PROJECT REPORT ON

Implementing CRM for Result Tracking of a Candidate with Internal Marks

(DEVELOPER) - (Short-term)

Introduction: 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 to those professionals who are in cross technology and wanted to switch to Salesforce with the help of this project they will gain knowledge and can include into their resume as well.

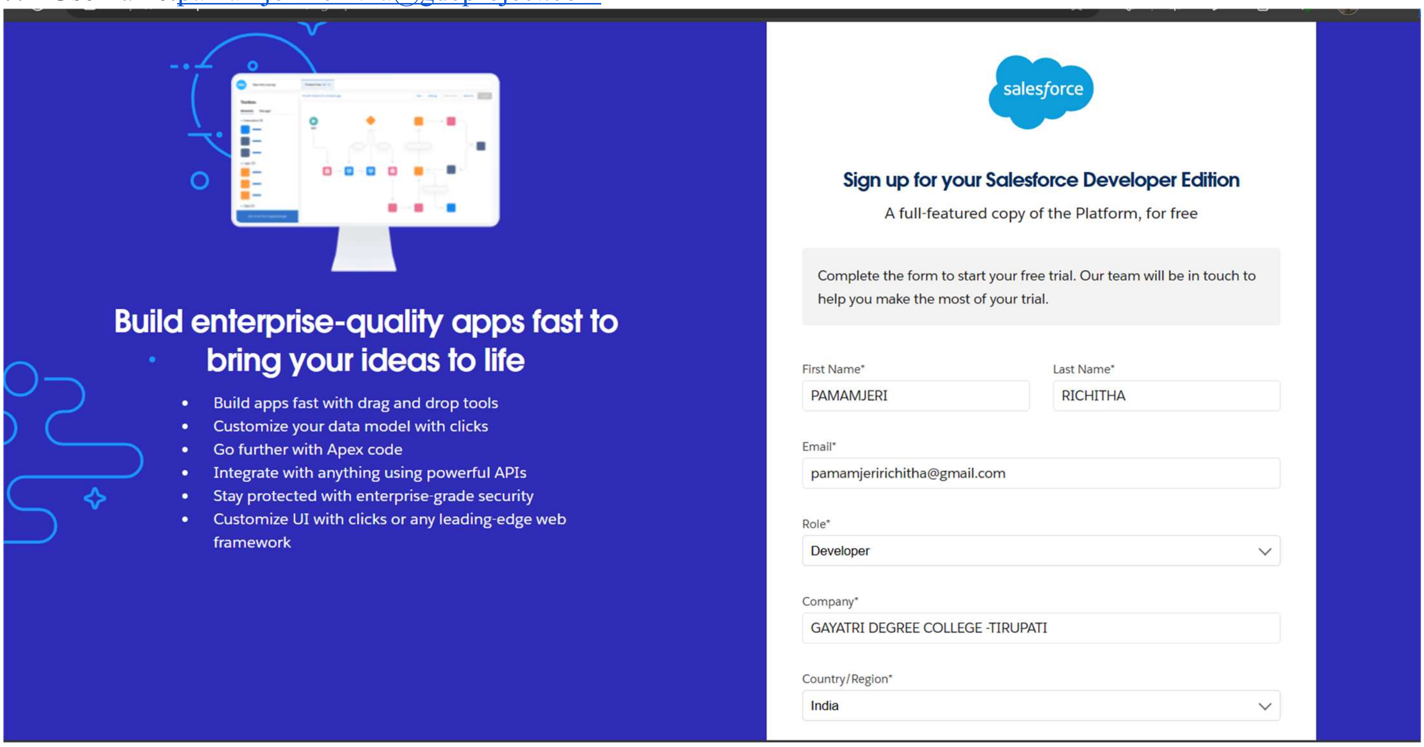
Milestone 01: Create Salesforce Org Go

to developers.salesforce.com/Signup

Click on sign up.

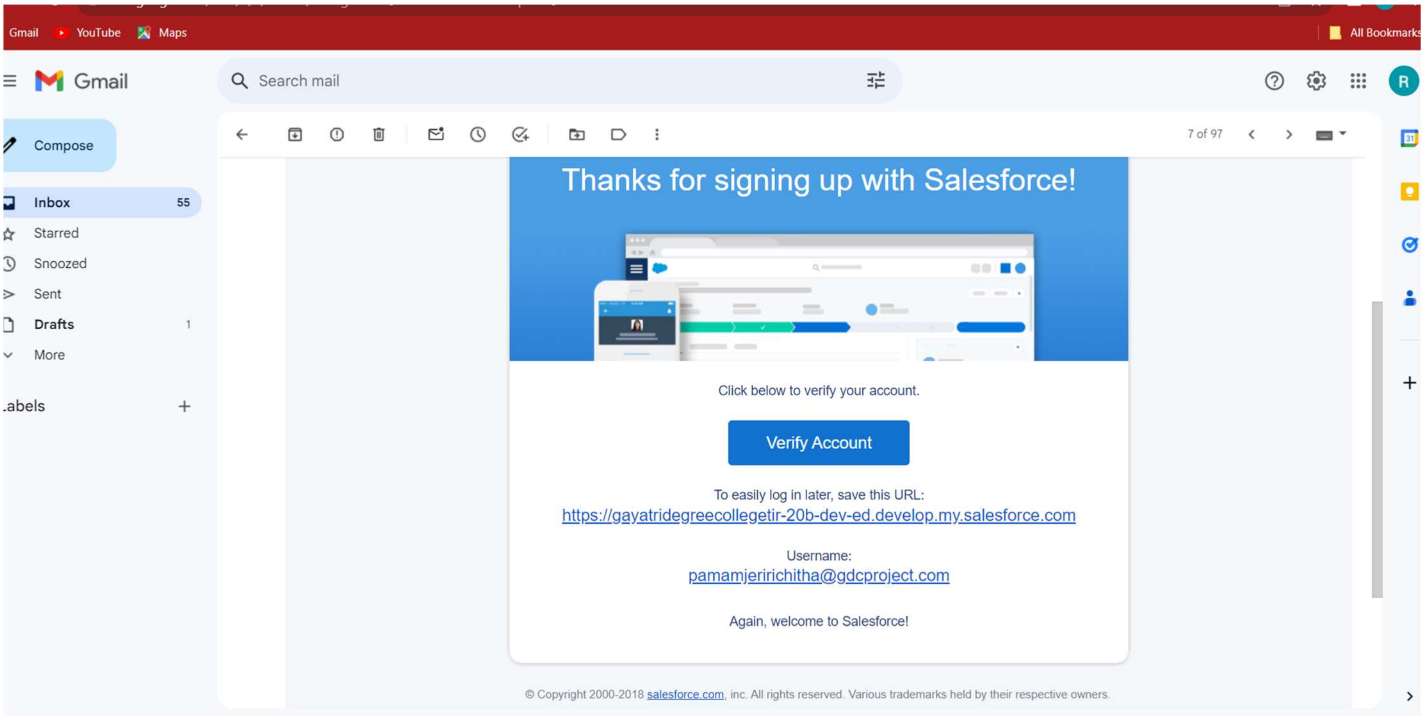
On the sign-up form, enter the following details:

1. First name & Last name – PAMAMJERI RICHITHA
2. Email –pamamjeririchitha@gmail.com
3. Role: Developer
4. Company: GAYATRI DEGREE COLLEGE - TIRUPATI
5. County: India
6. Postal Code: 517501
7. Username:pamamjeririchitha@gdcproject.com



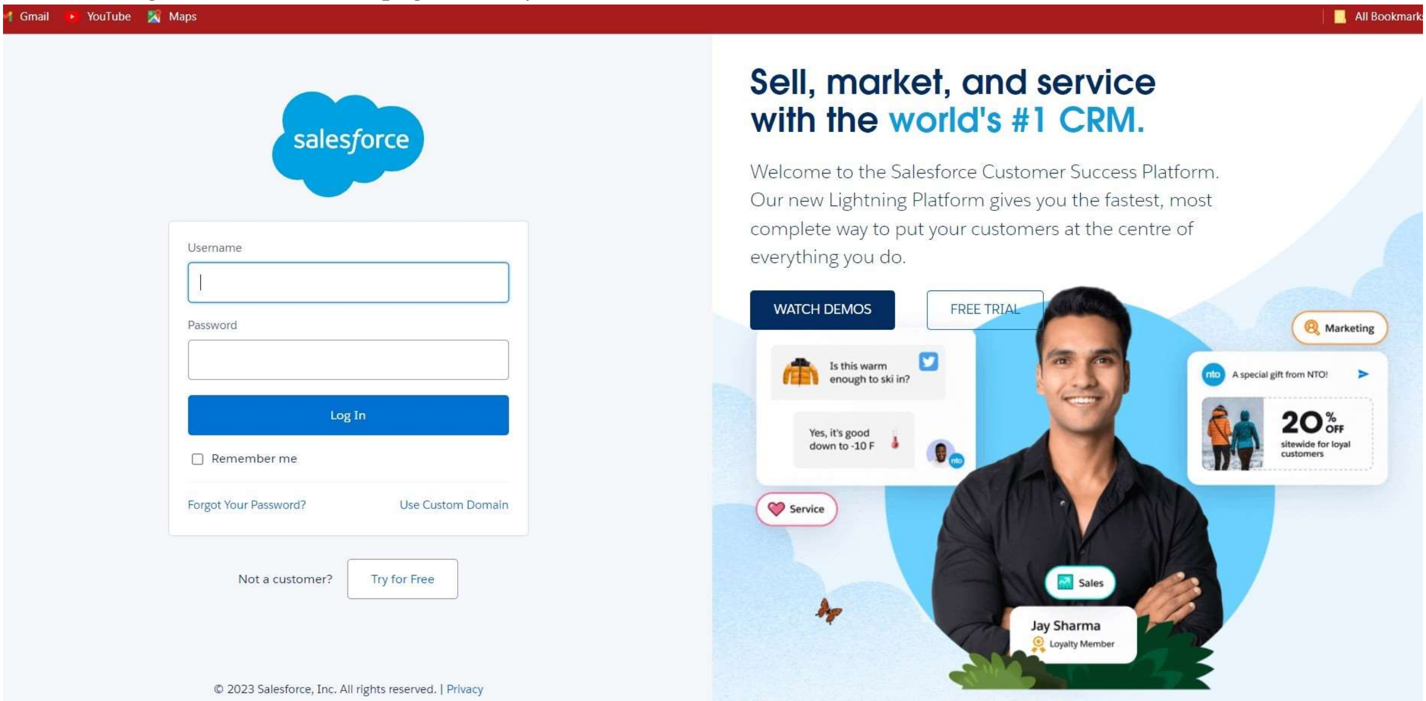
8.Account Activation

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

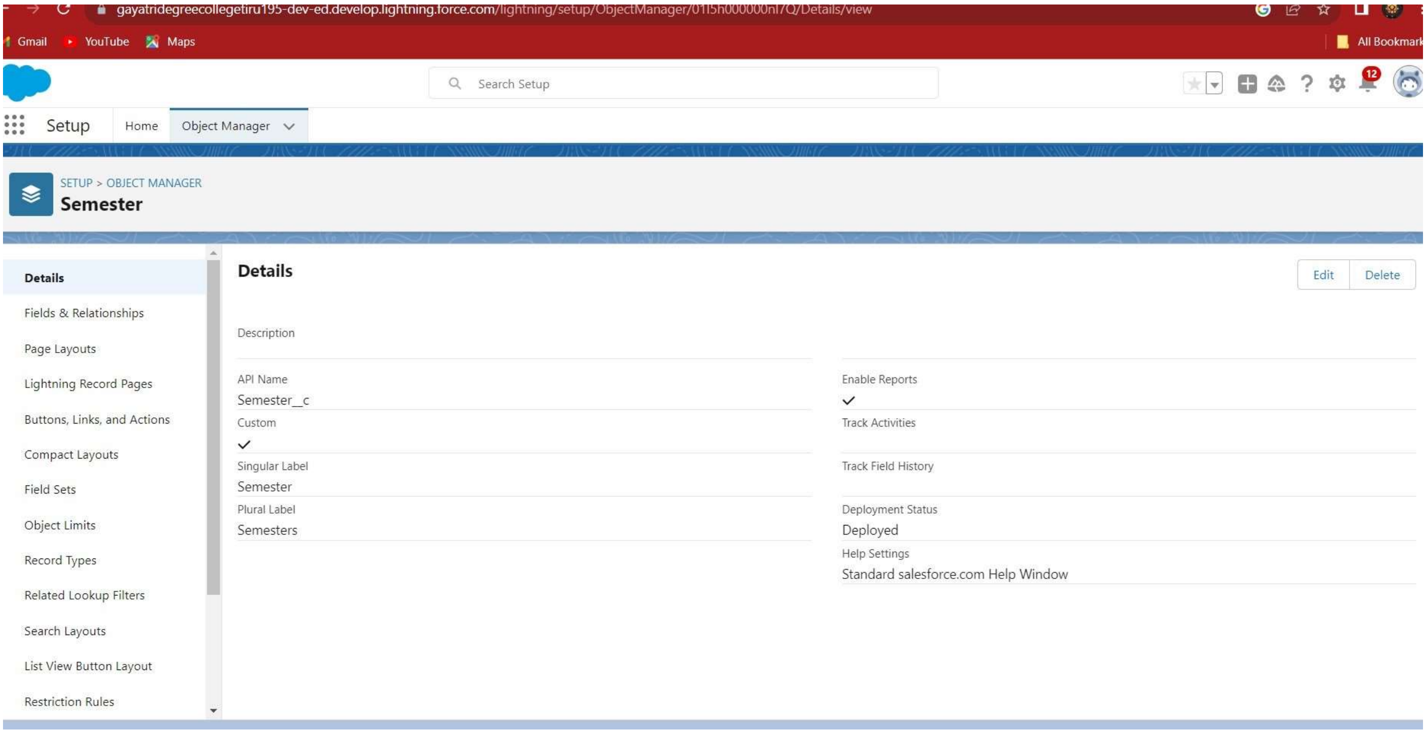
1. Go to salesforce.com and click on login.
2. Enter the username and password that you just created.
3. After login this is the home page which you will see.



Milestone – 02: Creation of Objects
Object – Semester

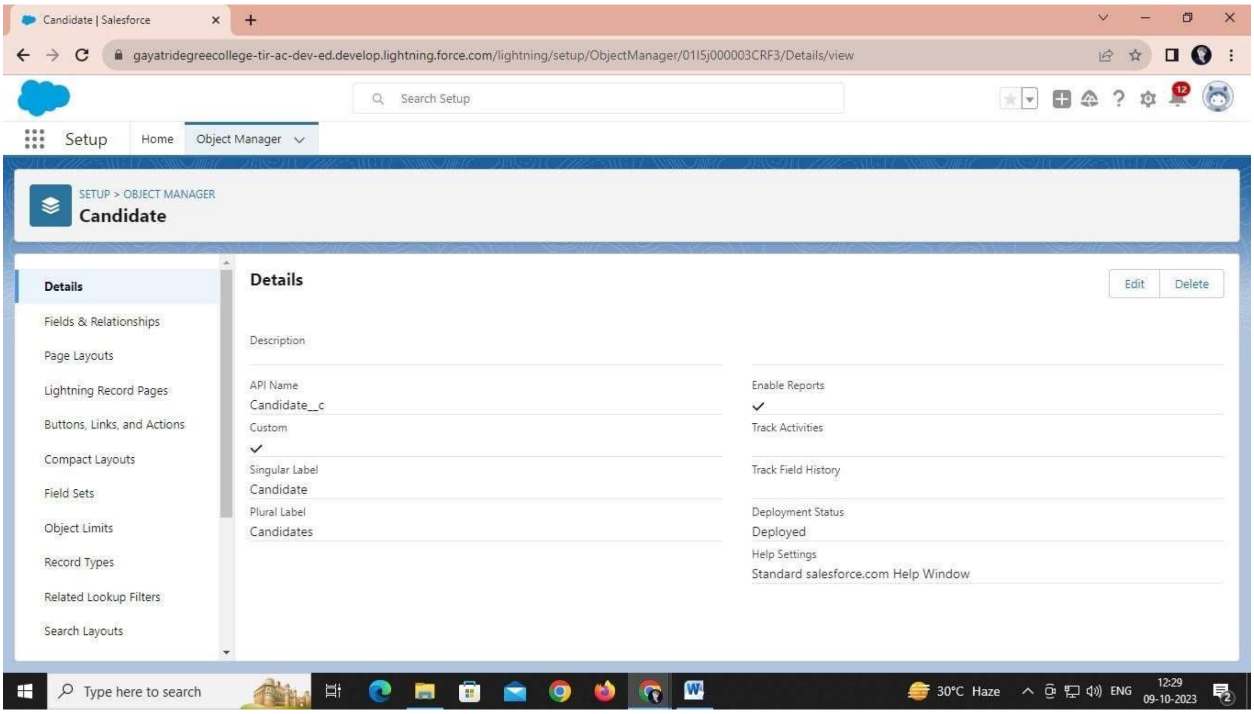
1. Click on the gear icon and then select Setup.
2. Click on the object manager tab just beside the home tab.

3. After the above steps, have a look on the extreme right you will find a Create Drop down click on that and select Custom Object.
4. On the Custom Object Definition page, create the object as follows:
5. Label: Semester
6. Plural Label: Semesters
7. Record Name: Semester Name
8. Check the Allow Reports
9. Check the Allow Search 10. 10.Click Save.



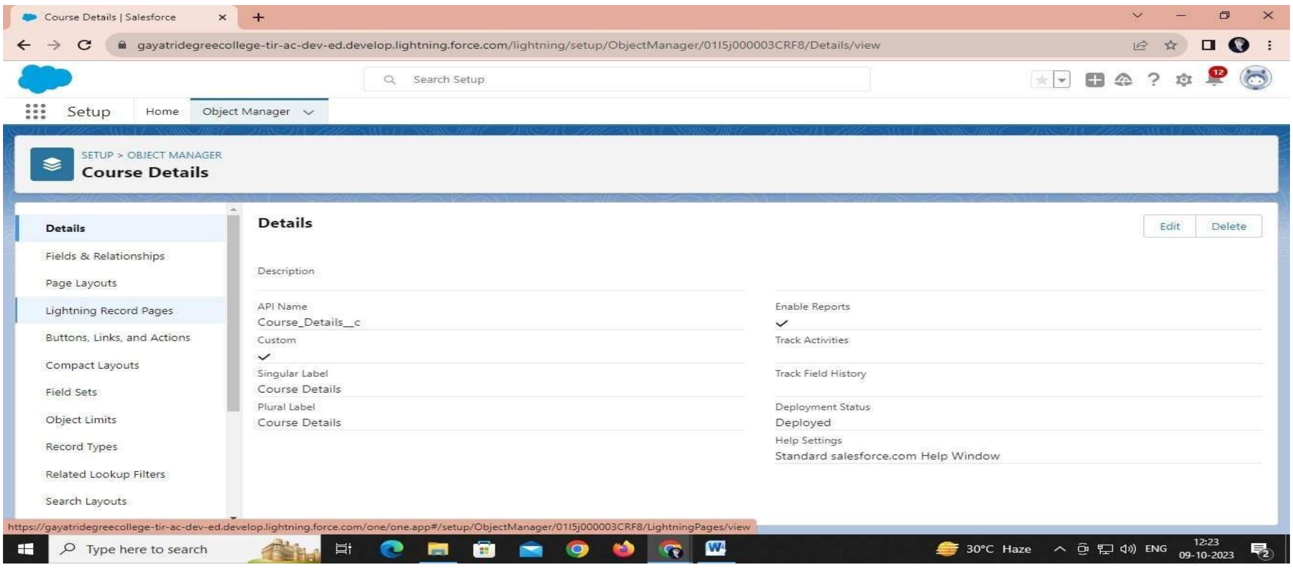
Object – Candidate

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 Drop down click on that and select Custom Object.
4. On the Custom Object Definition page, create the object as follows:
5. Label: Candidate
6. Plural Label: Candidates
7. Record Name: Candidate Name
8. Check the Allow Reports
9. Check the Allow Search
10. Click Save



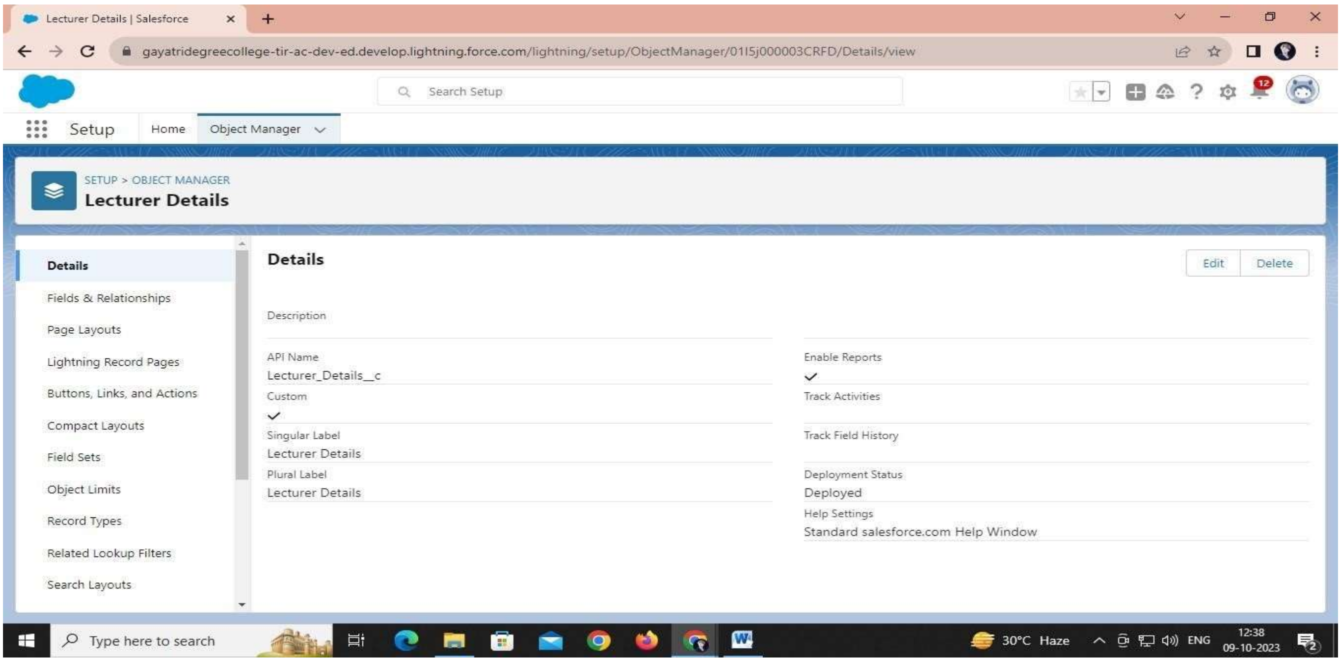
Object – Course Details

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 Drop down click on that and select Custom Object.
3. On the Custom Object Definition page, create the object as follows:
4. Label: Course Details
5. Plural Label: course details
6. Record Name: course details Name
7. Check the Allow Reports
8. Check the Allow Search 9 Click Save.

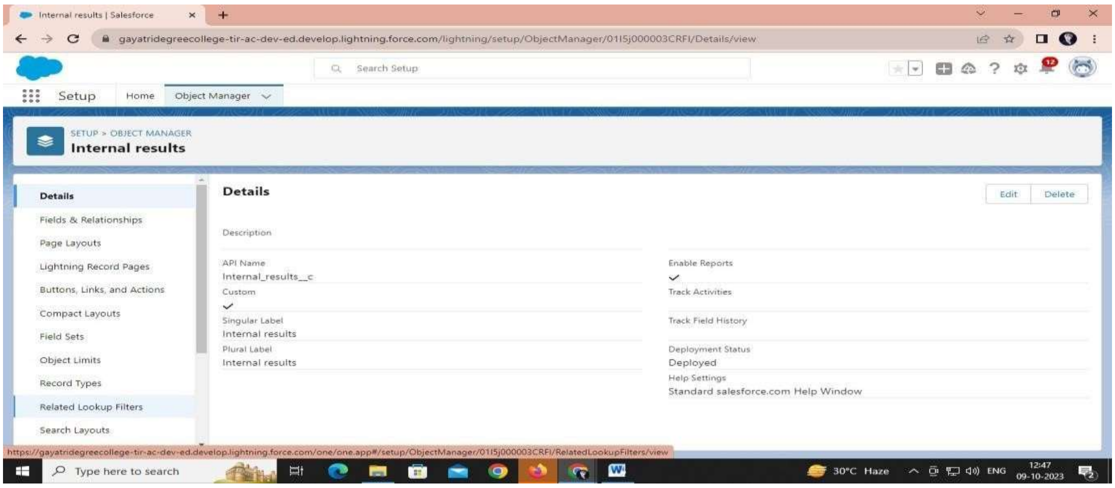


Object – Lecturer Details

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 Drop down click on that and select Custom Object.
4. On the Custom Object Definition page, create the object as follows:
5. Label: Lecturer Details
6. Plural Label: Lecturer Details
7. Record Name: Lecturer Details Name
8. Check the Allow Reports
9. Check the Allow Search 10. 10.Click Save.



1. Object – Internal results
2. Click on the gear icon and then select Setup.
3. Click on the object manager tab just beside the home tab.
4. After the above steps, have a look on the extreme right you will find a Create Drop down click on that and select Custom Object.
5. On the Custom Object Definition page, create the object as follows:
6. Label: – Internal results
7. Plural Label: Internal results
8. Record Name: Internal results Name
9. Check the Allow Reports
10. Check the Allow Search 11. 10.Click Save.



Milestone – 03: Tabs

Tabs in Salesforce help users view the information at a glance. It displays the data of objects and otherweb content in the application.

There are mainly 4 types of tabs:

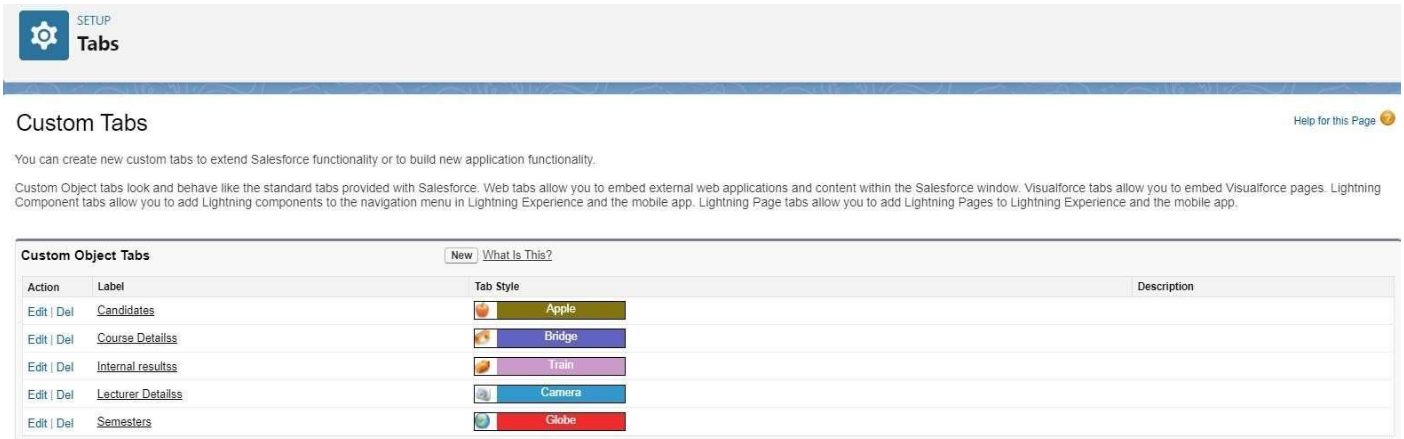
a. Standard Object Tabs: Standard object tabs display data related to standard objects

b. Custom Object Tabs: Custom object tabs displays data related to custom objects.

c. Web Tabs: Web Tabs display any external Web-based application or Web page in a Salesforce tabs.

d. Visual force Tabs: Visual force Tabs display data from a Visual force Page. Creation of semester candidate internal result card Now create a custom tab. Click the Home tab.

1. Enter Tabs in Quick Find and select Tabs.
2. Under Custom Object Tabs, click New.
3. For Object, select Semester.
4. For Tab Style, select any icon.
5. Leave all defaults as is. Click Next, Next, and Save
6. In the same way create Tabs for all Custom Objects -Candidate, Course Details, Lecturer Details, Internal results.



Milestone – 04: 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. There are two types of app –

1. Standard App: Standard apps come with every occurrence of Salesforce as default. Many features like Sales, Marketing, Community, call center content, Salesforce chatter, App Launcher, etc are present in it.

Note: The description, Logo, and Label of standard app cannot be altered.

2. Custom Apps: Custom apps are created according to need of user. Custom Apps are made by using standard and custom tabs together. Note: Logos for Custom Apps can be changed.

Create The Candidate Internal Result Card App

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

2. Click New Lightning App.

3. Enter Candidate Internal Result Card 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.

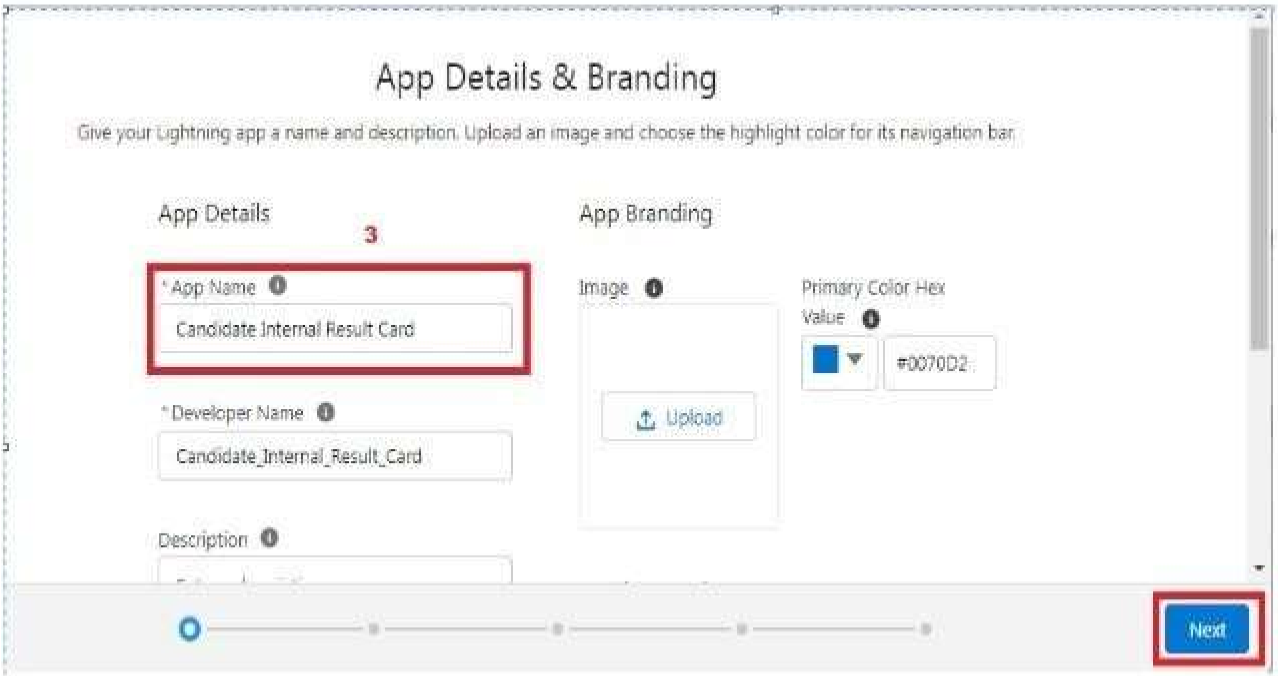
6. From Available Items, select Semester, Candidate, Course Details, Lecturer Details, Interna results, Reports,and Dashboards and move them to Selected Items.

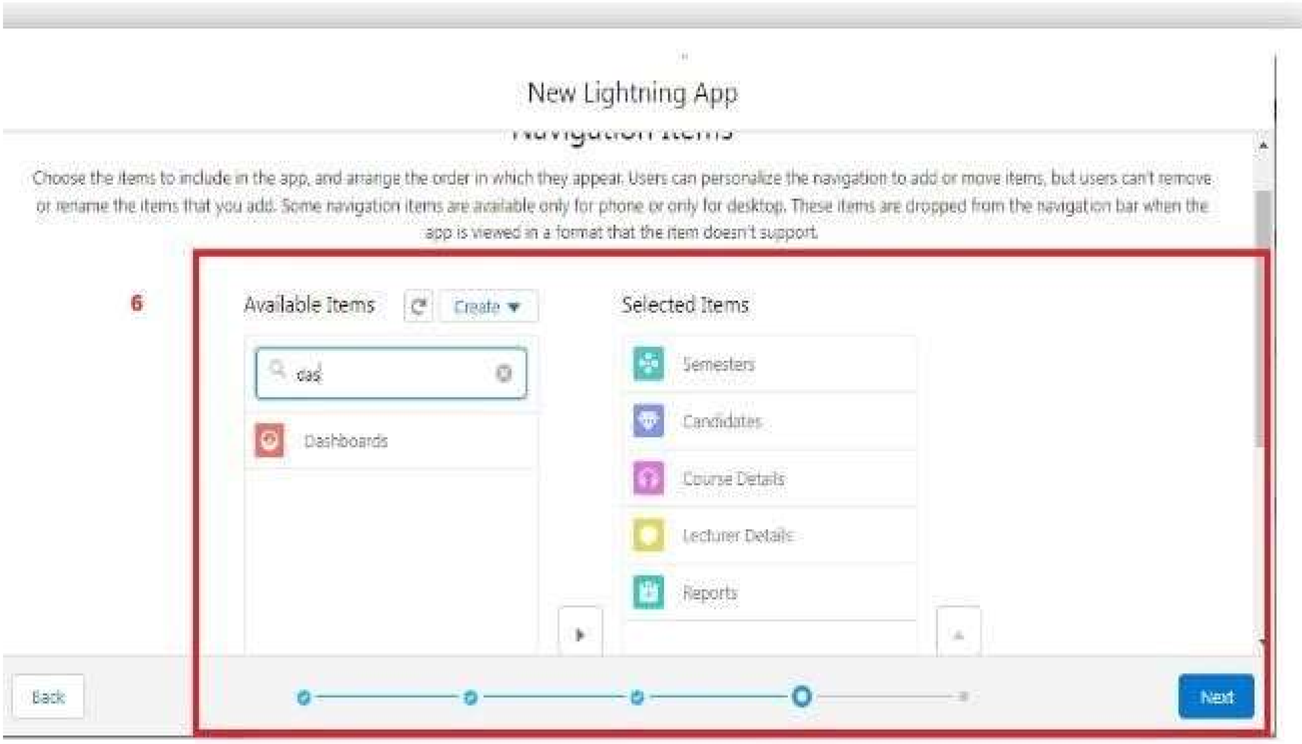
7. Click Next

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


Setup
Home
Object Manager
app man
Apps
App Manager
1
Didn't find what you're looking for? Try using Global Search.
SETUP
Home
Create


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
Give your Lightning app a name and description. Upload an image and choose the highlight color for its navigation bar.
App Details
3
* App Name
Candidate Internal Result Card
* Developer Name
Candidate_Internal_Result_Card
Description
App Branding
Image
Upload
Primary Color Hex Value
#0070D2
Next



Milestone – 05: fields and relationship

FieldsAnd Relationship

Fields - Fields store data values that are required for a particular object in a record . 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

Object Name	Field Name	Data type
Semester	Semester Name Course	Text(Standard field) Lookup(Course Details)
Candidate	Candidate Name Candidate Roll Number Semester Name	Text(Standard field) Auto Number Lookup(Semester
Lecturer Details	Lecturer Name Lecturer Role Course	Text(Standard field) Text Lookup(Course)
Course Details	Course Name Duration (Years)	Text(Standard field) Number

Internal results	Candidate Candidate Roll Number Course Marks	Lookup (candidate) Formula Lookup(Course) Number

Creation Of Text Field On "Lecturer Details" & Look Up Field For The “Candidate” Object

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 Lecturer Details

4. Select Fields & Relationships from the left navigation

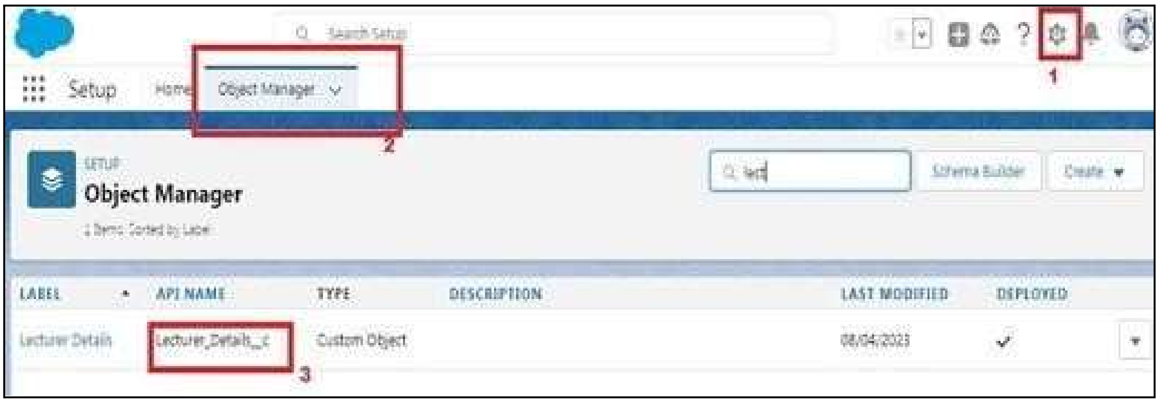
5. Click New

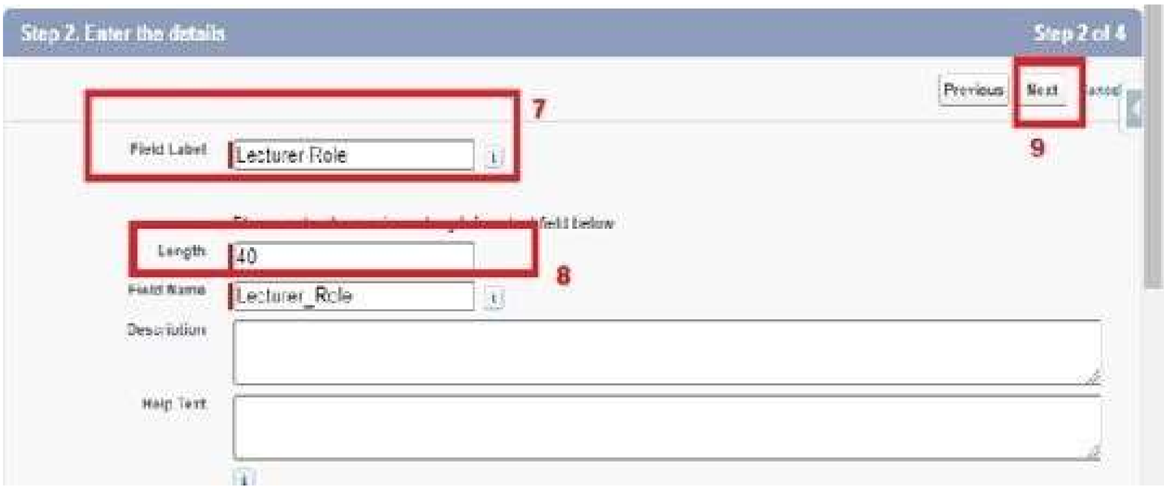
6. Select the Text as the Data Type, click next.

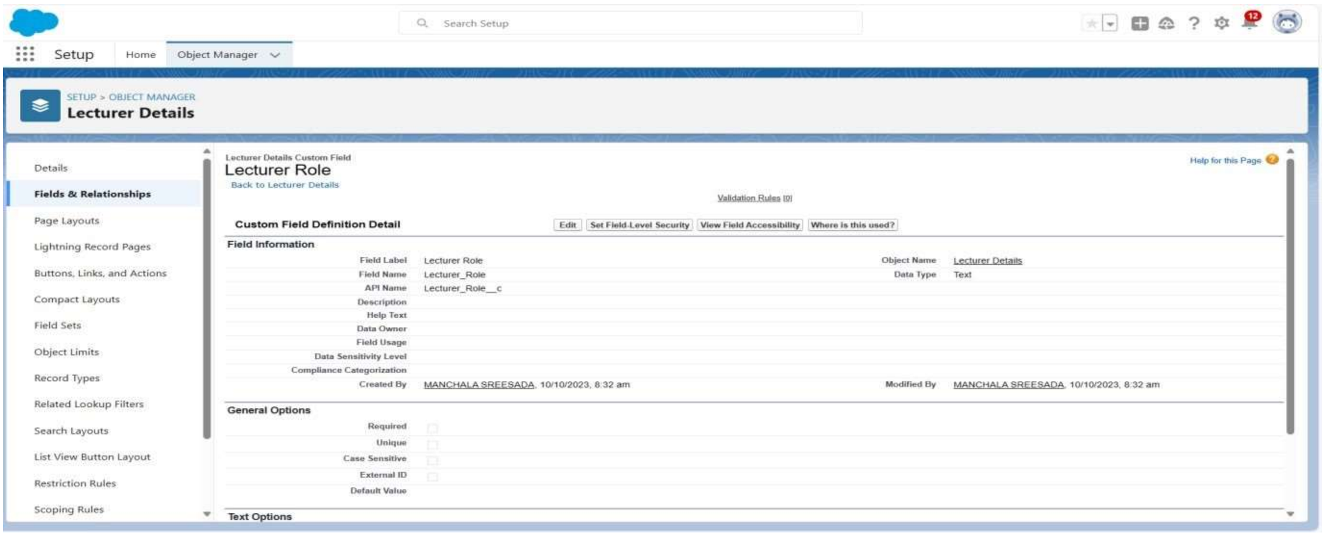
7. For Field Label, enter Lecturer Role

8. Enter Length 40

9. Click Next, Next, then Save & New







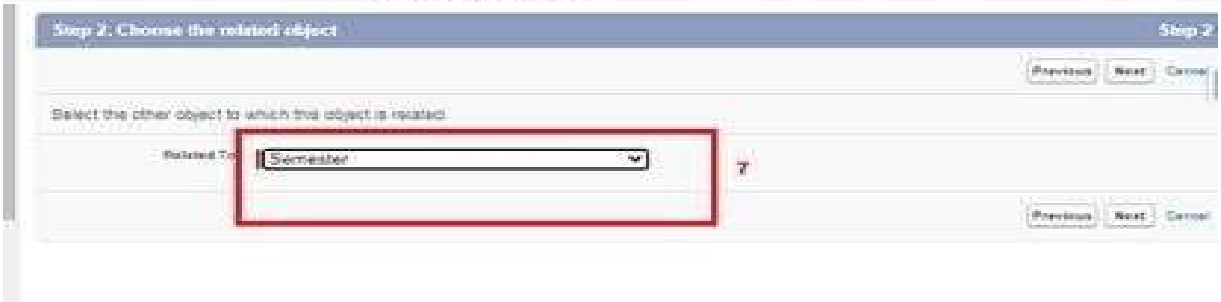
Now Let's create a Lookup field on candidate object

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 candidate.
4. Select Fields & Relationships from the left navigation
5. Click New

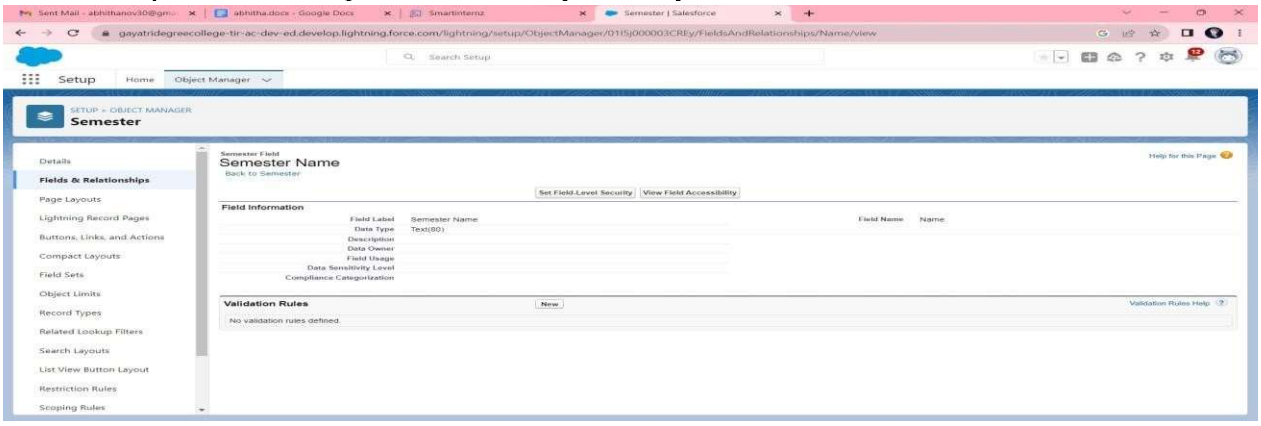
6. Select the lookup as the Data Type, then click Next.

7. In related select Semester 8. For Field Label Semester Name, enter.

9. Click Next, Next, then Save & New.



Note- Similarly create all lookup fields on their respective objects.



Creation Of Auto Number Field On Candidate Object, Number Field On Course Details Object & Formula Field Course Details Object

Let's create a Number field on Course Details object

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 Course Detail.

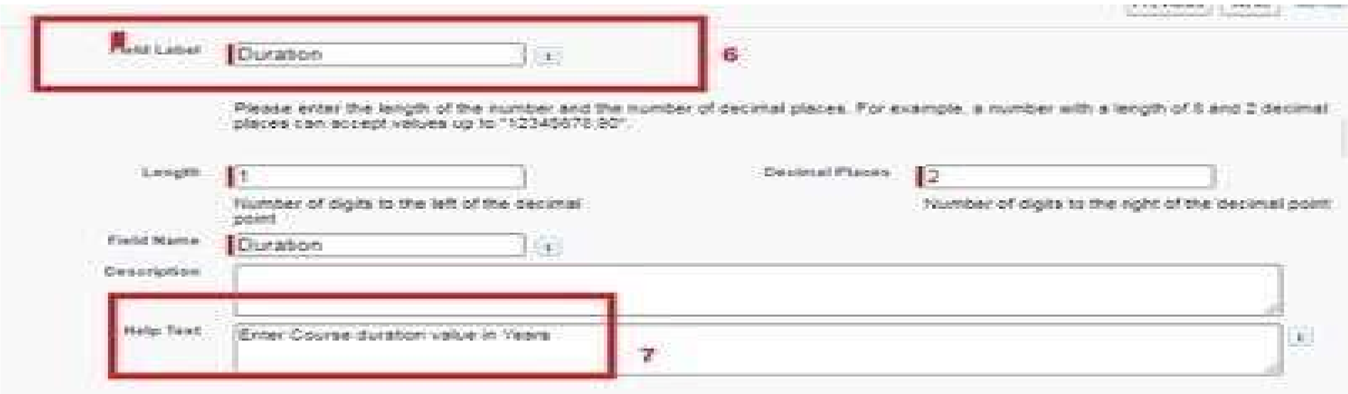
4. Select Fields & Relationships from the left navigation

4. Click New & select number field, click Next

6. For Field Label Duration, enter.

7. Give Help Text- Enter Course duration value in Years

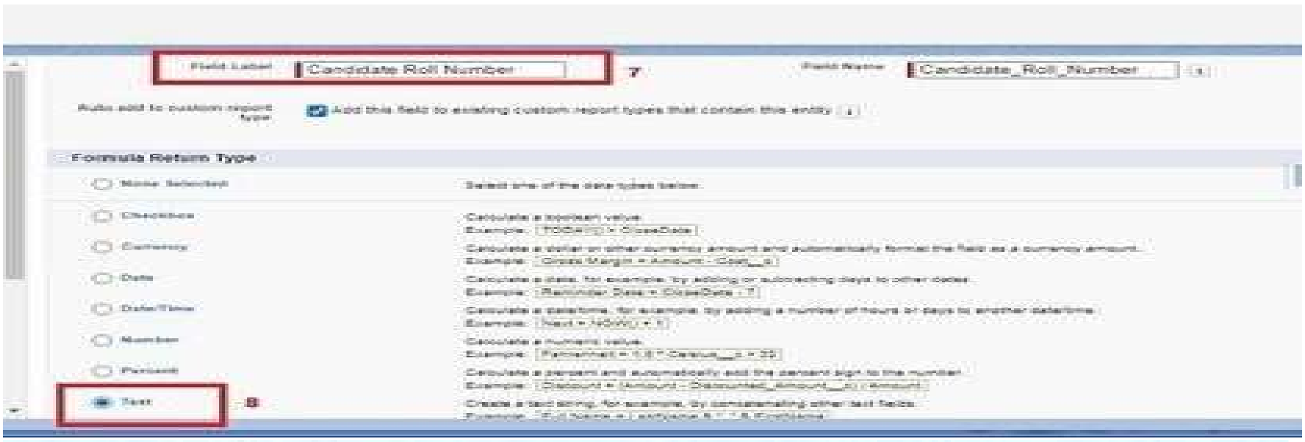
8. Click Next, Next, then Save & New.

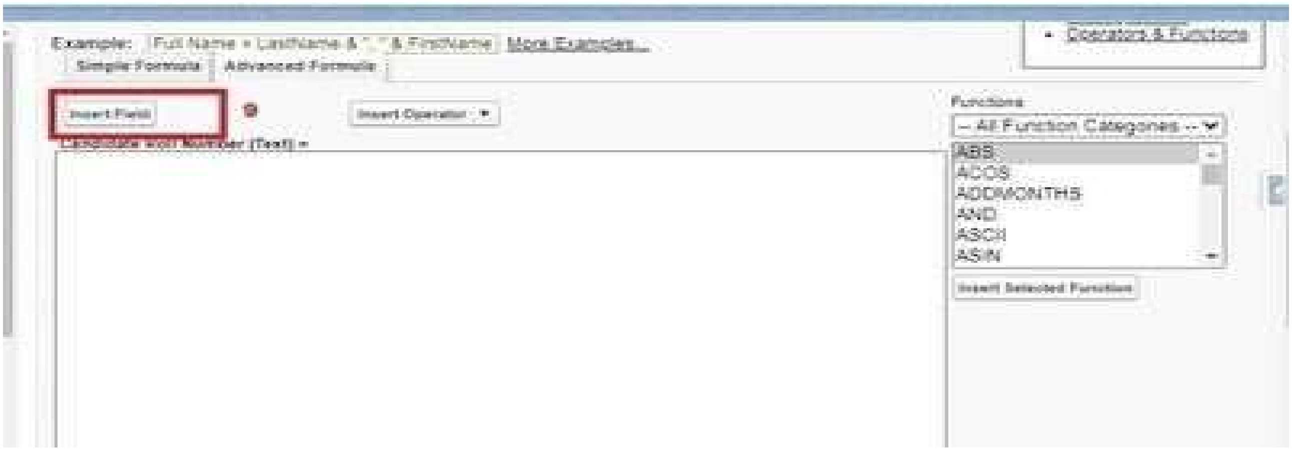


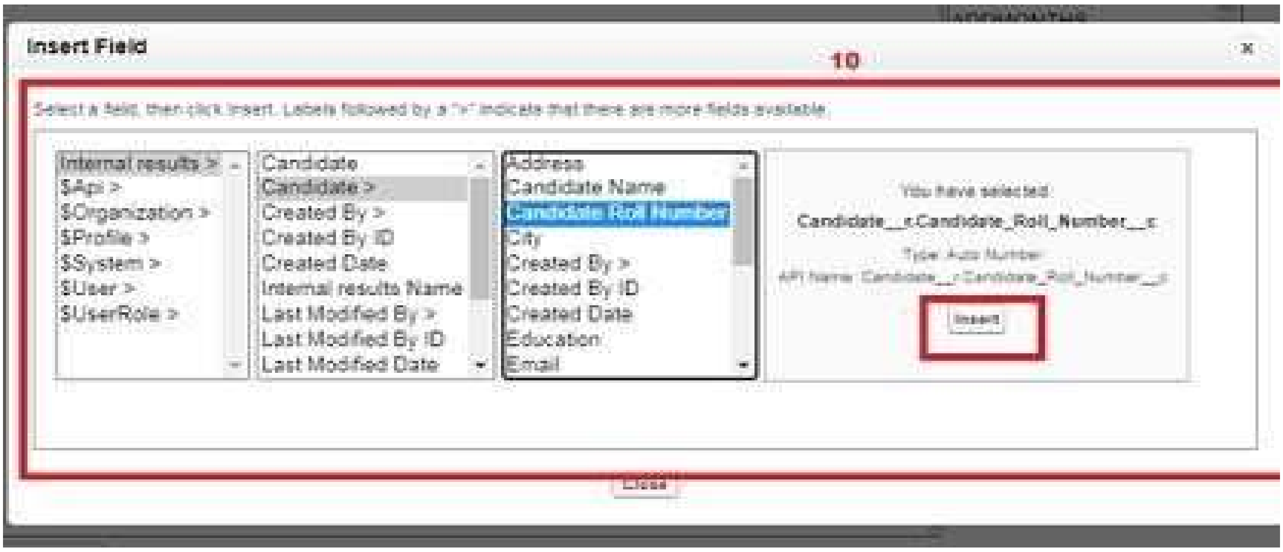
Now Let's create a Formula field on Internal Results object

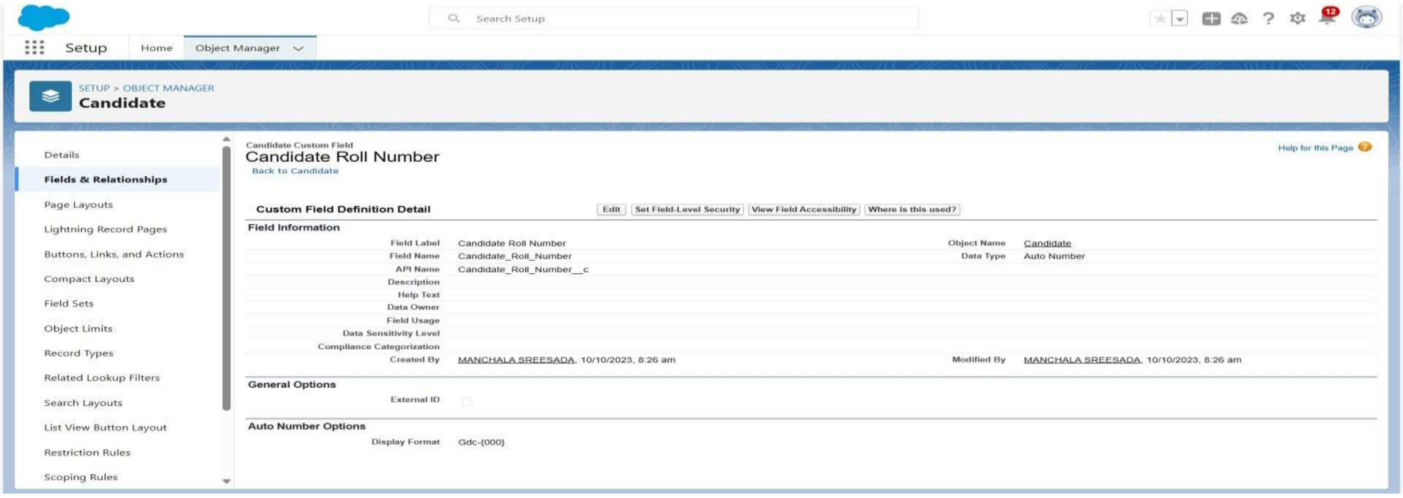
1. Click the gear icon and select Setup. This launches Setup in a new tab.
2. Click the Object Manager tab next to Home.
3. Select Internal results.
4. Select Fields & Relationships from the left navigation.
5. Click New
6. Select the Formula as the Data Type, then click Next.
7. Give field label Candidate Roll Number
8. Select formula return type text, Click Next
9. Click Insert Field
10. Create and insert formula Candidate r.Candidate_Roll_Number c, and then click Insert.

11.Click Next, Next, then Save.









Now Let’s create an auto number field on Candidate object 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 Candidate.

4. Select Fields & Relationships from the left navigation

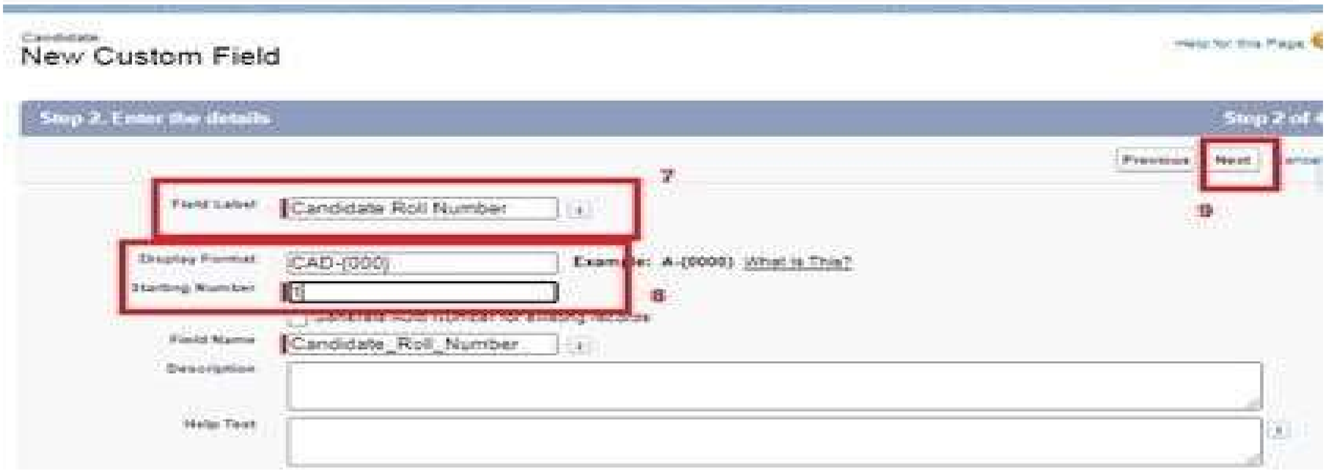
5. Click New

6. Select the Auto Number as the Data Type, then click Next.

7. For Field Label Candidate enter Roll Number.

8. Give a display format

9. Click Next, Next, then Save & New.



Milestone – 06: users

Creating A User

1. From Setup, in the Quick Find box, enter Users.
2. Select Users.

3. Click New User.

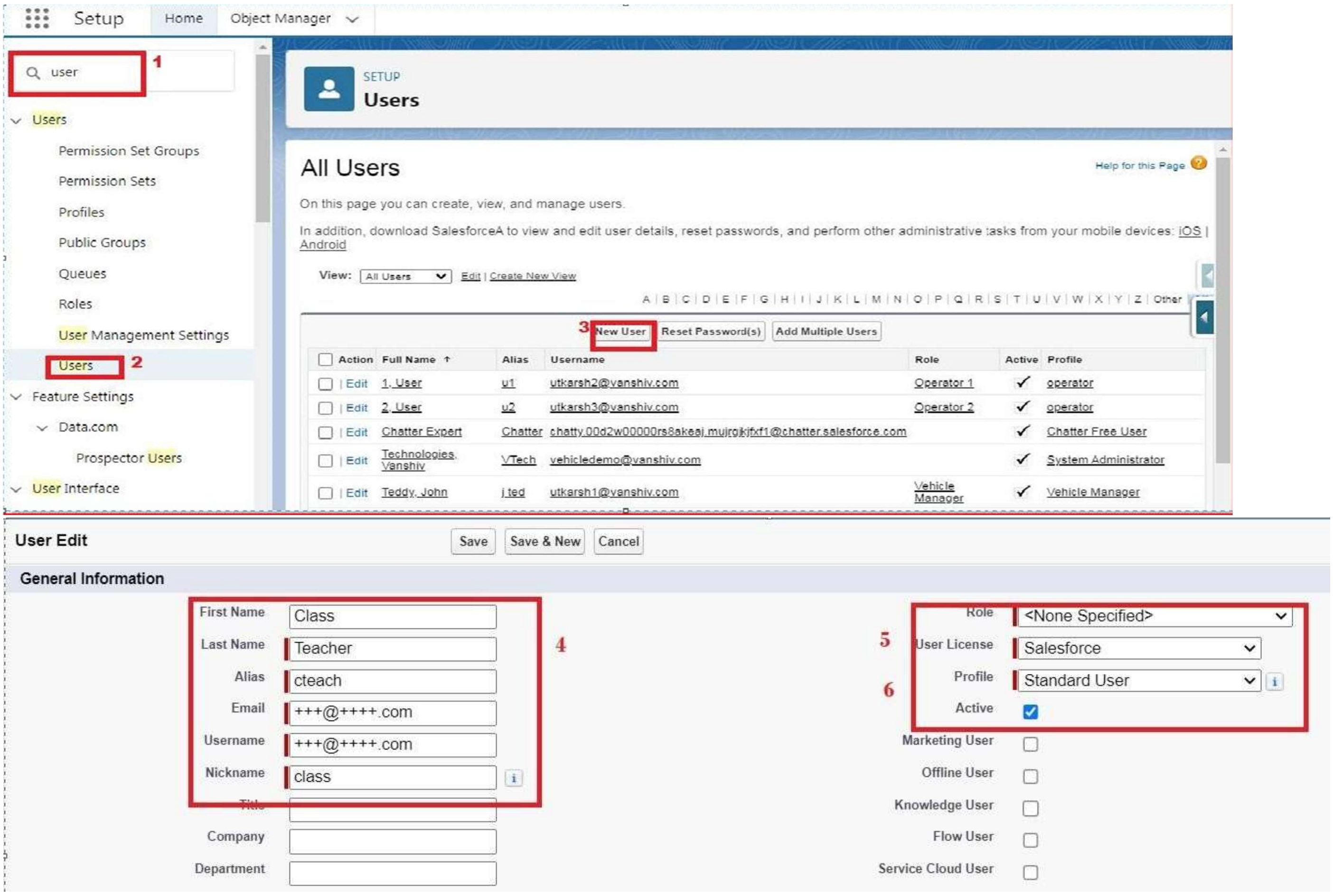
4. Enter the First Name, Class, Last Name, Teacher and (Your) email address anda unique username in the form of an emailaddress. By default, the username is the same as the email address.

5. Select a User License as salesforce.

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.

6. Select a profile as Standard user.

7. Check Generate new password and notify the user immediately to have the user's login name and a temporary passwordemailed to your email.



Milestone – 07: user adoption

User Adoption

Salesforce user adoption is the simple act of enabling a user to use SFDC's full CRM capabilities by creating strategies around onboarding, training, and continued development – all to drive overall digital adoption.

Create Record (Course Details)

Create Records on Course Details Objects

1. Click on App Launcher on left side of screen.

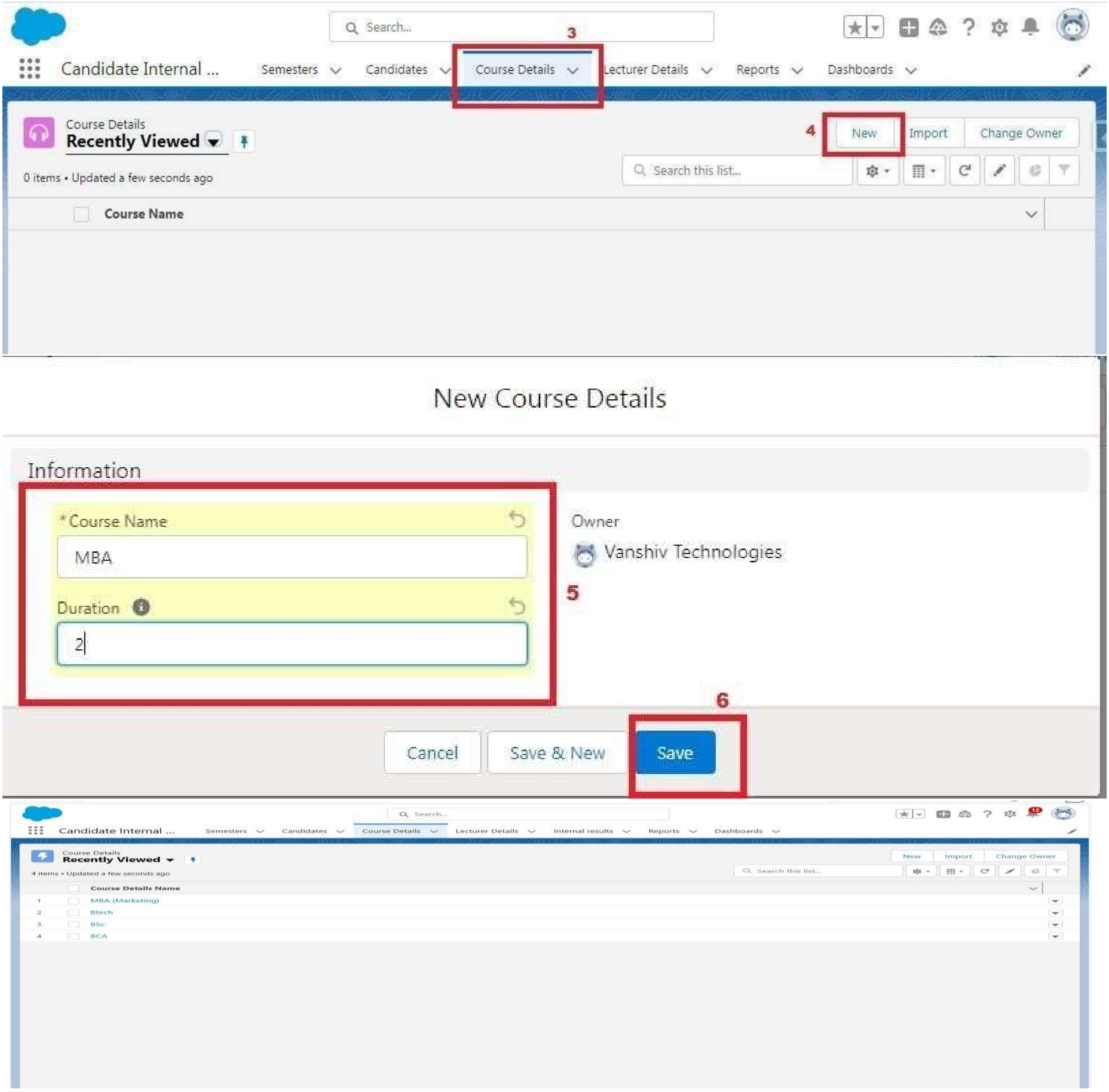
2. Search Candidate Internal Result Card App & click on it.

3. Click on Course Details tab.

4. Click new button

5. Fill all Course Details record details.

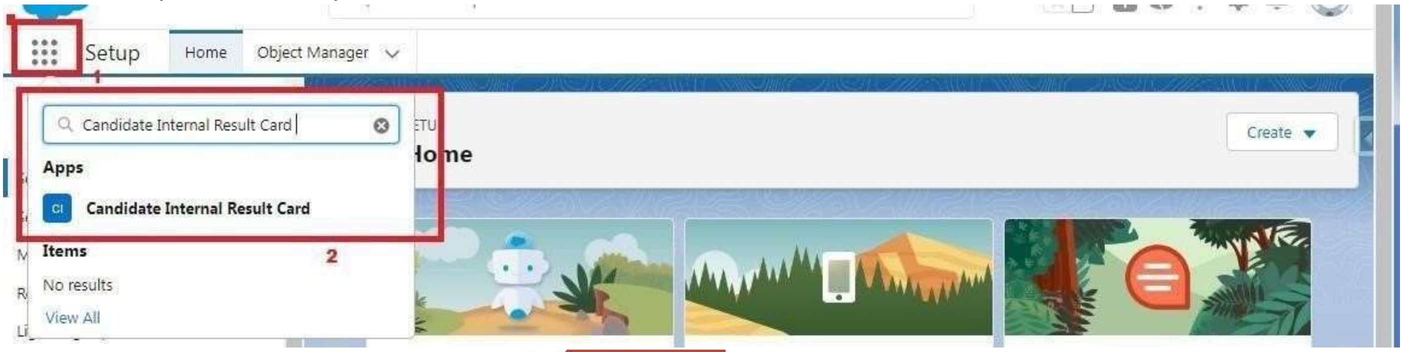
6. Click on Save Button.

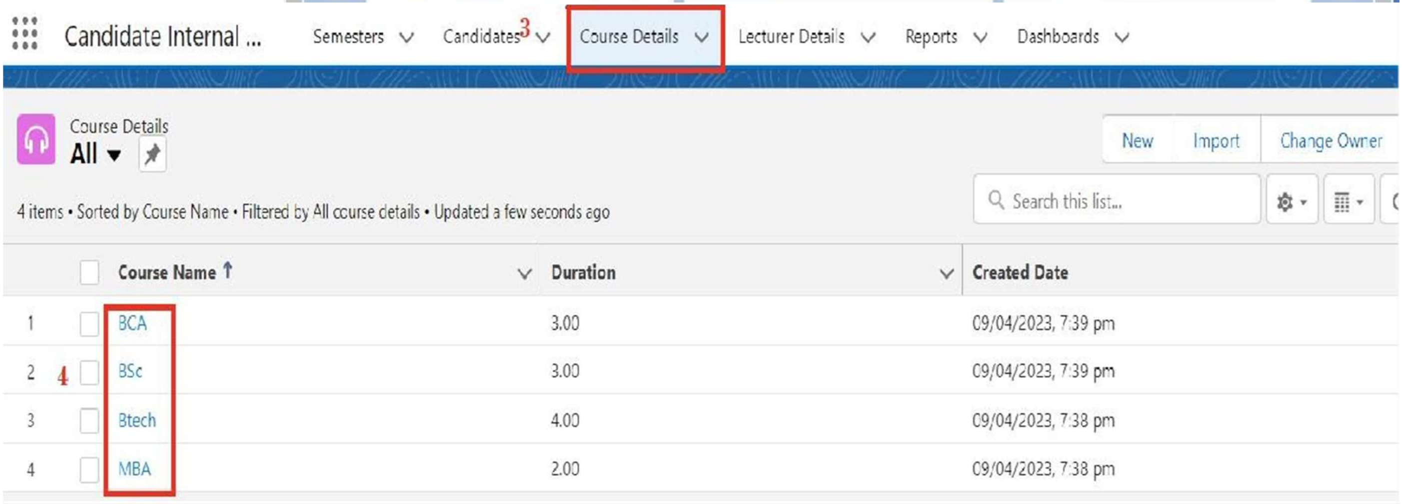


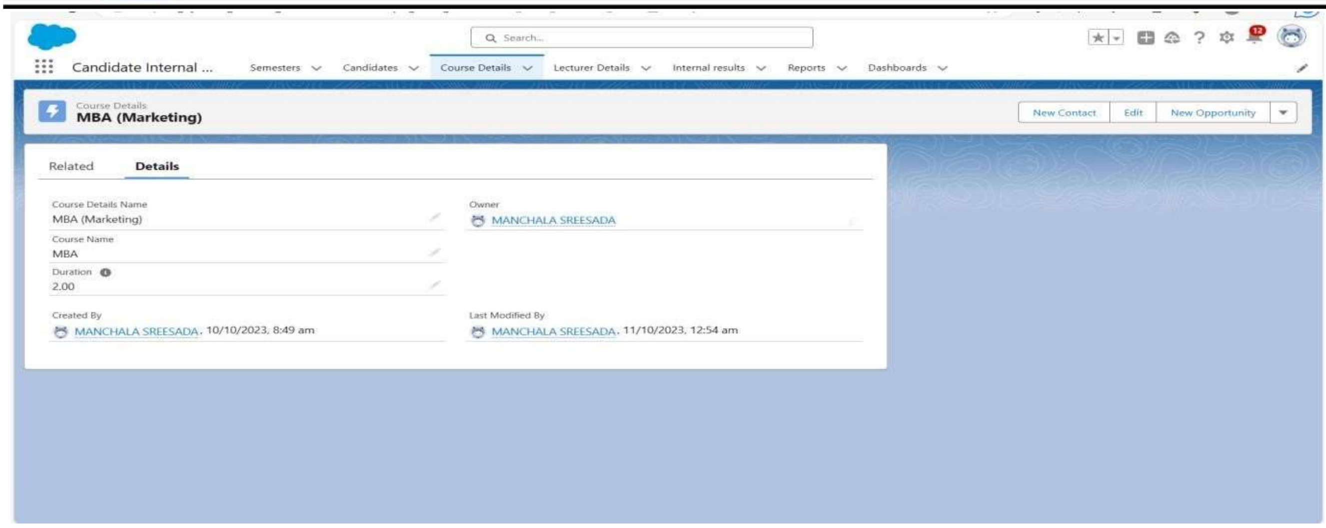
View Record (Course Details)

Viewing the Records of Course Detail Object

1. Click on App Launcher on left side of screen.
2. Search Candidate Internal Result Card & click on it.
3. Click on Course details Tab.
4. Click on any record name. you can see the details of the Driver



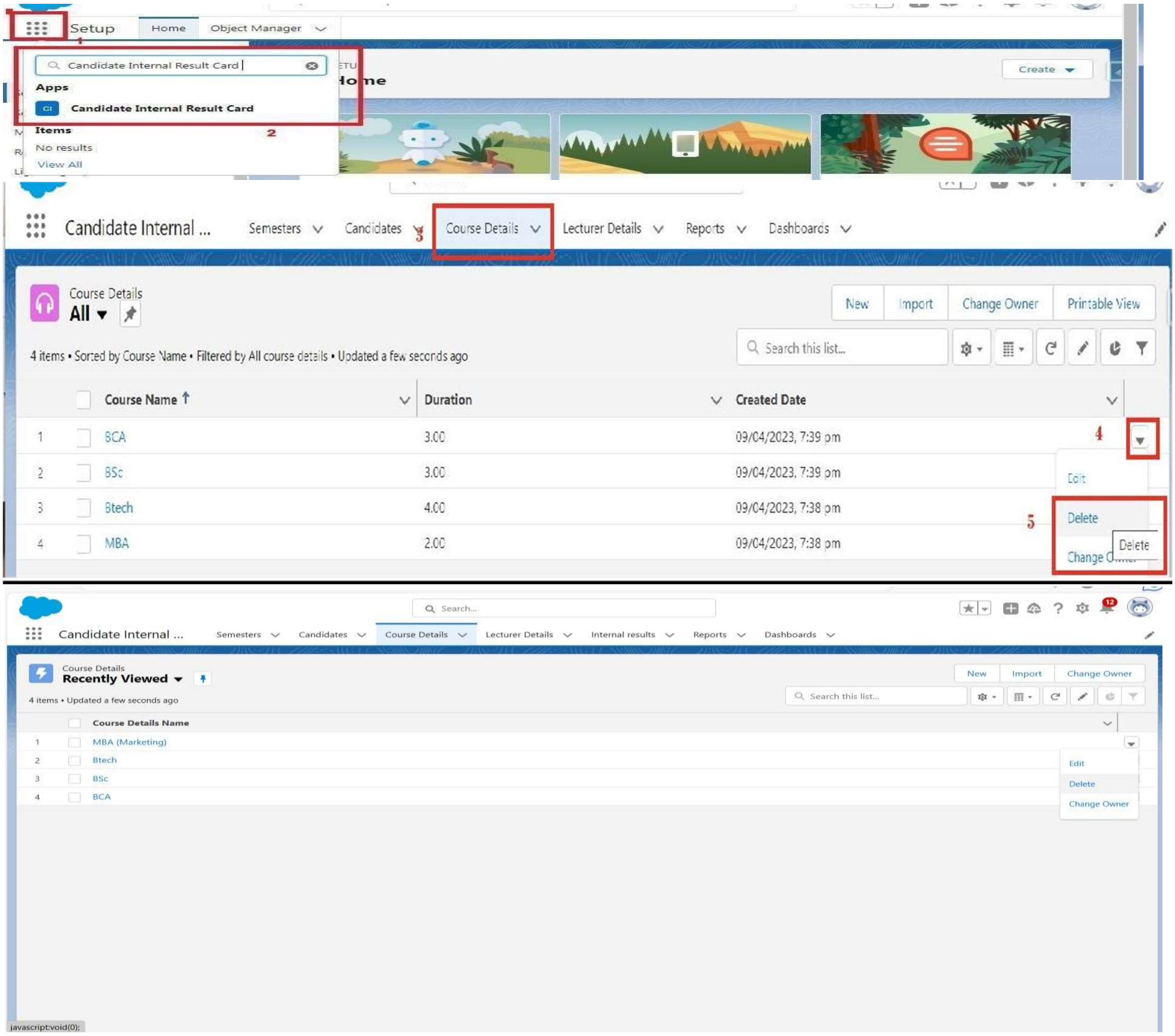




Delete Record (Course Details)

Deleting Records of Course Details Object

1. Click on App Launcher on left side of screen.
2. Search Candidate Internal Result Card & click on it.
3. Click on Course details Tab.
4. Click on Arrow at right hand side on that Particular record.
5. Click delete and delete again.



Milestone – 08: what are Reports?

What Are Reports?

Reports in Salesforce is a list of records that meet a particular criterion which gives an answerto a particular question. These records are displayed as a table that can be filtered or grouped based on any field.

There are 4 types of report formats in Salesforce:

Tabular Reports:

This is the most basic report format. It just displays the row of records in a table with a grand total. While easy to set up they can't be used to create groups of data or charts and also cannot beused in Dashboards.

They are mainly used to generate a simple list or a list with a grand total.

Summary Reports:

It is the most commonly used type of report. It allows grouping of rows of data, view subtotal,and create charts.

Matrix Report:

It is the most complex report format. Matrix report summarizes information in a grid format. It allows records to be grouped by both columns and rows. It can also be used to generate dashboards. Charts can be added to this type of report.

Joined Reports:

These types of reports let us create different views of data from multiple report types. The data is joined reports are organized in blocks. Each block acts as a sub-report with its own fields, columns, sorting, and filtering. They are used to group and show data from multiple report types in different views.

Report types:

Report type determines which set of records will be available in a report. Every report is based on a particular report type. The report type is selected first when we create a report. Every reporttype has a primary object and one or more related objects. All these objects must be linked together either directly or indirectly.

A report type cannot include more than 4 objects. Once a report is created its report type cannot be changed.

There are 2 types of report types:

Standard Report Types: Standard Report Types are automatically included with standard objects and also with custom objects where "Allow Reports" is checked. Standard report types cannot be customized and automatically include standard and custom fields for each object within the report type. Standard report types get created when an object is created, also when a relationship is created.

Note: Standard report types always have inner joins.

Custom Report Types: Custom report types are reporting templates created to streamline the reporting process. Custom Reports are created by an administrator or User with "Manage Custom Report Types" permission. Custom report types are created when standard report types cannot specify which records will be available on reports.

In custom report types we can specify objects which will be available in a particular report.
The primary object must have a relationship with other objects present in a report type either directly or indirectly.

There are 3 types of access levels of folders:

Viewer: With this access level, users can see the data in a report but cannot make any changes except cloning it into a new report

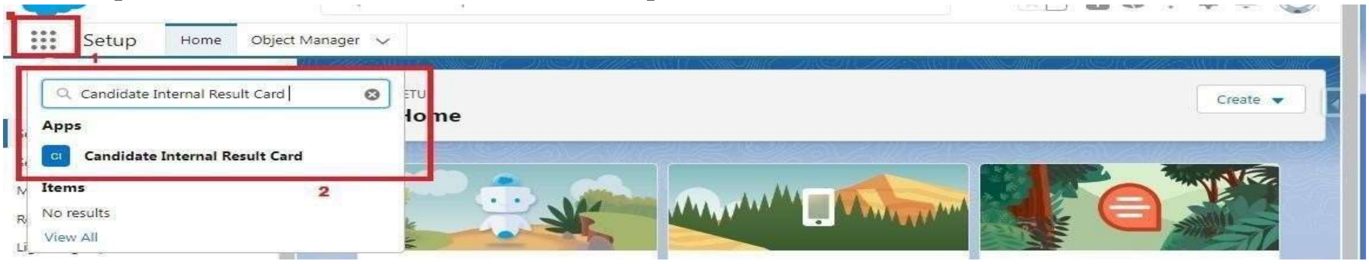
Editor: With this access level, users can view .

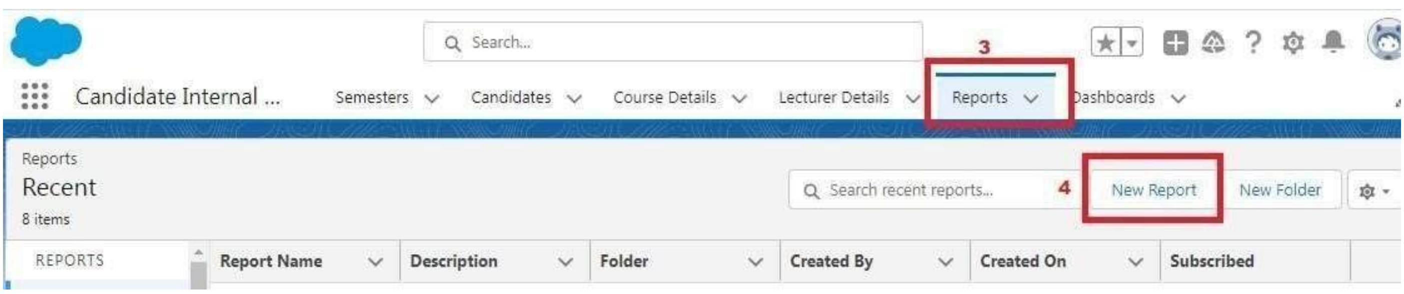
Manager: With this access level, users can do everything Viewers & Editors can do, plus they can also control other user's access levels to this folder. Also, users with Manager Access levels can delete the report.

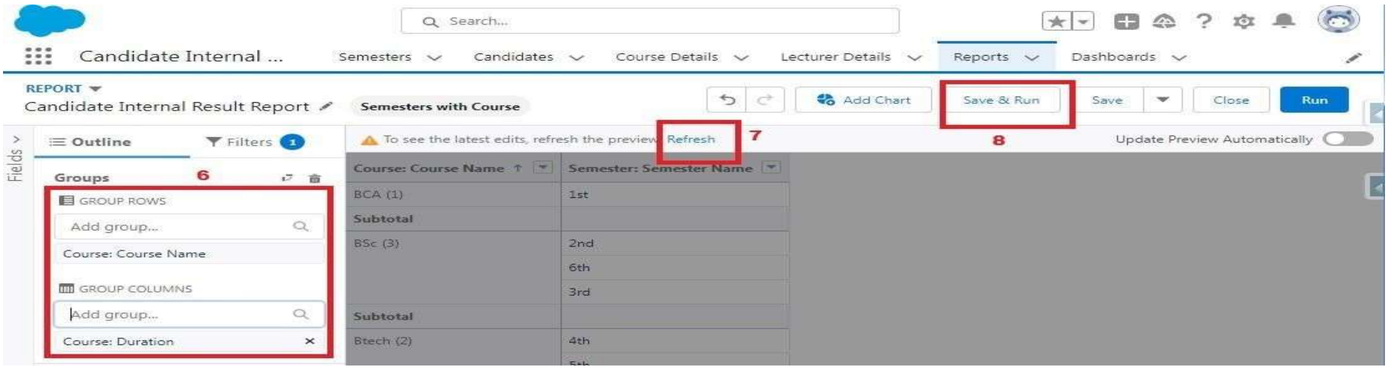
Create Report

1. Click App Launcher
2. Select Candidate Internal Result Card App
3. Click reports tab
4. Click New Report.
5. Click the report type as Semesters with Course Click Start report.
6. Customize your report, in group rows select - Course Name, in group column Select Duration (In this waywe are making a Matrix Report).

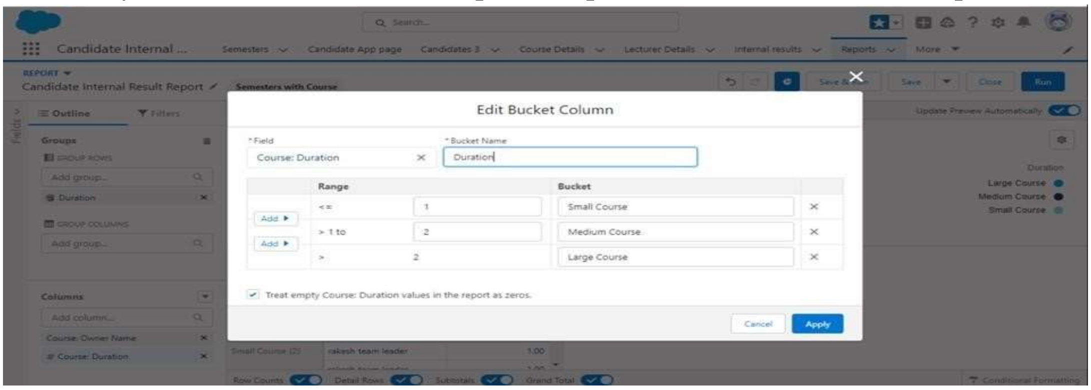
7. Click refresh
8. Click save and run
9. Give report name – Candidate Internal Result Report 10.Click Save





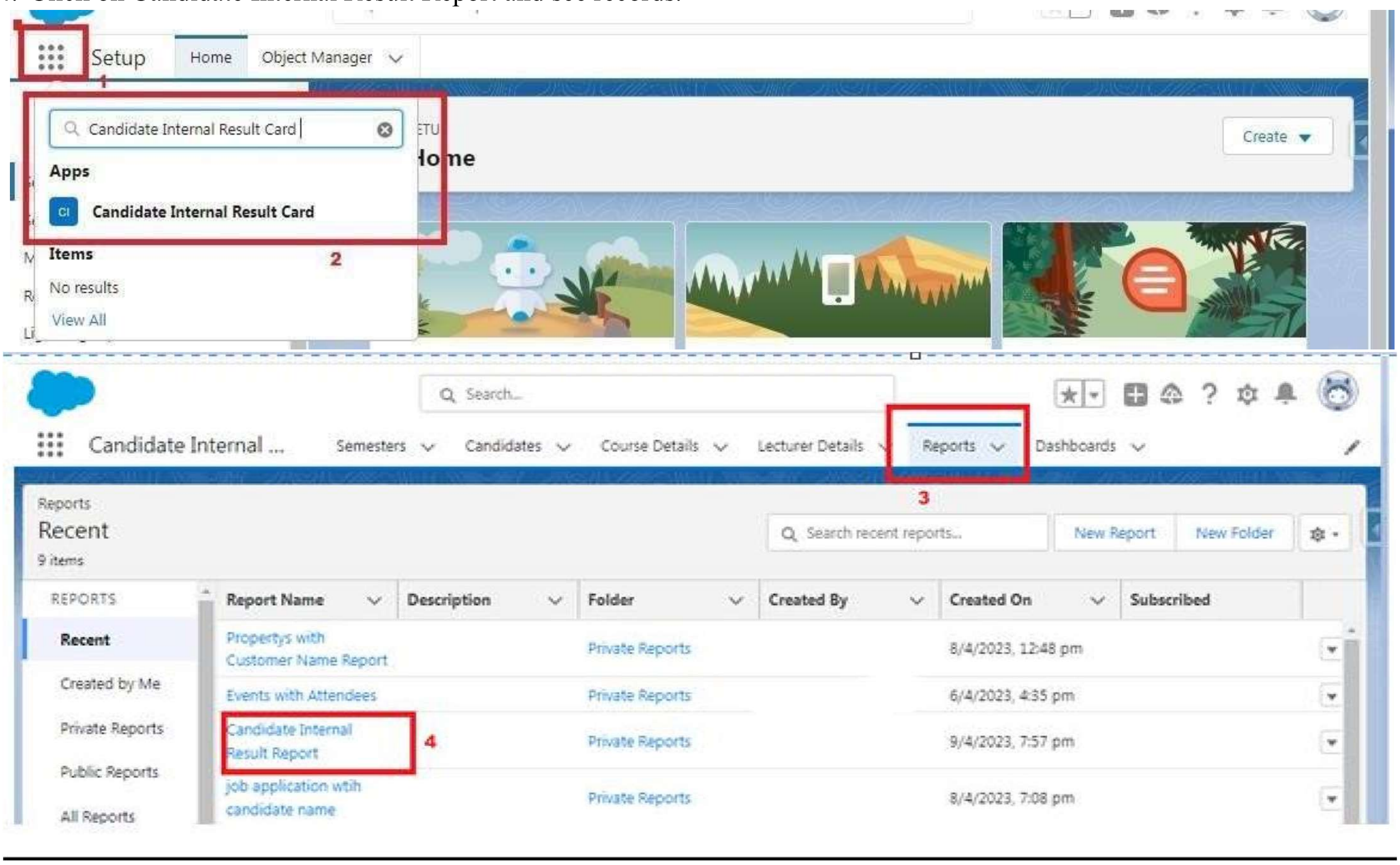


1. On the report builder page, locate the "Fields" pane on the left-hand side.
2. Find the field for which you want to create a bucket field and drag it to the report preview section.
3. Click on the field in the report preview to open the field properties.
4. In the field properties, locate the "Summarize" option and click the drop-down arrow.
5. Select "Bucket Field" from the available options.
6. In the bucket field settings, define the buckets based on your requirements. You can specify the bucket ranges, labels, and groupings.
7. Click "OK" or "Apply" to save the bucket field settings.
8. Customize the report layout and add any additional fields or filters as needed.
9. Once you are satisfied with the report setup, click "Save" to save the report.



View Report

1. Click on App Launcher on left side of screen.
2. Search Candidate Internal Result Card App & click on it.
3. Click on Reports Tab.
4. Click on Candidate Internal Result Report and see records.



Report: Semesters with Course

Candidate Internal Result Report

Total Records

7

Course: Course Name ↑	Semester: Semester Name	Course: Course Details Name	Duration
B.Tech (2)	Semester 03	B.Tech (Mechanical)	Large Course
	Semester 02	B.Tech (Automobile)	Large Course
Subtotal			
BCA (1)	Semester 06	BCA (Data Science)	Small Course
Subtotal			
BSC (3)	Semester 04	B.SC (Nursing)	Medium Course
	Semester 05	B.Sc (Bio Technology, Chemistry, Computer Applications)	Medium Course
	Semester 07	B.Sc (Bio Technology, Chemistry, Computer Applications)	Medium Course
Subtotal			
MBA (1)	Semester 01	MBA (Finance)	Large Course
Subtotal			
Total (7)			

Milestone – 06: dashboards

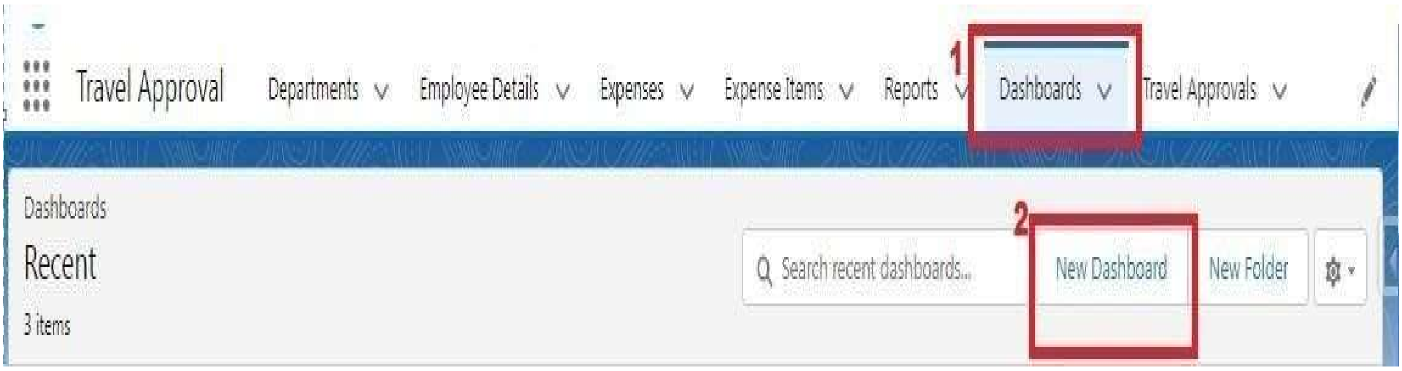
Dashboards

Dashboards let you curate data from reports using charts, tables, and metrics. If your colleagues need more information, then they reable to view your dashboard's data-supplying reports. Dashboard filters make it easy for users to apply different data perspectives to a single dashboard.

Create Dashboard

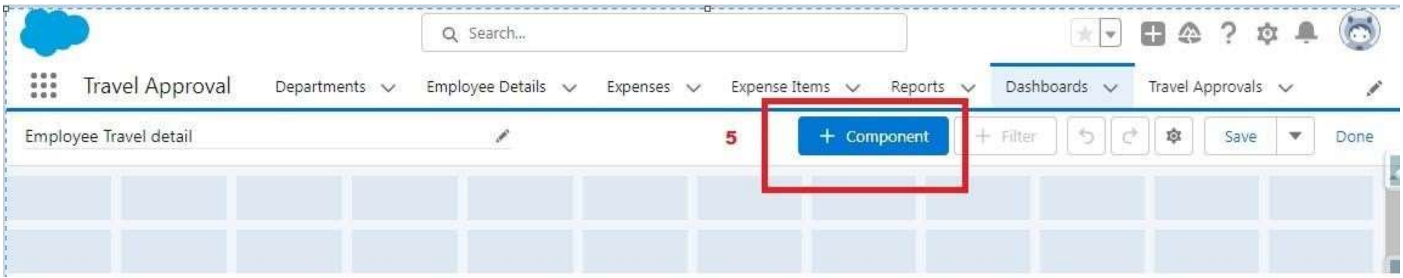
1. Click on Dashboards tab from the Candidate Internal Result Card application.
2. Click on new dashboard.
3. Give name- Candidate Internal Result Card
4. Click create
5. Give your dashboard a name and click on +component
6. Select the Candidate Internal Result Report which you created.
7. For the data visualization select any of the chart, table etc. as per your choice/requirement.
8. Click add.

9. Click save.

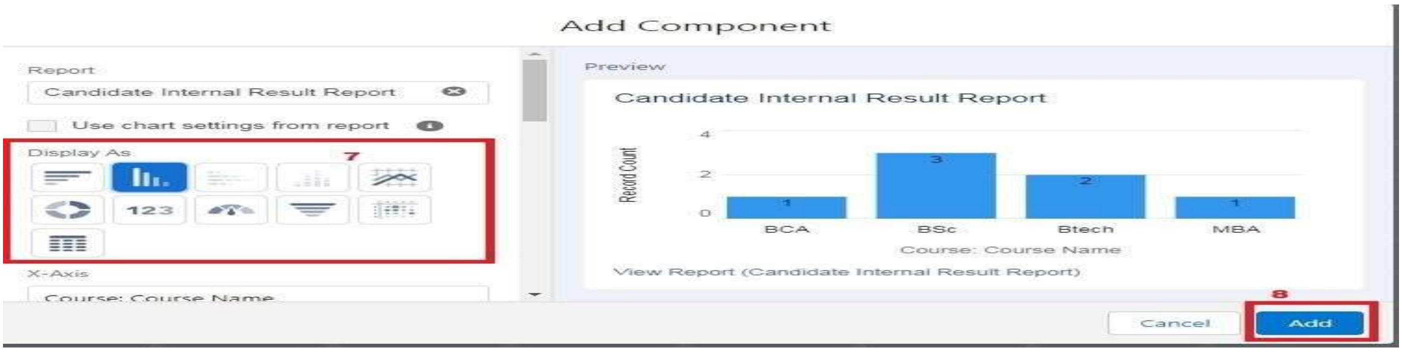


Travel Approval
Departments
Employee Details
Expenses
Expense Items
Reports
Dashboards
Travel Approvals
1
Dashboards
Recent
3 items
Search recent dashboards...
2
New Dashboard
New Folder

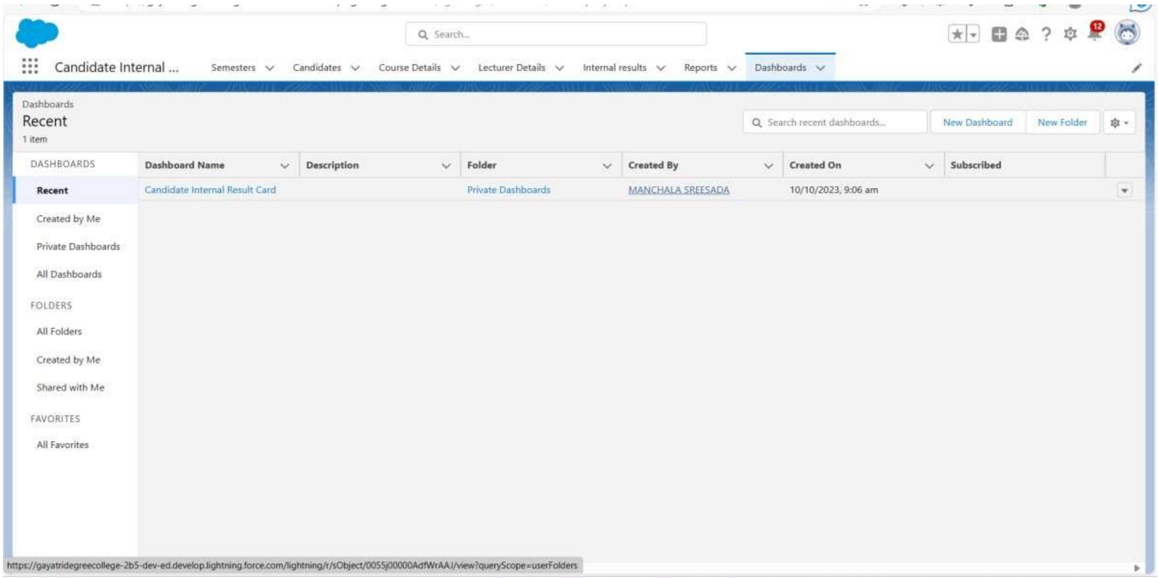
New Dashboard
* Name
Candidate Internal Result Card
Description
3
Folder
Private Dashboards
Select Folder
4
Cancel
Create



Search...
Travel Approval
Departments
Employee Details
Expenses
Expense Items
Reports
Dashboards
Travel Approvals
Employee Travel detail
5
+ Component
Filter
Save
Done



Add Component
Report
Candidate Internal Result Report
Use chart settings from report
Display As
7
X-Axis
Course: Course Name
Preview
Candidate Internal Result Report
Record Count
BCA
BSc
Btech
MBA
Course: Course Name
View Report (Candidate Internal Result Report)
8
Cancel
Add



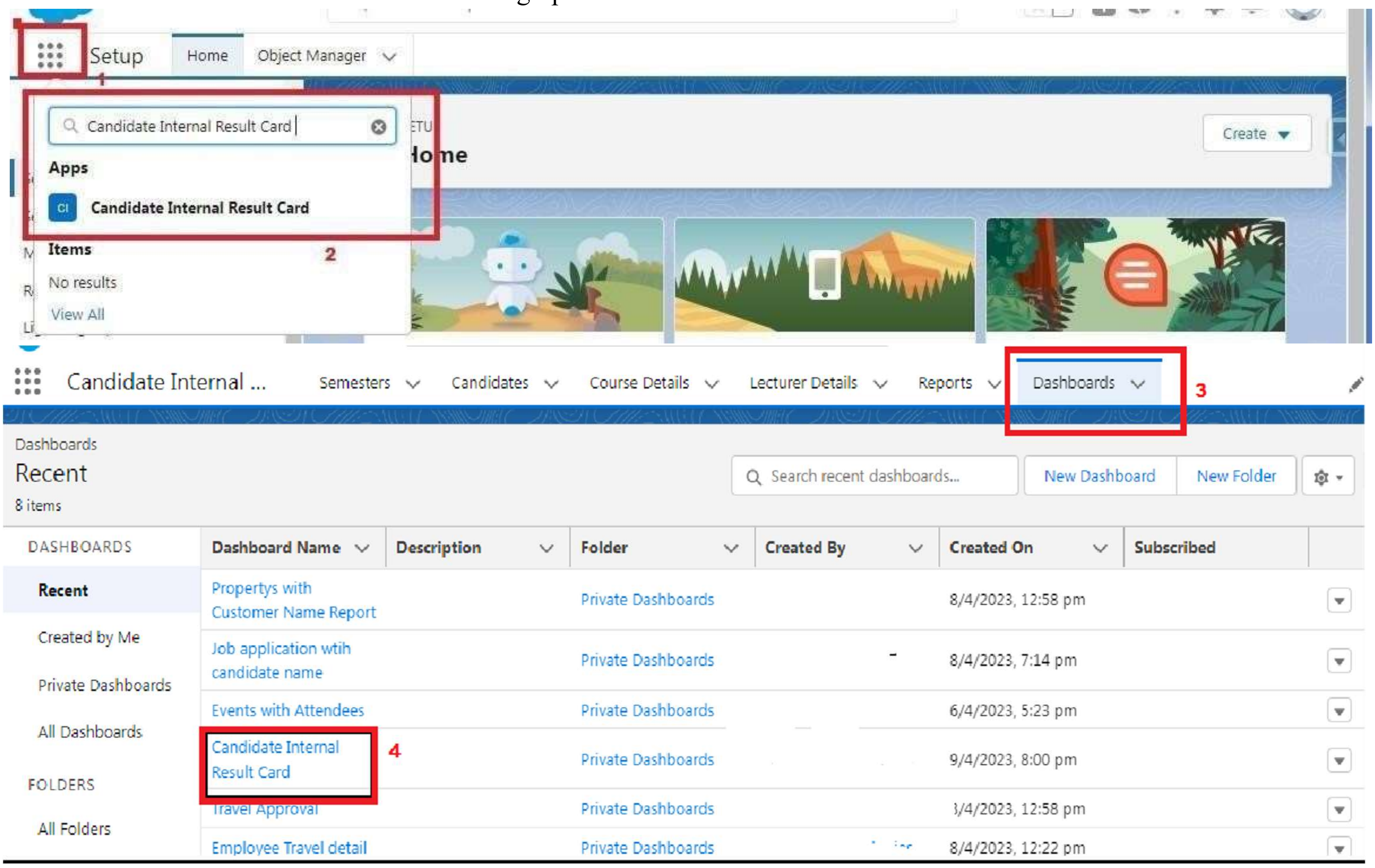
View Dashboard

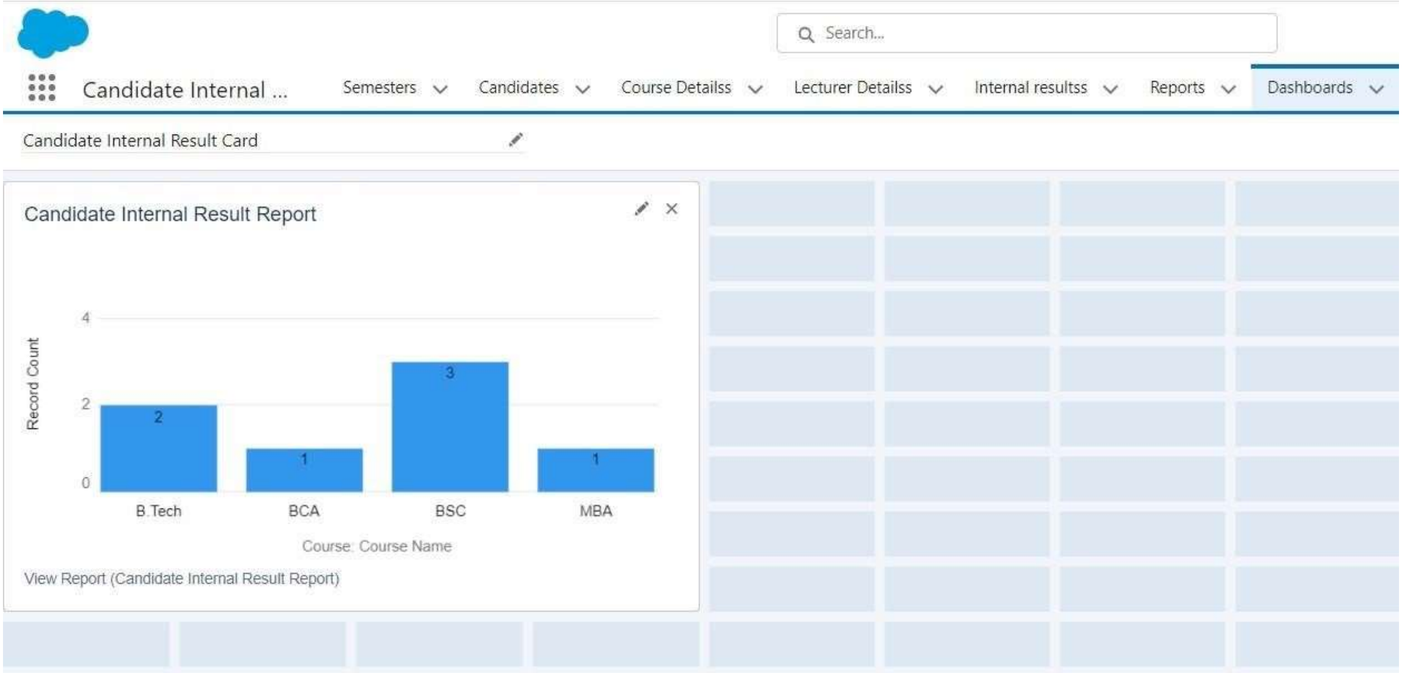
1. Click on App Launcher on left side of screen.

2. Search Candidate Internal Result Card & click on it.

3. Click on Dashboard Tab.

4. Click on Candidate Internal Result Card see graph view of records





Milestone-07: Screen Flow

Screen Flow

In Salesforce, flows are visual representations of business processes that can be created and managed using the Salesforce Flow Builder. Flows are designed to automate and streamline complex business processes, such as collecting data, updating records, and integrating with external systems, without writing any code. Screen Flows: Screen flows are flows that are designed to guide users through a series of screens to collect data or present information. They are typically used to create user-friendly data entry forms or wizards, and can include input fields, picklists, and other user interface components.

CreateAScreen Flow

1. Click on Gear icon and select setup
2. In Quick find Box enter flow and select the flows

3.Click on New flow and Select Screen flow

4.It will open the canvas. Select (+)

5.Select the screen element from the drop down.

6.It will open the dialog box. Now give the label name and api name will be auto populated. These labels are for your screen Element.

Label: Candidate info

API Name: Candidate_Info (This field will be auto populated.)

7..In search Component type text and drag the text component to canva and give the label and Api Name

8.Similarly, Add Email Component also.

9.Select (+)

10.In search bar search for Create records and select the create records

11.It will open you the details section and give the label as follows:

Label: Create candidate Records

API Name: Create_candidate_Records

Then check the use separate resources and literal values Search for candidate Object

12.Under field type name and select the name and select the candidate_name under Screen Component

13.Click on Done

14.Click on Save. It will open you details canva and give the details as follows:

15. Select (+)

16.Select the Action element from the drop down.

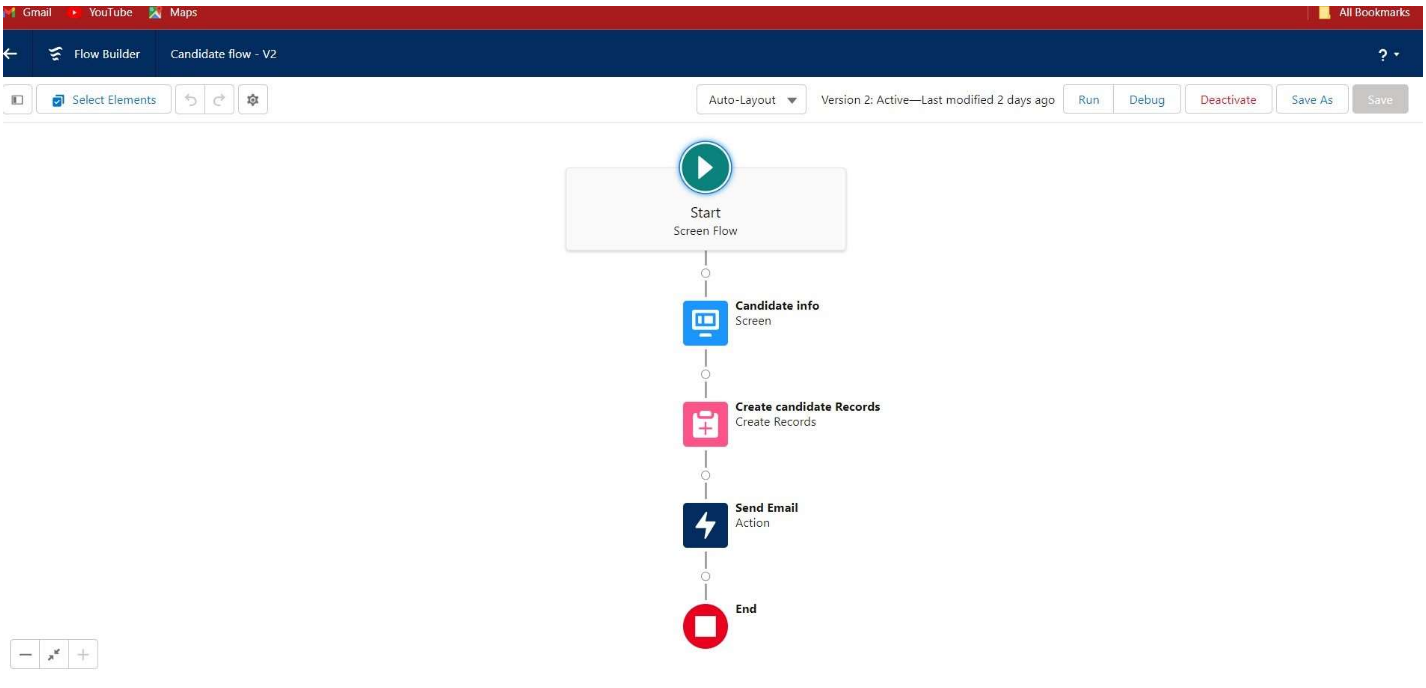
17.Enable Body and Give Hi {!Candidate_Name}, Welcome to the semester

18.Enable Recipient Address List and Give {!Email.value}

19.Enable Subject and Give Welcome

Flow label: Candidate flow

Flow API Name: Candidate_flow (this will be auto populated)



20.Click on save

21.Click on the Activate.

App Page

App page descriptions in Salesforce refer to the metadata and configuration settings that define the visual layout, functionality, and behavior of custom app pages within a Salesforce org. App pages are created using the Salesforce App Builder, which is a visual drag-and-drop tool that allows users to create custom pages without writing code.

CreateAn App Page

1. Click on the Gear icon and select set up.
2. In Quick Find Box . Type app Builder and select the lighting app builder
3. Select New

4.Select the App page and click on Next

5. Give the label Name.

Label Name: Candidate App page.

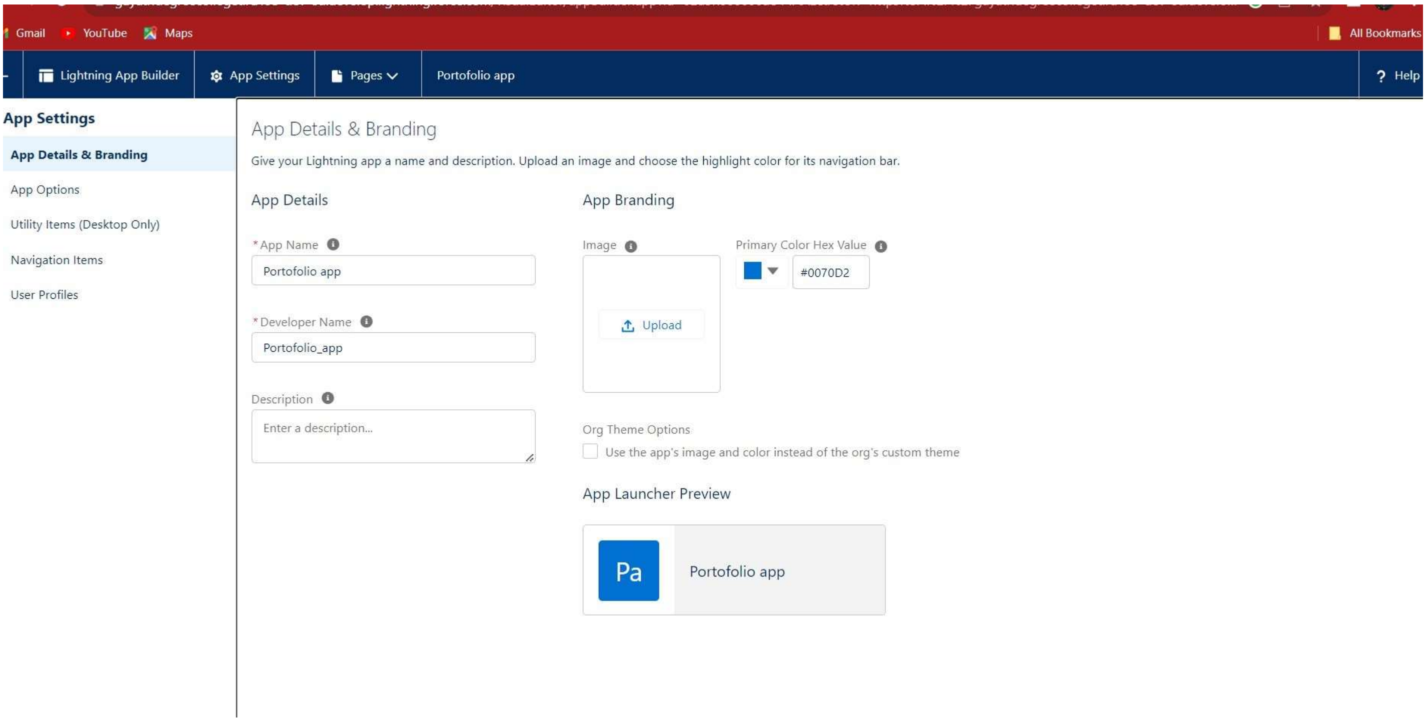
6. Select the one region and click on finish.

7. Type the flow in the search bar and select the flow component and drag the component to theAdd components here.

8. After dragging the component, give the flow label in the flow search and then click on save andthen click on activate.

Flow label: Candidate flow

9. After clicking on the activate it will open a page and then select the lightning experience andselect the app and then click on add page to the app.



Triggers

A trigger refers to an Apex code that is automatically executed before or after certain events occur in the Salesforce platform, such as when a record is inserted, updated, deleted, or undeleted. Triggers are used to automate business processes, enforce data integrity, and perform custom logic on data.

Field Update Using Trigger

Whenever a internal Marks is inserted if the marks is greater than or equal to 200 it must update the status field to Pass or else it must update to fail

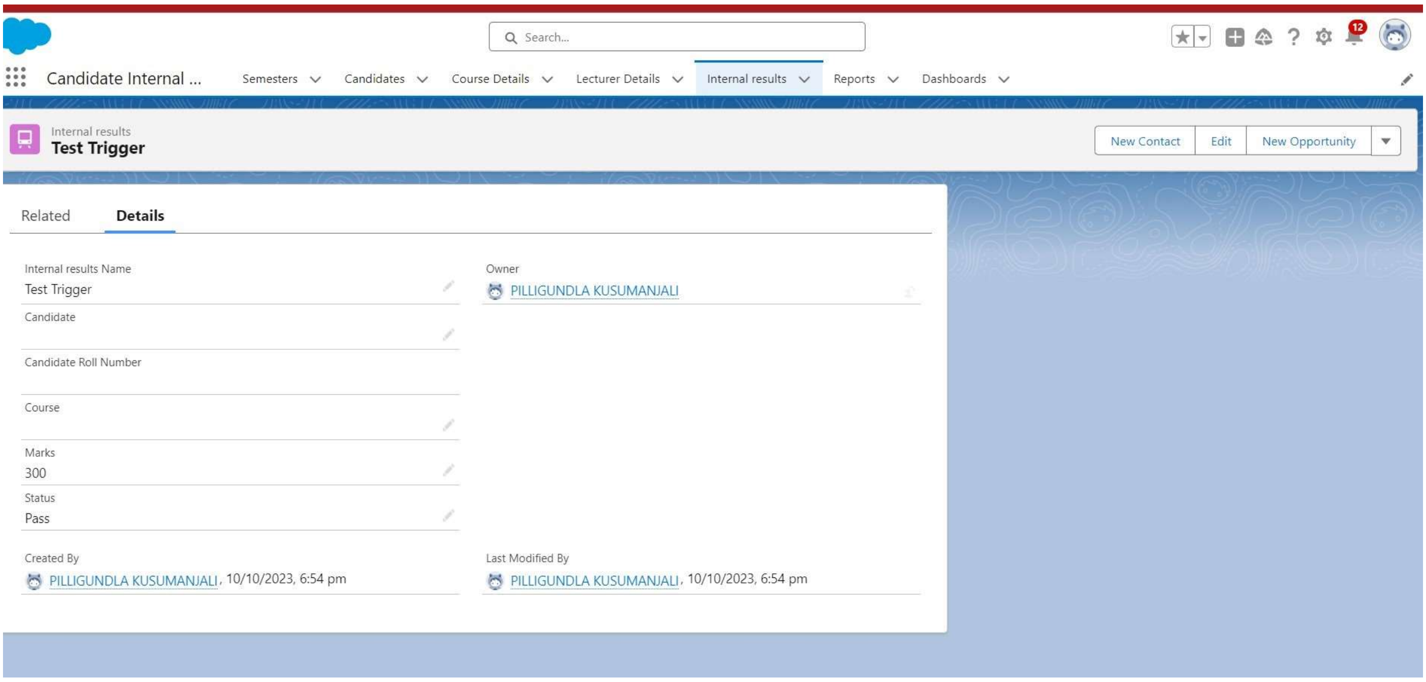
1. Go to the gear icon and select the developer console.
2. From the menu bar click on file and select Apex class.
3. Now give the class name as InternalmarksHandler4. Now Write the below code

```
public class InternalmarksHandler {
    public static void beforeinsert(list<Internal_results__c> newlist){

        for(Internal_results__c internalmarks : newlist){
            if(internalmarks.marks__c >= 200){
                internalmarks.status__c = 'Pass';
            }else{
                internalmarks.status__c='fail';
            }

        }
    }
}
```

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

```
trigger Internalmarks on Internal_results__c(before insert,after update) {
    If(trigger.isInsert)
    {
        If(trigger.isBefore)
        {
            InternalmarksHandler.beforeinsert(Trigger.new);
        }
    }
}
```

8. Trigger Working as follows:
In the following record Marks field is given as 300,Now trigger triggers and status changes to Pass


Search...
Candidate Internal ...
Semesters
Candidates
Course Details
Lecturer Details
Internal results
Reports
Dashboards
Internal results
Test Trigger
New Contact
Edit
New Opportunity
Related
Details
Internal results Name
Test Trigger
Owner
PILLIGUNDLA KUSUMANJALI
Candidate
Candidate Roll Number
Course
Marks
300
Status
Pass
Created By
PILLIGUNDLA KUSUMANJALI, 10/10/2023, 6:54 pm
Last Modified By
PILLIGUNDLA KUSUMANJALI, 10/10/2023, 6:54 pm

THEEND