

PROJECT REPORT

Implementing CRM For Result Tracking Of A Candidate With Internal Marks - (DEV)

1. INTRODUCTION

1.1. OVERVIEW

Candidate Result Tracking is a specialized Salesforce software solution tailored to support educational institutions in effectively overseeing student outcomes. This comprehensive tool streamlines the entire result management process, spanning from creating examination schedules to disseminating final results. The software proves invaluable in efficiently managing extensive student datasets, encompassing personal particulars, enrollment specifics, and scholastic achievements.

1.2. PURPOSE

This software serves a multifaceted purpose, including safeguarding data through backup mechanisms during unforeseen scenarios, fortifying data security against unauthorized breaches and cyber threats, ensuring data retention, implementing stringent data access controls, facilitating data categorization, and ensuring alignment with all legal protocols and procedures.

2. PROJECT DESCRIPTION & DESIGN THINKING

2.1. PROJECT DESCRIPTION

The administrator should be able to create all base data including Semester, Candidate, Course and Lecturer ,Lecturer should have the ability to create Internal Results, Dean, who is one of the Lecturer, should be the only one with ability to update Internal Results, Re-evaluation Can be initialized by Candidate for all Internal Results. Now only the dean can update the marks after re- evaluation.

2.2. ENTITY RELATIONSHIP DIAGRAM

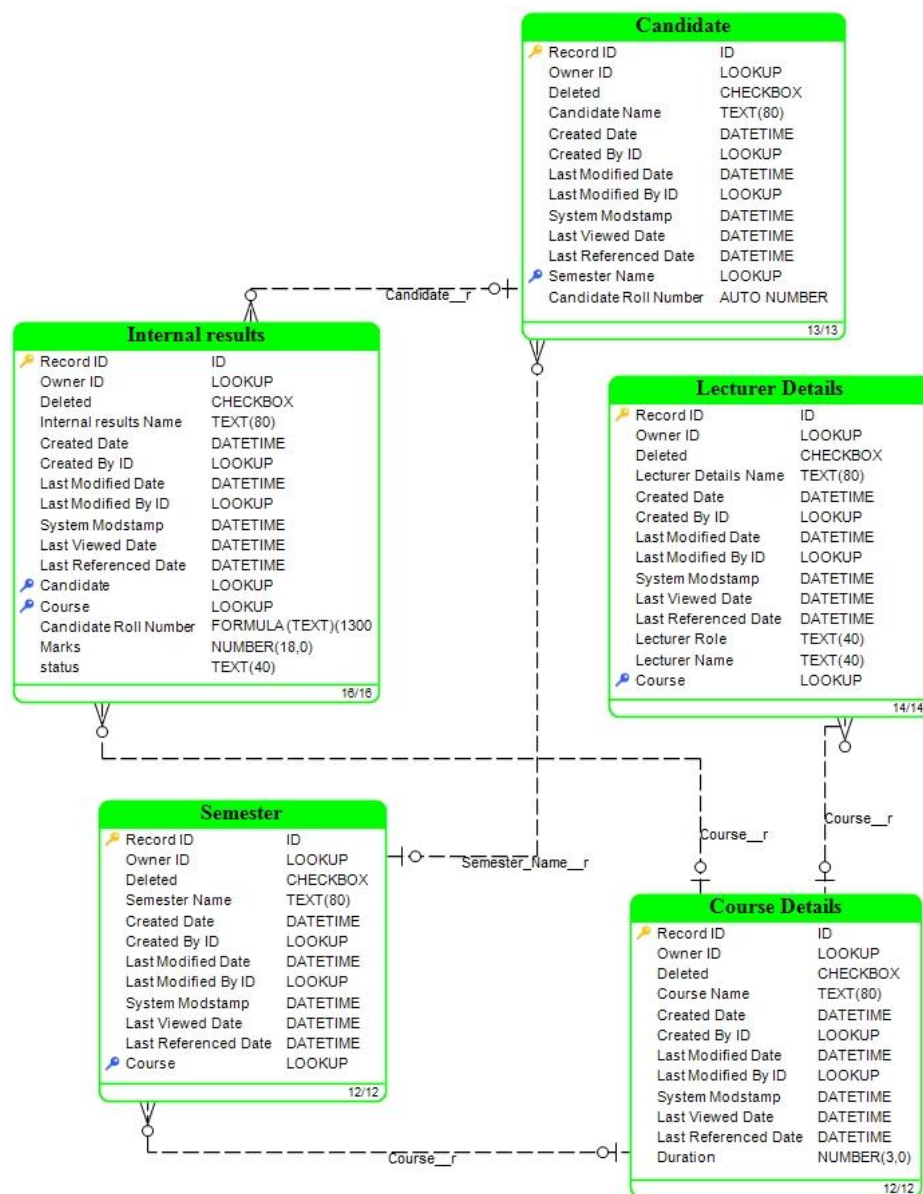


Fig: Entity Relationship Diagram of the project.

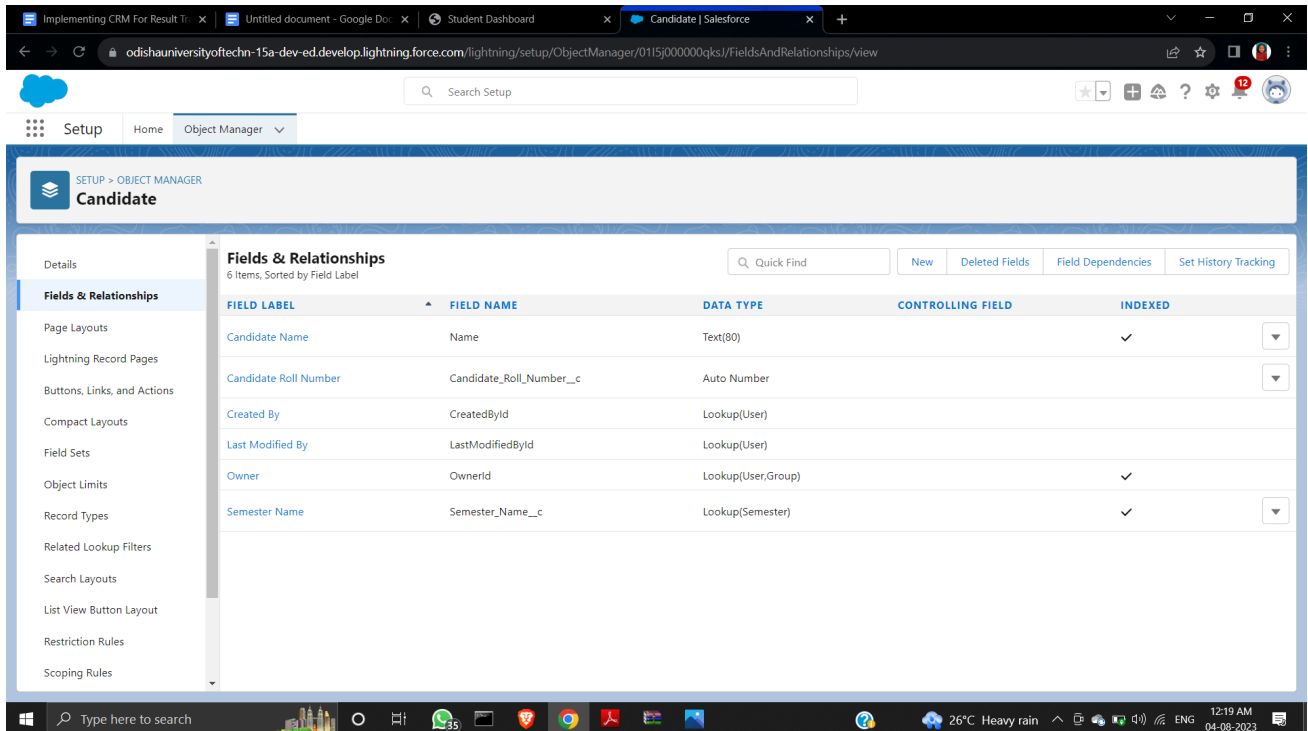
2.3. TABULAR FORMAT

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)
Course Details	Course Name	Text(Standard field)
	Duration (Years)	Number
Internal results	Candidate	Lookup (candidate)
	Candidate Roll Number	Formula
	Course	Lookup(Course)
	Marks	Number
	Status	Text

Table: Objects and fields created.

3. ACTIVITY AND SCREENSHOTS

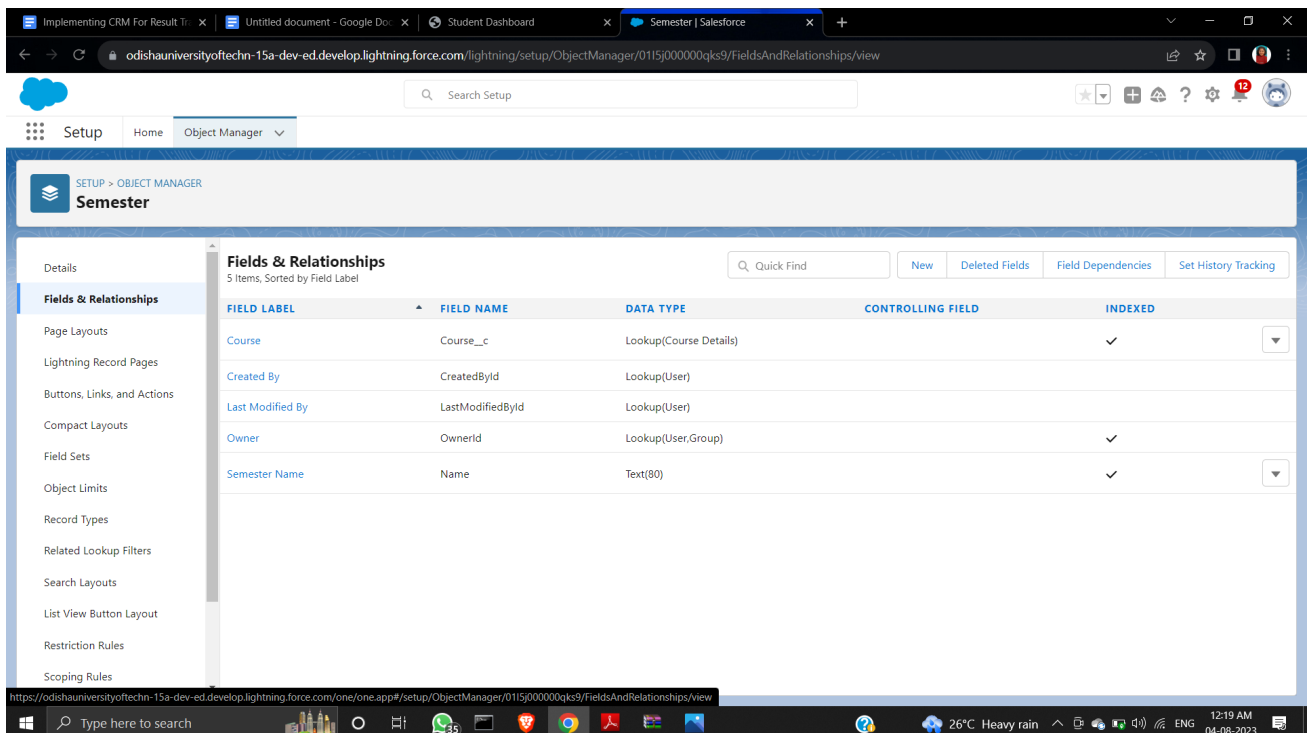
3.1. CREATION OF OBJECTS AND FIELDS FOR CANDIDATE INTERNAL RESULT CARD



The screenshot shows the Salesforce Setup interface for the 'Candidate' object. The 'Fields & Relationships' section is active, displaying a table of 6 fields. The table has columns for FIELD LABEL, FIELD NAME, DATA TYPE, CONTROLLING FIELD, and INDEXED. The fields listed are: Candidate Name (Text(80)), Candidate Roll Number (Auto Number), Created By (Lookup(User)), Last Modified By (Lookup(User)), Owner (Lookup(User,Group)), and Semester Name (Lookup(Semester)).

FIELD LABEL	FIELD NAME	DATA TYPE	CONTROLLING FIELD	INDEXED
Candidate Name	Name	Text(80)		✓
Candidate Roll Number	Candidate_Roll_Number__c	Auto Number		
Created By	CreatedById	Lookup(User)		
Last Modified By	LastModifiedById	Lookup(User)		
Owner	OwnerId	Lookup(User,Group)		✓
Semester Name	Semester_Name__c	Lookup(Semester)		✓

Fig: All the fields for the Candidate object are created



The screenshot shows the Salesforce Setup interface for the 'Semester' object. The 'Fields & Relationships' section is active, displaying a table of 5 fields. The table has columns for FIELD LABEL, FIELD NAME, DATA TYPE, CONTROLLING FIELD, and INDEXED. The fields listed are: Course (Lookup(Course Details)), Created By (Lookup(User)), Last Modified By (Lookup(User)), Owner (Lookup(User,Group)), and Semester Name (Text(80)).

FIELD LABEL	FIELD NAME	DATA TYPE	CONTROLLING FIELD	INDEXED
Course	Course__c	Lookup(Course Details)		✓
Created By	CreatedById	Lookup(User)		
Last Modified By	LastModifiedById	Lookup(User)		
Owner	OwnerId	Lookup(User,Group)		✓
Semester Name	Name	Text(80)		✓

Fig: All the fields for the Semester object are created

The screenshot shows the Salesforce Setup interface for the 'Course Details' object. The left sidebar lists various setup options, with 'Fields & Relationships' selected. The main area displays a table of 5 fields, sorted by Field Label. The fields are: Course Name (Text(80)), Created By (Lookup(User)), Duration (Number(3, 0)), Last Modified By (Lookup(User)), and Owner (Lookup(User, Group)).

FIELD LABEL	FIELD NAME	DATA TYPE	CONTROLLING FIELD	INDEXED
Course Name	Name	Text(80)		✓
Created By	CreatedById	Lookup(User)		
Duration	Duration__c	Number(3, 0)		
Last Modified By	LastModifiedById	Lookup(User)		
Owner	OwnerId	Lookup(User, Group)		✓

Fig: All the fields for the Course Detail object are created

The screenshot shows the Salesforce Setup interface for the 'Lecturer Details' object. The left sidebar lists various setup options, with 'Fields & Relationships' selected. The main area displays a table of 7 fields, sorted by Field Label. The fields are: Course (Lookup(Course Details)), Created By (Lookup(User)), Last Modified By (Lookup(User)), Lecturer Details Name (Text(80)), Lecturer Name (Text(40)), Lecturer Role (Text(40)), and Owner (Lookup(User, Group)).

FIELD LABEL	FIELD NAME	DATA TYPE	CONTROLLING FIELD	INDEXED
Course	Course__c	Lookup(Course Details)		✓
Created By	CreatedById	Lookup(User)		
Last Modified By	LastModifiedById	Lookup(User)		
Lecturer Details Name	Name	Text(80)		✓
Lecturer Name	Lecturer_Name__c	Text(40)		
Lecturer Role	Lecturer_Role__c	Text(40)		
Owner	OwnerId	Lookup(User, Group)		✓

Fig: All the fields for the Lecturer Detail object are created

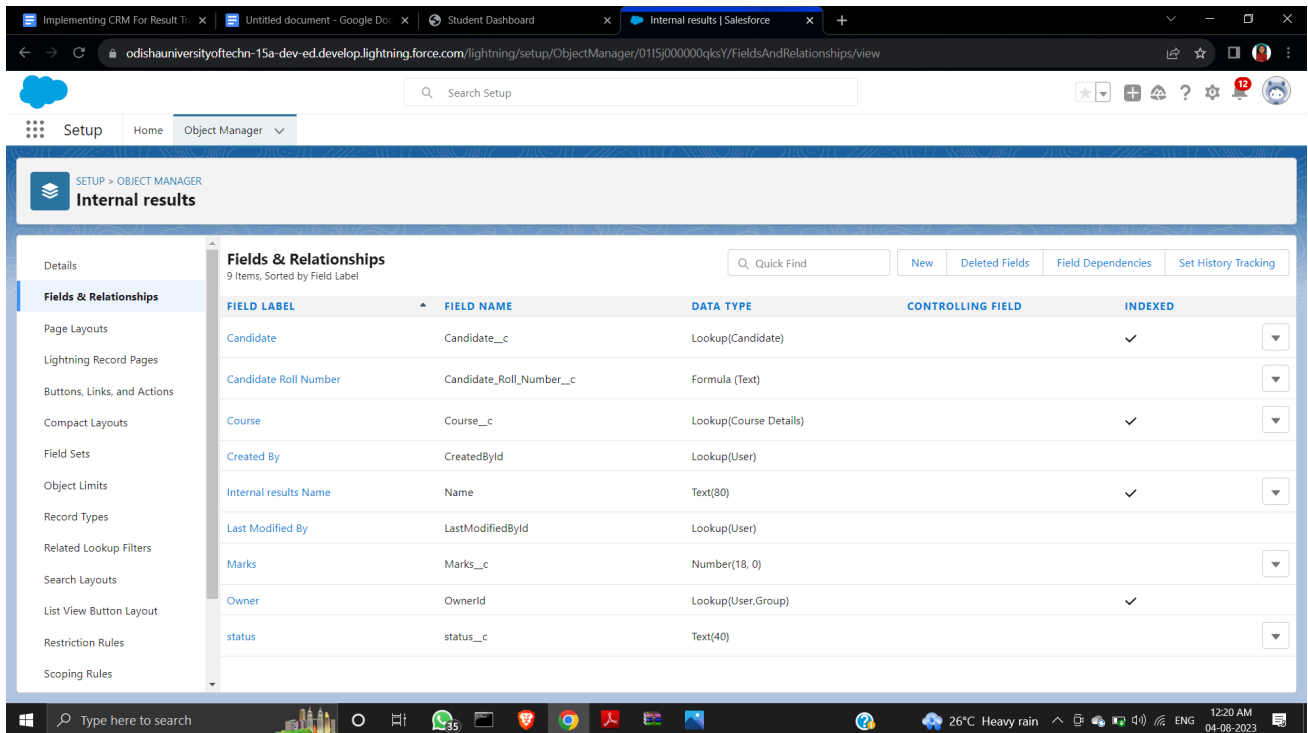


Fig: All the fields for the Internal Results object are created

3.2. CREATION OF TABS IN THE LIGHTNING APP

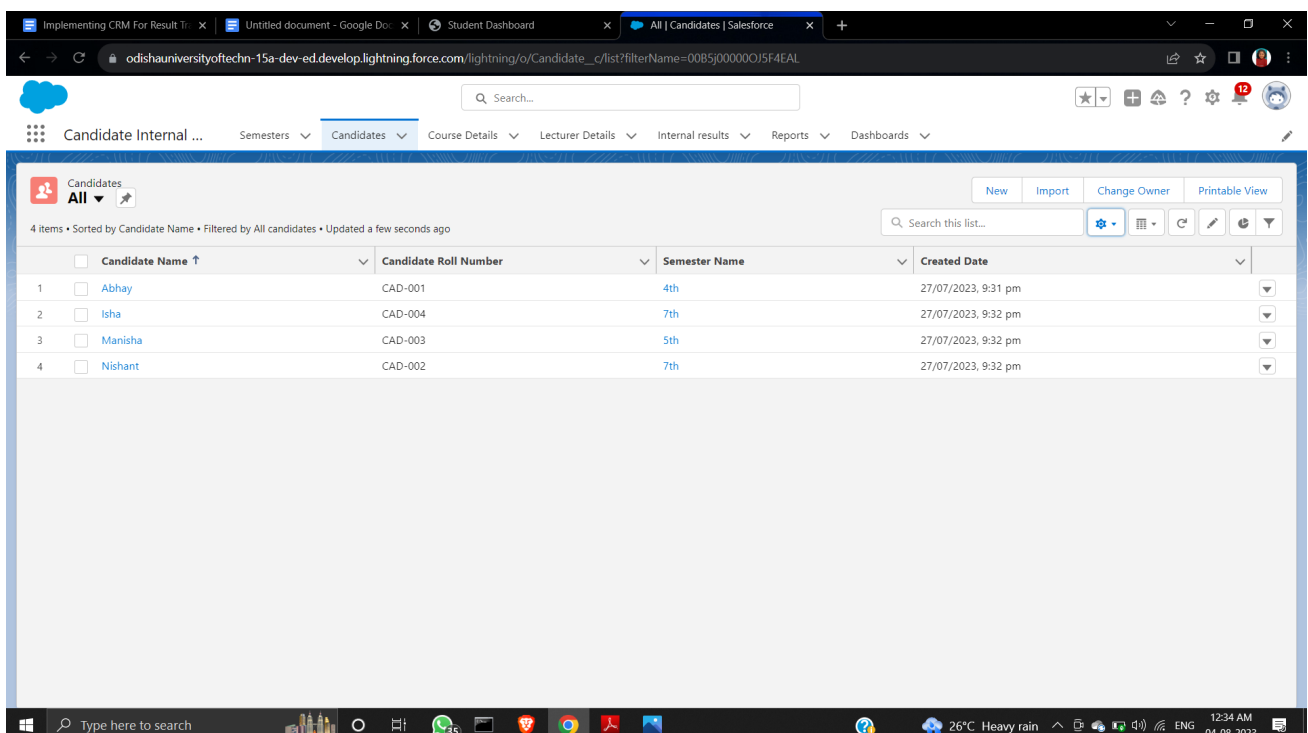


Fig: The lightning app is created according to procedure

3.3. CREATION OF A USER

The screenshot shows the Salesforce Setup interface for the 'Users' section. The user profile for 'Class Teacher' is displayed with the following details:

User Detail	
Name	Class Teacher
Alias	cleac
Email	shasama23@gmail.com (Verify)
Username	sama23@gmail.com
Nickname	User16897100653164435132
Title	
Company	
Department	
Division	
Address	Qr No.-VR-29 unit-6, Gangaganagar Bhubaneswar 751001 Odisha India
Time Zone	(GMT+05:30) India Standard Time (Asia/Kolkata)
Locale	English (India)
Language	English
Delegated Approver	
Manager	
Receive Approval Request Emails	Only if I am an approver
Role	Salesforce
User License	Salesforce
Profile	Standard User
Active	<input checked="" type="checkbox"/>
Marketing User	<input type="checkbox"/>
Offline User	<input type="checkbox"/>
Knowledge User	<input type="checkbox"/>
Flow User	<input type="checkbox"/>
Service Cloud User	<input type="checkbox"/>
Site.com Contributor User	<input type="checkbox"/>
Site.com Publisher User	<input type="checkbox"/>
WDC User	<input type="checkbox"/>
Mobile Push Registrations	View
Data.com User Type	
Accessibility Mode (Classic Only)	<input type="checkbox"/>
Debug Mode	<input type="checkbox"/>

Fig: Class Teacher user was created and the User License is set as salesforce

3.4. CREATION OF REPORT IN CANDIDATE INTERNAL RESULT CARD APP

The screenshot shows the Salesforce Reports interface for the 'Candidate Internal Result Report'. The report is titled 'Report: Semesters with Course' and 'Candidate Internal Result Report'. It displays a table with the following data:

Course: Course Name	Course: Duration	3	4	Total
BCA	Record Count	1	0	1
BSc	Record Count	2	0	2
Btech	Record Count	0	2	2
Total	Record Count	3	2	5

Details (5 Rows) Click an intersection in the table above to filter details.

Semester: Semester Name
7th
6th
4th
8th
5th
6

Fig: The Candidate Internal Result Report is created

3.5. CREATION OF DASHBOARD IN CANDIDATE INTERNAL RESULT CARD APP

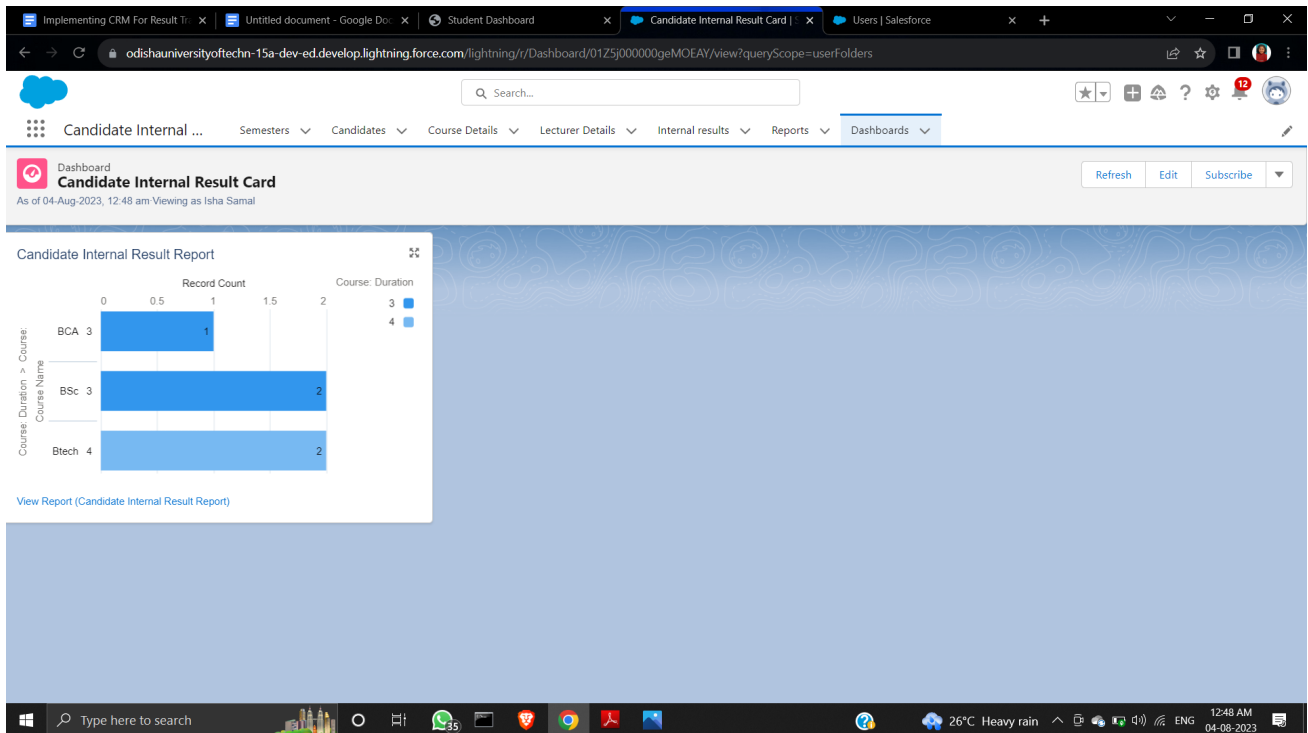


Fig: In dashboard horizontal Bar Chart is added in the Candidate Internal Result Card

3.6. CREATION OF FIELD UPDATE USING TRIGGER

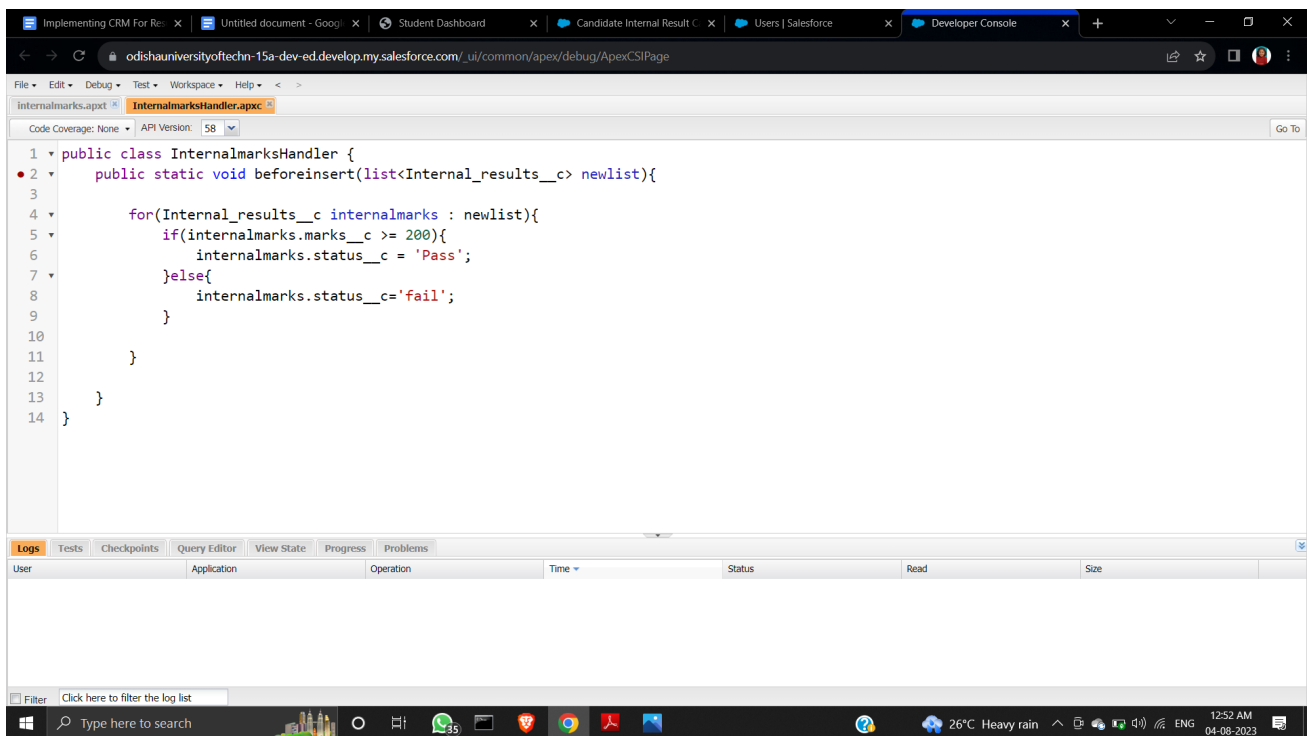


Fig: the Apex class named as InternalmarksHandler is created

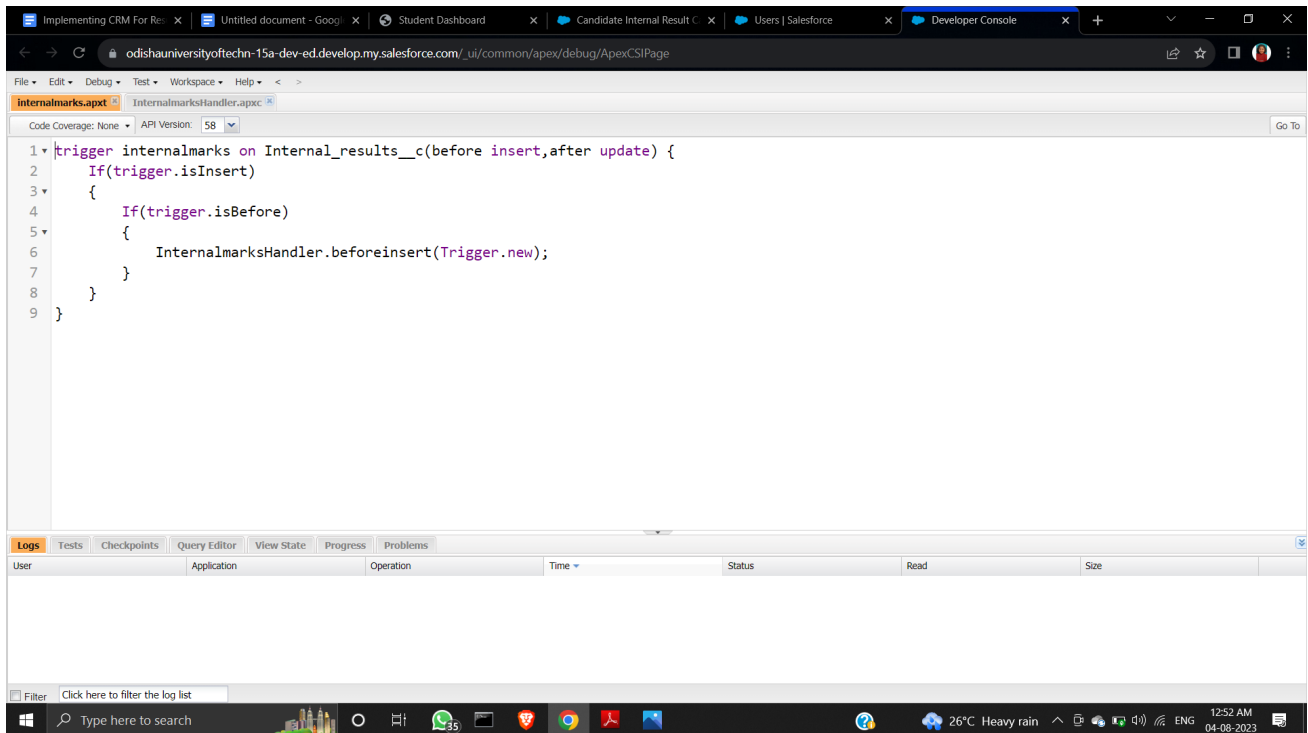


Fig: the Apex trigger named as Internalmarks is created

4. TRAILHEAD PROFILE PUBLIC URL

Trailhead ID: <https://www.salesforce.com/trailblazer/ishasamal23>

5. ADVANTAGES

- Streamlines result processing by automating the procedure, conserving valuable time and resources.
- Enhances precision by minimizing the potential for human errors.
- Ensures data security and proficient management of student records.
- Delivers performance analysis for pinpointing areas necessitating extra student assistance.
- Amplifies communication among students, parents, and faculty members.
- Elevates the holistic standard of education.

6. DISADVANTAGES

- Effective utilization of the software demands thorough training and specialized proficiency.
- The adoption of result management software carries a financial implication.
- The intricacy of result management software introduces the possibility of technical challenges like system disruptions or software glitches, potentially leading to processing setbacks or inaccuracies.

7. APPLICATIONS

- Educational Institutions: Streamline internal result tracking for students, aiding educators in evaluating academic progress and providing targeted support.
- Performance Analysis: Provide detailed insights into individual strengths and weaknesses, enabling personalized guidance and improvement strategies.
- Resource Optimization: Efficiently manage student data and academic records, optimizing administrative processes and resource allocation.
- Error Reduction: Minimize manual errors in result processing, ensuring accurate and reliable evaluation.
- Data Security: Safeguard sensitive student information through a secure digital platform.
- Efficient Reporting: Generate comprehensive and customizable reports for internal analysis and compliance purposes.

8. CONCLUSION

Incorporating a CRM system for tracking candidate results, including internal marks, through Salesforce yields a transformative solution for educational institutions. This project streamlines result management, enhances communication, and provides insightful analytics, ultimately fostering improved student engagement, informed decision-making, and an elevated educational experience.

9. FUTURE SCOPES

- Integration with Learning Management Systems (LMS): Enhance the project's scope by integrating with popular LMS platforms to create a comprehensive educational ecosystem.
- Predictive Analytics for Student Performance: Implement advanced analytics to predict student performance trends and provide proactive support.
- AI-driven Personalized Recommendations: Utilize artificial intelligence to offer tailored study resources and strategies based on individual student needs.
- Expanded Data Insights: Extend data analysis capabilities to gain deeper insights into student behavior, enabling more effective decision-making.
- Mobile App Accessibility: Develop a dedicated mobile app for real-time access to results, updates, and communication, enhancing user engagement.
- Incorporation of External Assessments: Integrate external assessment data to provide a comprehensive view of a student's overall progress.
- Parent-Teacher Collaboration: Facilitate seamless communication and collaboration between parents, teachers, and students through additional features.