Label, enter Parent Number.
6. Click Next, Next, then Save & New

Milestone-5: Profile

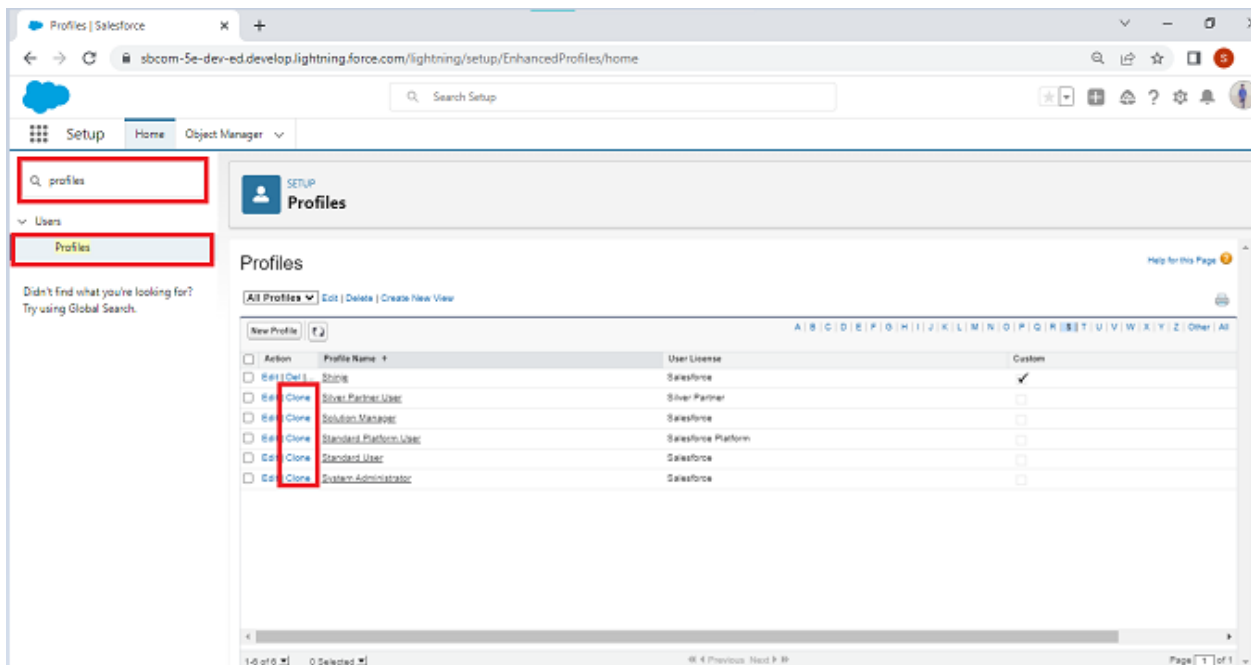
A profile is a **group/collection of settings and permissions that define what a user can do in salesforce**. A profile controls “Object permissions, Field permissions, User permissions, Tab settings, App settings, Apex class access, Visualforce page access, Page layouts, Record Types, Login hours &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

Activity:

Creation on profile:

From Setup enter Profiles in the Quick Find box, and select Profiles.

1. From the list of profiles, find Standard User.
2. Click Clone.

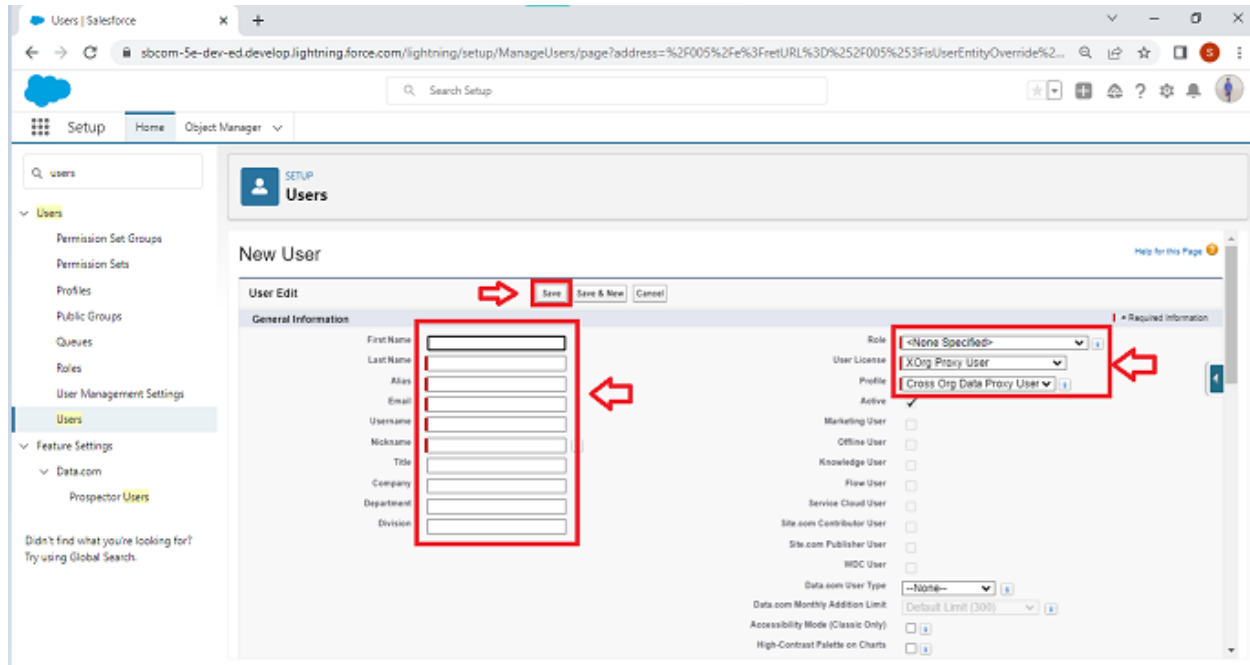


The screenshot shows the Salesforce Setup interface for Profiles. The left sidebar has a search bar with 'profiles' entered and the 'Profiles' link highlighted. The main content area shows the 'Profiles' page with a table of existing profiles. The 'Standard User' profile is highlighted, and the 'Clone' button next to it is circled in red.

| Action | Profile Name | User License | Custom |
|---------------------------------------------|------------------------|---------------------|-------------------------------------|
| Edit Delete | Shop | Salesforce | <input checked="" type="checkbox"/> |
| Clone | Silver Partner User | Silver Partner | <input type="checkbox"/> |
| Clone | Solution Manager | Salesforce | <input type="checkbox"/> |
| Clone | Standard Platform User | Salesforce Platform | <input type="checkbox"/> |
| Clone | Standard User | Salesforce Platform | <input type="checkbox"/> |
| Clone | System Administrator | Salesforce | <input type="checkbox"/> |

[illegible]

3. Enter the user's name Parents and (Your) email address and a unique username in the form of an email address. By default, the username is the same as the email address.
4. Select a User License As salesforce.
5. Select a profile as a School profile.
6. Check Generate new password and notify the user immediately to have the user's login name and a temporary password emailed to your email.



7. Similarly follow the above steps and create 3 users as Teachers and principals.

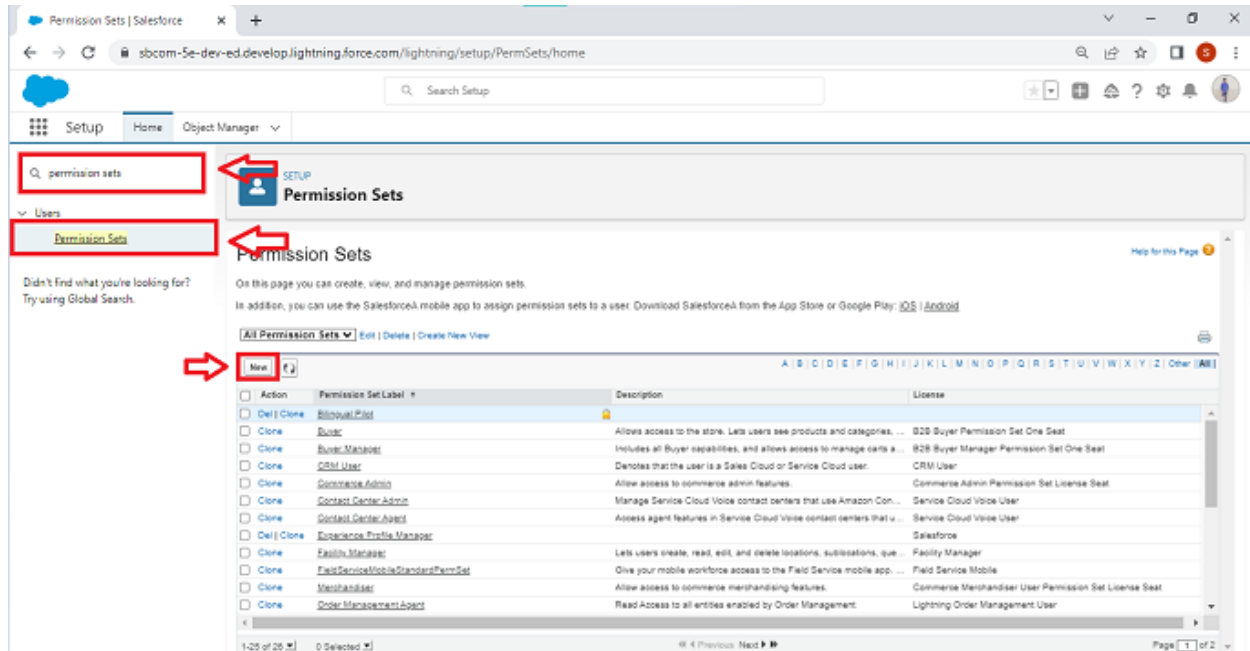
Milestone-7:Permission sets

A permission set is a collection of settings and permissions that give users access to various tools and functions. Permission sets extend users' functional access without changing their profiles.

Activity-1:

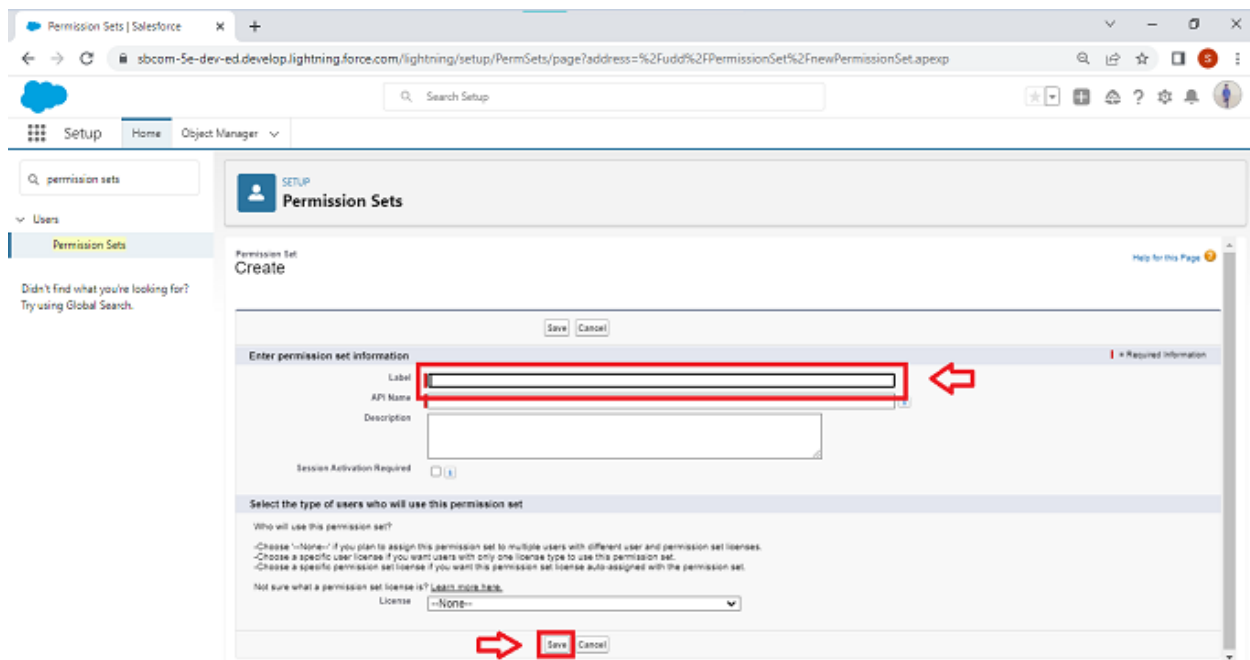
Permission sets 1:

1. From Setup, enter Permission Sets in the Quick Find box, then select Permission Sets.
2. Click New.



The screenshot shows the Salesforce Setup page for Permission Sets. The left sidebar has a search bar with "permission sets" entered. Below it, the "Users" section is expanded, and "Permission Sets" is selected. The main content area shows the "Permission Sets" page with a table of existing sets. A red arrow points to the "New" button in the top left of the table. Another red arrow points to the "permission sets" search bar. A third red arrow points to the "Permission Sets" link in the left sidebar.

- Give the name of the Permission set name as teacher permission and then under the object settings give the view create and edit permissions to all custom objects and assign to the teacher user



The screenshot shows the "Create" page for a new Permission Set in Salesforce. The page has a "Save" button at the top right. Below it, the "Enter permission set information" section contains fields for "Label", "API Name", and "Description". A red arrow points to the "Label" field. Below this section, the "Select the type of users who will use this permission set" section contains a "License" dropdown menu. A red arrow points to the "Save" button at the bottom right.

Permission Sets | Salesforce

sbcom-5e-dev-ed.develop.lightning.force.com/lightning/setup/PermSets/page?address=%2F0PS2w000006svw7

Search Setup

Setup Home Object Manager

permission sets

Users

Permission Sets

Didn't find what you're looking for? Try using Global Search.

SETUP

Permission Sets

teacher permission

Find Settings Clone Delete Edit Properties **Manage Assignments**

Permission Set Overview

Description

License

Session Activation Required

Last Modified By

API Name

Namespace Prefix

Created By

Apps

Assigned Areas

Assigned Connected Areas

Object Settings

Flow Permissions

Flow Class Access

Visualforce Page Access

External Data Source Access

Permission Sets | Salesforce

sbcom-5e-dev-ed.develop.lightning.force.com/lightning/setup/PermSets/0PS2w000006svw7/PermissionSetAssignment/home

Search Setup

Setup Home Object Manager

permission sets

Users

Permission Sets

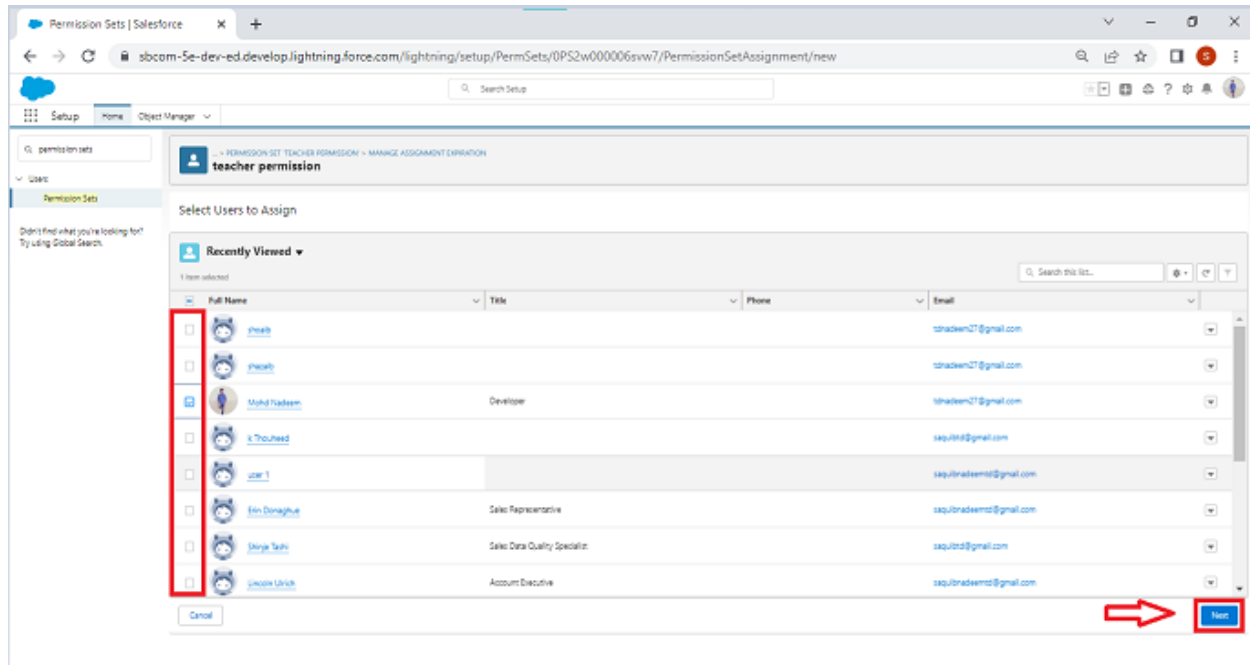
Didn't find what you're looking for? Try using Global Search.

teacher permission

Current Assignments

Add Assignment

No assignments defined.



Similarly follow the above steps for the permission set 2.

Activity-2:

Permission sets 2:

1. From Setup, enter Permission Sets in the Quick Find box, then select Permission Sets.
2. Click New.
3. Give the name of the Permission set name as Principal permission and then under the object settings give all permissions for the custom objects and assign them to the Principal user.

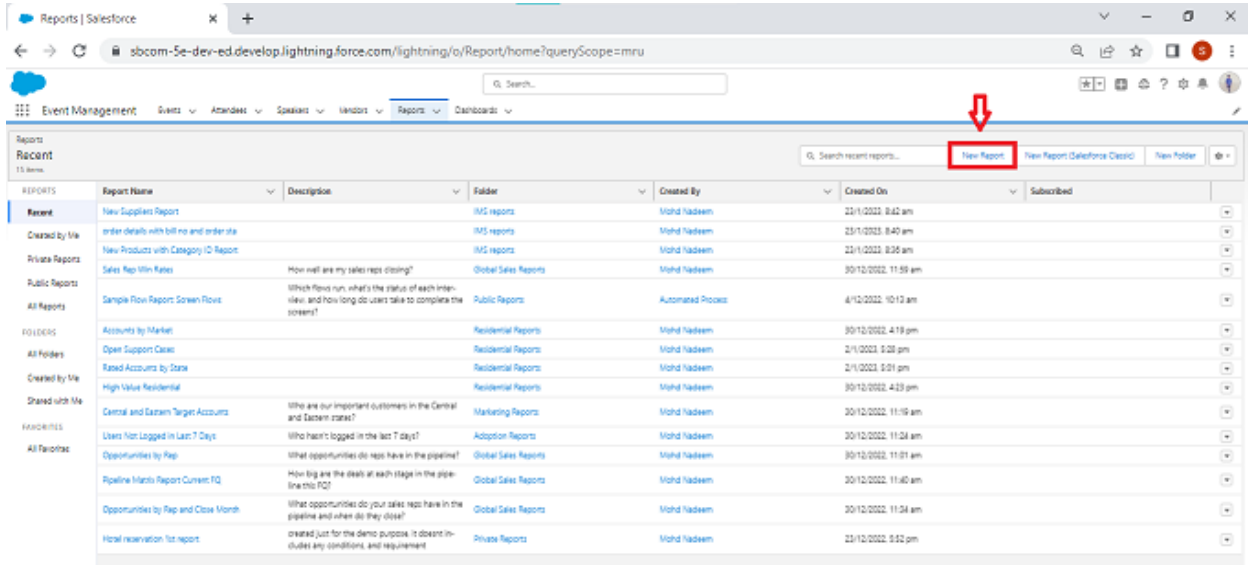
Milestone-8:Reports

A report is a **list of records that meet the criteria you define**. It's displayed in Salesforce in rows and columns, and can be filtered, grouped, or displayed in a graphical chart. Every report is stored in a folder. Folders can be public, hidden, or shared, and can be set to read-only or read/write.

Activity:

Reports :

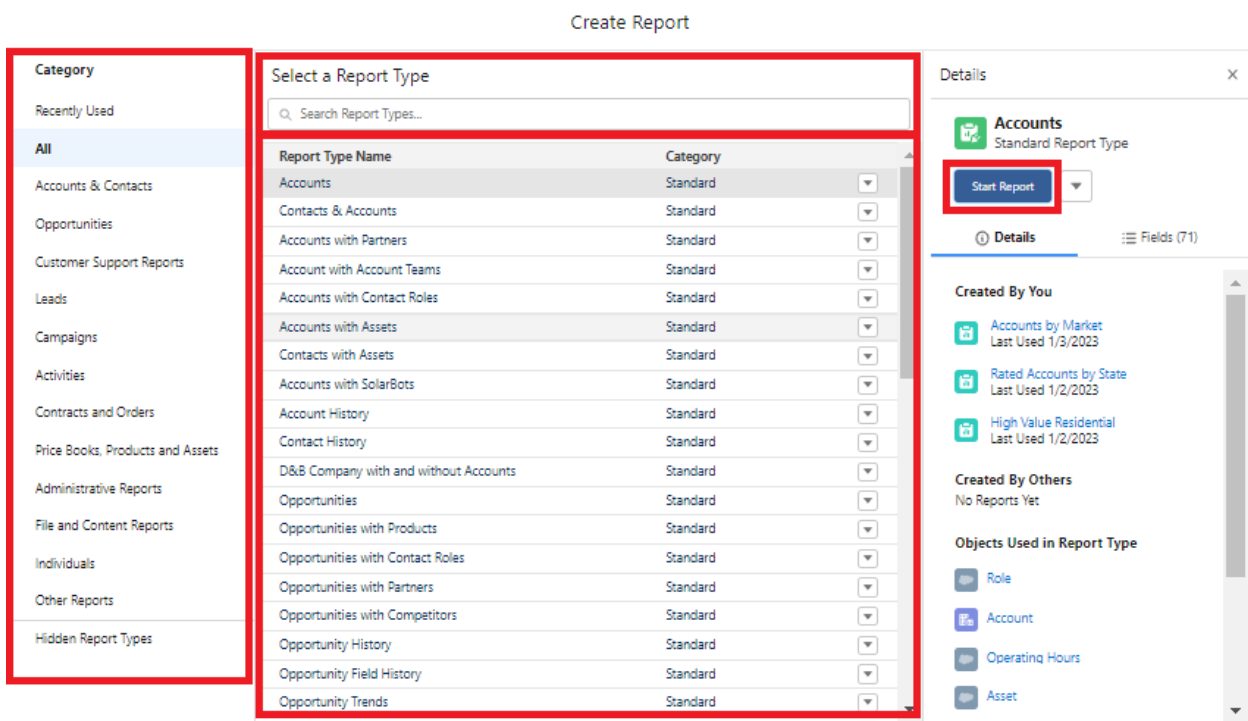
1. From the Reports tab, click New Report.



The screenshot shows the Salesforce Reports interface. A red arrow points to the 'New Report' button in the top right corner of the 'Recent Reports' section. The interface includes a search bar, navigation tabs, and a list of recent reports with columns for Report Name, Description, Folder, Created By, Created On, and Subscribed.

2. Select the report type as School with students and parents for the report, and click Create.

Create Report



The screenshot shows the 'Create Report' dialog. The 'Select a Report Type' section is highlighted with a red box. It contains a search bar and a list of report types. The 'Start Report' button is also highlighted with a red box. The right sidebar shows details for the selected report type, including 'Accounts' and 'Standard Report Type'.

| Report Type Name | Category |
|---------------------------------------|----------|
| Accounts | Standard |
| Contacts & Accounts | Standard |
| Accounts with Partners | Standard |
| Account with Account Teams | Standard |
| Accounts with Contact Roles | Standard |
| Accounts with Assets | Standard |
| Contacts with Assets | Standard |
| Accounts with SolarBots | Standard |
| Account History | Standard |
| Contact History | Standard |
| D&B Company with and without Accounts | Standard |
| Opportunities | Standard |
| Opportunities with Products | Standard |
| Opportunities with Contact Roles | Standard |
| Opportunities with Partners | Standard |
| Opportunities with Competitors | Standard |
| Opportunity History | Standard |
| Opportunity Field History | Standard |
| Opportunity Trends | Standard |

3. Customize your report, then save or run it.

Report Builder | Salesforce

sbcom-5e-dev-ed.develop.lightning.force.com/one/one.app#eyJjb21wb25lbnREZWYyOjYyZXh0b3RzOnJlcG9ydEJ1aWxkZXh0CjhdHRyaWJ1dGVzZjpw71nIY29yZEIkjoili...

Event Management | Swits | Atarides | Spakiss | Vendors | Reports | Dashboards

REPORTS
New Accounts Report | Accounts

Get Feedback? | To | Add Chart | Save & Run | Save | Close | Run

Previewing a limited number of records. Run the report to see everything.

Fields

Outline | Filters

Groups

GROUP NAME

Add group...

Columns

Add column...

Last Activity

Account Owner

Account Name

Billing State/Province

Type

Rating

Last Modified Date

| | Last Activity | Account Owner | Account Name | Billing State/Province | Type | Rating | Last Modified Date |
|---|---------------|---------------|-----------------------------|------------------------|----------------------|--------|--------------------|
| 1 | | Muhd Nadeem | United Oil & Gas, Singapore | - | Customer - Direct | Medium | 18/01/2023 |
| 2 | | Muhd Nadeem | United Oil & Gas, UK | - | Customer - Direct | Medium | 18/01/2023 |
| 3 | | Muhd Nadeem | University of Arkansas | - | Customer - Direct | Warm | 18/01/2023 |
| 4 | | Muhd Nadeem | Whitney Kelle Household | - | Residential | Hot | 18/01/2023 |
| 5 | | Muhd Nadeem | Whitney Kelle Household | - | Residential | Hot | 18/01/2023 |
| 6 | | Muhd Nadeem | Arana parner | - | Customer - Direct | Warm | 18/01/2023 |
| 7 | | Muhd Nadeem | guru randheev | - | Installation Partner | Cold | 18/01/2023 |
| 8 | | Muhd Nadeem | Pat Heath Household | - | Residential | Cold | 18/01/2023 |

Update Preview Automatically

