Project Report on

Implementing CRM for Result Tracking Of A Candidate With Internal Marks (DEVELOPER) - (Short-Term)

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 - BUKKE NANDINI

2. Email – bukkenandini2022@gmail.com

3. Role: Developer

4. Company: GAYATRI DEGREE COLLEGE - TIRUPATI

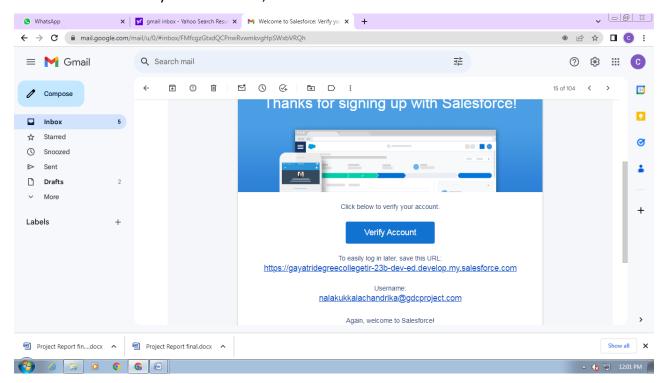
5. County: India

6. Postal Code: 517501

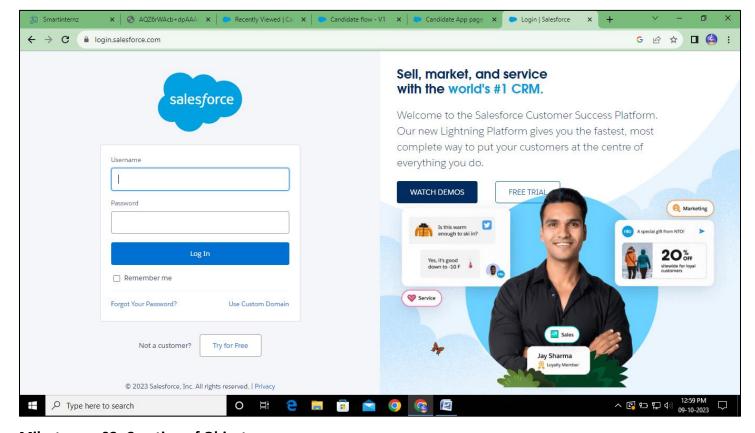
7. Username: bukkenandini2022@gdcproject.com

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



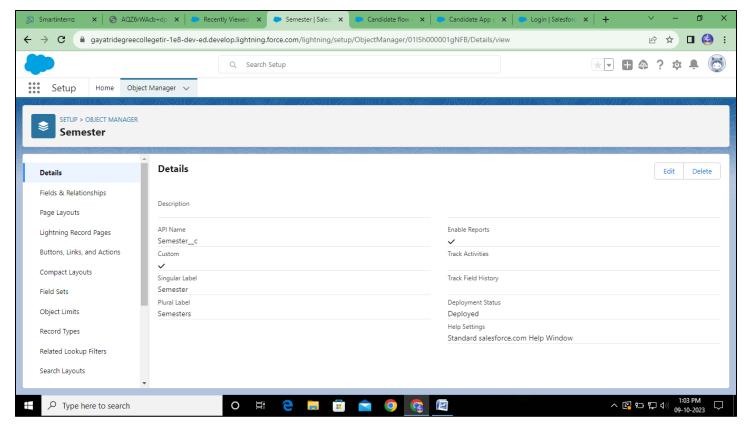
- 1. Go to salesforce.com and click on login.
- 2. Enter the username and password that you just created.
- 3. After login this is the home page which you will see.



Milestone – 02: Creation of Objects

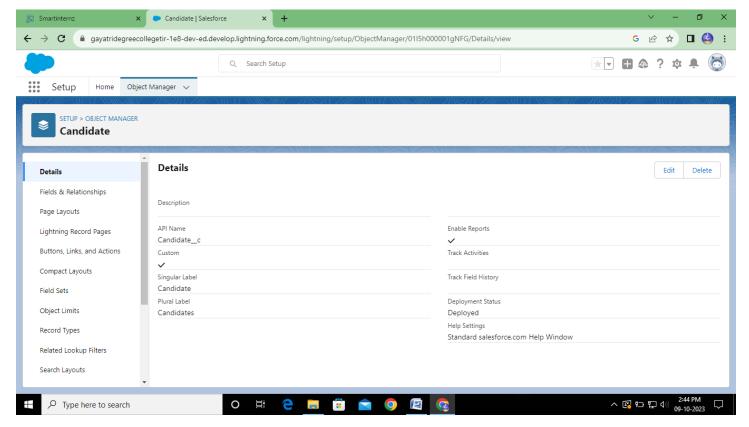
Object – Semester:

- 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 Dropdownclick 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. Click Save.



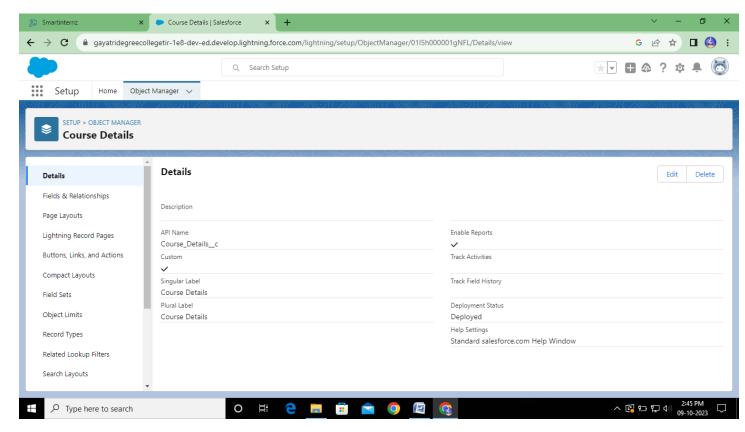
Object- Candidate

- 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 Dropdownclick 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.



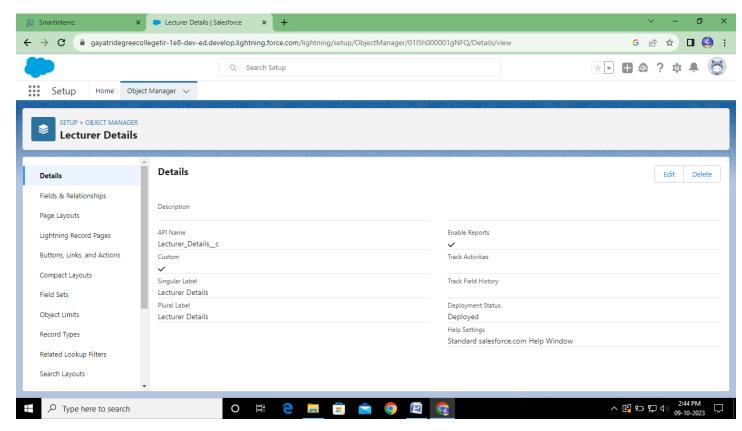
Object - Course Details

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



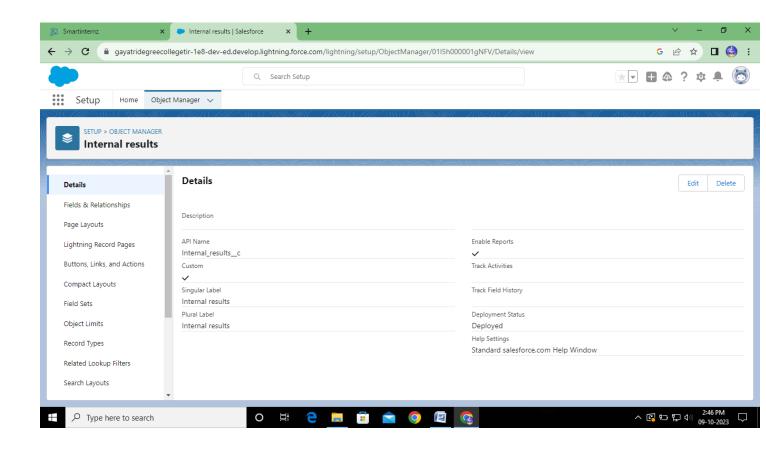
Object - Lecturer Details

- 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 Dropdownclick 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
- 8. Check the Allow Reports
- 9. Check the Allow Search
- 10. Click Save.



Object - Internal results

- 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 Dropdownclick on that and select Custom Object.
- 4. On the Custom Object Definition page, create the object as follows:
- 5. Label: Internal results
- 6. Plural Label: Internal results
- 7. Record Name: Internal results
- 8. Check the Allow Reports
- 9. Check the Allow Search
- 10. Click Save.

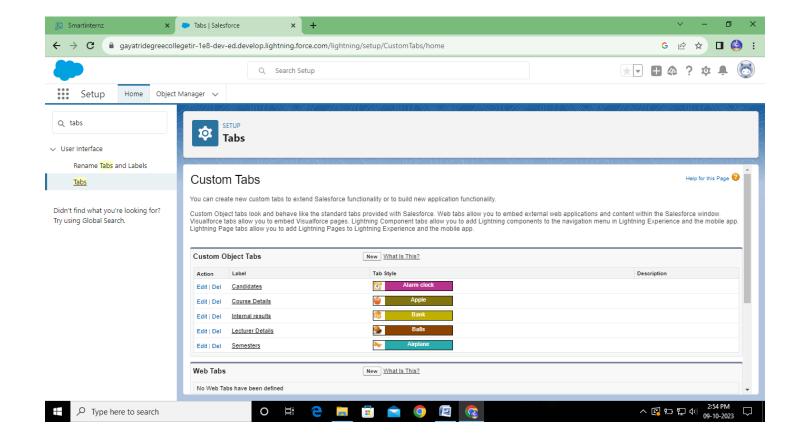


Milestone - 03: what Is A Tab?

Creation Of Semester Tab For 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 .

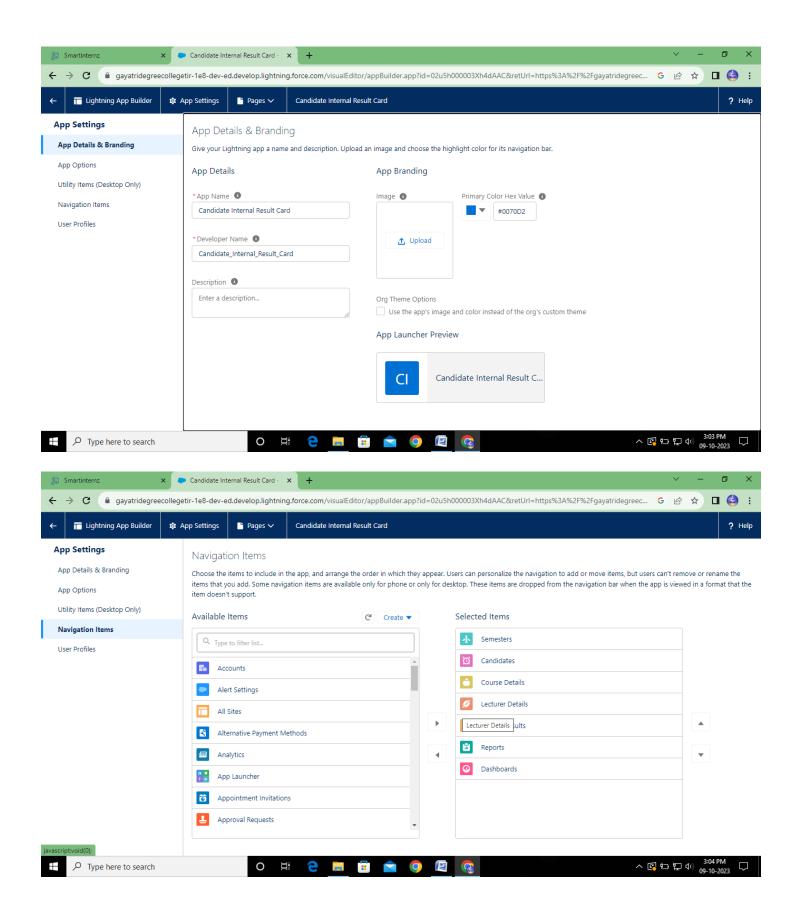


Milestone – 04: **Lightning App**

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**, **Internalresults**, **Reports**, and **Dashboards** and move them to Selected Items.
- 7. Click Next.

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

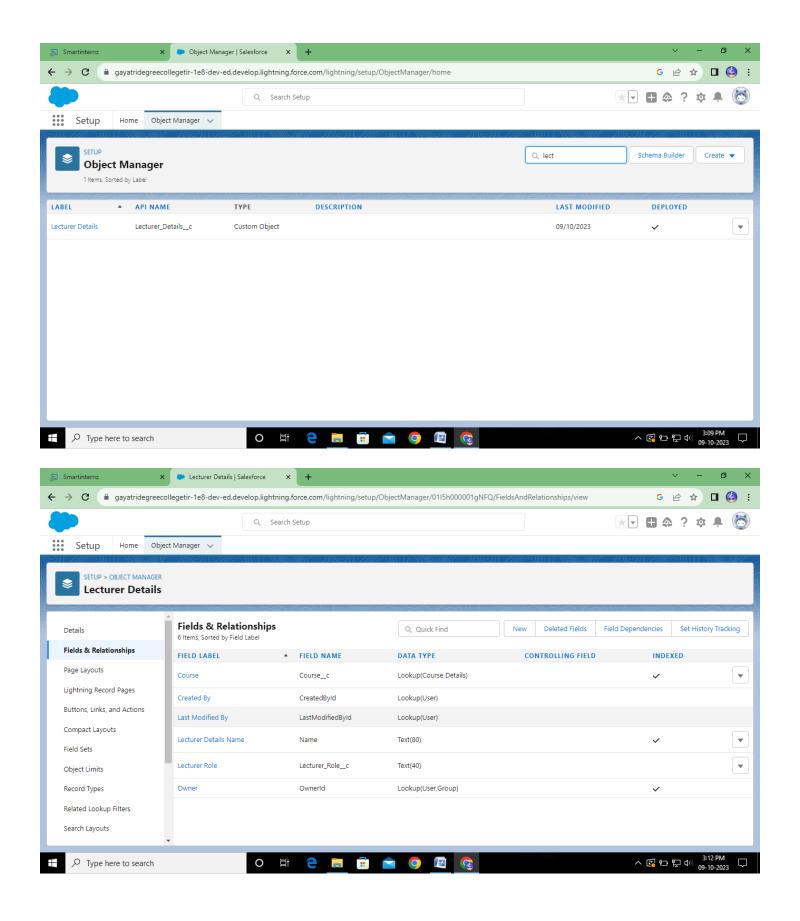


Milestone – 05: **Fields And Relationship**

Object Name	Field Name	Data type
Semester	Semester Name	Text(Standard field)
	Course	Lookup(Course Details)
Candidate	Candidate Name	Text(Standard field)
	Candidate Roll Number	Auto Number
	Semester Name	Lookup(Semester)
Lecturer Details	Lecturer Name	Text(Standard field)
	Lecturer Role	Text
	Course	Lookup(Course Details)
Course Details	Course Name	Text(Standard field)
	Duration (Years)	Number
Internal results	Candidate	Lookup (candidate)
	Candidate Roll Number	Formula
	Course	Lookup (Course detail)
	Marks	Number
	Status	Pick list Values: Pass Fail

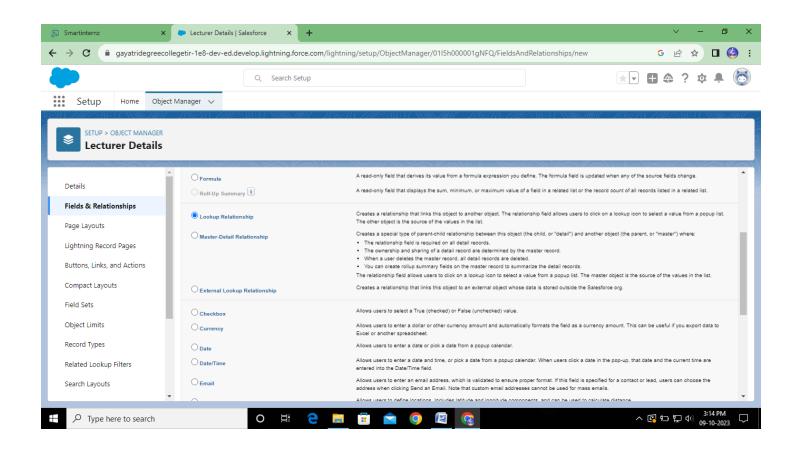
Creation Of Text Field On "Lecturer Details" & Look Up Field For The "Candidate" Object

- 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.

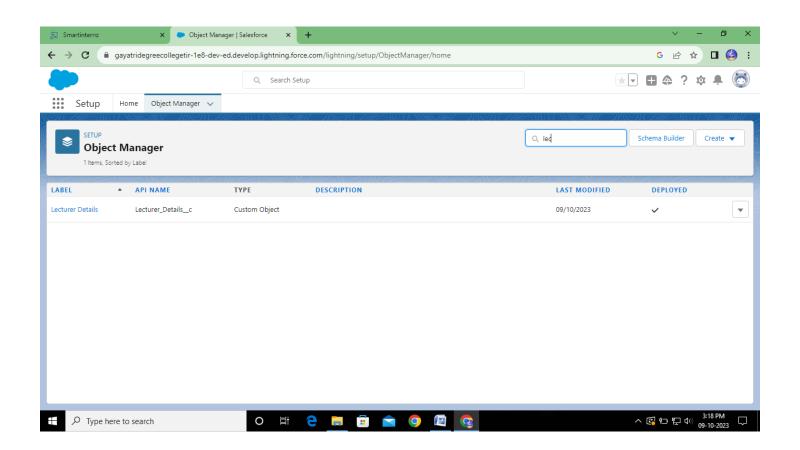


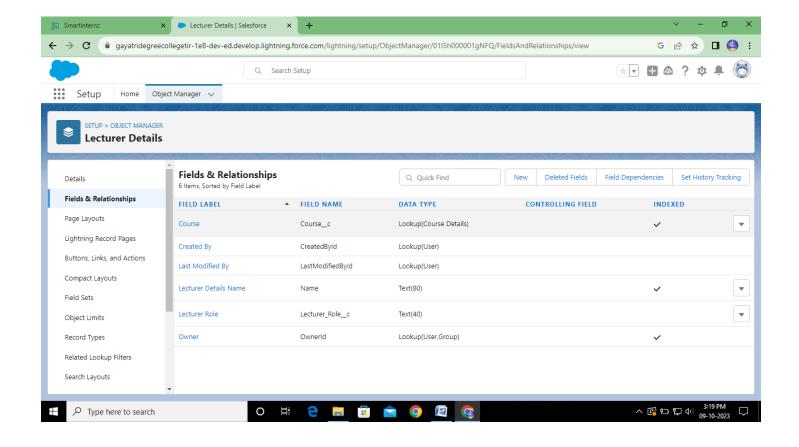
Note- Similarly create all lookup fields on their respective objects.

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.

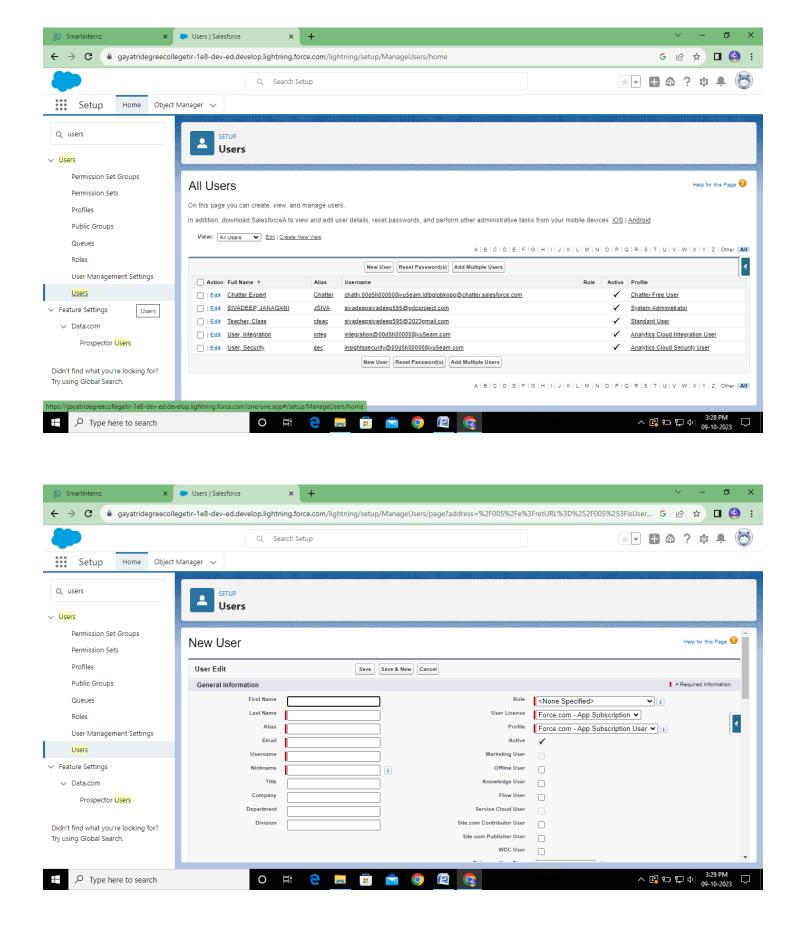
Milestone - 06: Users

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 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.

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 password emailed to your email.

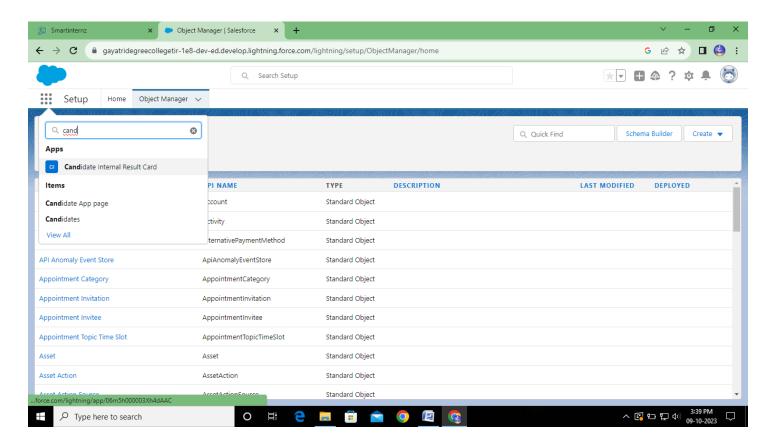


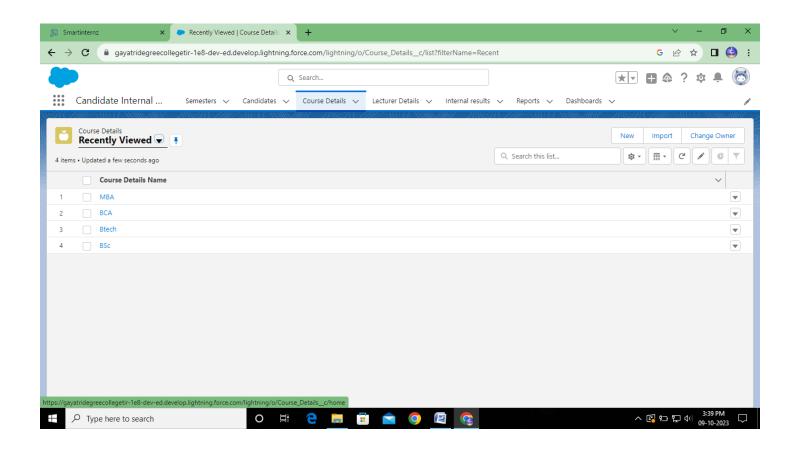
Milestone -07: **User Adoption**

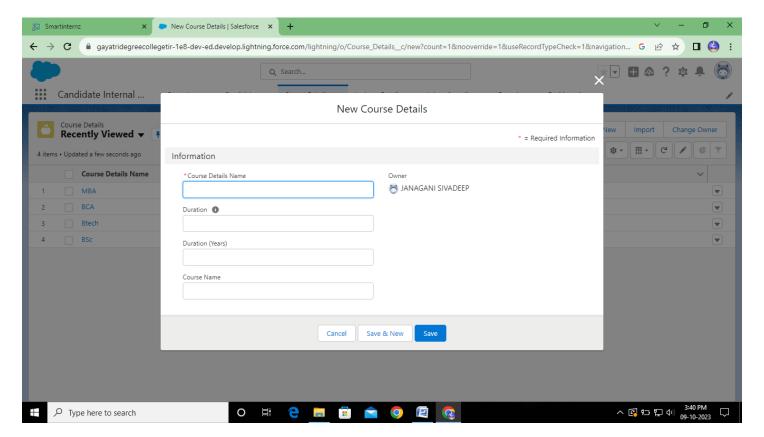
Create Record (Course Details)

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.



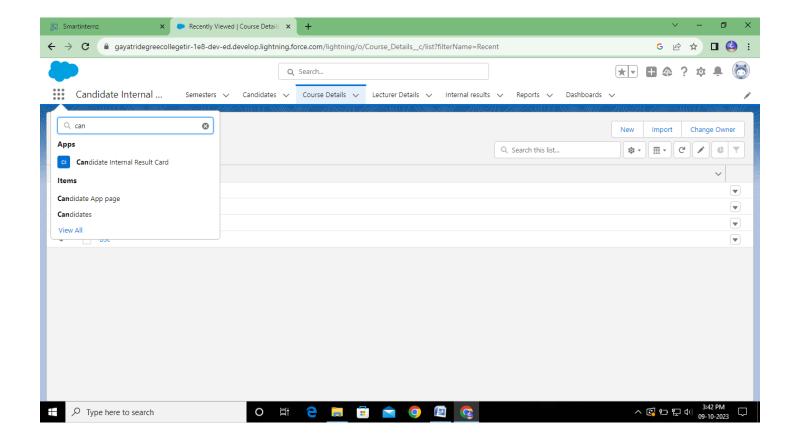


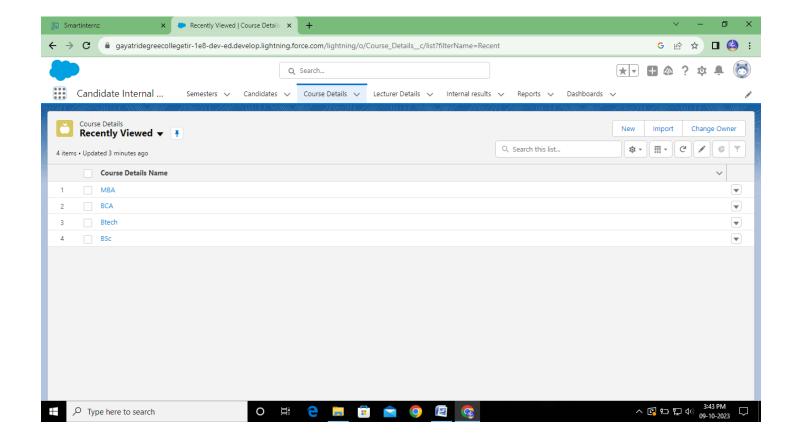


View Record (Course Details)

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

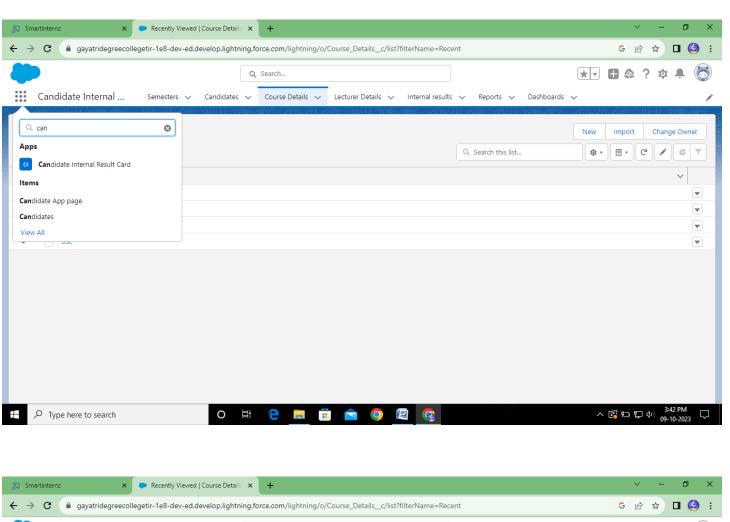


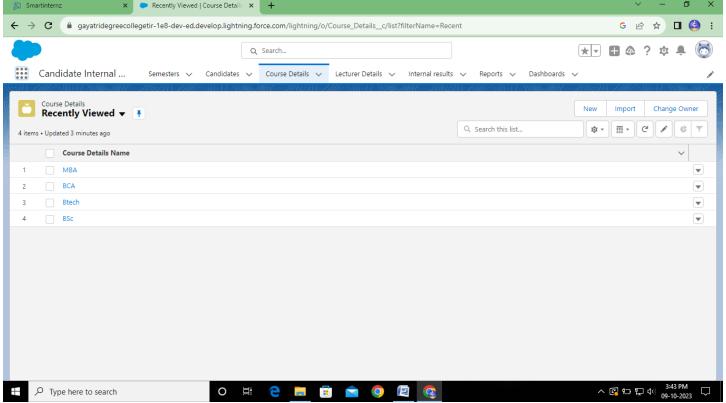


Delete Record (Course Details)

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?

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 customobjects 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 iscreated, 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 and modify the reports it contains and can also move themto/from any other folders they have access level as Editor or Manager.

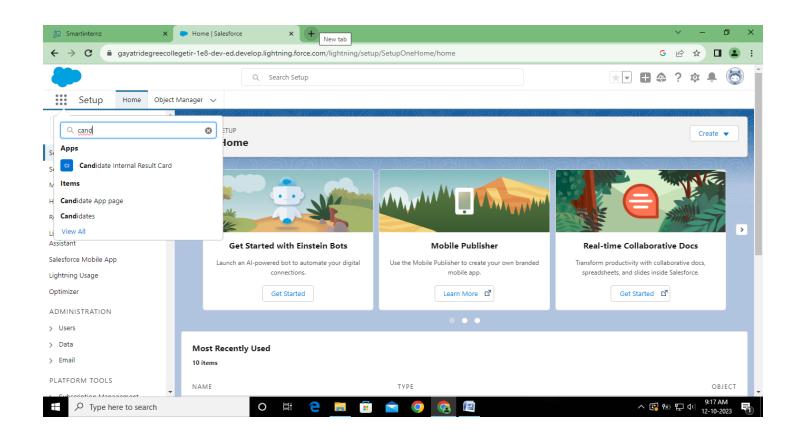
Manager: With this access level, users can do everything Viewers & Editors can do, plus they can alsocontrol other user's access levels to this folder. Also, users with Manager Access levels can delete the report.

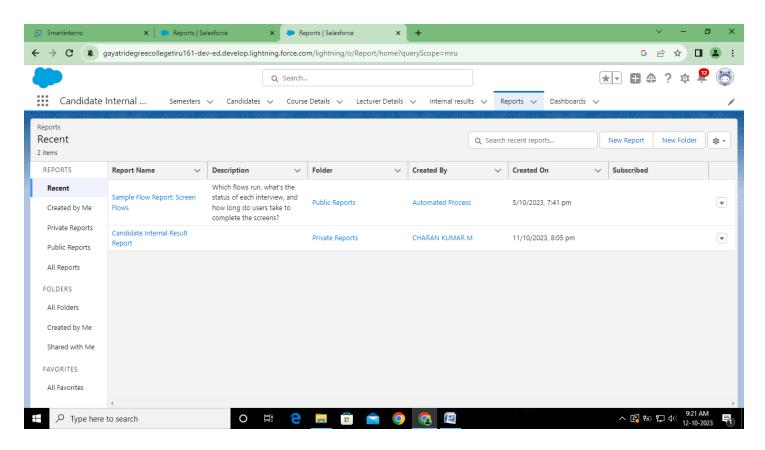
Create Report

- 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 way we are making a Matrix Report).
- 7. Click refresh
- 8. Click save and run
- 9. Give report name Candidate Internal Result Report

10.Click Save

NOTE: In this report you can see your all record of the object you selected for reporting (What you Selects in "Select a report type option").

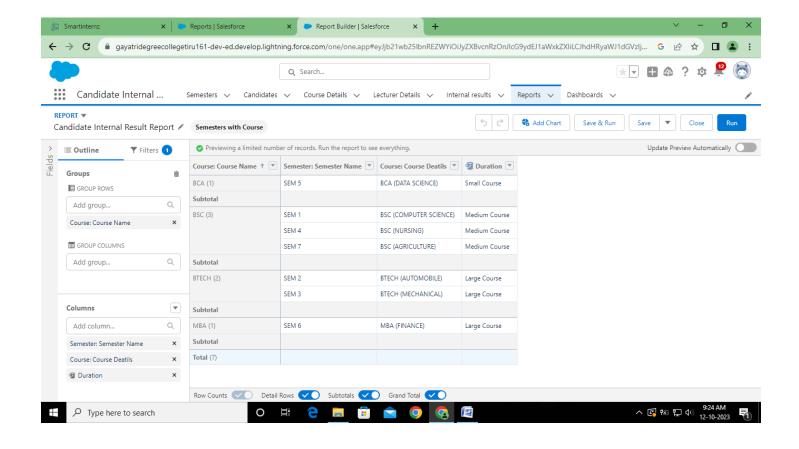




- . On the report builder page, locate the "Fields" pane on the left-hand side.
- 2. Find the field for which you want to create a bucket field and drag it to the report preview section.
- 3. Click on the field in the report preview to open the field properties.
- 4. In the field properties, locate the "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.

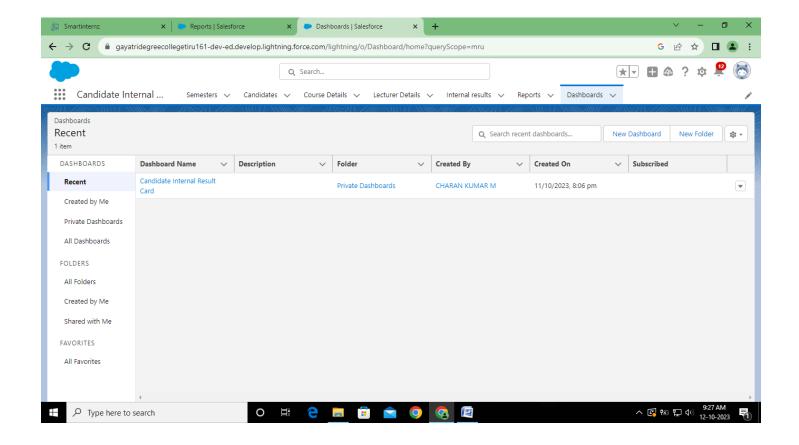


Milestone - 09: Dashboards

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 asingle dashboard.

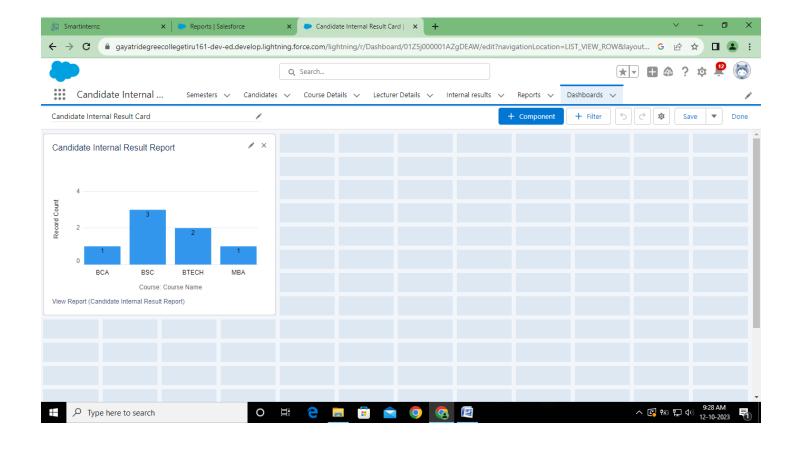
Create Dashboard

- 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.



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 - 10: 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.

Create A Screen 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}

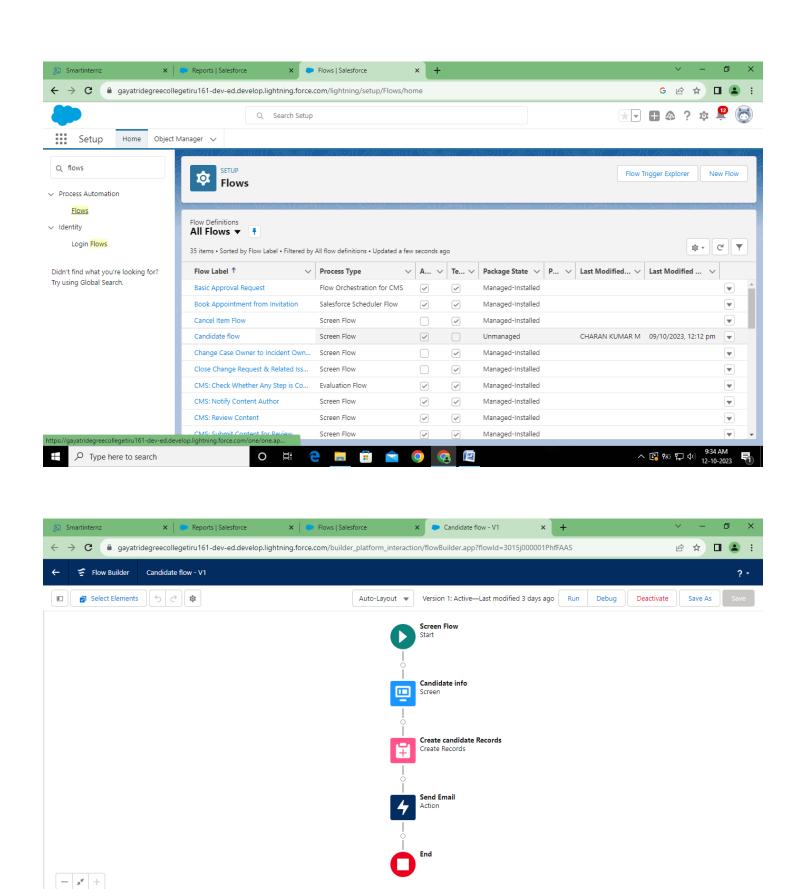
19. Enable Subject and Give Welcome

Flow label: Candidate flow

Flow API Name: Candidate flow (this will be auto populated)

20.Click on save

21.Click on the Activate.



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Milestone - 11: App Page

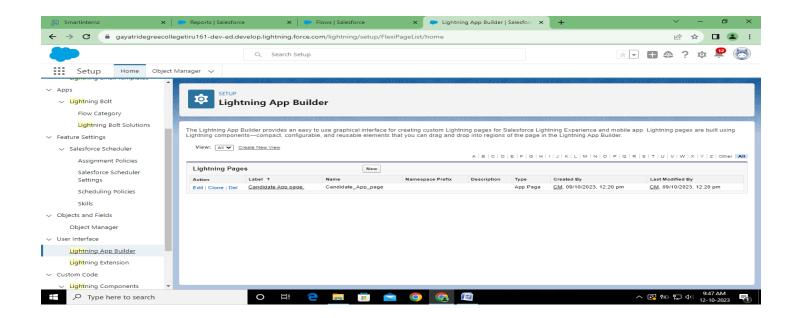
App page descriptions in Salesforce refer to the metadata and configuration settings that define the visual layout, functionality, and behavior of custom app pages within a Salesforce org. App pages are created using the Salesforce App Builder, which is a visual drag-and-drop tool that allows users to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

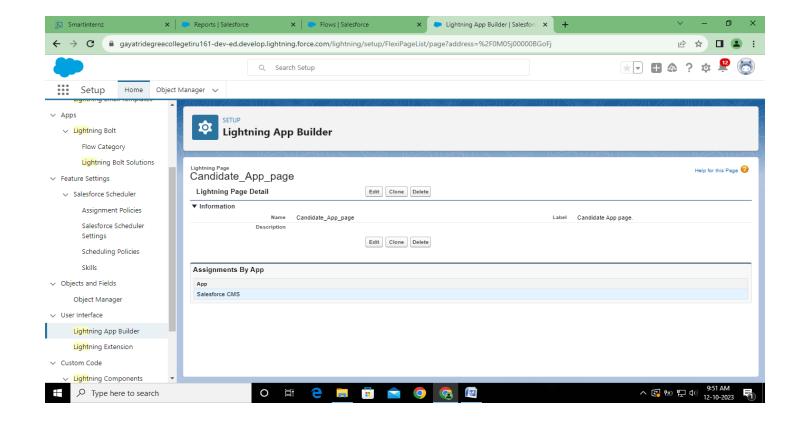
Create An App Page

- 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 the Add components here.
- 8. After dragging the component, give the flow label in the flow search and then click on save and then click on activate. Flow label:Candidate flow
- 9. After clicking on the activate it will open a page and then select the lightning experience and select the app and then click on add page to the app.





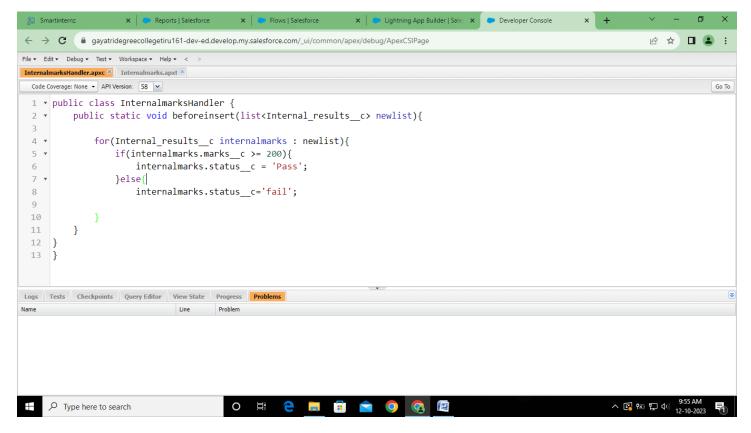
Milestone - 12: Triggers

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.

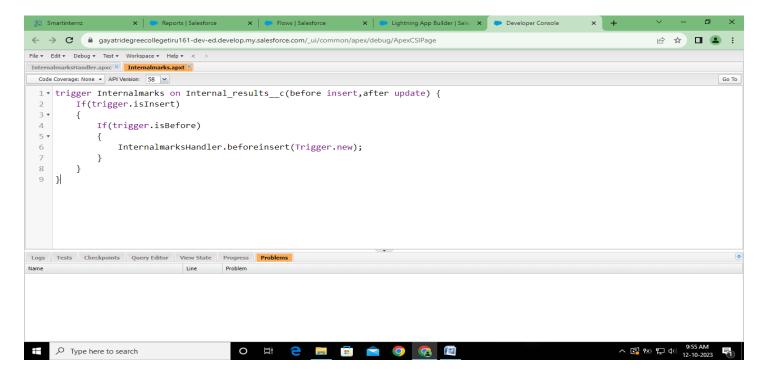
Field Update Using Trigger

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

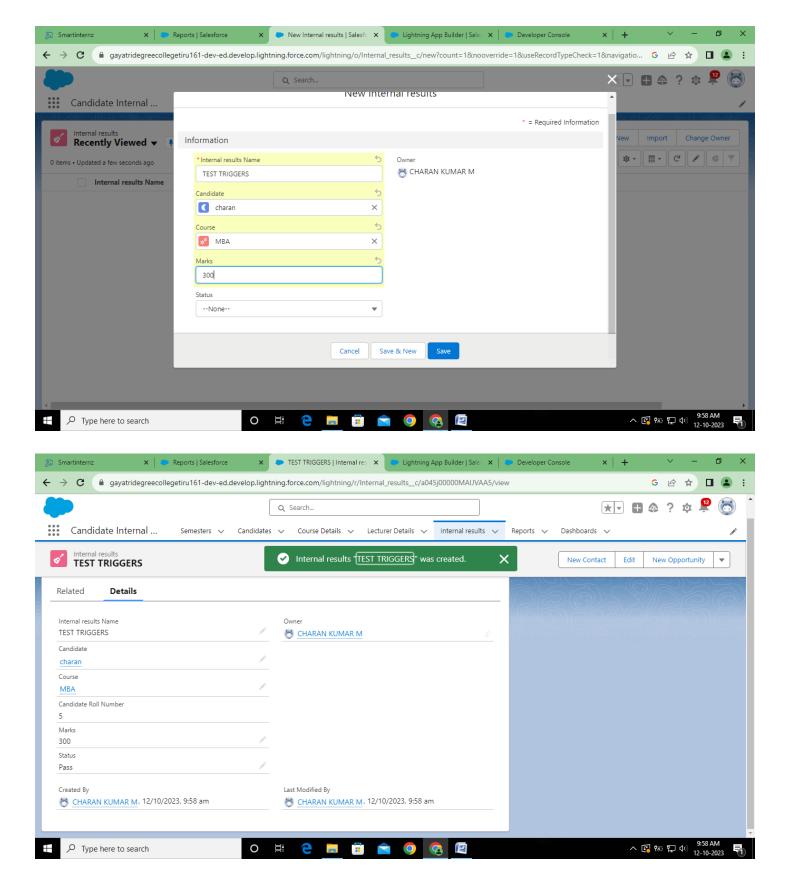
- 1. Go to the gear icon and select the developer console.
- 2. From the menu bar click on file and select Apex class.
- 3. Now give the class name as InternalmarksHandler
- 4. Now Write the below code



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



OUTPUT:



THE END