CREATION OF AN APPLICATION FOR SCHOOL MANAGEMENT - DEVELOPER - (SHORT-TERM)

Team ID : LTVIP2023TMID11598

Team Size : 4

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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.

Introduction

1. Go to developer.salesforce.com
2. Click on sign up.
3. On the sign up form, enter the following details

a. First name & Last name
b. Email
c. Role - Developer
d. Company - College Name
e. Country - India
f. Postal Code - pin code

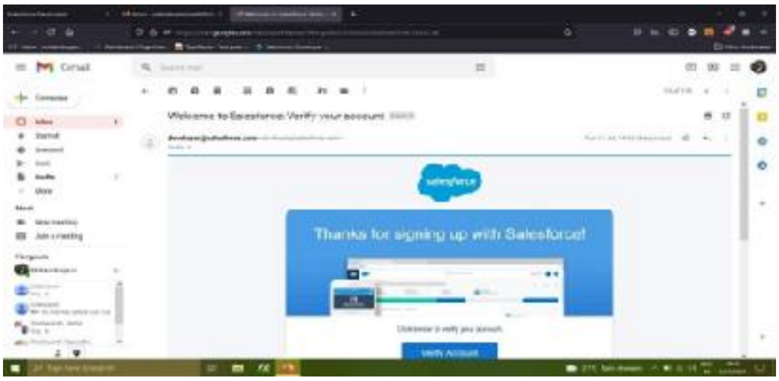
g. Username- should be a combination of your name and company

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.

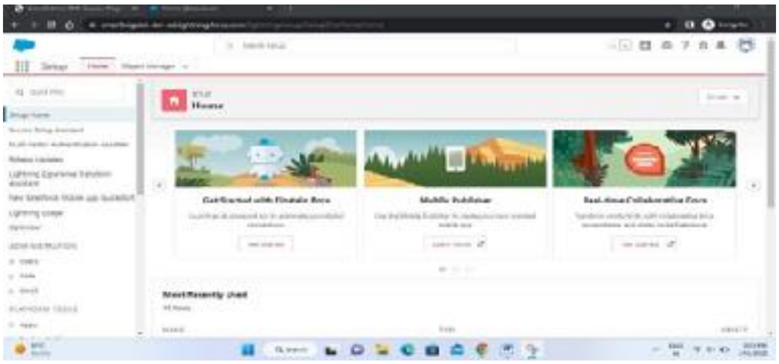
Account Activation

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

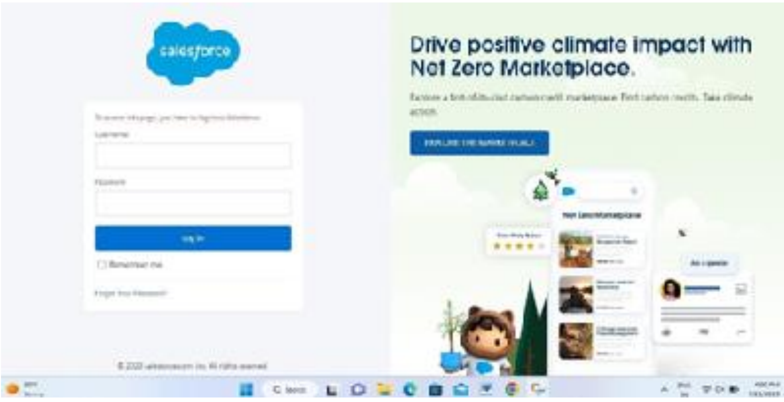


Login To Your Salesforce Account

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 htttps://login.salesforce.com



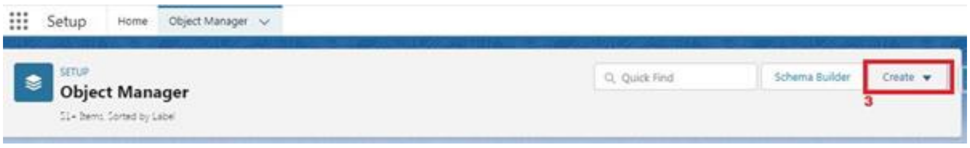
Object

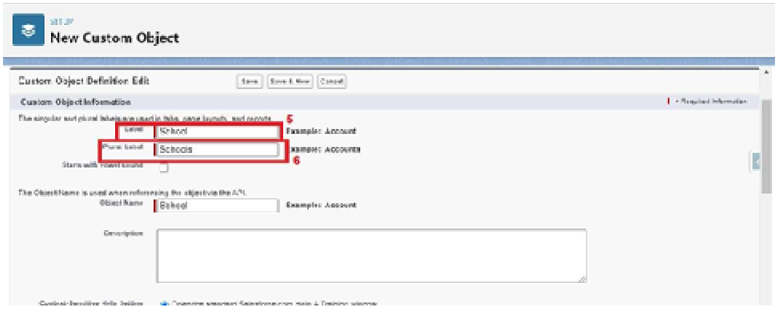
Creation Of School Object Creation Of Objects For School Management

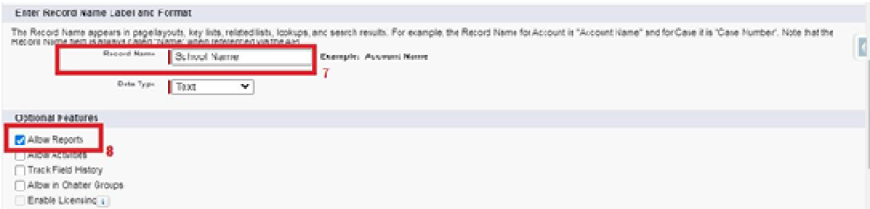
For this school management we need to create 3 objects School, Parents and Student. The below steps will assist you in creating those objects.

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.
4. On the Custom Object Definition page, create the object as follows:
5. Label: School
6. Plural Label: Schools
7. Record Name: School Name

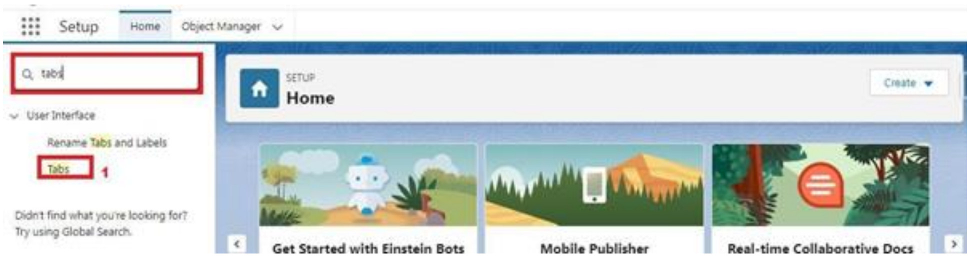
8. Check the Allow Reports checkbox
9. Check the Allow Search checkbox
10. Click Save.

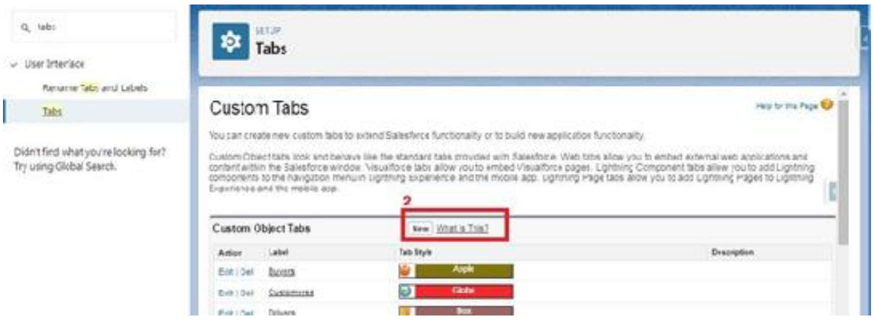


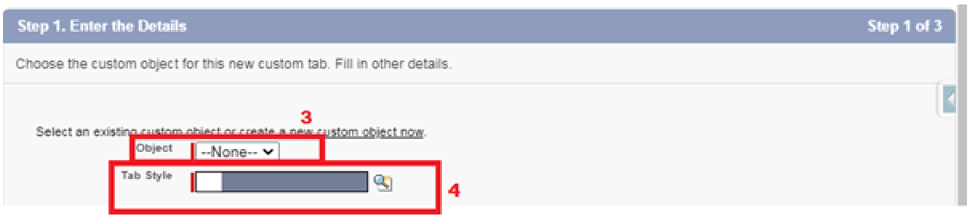




Now create a custom tab. Click the Home tab.







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: Student
- 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.

Create Parent Object

Click on the gear icon and then select Setup.

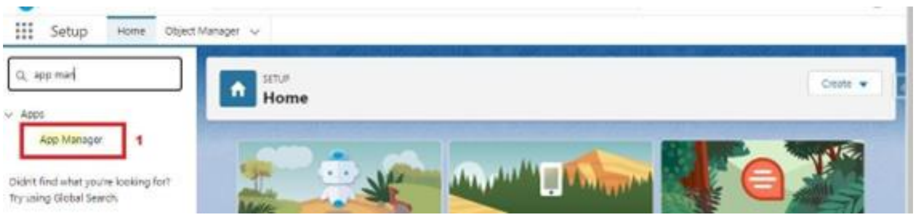
1. Click on the object manager tab just beside the home tab.
2. After the above steps, have a look on the extreme right you will find a Create Dropdown click on that and select Custom Object.

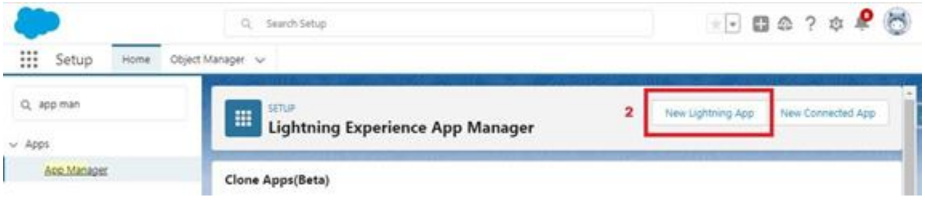
- On the Custom Object Definition page, create the object as follows:
- Label: Parent
- Plural Label: Parents
- Record Name: Parent Name
- Check the Allow Reports checkbox
- Check the Allow Search checkbox
- Click Save.

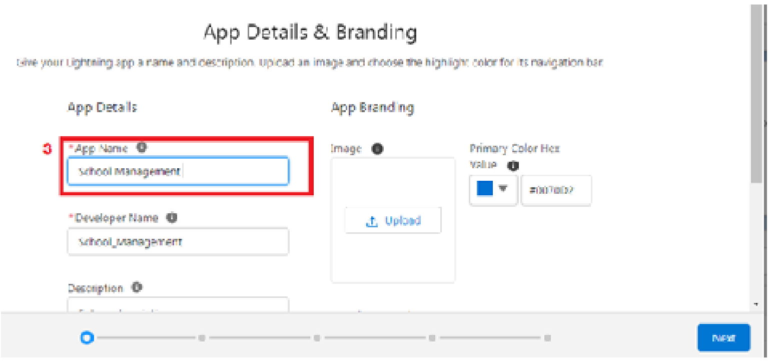
Lightning App

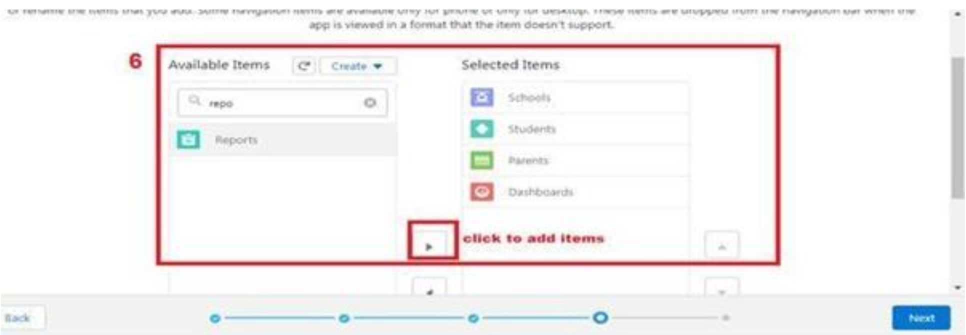
Create The School Management App

1. From Setup, enter App Manager in the Quick Find and select App Manager.
2. Click New Lightning App.
3. Enter School Management as the App Name, then click Next
4. Under App Options, leave the default selections and click Next.
5. Under Utility Items, leave as is and click Next.
6. From Available Items, select Schools, Students, Parents, Reports, and Dashboards and move them to Selected Items. Click Next.
7. From Available Profiles, select System Administrator and move it to Selected Profiles.Click Save & Finish.




Search Setup
Setup
Home
Object Manager
app man
Apps
App Manager
SETUP
Lightning Experience App Manager
2
New Lightning App
New Connected App
Clone Apps(Beta)


App Details & Branding
App Details
App Branding
3
*App Name
School Management
*Developer Name
School_Management
Description
Image
Upload
Primary Color Hex Value
Next

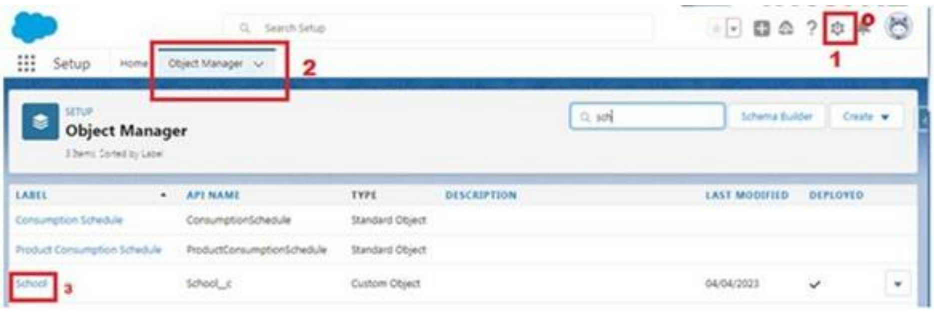

app is viewed in a format that the item doesn't support.
6
Available Items
Create
repo
Reports
Selected Items
Schools
Students
Parents
Dashboards
click to add items
Back
Next

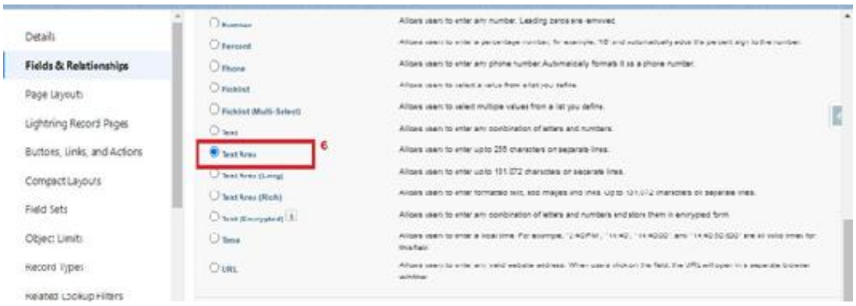

User Profiles
Choose the user profiles that can access this app.
7
Available Profiles
system
System Administrator
Selected Profiles
Save & Finish

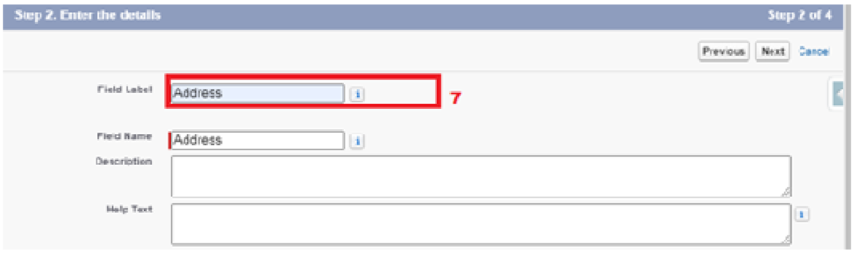
Fields And Relationship

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
5. Click New
6. Select the Text Area as the Data Type, click Next.
7. For Field Label, enter Address.
8. Click Next, Next, then Save & New.
9. Follow steps 1 to 3 and create two more Text type field - District & State.
10. Create URL type field & give School website as the field label.





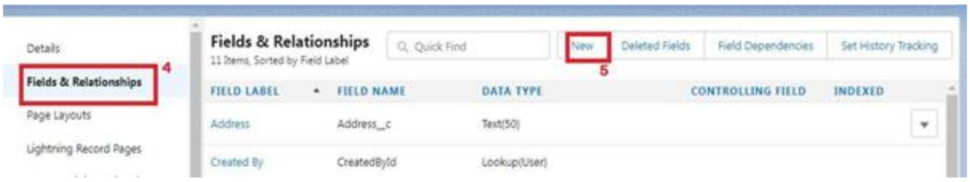


Creation Of Fields For The Student Objects

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.

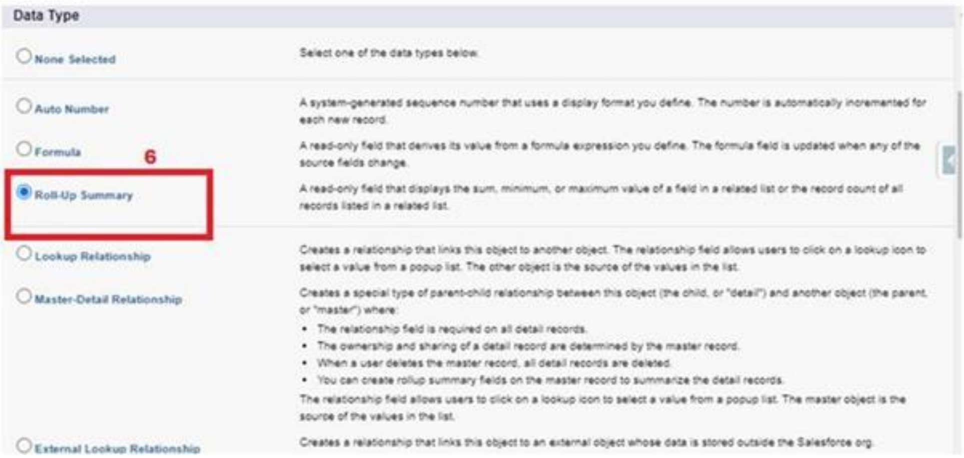


Let’s create a Pick-List field:

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

Let’s create a Number field:
Note- Follow above steps 1 to 5 to create field and then follow below steps

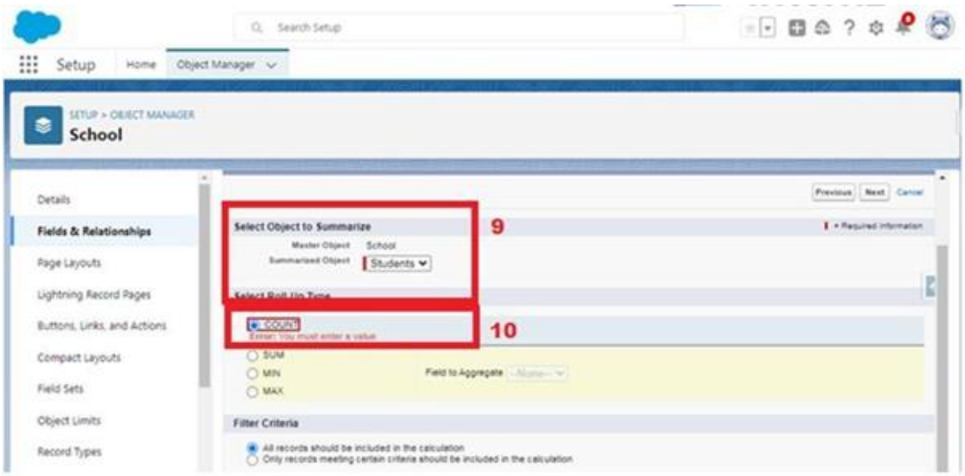
1. Select the Number as the Data Type, then click Next.
2. For Field Label, enter Class.
3. Click Next, Next, then Save & New
4. Follow steps 1 through 3 and create one more number field with Marks as the field labels.



Let’s create Roll-up summary fields on School Object to calculate the number of students

1. Click gear icon Select Setup, This launches Setup in a new tab.

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



Create one more rollup summary field-

- From Setup, click Object Manager and select School.
- Click Fields & Relationships, then New.
- Select the Roll-up summary field as data type
- Enter the field label as Highest Marks
- Click Next
- 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.

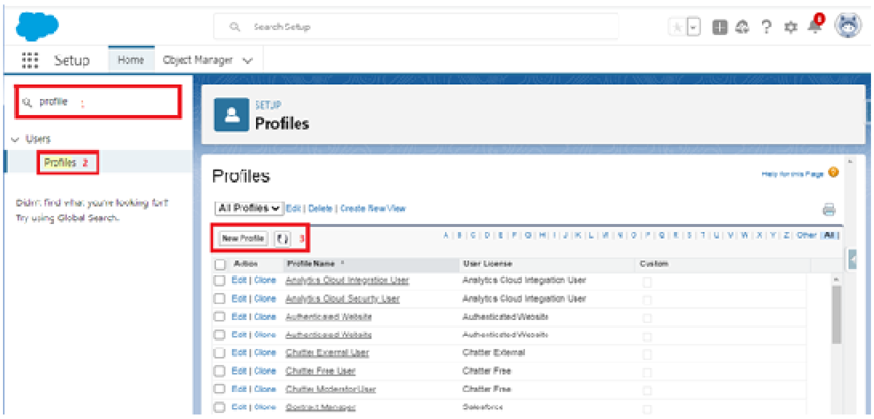
Creation Of Fields For The Parent Objects

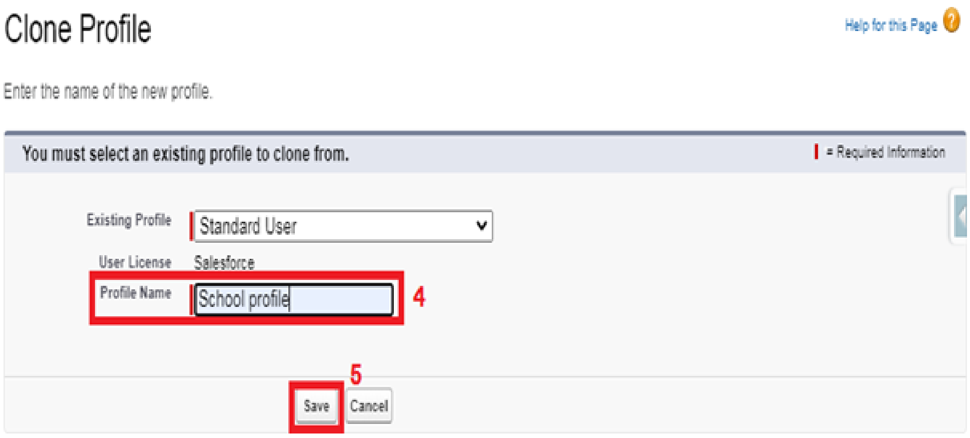
- Select the Text Area as the Data Type, then click Next.
- For Field Label, enter Parent Address.
- Click Next, Next, then Save & New.
- Select the Phone as the Data Type, then click Next.
- For Field Label, enter Parent Number.
- Click Next, Next, then Save & New

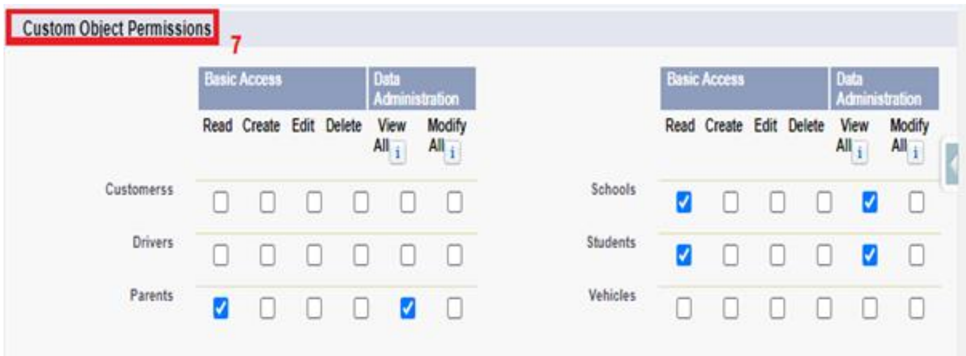
Profile

Creation On Profile

- From Setup enter Profiles in the Quick Find box
- Select Profiles.
- Click new, From the list of profiles, find Standard User (profile to clone)
- For Profile Name, enter School Profile
- Click Save.
- While still on the School profile page, then click Edit.
- Scroll down to Custom Object Permissions and Give view all access permissions.





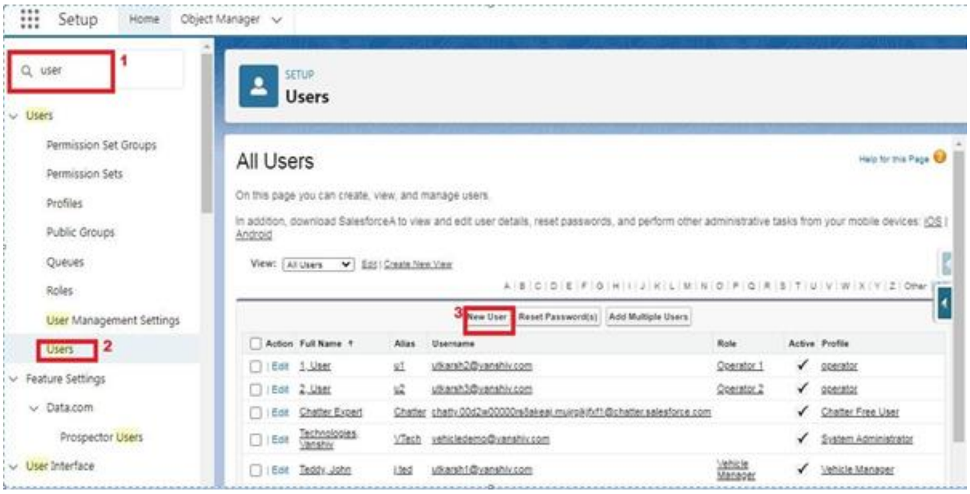


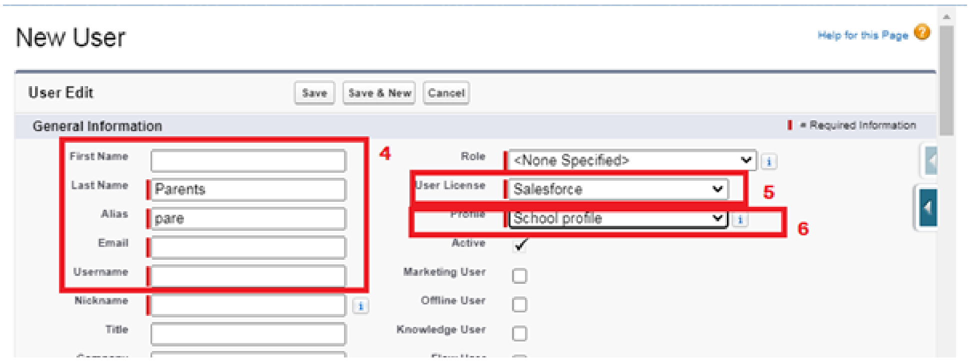
[Users]()

Creating A User

1. From Setup, in the Quick Find box, enter Users.
2. Select Users.
3. Click New User.
4. 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.
5. Select a User License as salesforce.

6. NOTE- As Salesforce license can only be used by 2 Users at a time in Dev Org, so If you don't find salesforce license then deactivate a user who has salesforce license or change the license type from Salesforce to any other.
7. Select a profile as a School profile.
8. Check Generate new password and notify the user immediately to have the user's login name and a temporary password emailed to your email.
9. Similarly follow the above steps and create 2 users as Teachers and principals.

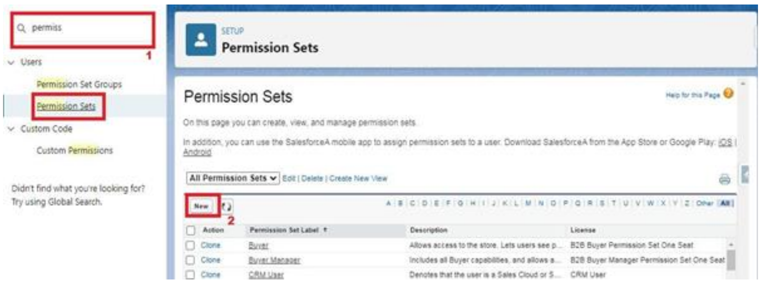


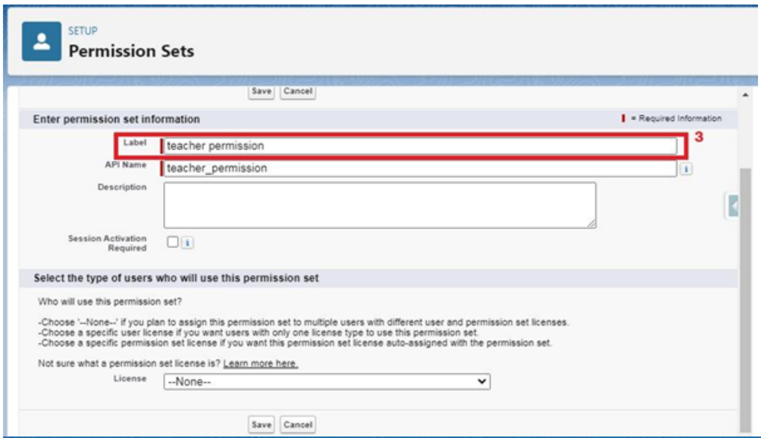


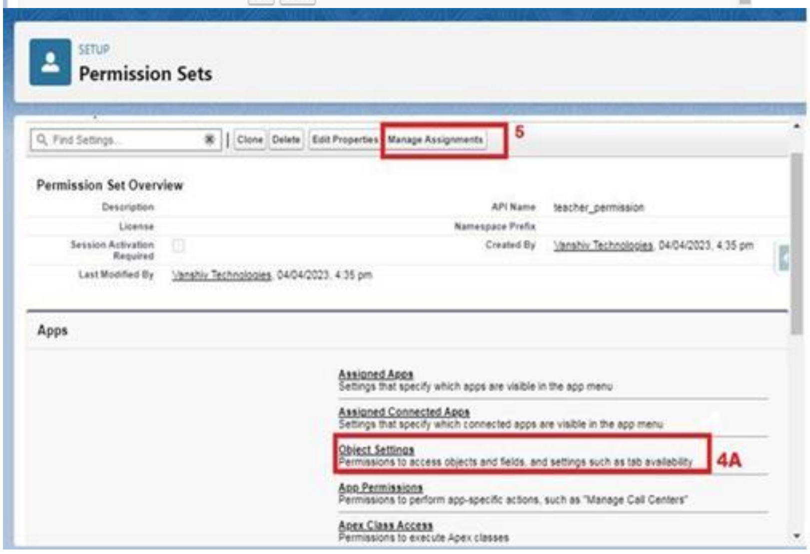
Permission Sets

Permission Sets 1

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 teacher permission.
4. Under the object settings give the view create and edit permissions to all 3 custom objects (By click open the object)
5. Click on manage assignment
6. Click on add assignment.
7. Click on Teacher (user), Next, Assign.


permiss
1
Users
Permission Set Groups
Permission Sets
Custom Code
Custom Permissions
Didn't find what you're looking for? Try using Global Search.
SETUP
Permission Sets
Permission Sets
On this page you can create, view, and manage permission sets.
All Permission Sets
New
2
Action
Permission Set Label
Description
License
Buyer
Buyer Manager
CRM User


SETUP
Permission Sets
Save
Cancel
Enter permission set information
= Required Information
Label
teacher permission
3
API Name
teacher_permission
Description
Session Activation Required
Select the type of users who will use this permission set
Who will use this permission set?
-Choose '--None--' if you plan to assign this permission set to multiple users with different user and permission set licenses.
-Choose a specific user license if you want users with only one license type to use this permission set.
-Choose a specific permission set license if you want this permission set license auto-assigned with the permission set.
Not sure what a permission set license is? Learn more here.
License
--None--
Save
Cancel


SETUP
Permission Sets
Find Settings...
Clone
Delete
Edit Properties
Manage Assignments
5
Permission Set Overview
Description
API Name
teacher_permission
License
Namespace Prefix
Session Activation Required
Created By
Vanshiv Technologies, 04/04/2023, 4:35 pm
Last Modified By
Vanshiv Technologies, 04/04/2023, 4:35 pm
Apps
Assigned Apps
Settings that specify which apps are visible in the app menu
Assigned Connected Apps
Settings that specify which connected apps are visible in the app menu
Object Settings
Permissions to access objects and fields, and settings such as tab availability
4A
App Permissions
Permissions to perform app-specific actions, such as "Manage Call Centers"
Apex Class Access
Permissions to execute Apex classes


SETUP
Permission Sets
Available
Visible
Object Permissions
Permission Name
Enabled
Read
Create
Edit
Delete
View All
Modify All
4B

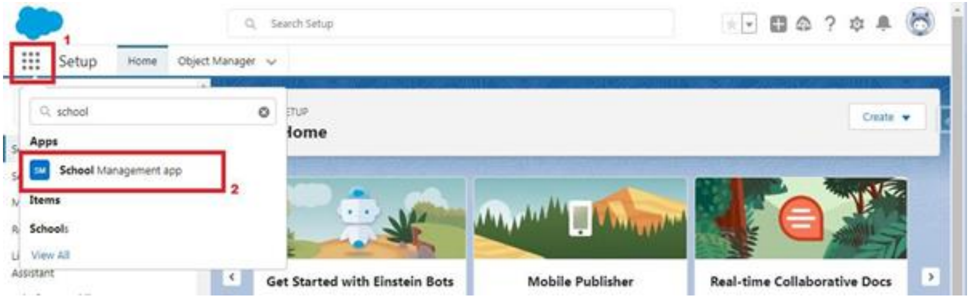
Permission Sets 2

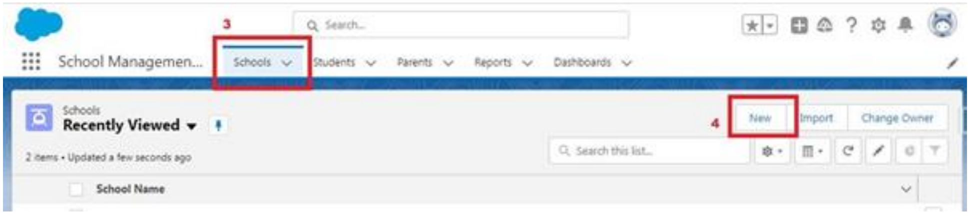
1. From Setup, enter Permission Sets in the Quick Find box, then select Permission Sets.
2. Click New.
3. Give the name of the Permission set name as Principal permission and then under the object settings give all permissions for the all 3 custom objects and assign them to the Principal user.

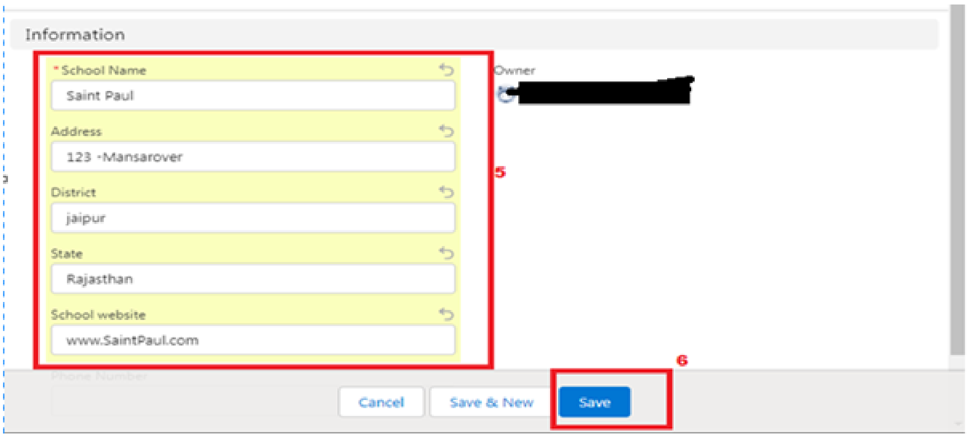
User Adoption

Create Record (School)

1. Click on App Launcher on left side of screen.
2. Search School Management App & click on it.
3. Click on Schools tab.
4. Click new button
5. Fill all School record details.
6. Click on Save Button

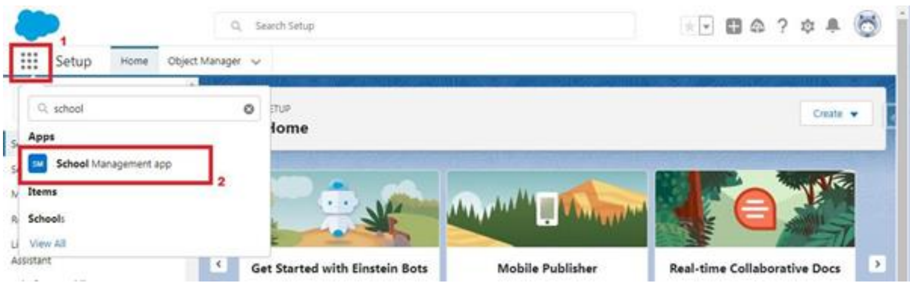


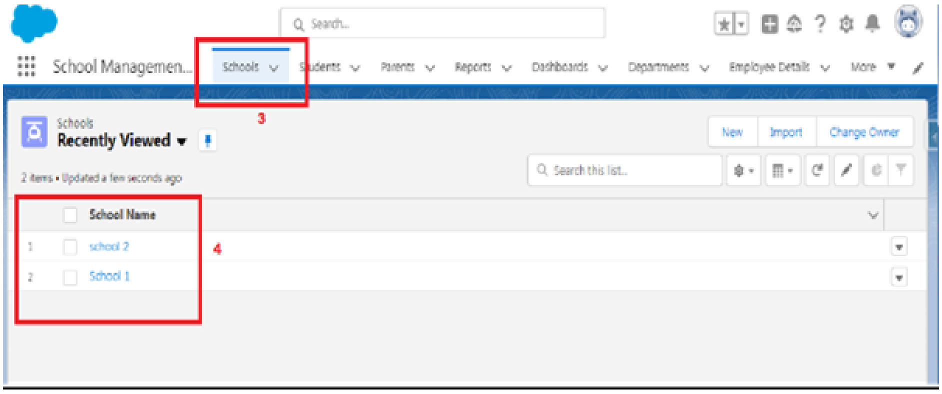




View Record (School)

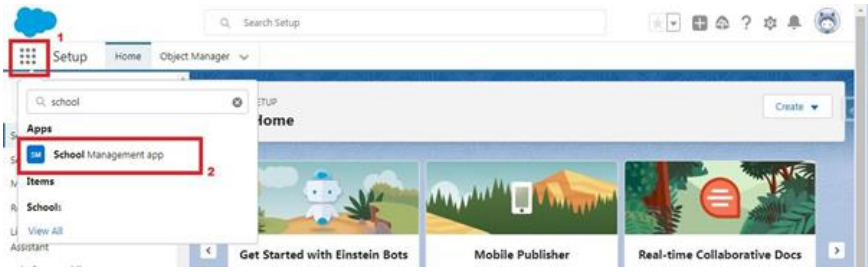
1. Click on App Launcher on left side of screen.
2. Search School Management App & click on it.
3. Click on Schools Tab.
4. Click on any record name. you can see the details of the School.

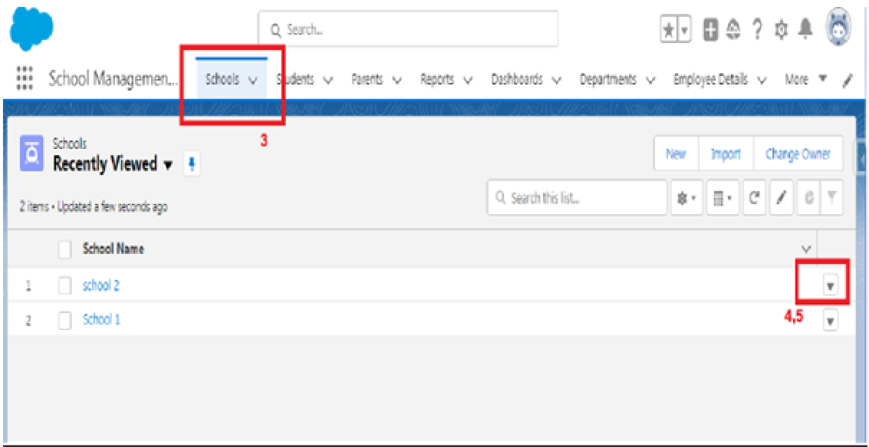




Delete Record (School)

1. Click on App Launcher on left side of screen.
2. Search School Management App & click on it.
3. Click on Schools Tab.
4. Click on Arrow at right hand side on that Particular record.
5. Click delete and delete again.



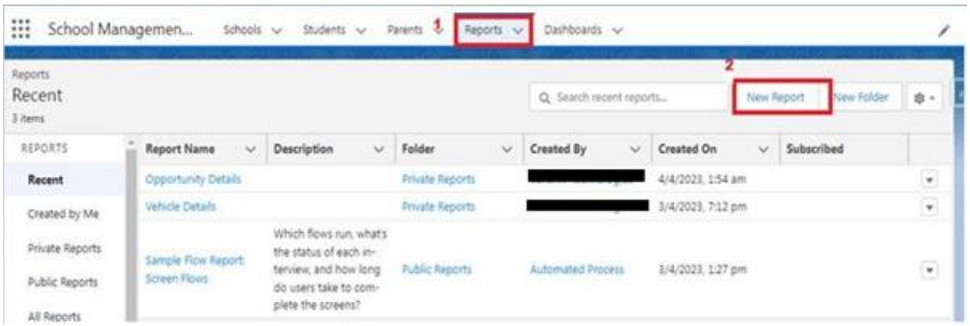


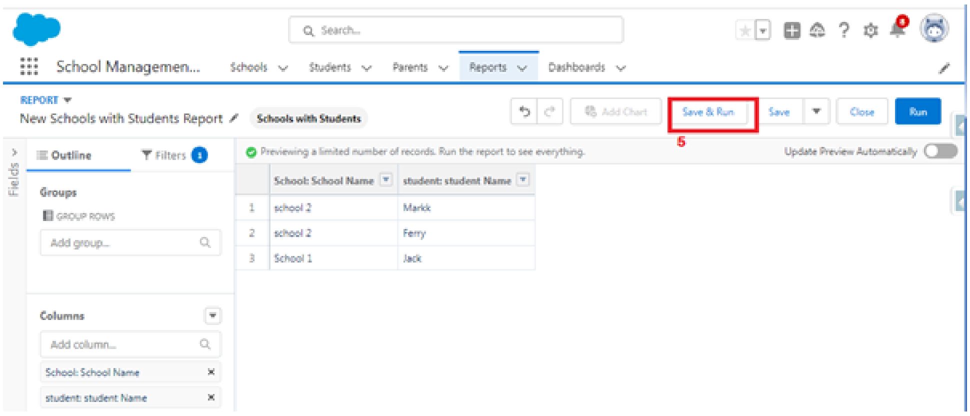
Reports

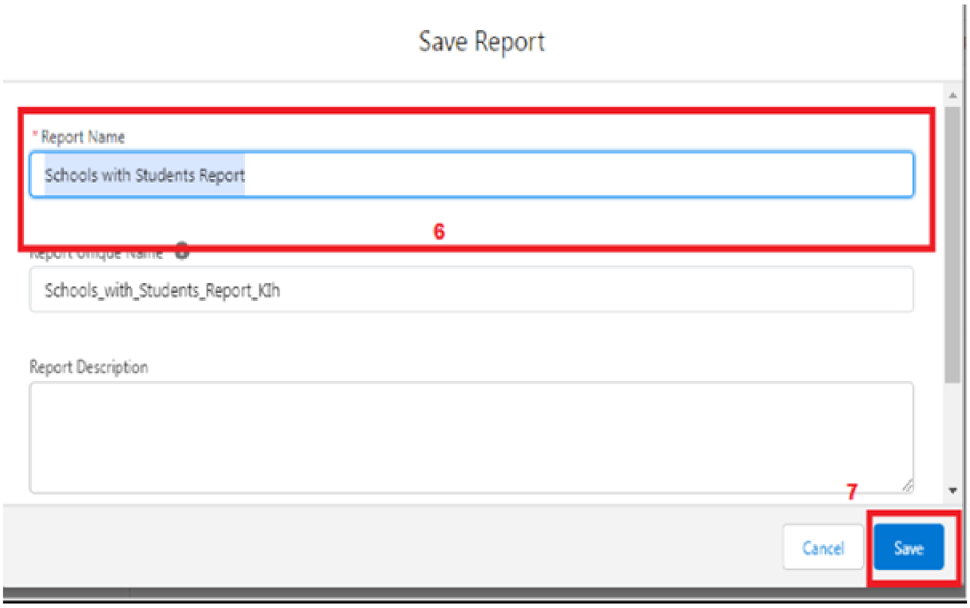
Create Report

Reports:

1. In School Management App click Reports tab.
2. Click New Report.
3. Select the report type as School with students and parents for the report.
4. Click start report.
5. Customize your report, then save and run
6. Give report name – Schools with Students Report
7. Click Save

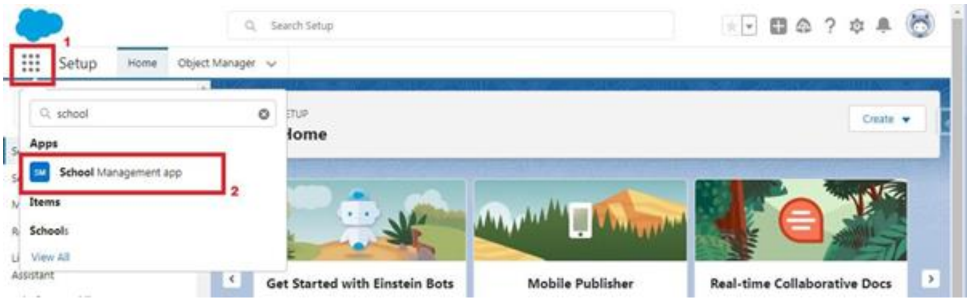


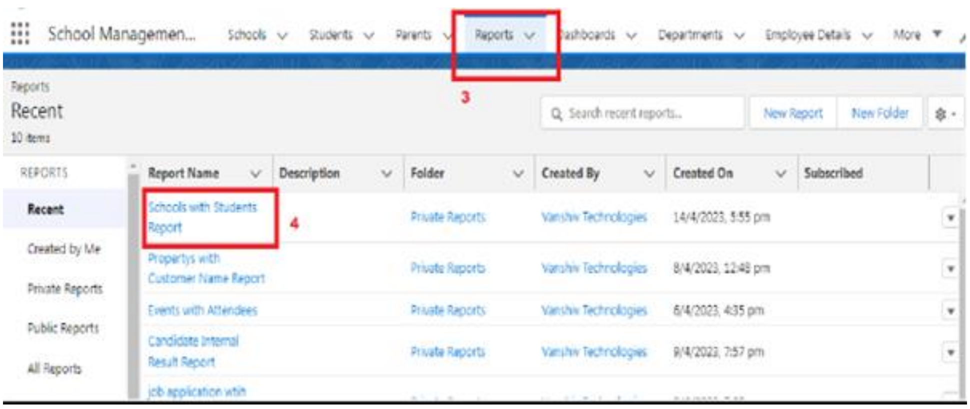




View Report

1. Click on App Launcher on left side of screen.
2. Search School Management App & click on it.
3. Click on Reports Tab.
4. Click on School with Students report and see records





Triggers

Write A Trigger

write a trigger whenever the school website is null you should be unable to delete the record.

Go to the gear icon and select the developer console.
From the menu bar click on file and select Apex class.
Now give the class name as schoolHandler
Now Write the below code

```
public class schoolHandler {
   public static void beforeDelete(list<School__c> oldlist){
      for(School__c s : oldlist){
         if(s.Schoolwebsite__c == null ){
            s.addError('you cannot delete the record');
         }
      }
   }
}
```

From the menu bar click on file and select Apex trigger.
Now give the trigger name as Internalmarks
Now write the below code

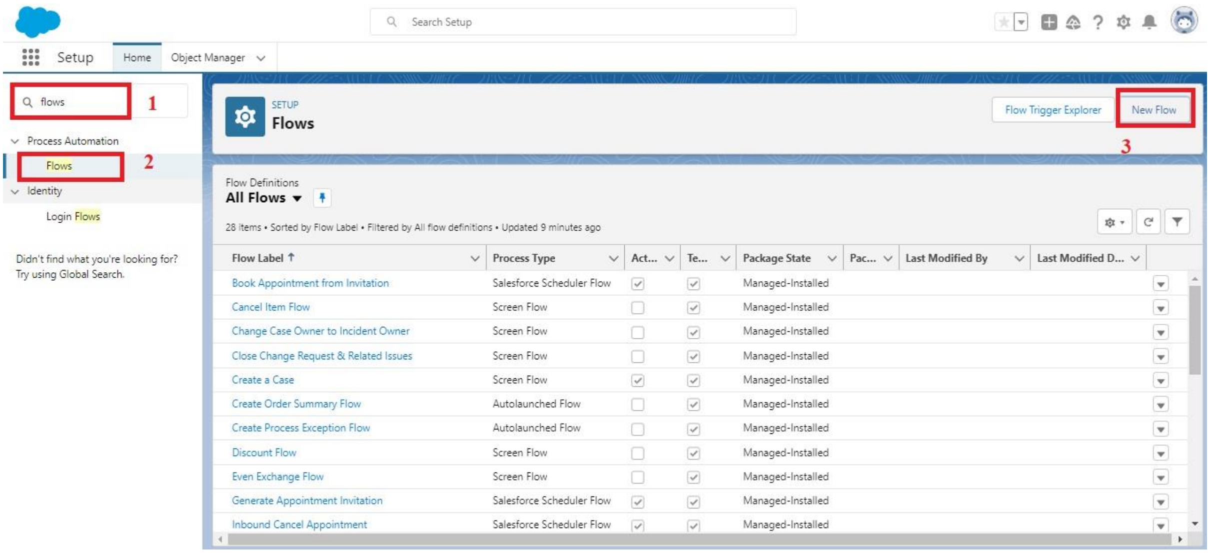
```
trigger SchoolTrigger on School__c (before delete) {
   if(trigger.isDelete){
      if(trigger.isBefore){
         schoolHandler.beforeDelete(trigger.old);
      }
   }
}
```

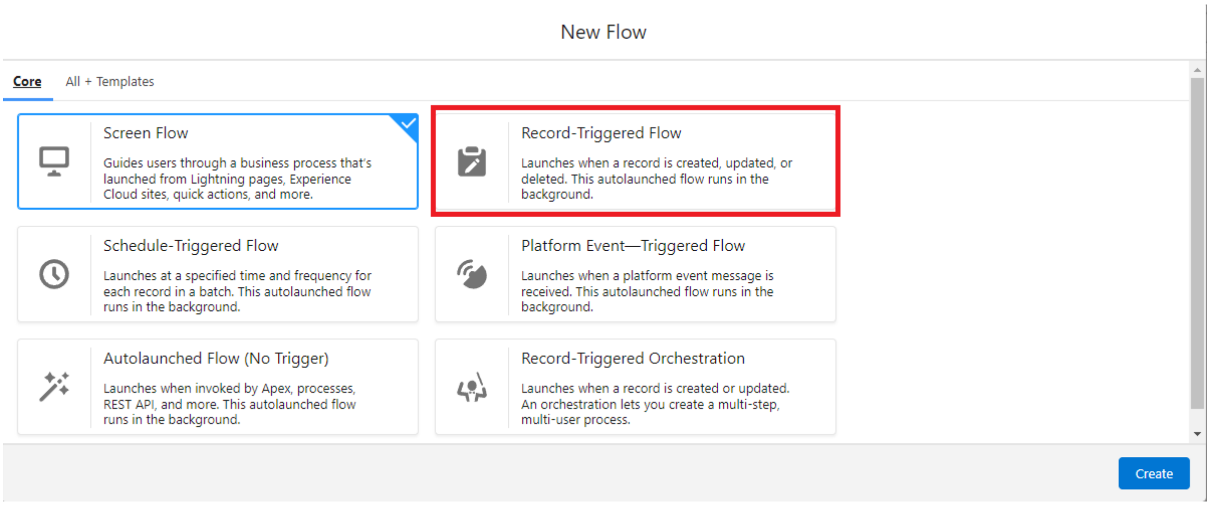
Flows

Create Flow

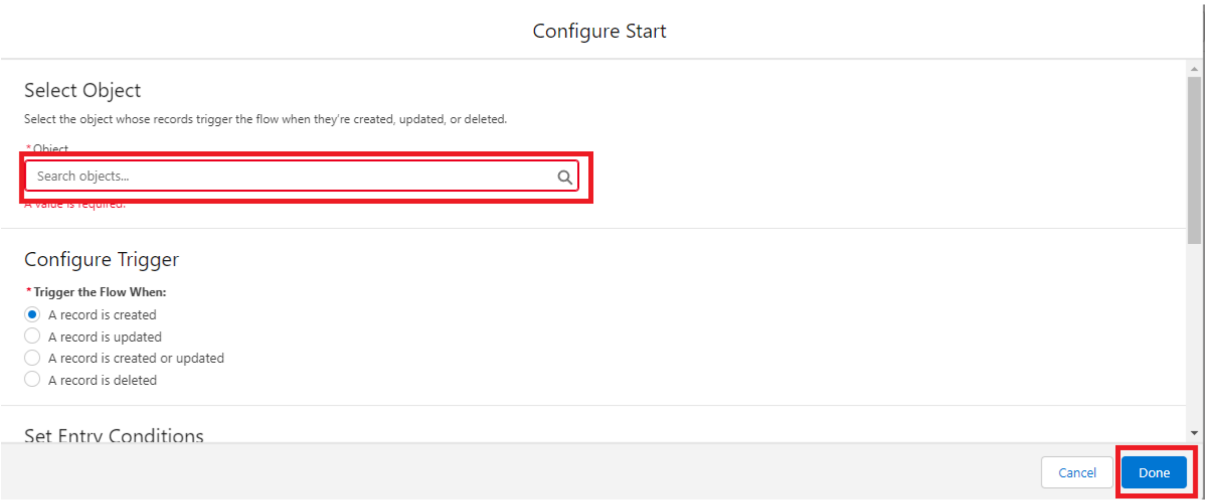
Create a record triggered flow whenever a student record is created it must send the email to the student about their welcome.

Click on Gear icon and select setup
In Quick find Box enter flow and select the flows
Click on New flow and Select Record triggered Flows.



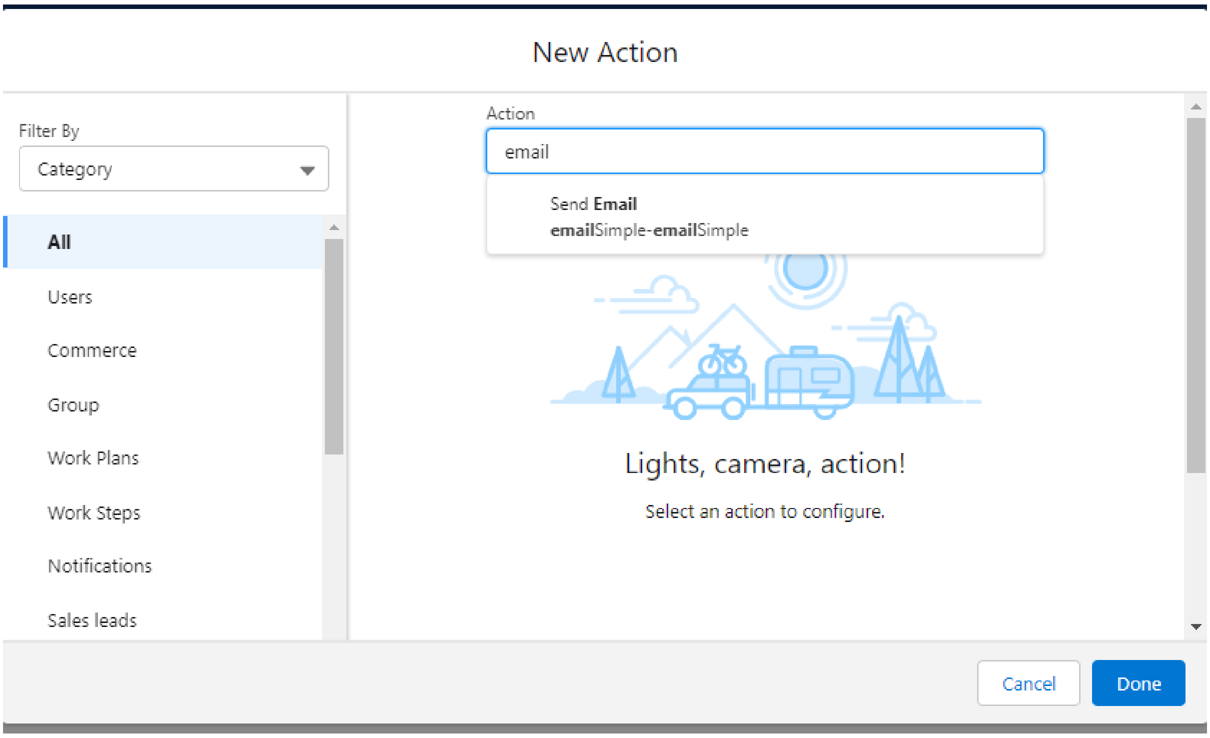


In the search bar type student and click done.

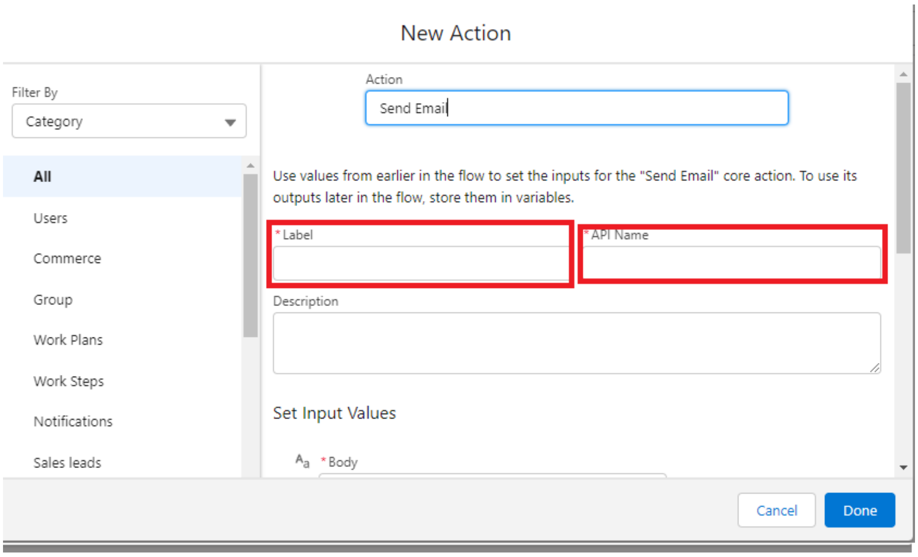


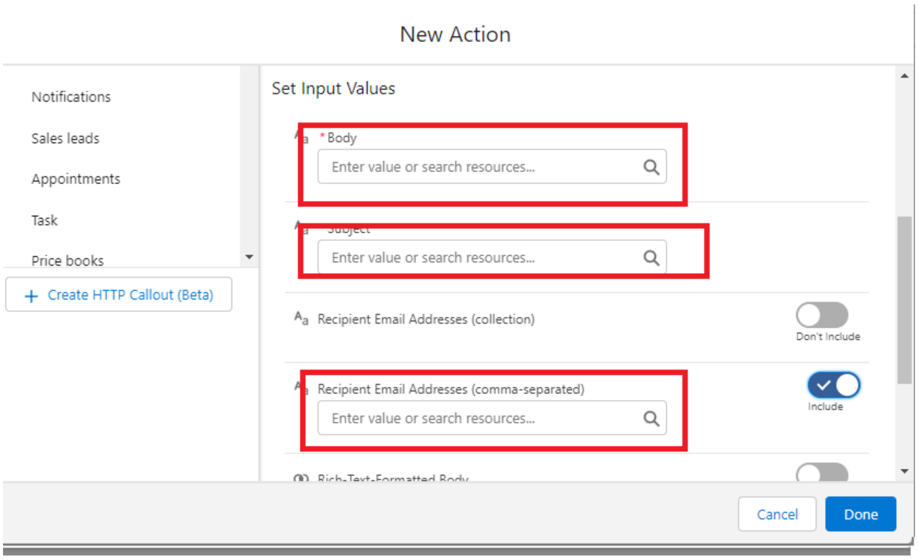
Select (+)

type action and type email as follows.



Enter the following details
Label:Student Record Creation
Api Name:Student_Record_Creation(Auto-pupulated)
Body: Hi {!$Record.Name} , we are happy to inform you that you have joined in our {!$Record.school__r.Name}.
Subject: Record Creation
Recipient email Address:{!$Record.Email__c}





click on done and Click on save
Flow label:Student flow
Flow API Name:Student_flow
and then click Activate.