

## 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](https://developers.salesforce.com/Signup)

Click on sign up.

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

1. First name & Last name – PILLIGUNDLA KUSUMANJALI
2. Email –pkusumanjali0@gmail.com
3. Role: Developer
4. Company: GAYATRI DEGREE COLLEGE - TIRUPATI
5. County: India
6. Postal Code: 517501

7. Username:[pkusumanjali0@gdcproject.com](mailto:pkusumanjali0@gdcproject.com)

First Name\*  
PILLIGUNDLA

Last Name\*  
KUSUMANJALI

Email\*  
pkusumanjali0@gmail.com

Role\*  
Developer

Company\*  
GAYATRI DEGREE COLLEGE -TIRUPATI

Country/Region\*  
India

State/Province\*  
Andhra Pradesh

Postal Code\*  
517501

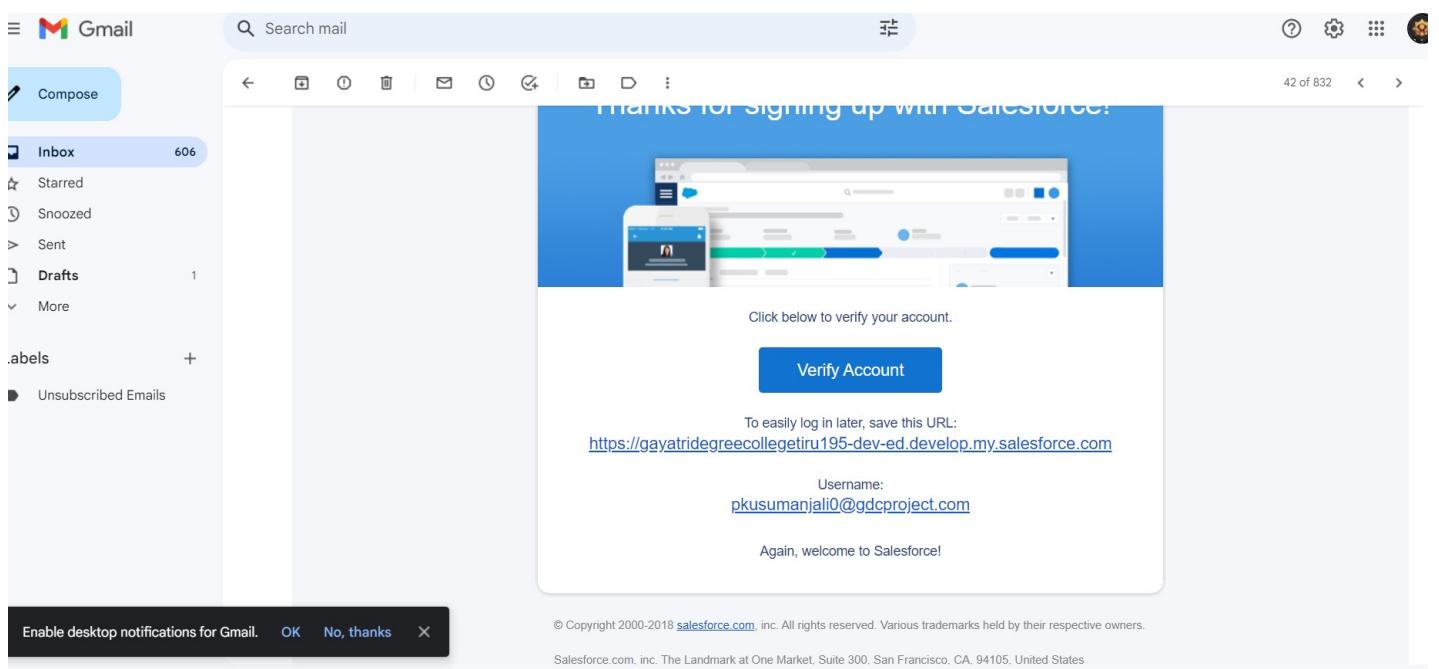
Username\*  
pkusumanjali0@gdcproject.com

Your username must be in the form of an email address (It does not have to be real). It must be unique and cannot be associated with another Salesforce login credential. [Read more about username recommendations.](#)

I agree to the [Main Services Agreement – Developer Services](#) and [Privacy Statement](#).

## 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.

A screenshot of the Salesforce website. The top navigation bar includes links for 'Gmail', 'YouTube', 'Maps', and 'All Bookmarks'. The main content features the Salesforce logo in a blue cloud. To the right, a large promotional image for the 'Lightning Platform' highlights its features: 'Sell, market, and service with the world's #1 CRM.', 'Welcome to the Salesforce Customer Success Platform.', 'Our new Lightning Platform gives you the fastest, most complete way to put your customers at the centre of everything you do.', 'WATCH DEMOS', 'FREE TRIAL', and 'Marketing'. Below the promotional image is the login form with fields for 'Username' and 'Password', a 'Log In' button, and checkboxes for 'Remember me' and 'Forgot Your Password?'. There are also links for 'Use Custom Domain' and 'Not a customer? Try for Free'. At the bottom, a footer note reads '© 2023 Salesforce, Inc. All rights reserved. | Privacy'.

## 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.

The screenshot shows the Salesforce Setup interface. The top navigation bar includes links for Gmail, YouTube, Maps, and All Bookmarks. Below the bar, the main header says "SETUP > OBJECT MANAGER" and "Semester". The left sidebar lists various configuration options under "Details": Fields & Relationships, Page Layouts, Lightning Record Pages, Buttons, Links, and Actions, Compact Layouts, Field Sets, Object Limits, Record Types, Related Lookup Filters, Search Layouts, List View Button Layout, and Restriction Rules. The main content area is titled "Details" and contains the following fields:

- Description
- API Name: Semester\_c
- Custom: ✓
- Singular Label: Semester
- Plural Label: Semesters
- Enable Reports: ✓
- Track Activities
- Track Field History
- Deployment Status: Deployed
- Help Settings: Standard salesforce.com Help Window

At the bottom right of the content area are "Edit" and "Delete" buttons.

### 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

The screenshot shows the Salesforce Setup interface with the 'Object Manager' tab selected. The main panel displays the 'Candidate' object details. On the left, a sidebar lists various configuration tabs: Details, Fields & Relationships, Page Layouts, Lightning Record Pages, Buttons, Links, and Actions, Compact Layouts, Field Sets, Object Limits, Record Types, Related Lookup Filters, and Search Layouts. The 'Details' tab is active. The main content area shows the following fields:

Field	Value	Action
Description		
API Name	Candidate__c	Enable Reports ✓
Custom	✓	Track Activities
Singular Label	Candidate	Track Field History
Plural Label	Candidates	Deployment Status: Deployed Help Settings: Standard salesforce.com Help Window

At the bottom right of the main panel are 'Edit' and 'Delete' buttons. The browser address bar shows the URL: <https://gayatridegreecollege-tir-ac-dev-ed.develop.lightning.force.com/lightning/setup/ObjectManager/01I5j000003CRF3/Details/view>. The Windows taskbar at the bottom includes icons for File Explorer, Task View, Edge, File, Mail, Google Chrome, Firefox, and Word.

## Object – Course Details

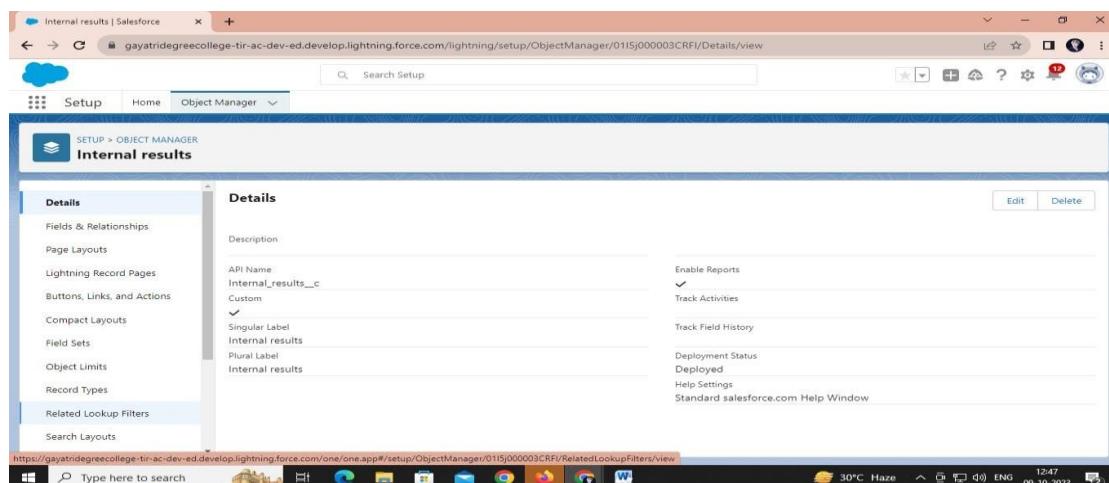
1. Click on the object manager tab just beside the home tab
2. After the above steps, have a look on the extreme right you will find a Create Drop down click on that and select Custom Object.
3. On the Custom Object Definition page, create the object as follows:
4. Label: **Course Details**
5. Plural 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 other web 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.



## Custom Tabs

[Help for this Page](#)

You can create new custom tabs to extend Salesforce functionality or to build new application functionality.

Custom Object tabs look and behave like the standard tabs provided with Salesforce. Web tabs allow you to embed external web applications and content within the Salesforce window. Visualforce tabs allow you to embed Visualforce pages. Lightning Component tabs allow you to add Lightning components to the navigation menu in Lightning Experience and the mobile app. Lightning Page tabs allow you to add Lightning Pages to Lightning Experience and the mobile app.

Custom Object Tabs		New	What Is This?	Description
Action	Label	Tab Style		
Edit   Del	Candidates	Apple		
Edit   Del	Course Detailss	Bridge		
Edit   Del	Internal resultss	Train		
Edit   Del	Lecturer Detailss	Camera		
Edit   Del	Semesters	Globe		

## 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.

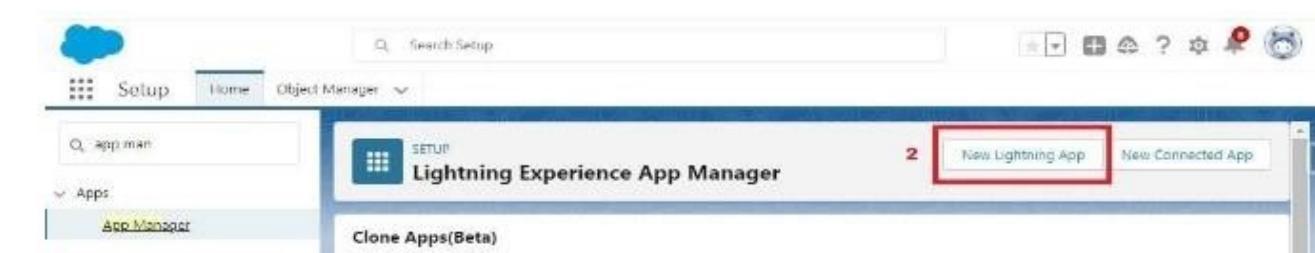
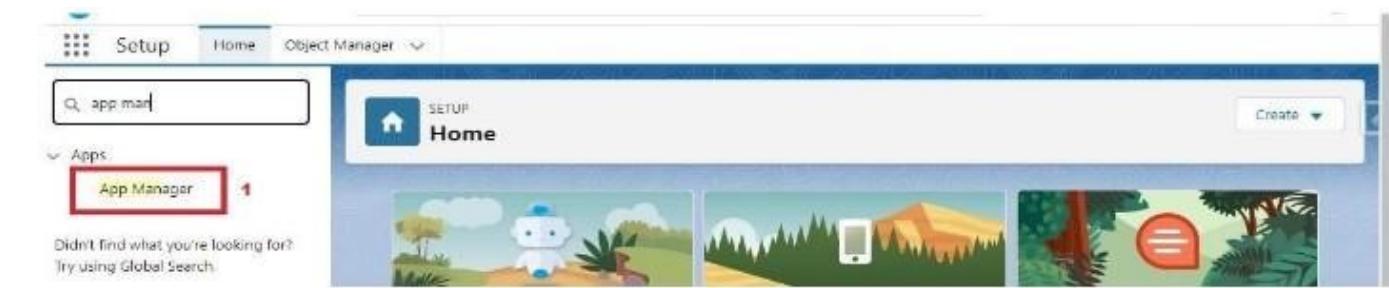
Note: The description, Logo, and Label of standard app cannot be altered.

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



### 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 1  
Candidate Internal Result Card

\* Developer Name 1  
Candidate\_Internal\_Result\_Card

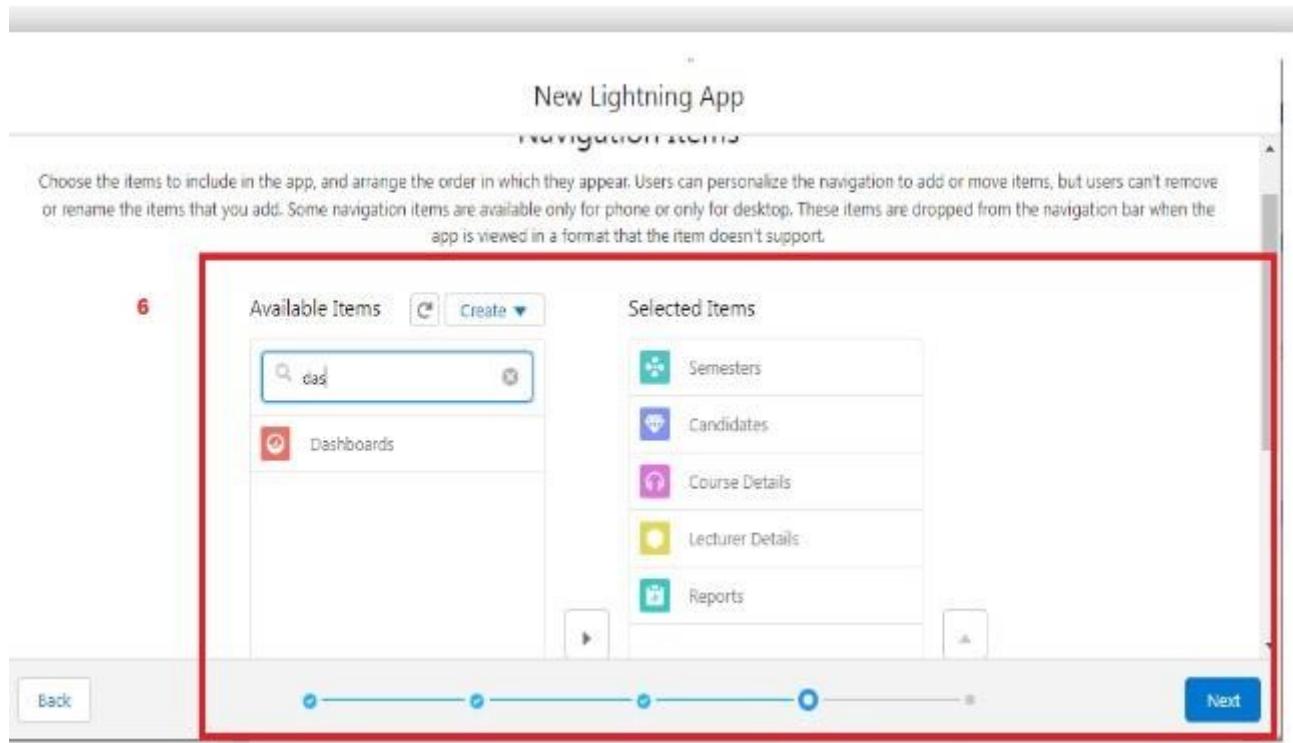
Description 1

**App Branding**

Image 1

Primary Color Hex  
Value 1  
 #0070D2

**Next**



#### Milestone – 05: fields and relationship

## Fields And 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
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## 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

The screenshot shows the Salesforce Setup interface. At the top, there's a blue header bar with a gear icon and the word 'Setup'. Below it is a navigation bar with tabs: 'Home' (highlighted), 'Object Manager' (highlighted with a red box), 'Search Setup', and other icons. The main area is titled 'Object Manager' with a sub-header '1 Item. Sorted by Label.' There's a search bar with 'lect' and buttons for 'Schema Builder' and 'Create'. A table lists one item: 'Lecturer Details' (Label), 'Lecturer\_Details\_\_c' (API Name), 'Custom Object' (Type), and '08/04/2023' (Last Modified). A red box highlights the 'Lecturer\_Details\_\_c' API name in the table.

The screenshot shows the Salesforce Setup interface with the 'Fields & Relationships' tab selected in the sidebar (highlighted with a red box). The main area has a search bar with 'Quick Find' and buttons for 'Deleted Field', 'Field Dependencies', and 'Get History Tracking'. A table lists fields: 'Address' (Field Label), 'Address\_\_c' (Field Name), 'Text(50)' (Data Type), 'Created By' (Controlling Field), and 'INDEXED' (Indexed). A red box highlights the 'New' button in the top right corner, and a red number '5' is placed near it.



**Step 2. Enter the details**

**Step 2 of 4**

Field Label:	Lecturer Role	7
Length:	140	8
Field Name:	Lecturer_Role	9
Description:		
Help Text:		

Setup Home Object Manager

SETUP > OBJECT MANAGER Lecturer Details

Details Fields & Relationships

Lecturer Details Custom Field Lecturer Role Back to Lecturer Details Validation Rules [0]

Custom Field Definition Detail Edit Set Field-Level Security View Field Accessibility Where is this used?

**Field Information**

Field Label: Lecturer Role	Object Name: Lecturer Details
Field Name: Lecturer_Role	Data Type: Text
API Name: Lecturer_Role__c	
Description:	
Help Text:	
Data Owner:	
Field Usage:	
Data Sensitivity Level:	
Compliance Categorization:	
Created By: MANCHALA SREESADA 10/10/2023, 8:32 am	Modified By: MANCHALA SREESADA 10/10/2023, 8:32 am

**General Options**

Required:	<input type="checkbox"/>
Unique:	<input type="checkbox"/>
Case Sensitive:	<input type="checkbox"/>
External ID:	<input type="checkbox"/>
Default Value:	

**Text Options**

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.

The screenshot shows the Salesforce Object Manager interface. A red box highlights the 'Object Manager' tab in the top navigation bar. Another red box highlights the search bar with the text 'lect'. A third red box highlights the 'Create' button in the top right corner. The main table lists one item: 'Lecturer Details' with API name 'Lecturer\_Details\_\_c', Type 'Custom Object', and Last Modified date '08/04/2023'. A red box highlights the API name 'Lecturer\_Details\_\_c'.

The screenshot shows the 'Fields & Relationships' section of the Object Manager. A red box highlights the 'Fields & Relationships' tab in the sidebar. Another red box highlights the 'New' button at the top of the list table. The table lists two fields: 'Address' (Text(50)) and 'Created By' (LookupId). A red box highlights the 'Address' field. The sidebar also includes sections for 'Formula', 'Rollup Summary', and 'Lookup Relationship'. A red box highlights the 'Lookup Relationship' section, which contains a detailed description and a list of bullet points. A red box highlights the 'Step 2: Choose the related object' header of a modal window. A red box highlights the 'Related To' dropdown menu, which has 'Semester' selected.

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The screenshot shows the Salesforce Object Manager interface. A new field is being created for the 'Semester' object. The 'Field Label' is set to 'Semester Name' and the 'Field Name' is also 'Semester Name'. There is a red box highlighting the 'Field Label' and 'Field Name' fields. Below them are 'Description' and 'Help Text' input fields.

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

The screenshot shows the Salesforce Setup page for the 'Semester' object. The 'Fields & Relationships' tab is selected. On the right, the 'Field Information' section shows the 'Field Label' as 'Semester Name', 'Data Type' as 'Text(80)', and 'Field Name' as 'Name'. The 'Validation Rules' section indicates 'No validation rules defined'.

## 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.

Screenshot 1: Object Manager

Screenshot 2: Fields & Relationships

Screenshot 3: Field Creation Dialog

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.

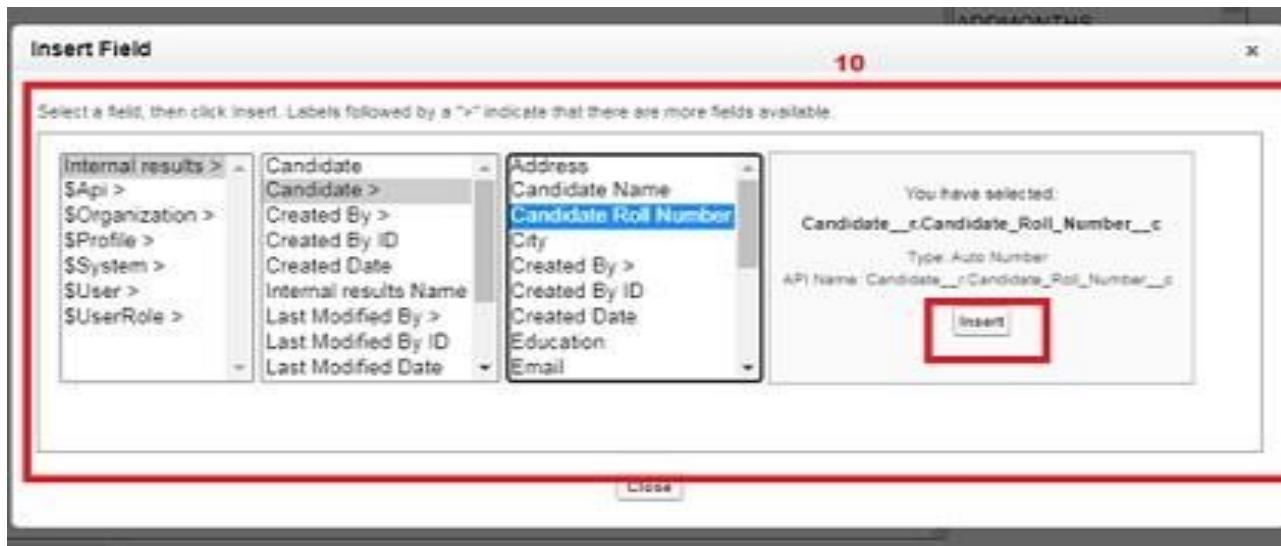
11. Click Next, Next, then Save.

The screenshot shows the Salesforce Object Manager interface. At the top, there's a search bar and a toolbar with various icons. Below that, the 'Object Manager' tab is selected. A red box highlights the 'Object Manager' tab itself. In the main area, there's a table with columns: Label, API Name, Type, Description, Last Modified, and Deployed. One row is visible, labeled 'Lecturer Details' with API name 'Lecturer\_Details\_\_c'. A red box highlights the API name. The 'Type' column shows 'Custom Object'. The 'Last Modified' column shows '08/04/2023'. A red box highlights the 'Last Modified' column. The 'Deployed' column has a checkmark icon. A red box highlights the checkmark icon.

This screenshot shows the 'Fields & Relationships' section for the 'Lecturer Details' object. It includes a table with columns: Field Label, Field Name, Data Type, Controlling Field, and Indexed. Two fields are listed: 'Address' (Address\_c, Text) and 'Created By' (CreatedById, Lookup). A red box highlights the 'Address' field. The 'Data Type' column shows 'Text'. The 'Controlling Field' column shows 'Lookup'. A red box highlights the 'Created By' field. The 'Data Type' column shows 'Lookup'.

This screenshot shows the 'Data Type' selection screen. It lists several options: 'None Selected', 'Auto Number', 'Formula', and 'Text'. The 'Formula' option is selected and highlighted with a red box. A red box also highlights the 'Formula' label. The 'None Selected' option is unselected. The 'Auto Number' option is unselected. The 'Text' option is unselected.

This screenshot shows the 'Formula Editor' for creating a formula field. The 'Field Label' is set to 'Candidate Roll Number' and the 'Field Name' is set to 'Candidate\_Roll\_Number'. A red box highlights the 'Field Label' input field. A red box highlights the 'Field Name' input field. There's a checkbox for 'Add this field to existing custom report types that contain this entity'. A red box highlights the checkbox. The 'Formula Return Type' section shows 'Text' selected, highlighted with a red box. A red box highlights the 'Text' label. Below this, there are examples for each return type. The 'Text' example is: 'CandidateRollNumber = Candidate\_\_c & " - " & CandidateName\_\_c'. A red box highlights the formula input field. The 'Operators & Functions' section shows a dropdown menu for 'All Function Categories' and a list of functions: ABS, ACOS, ADDMONTHS, AND, ASCII, ASIN. A red box highlights the dropdown menu. A red box highlights the 'Insert Selected Functions' button. The 'Simple Formula' and 'Advanced Formula' tabs are at the bottom left. A red box highlights the 'Insert Field' button. A red box highlights the 'Insert Operator' button.



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.

The screenshot shows the Salesforce Object Manager interface. A red box labeled '1' highlights the 'Object Manager' button in the top navigation bar. A red box labeled '2' highlights the 'Search Setup' bar. A red box labeled '3' highlights the 'Lecturer Details' row in the table, which includes columns for Label, API Name, Type, Description, Last Modified, and Deployed.

The screenshot shows the 'Fields & Relationships' section of the Object Manager. A red box labeled '4' highlights the 'Fields & Relationships' tab. A red box labeled '5' highlights the 'New' button. The table lists two fields: 'Address' (Text(50)) and 'Created By' (Lookup). Below the table, a section for creating a new field is shown, with 'Auto Number' selected. A red box labeled '6' highlights the 'Auto Number' option. A red box labeled '7' highlights the 'Field Label' input field containing 'Candidate Roll Number'. A red box labeled '8' highlights the 'Starting Number' input field containing '1'. A red box labeled '9' highlights the 'Next' button at the bottom right of the step 2 form.

## 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.

The screenshot shows the Salesforce Setup interface with the following steps highlighted:

1. Search bar: "user" (highlighted with a red box).
2. Left sidebar: "Users" (highlighted with a red box).
3. Top right button: "New User" (highlighted with a red box).
4. General Information form fields:
  - First Name: Class
  - Last Name: Teacher
  - Alias: cteach
  - Email: +++@++++.com
  - Username: +++@++++.com
  - Nickname: class
  - Title: (empty)
  - Company: (empty)
  - Department: (empty)
5. User License dropdown: "Salesforce" (highlighted with a red box).
6. Profile dropdown: "Standard User" (highlighted with a red box). The "Active" checkbox is checked.

#### Milestone – 07: user adoption

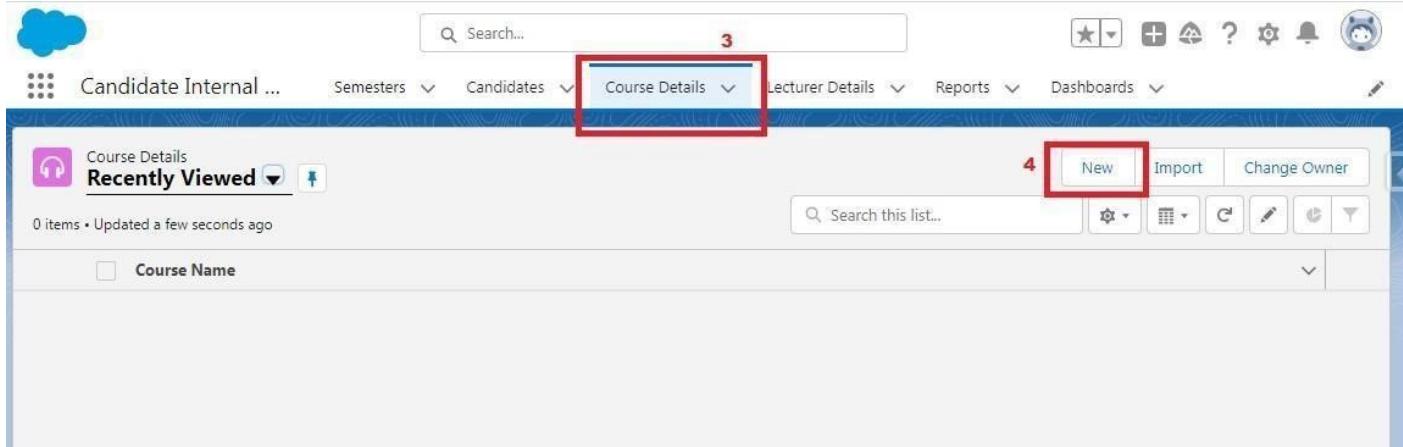
## User Adoption

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.



This screenshot shows the 'New Course Details' form. It has sections for 'Information' and 'Owner'. In the 'Information' section, 'Course Name' is set to 'MBA' and 'Duration' is set to '2'. The 'Owner' section shows 'Vanshiv Technologies' as the owner. At the bottom are 'Cancel', 'Save & New', and a large red-highlighted 'Save' button (labeled '6').

This screenshot shows the 'Course Details' list view. It displays a table with columns for Course Details Name and Status. The first row shows 'MBA (Marketing)' with a status of 'Active'. There are four items listed in total. The top of the screen shows the navigation bar and a sidebar with 'Recently Viewed' items.

Course Details Name	Status
MBA (Marketing)	Active
Btech	Active
BSc	Active
BCA	Active

## 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

The screenshot shows a CRM application interface. At the top, there is a search bar with the text "Candidate Internal Result Card". Below the search bar, there is a section titled "Apps" with a button labeled "Candidate Internal Result Card". On the left, there is a sidebar with a "Setup" icon, a "Home" button, and an "Object Manager" dropdown. The main area shows a "Course Details" list view with the following data:

	Course Name	Duration	Created Date
1	BCA	3.00	09/04/2023, 7:39 pm
2	BSc	3.00	09/04/2023, 7:39 pm
3	Btech	4.00	09/04/2023, 7:38 pm
4	MBA	2.00	09/04/2023, 7:38 pm

Below the list view, there is a detailed view of the "MBA (Marketing)" record. The "Details" tab is selected, showing fields such as Course Details Name (MBA (Marketing)), Course Name (MBA), Duration (2.00), Owner (MANCHALA SREESADA), and activity history.

## 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.

The top screenshot shows the 'Course Details' list view. A red box highlights the 'Course Details' tab in the top navigation bar. Another red box highlights the 'Edit' button in the header of the list table. A third red box highlights the 'Delete' button in the context menu for the fourth row, which contains 'MBA'.

	Course Name	Duration	Created Date
1	BCA	3.00	09/04/2023, 7:39 pm
2	BSc	3.00	09/04/2023, 7:39 pm
3	Btech	4.00	09/04/2023, 7:38 pm
4	MBA	2.00	09/04/2023, 7:38 pm

The bottom screenshot shows the 'Recently Viewed' list view. A red box highlights the 'Recently Viewed' tab in the top navigation bar. A fourth red box highlights the 'Delete' button in the context menu for the first row, which contains 'MBA (Marketing)'.

	Course Details Name
1	MBA (Marketing)
2	Btech
3	BSc
4	BCA

## Milestone – 08: what are Reports?

Reports in Salesforce is a list of records that meet a particular criterion which gives an answer to 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 be used 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 report type 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:

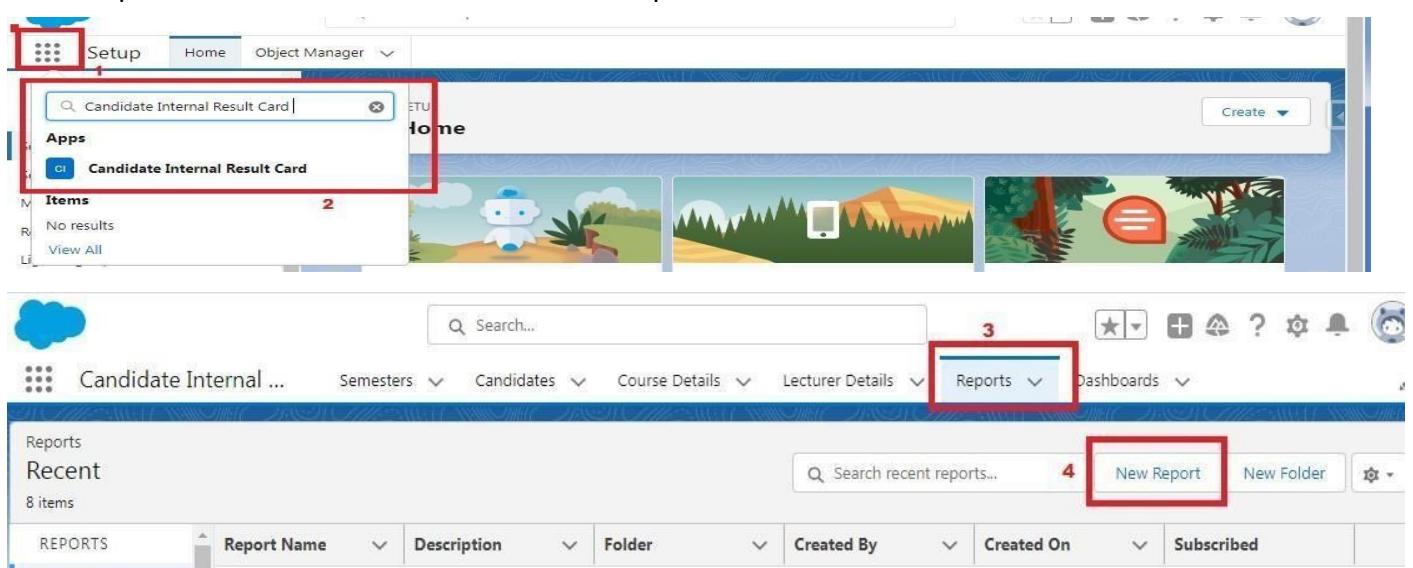
Viewer: With this access level, users can see the data in a report but cannot make any changes except cloning it into a new report

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 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



The screenshot shows the 'Candidate Internal ...' report builder. On the left, the 'Fields' pane is open, displaying sections for 'Groups' and 'Columns'. In the 'Groups' section, 'Course: Duration' is selected and highlighted with a red box. In the 'Columns' section, 'Course: Duration' is also listed. At the top right, there are several buttons: 'Save & Run' (highlighted with a red box), 'Save', 'Close', and 'Run'. A status message 'To see the latest edits, refresh the preview. Refresh' is visible above the preview area, which shows a table titled 'Semesters with Course'.

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.

This screenshot shows the 'Edit Bucket Column' dialog box overlaid on the report builder interface. The dialog has a title 'Edit Bucket Column'. It contains a table with two columns: 'Range' and 'Bucket'. Under 'Range', there are three rows: ' $\leq$ ' with value '1', ' $> 1$  to' with value '2', and ' $>$ ' with value '2'. Under 'Bucket', there are three corresponding rows: 'Small Course', 'Medium Course', and 'Large Course'. A checkbox at the bottom left is checked, stating 'Treat empty Course: Duration values in the report as zeros.' At the bottom right are 'Cancel' and 'Apply' buttons. To the right of the dialog, a legend for 'Duration' is shown with three categories: 'Large Course' (blue dot), 'Medium Course' (black dot), and 'Small Course' (green dot). The background of the dialog shows the report preview with a table titled 'Semesters with Course'.

## Save Report

\* Report Name  
Candidate Internal Result Report

Report Unique Name ⓘ  
Candidate\_Internal\_Result\_Report\_bkY

Report Description

Cancel Save

10

## 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.

Setup Home Object Manager

Candidate Internal Result Card

Apps Candidate Internal Result Card

Items 2

No results

View All

Cloud

Candidate Internal ... Semesters Candidates Course Details Lecturer Details Reports Dashboards

3

REPORTS	Report Name	Description	Folder	Created By	Created On	Subscribed
Recent	Properties with Customer Name Report		Private Reports		8/4/2023, 12:48 pm	
Created by Me	Events with Attendees		Private Reports		6/4/2023, 4:35 pm	
Private Reports	4 Candidate Internal Result Report	Job application with candidate name.	Private Reports		9/4/2023, 7:57 pm	
Public Reports			Private Reports		8/4/2023, 7:08 pm	
All Reports						



Report: Semesters with Course  
**Candidate Internal Result Report**

Total Records

7

<input type="checkbox"/> Course: Course Name ↑ ↓	Semester: Semester Name ↓	Course: Course Details Name	<input type="checkbox"/> Duration ↓
<input type="checkbox"/> B.Tech (2)	Semester 03	B.Tech (Mechanical)	Large Course
	Semester 02	B.Tech (Automobile)	Large Course
<b>Subtotal</b>			
<input type="checkbox"/> BCA (1)	Semester 06	BCA (Data Science)	Small Course
<b>Subtotal</b>			
<input type="checkbox"/> 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
<b>Subtotal</b>			
<input type="checkbox"/> MBA (1)	Semester 01	MBA (Finance)	Large Course
<b>Subtotal</b>			
<b>Total (7)</b>			

## Milestone – 06: dashboards

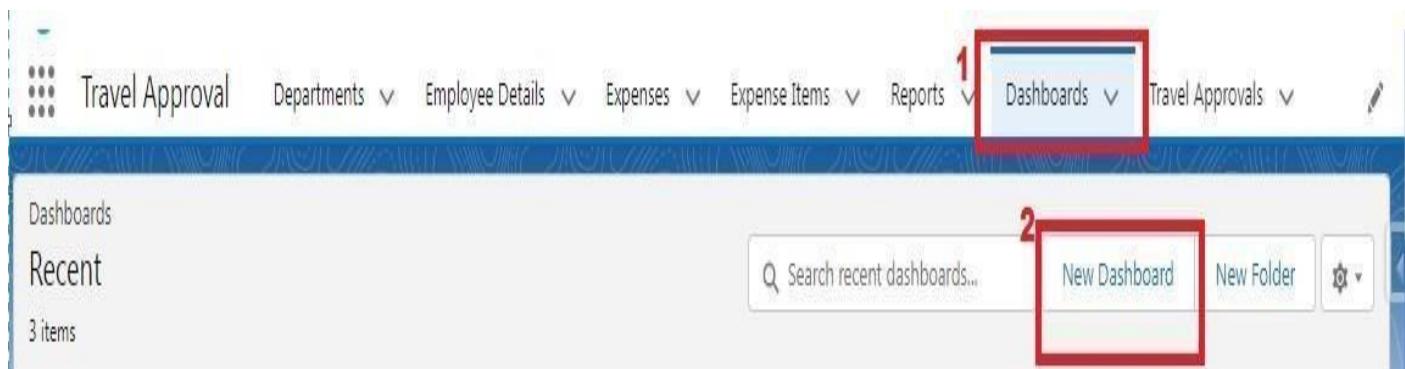
# Dashboards

Dashboards let you curate data from reports using charts, tables, and metrics. If your colleagues need more information, then they are able 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.



### New Dashboard

\* Name  
Candidate Internal Result Card |

Description **3**  
[Empty text area]

Folder  
Private Dashboards

**4** is positioned above the 'Create' button.

The screenshot shows a report titled 'Employee Travel detail'. At the top right, there is a toolbar with various icons and a search bar. In the center, there is a grid of empty report components. A prominent red box highlights the '+ Component' button, which is a blue button with white text. Other buttons in the toolbar include '+ Filter', 'Save', and 'Done'.

### Add Component

Report  
Candidate Internal Result Report

Use chart settings from report **6**

Display As **7**  
[A grid of icons representing different chart types: bar, line, pie, etc.]

X-Axis  
Course: Course Name

Preview  
Candidate Internal Result Report  

Course	Record Count
BCA	1
BSc	3
Btech	2
MBA	1

View Report (Candidate Internal Result Report)

**8** is positioned above the 'Add' button.

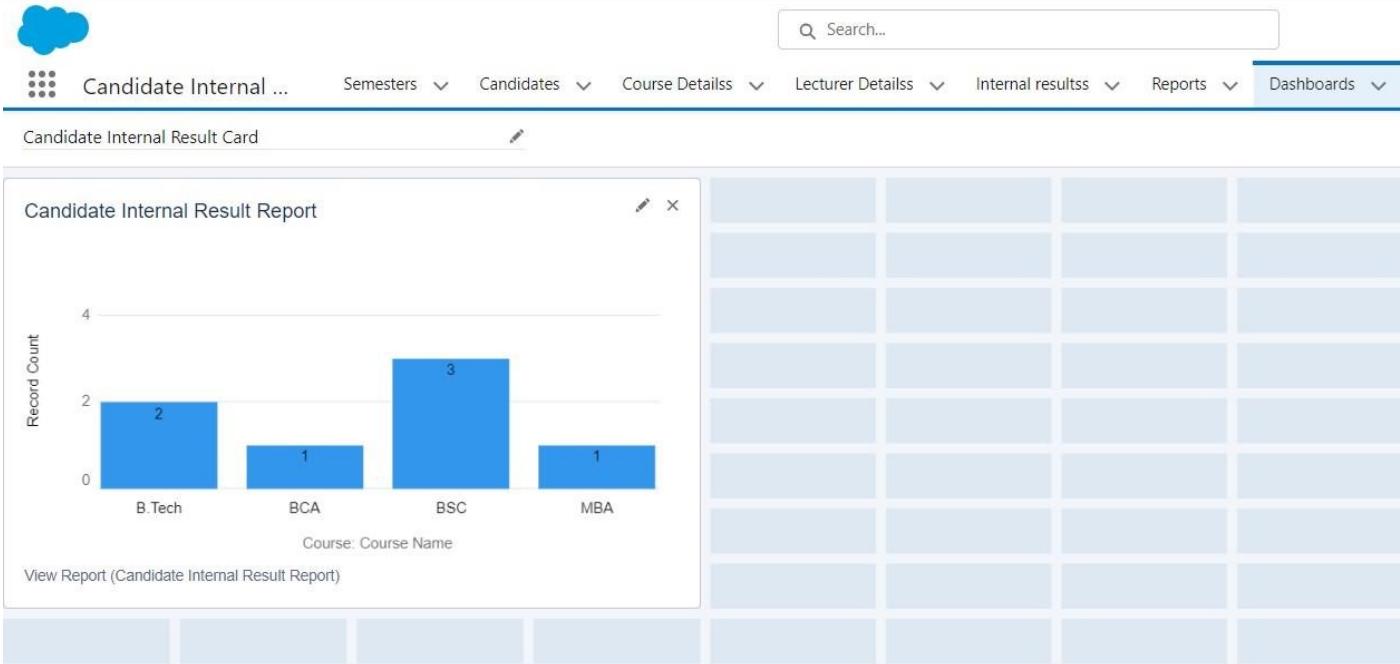
## View Dashboard

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

The screenshot shows the Salesforce home page with the following highlights:

- Step 2:** A red box highlights the search result for "Candidate Internal Result Card" in the Apps section.
- Step 3:** A red box highlights the "Dashboards" tab in the top navigation bar.
- Step 4:** A red box highlights the "Candidate Internal Result Card" record in the "Recent" dashboards list.

DASHBOARDS	Dashboard Name	Description	Folder	Created By	Created On	Subscribed
Recent	Properties with Customer Name Report		Private Dashboards	MANCHALA SREESADA	8/4/2023, 12:58 pm	
Created by Me	Job application with candidate name		Private Dashboards		8/4/2023, 7:14 pm	
Private Dashboards	Events with Attendees		Private Dashboards		6/4/2023, 5:23 pm	
All Dashboards	Candidate Internal Result Card		Private Dashboards		9/4/2023, 8:00 pm	
FOLDERS	Travel Approval		Private Dashboards		3/4/2023, 12:58 pm	
All Folders	Employee Travel detail		Private Dashboards		8/4/2023, 12:22 pm	



#### **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.

## 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.

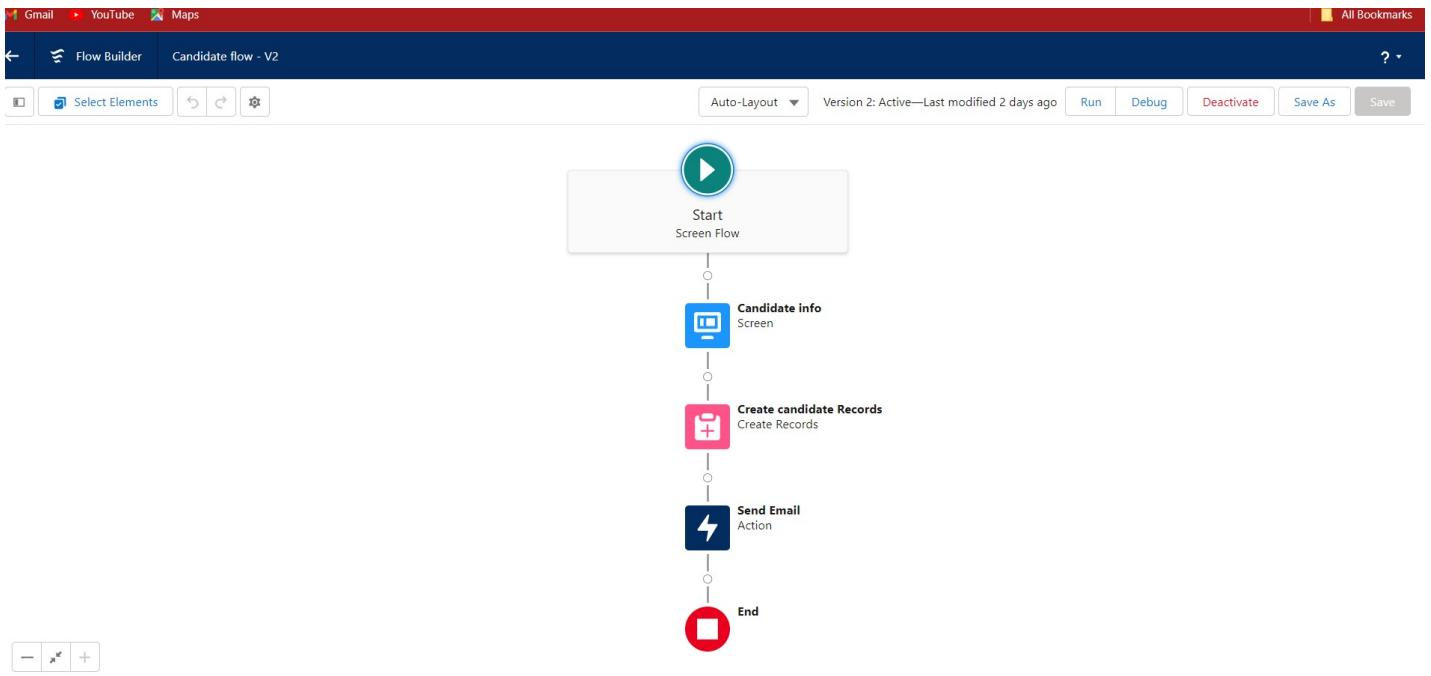
17. Enable Body and Give Hi {!Candidate\_Name}, Welcome to the semester

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.

## 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.

The screenshot shows the Salesforce Lightning App Builder interface. The top navigation bar includes links for Gmail, YouTube, Maps, Lightning App Builder, App Settings, Pages, Portofolio app, All Bookmarks, and Help. On the left, a sidebar titled 'App Settings' has a 'App Details & Branding' tab selected. The main content area is titled 'App Details & Branding' and contains fields for 'App Details' (App Name: Portofolio app, Developer Name: Portofolio\_app) and 'App Branding' (Image upload field, Primary Color Hex Value: #0070D2). Below these are 'Org Theme Options' (checkbox for using the app's image and color instead of the org's custom theme) and an 'App Launcher Preview' which displays a blue button with 'Pa' and the text 'Portofolio 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 InternalmarksHandler
4. Now Write the below code

The screenshot shows the Salesforce Developer Console interface. The top navigation bar includes 'File', 'Edit', 'Debug', 'Test', 'Workspace', 'Help', and a 'Go To' search bar. The main area displays the code for 'InternalmarksHandler.apxc'. The code is a trigger handler for insert operations on the 'Internal\_results\_\_c' object. It iterates through a list of new records, checking the 'marks\_\_c' field. If the value is 200 or greater, it sets the 'status\_\_c' field to 'Pass'; otherwise, it sets it to 'fail'. The code editor has syntax highlighting for Java-like syntax. Below the code editor is a tabs bar with 'Logs' selected, followed by 'Tests', 'Checkpoints', 'Query Editor', 'View State', 'Progress', and 'Problems'. The logs tab shows a table with columns: Log, Application, Operation, Time, Status, Read, and Size. A filter bar at the bottom allows users to 'Click here to filter the log list'.

```
1 public class InternalmarksHandler {  
2     public static void beforeinsert(list<Internal_results__c> newlist){  
3         for(Internal_results__c internalmarks : newlist){  
4             if(internalmarks.marks__c >= 200){  
5                 internalmarks.status__c = 'Pass';  
6             }else{  
7                 internalmarks.status__c='fail';  
8             }  
9         }  
10    }  
11 }  
12 }  
13 }
```

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

File ▾ Edit ▾ Debug ▾ Test ▾ Workspace ▾ Help ▾ < >

InternalmarksHandler.apxc Internalmarks.apxt

Code Coverage: None API Version: 58 Go ▾

```

1 trigger Internalmarks on Internal_results__c(before insert,after update) {
2     If(trigger.isInsert)
3     {
4         If(trigger.isBefore)
5         {
6             InternalmarksHandler.beforeinsert(Trigger.new);
7         }
8     }
9 }
```

Logs Tests Checkpoints Query Editor View State Progress Problems

Jser Application Operation Time Status Read Size

Filter Click here to filter the log list

## 8.Trigger Working as follows:

In the following record Marks field is given as 300,Now trigger triggers and status changes to Pass

The screenshot shows a Salesforce record detail page for an 'Internal results' object named 'Test Trigger'. The page has a blue header with navigation links like Candidate Internal ..., Semesters, Candidates, Course Details, Lecturer Details, Internal results (which is the active tab), Reports, and Dashboards. Below the header is a toolbar with icons for New Contact, Edit, and New Opportunity.

The main content area displays the record details under the 'Details' tab. The fields shown are:

- Internal results Name: Test Trigger
- Owner: PILLIGUNDLA KUSUMANJALI
- Candidate: (empty)
- Candidate Roll Number: (empty)
- Course: (empty)
- Marks: 300
- Status: Pass

At the bottom, it shows the 'Created By' and 'Last Modified By' fields, both set to PILLIGUNDLA KUSUMANJALI, with the timestamp 10/10/2023, 6:54 pm.

# THE END





