

PROJECT REPORT

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

1. INTRODUCTION

1.1 OVERVIEW :

Result tracking of a Candidate is a type of salesforce software that is designed to help educational institutions manage the results of their students. It automates the entire process of result management, right from the creation of exam schedules to the publication of results. The software allows for easy and efficient management of large amounts of student data, including their personal information, enrollment details, and academic performance.

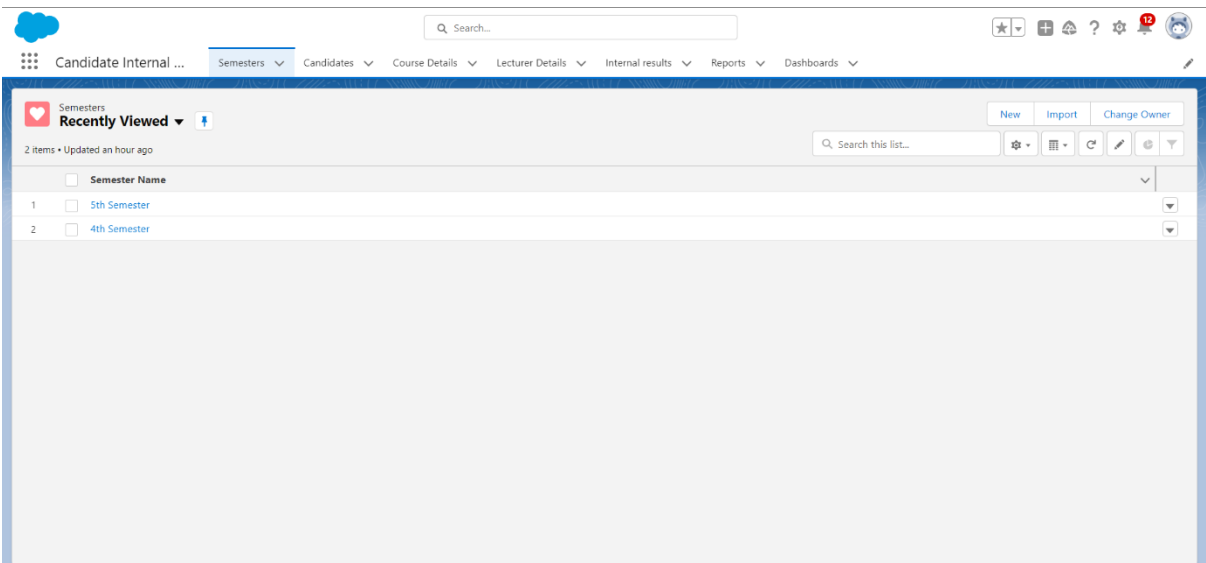
1.2 PURPOSE :

The purpose of the software includes data backup in case of unforeseen events, data security against unauthorised access and cyberattacks, data retention, data access control, data classification, and compliance with all legal procedures are all provided.

1.3 PROJECT DESCRIPTION :

All basic data, such as the semester, candidate, course, and lecturer, should be able to be created by the administrator; however, only the lecturer, who also happens to be the dean, should be able to amend the internal results. Re-evaluation Candidate has the ability to initialise all Internal Results. Following a second evaluation, only the dean is now able to update the grades.

2. CANDIDATE INTERNAL RESULT CARD:



3. FIELDS & RELATIONSHIPS :

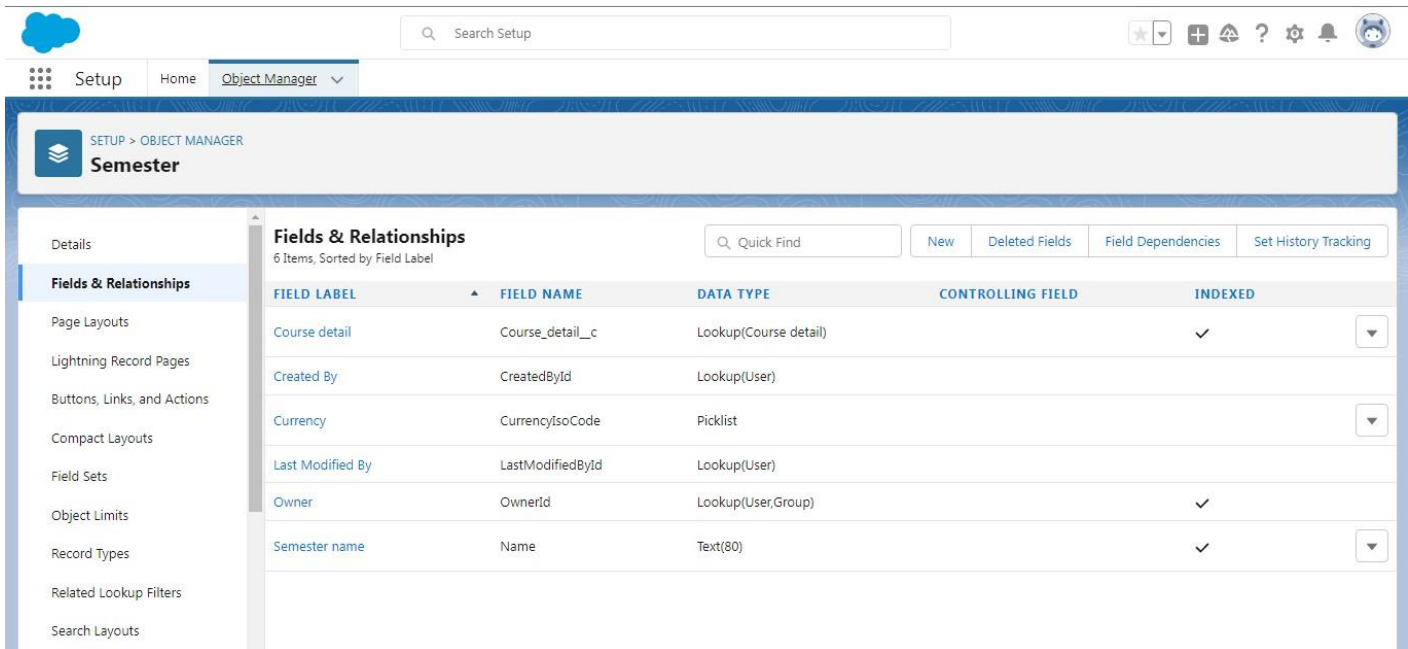
3.1 Activity given :

| 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 |

3.2 SCREENSHOTS

3.2.1 Semester Object

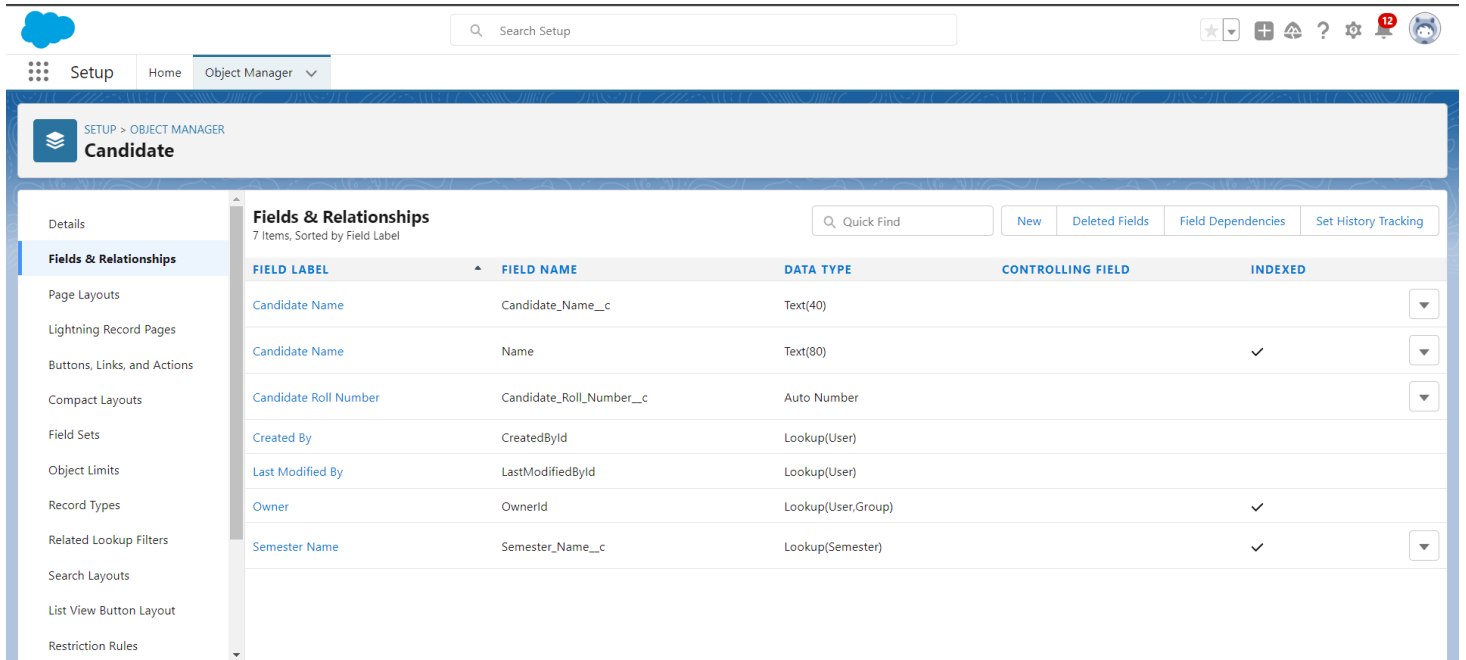


The screenshot shows the Salesforce Setup interface for the 'Semester' object. The left sidebar contains a navigation menu with options like Details, Fields & Relationships, Page Layouts, Lightning Record Pages, Buttons, Links, and Actions, Compact Layouts, Field Sets, Object Limits, Record Types, Related Lookup Filters, and Search Layouts. The main content area is titled 'Fields & Relationships' and shows a table of 6 items, sorted by Field Label. The table has columns for FIELD LABEL, FIELD NAME, DATA TYPE, CONTROLLING FIELD, and INDEXED. The fields listed are Course detail, Created By, Currency, Last Modified By, Owner, and Semester name.

| FIELD LABEL | FIELD NAME | DATA TYPE | CONTROLLING FIELD | INDEXED |
|------------------|------------------|-----------------------|-------------------|---------|
| Course detail | Course_detail__c | Lookup(Course detail) | | ✓ |
| Created By | CreatedById | Lookup(User) | | |
| Currency | CurrencyIsoCode | Picklist | | |
| Last Modified By | LastModifiedById | Lookup(User) | | |
| Owner | OwnerId | Lookup(User,Group) | | ✓ |
| Semester name | Name | Text(80) | | ✓ |

The fields for Semester Object are created.

3.2.2 Candidate Object :

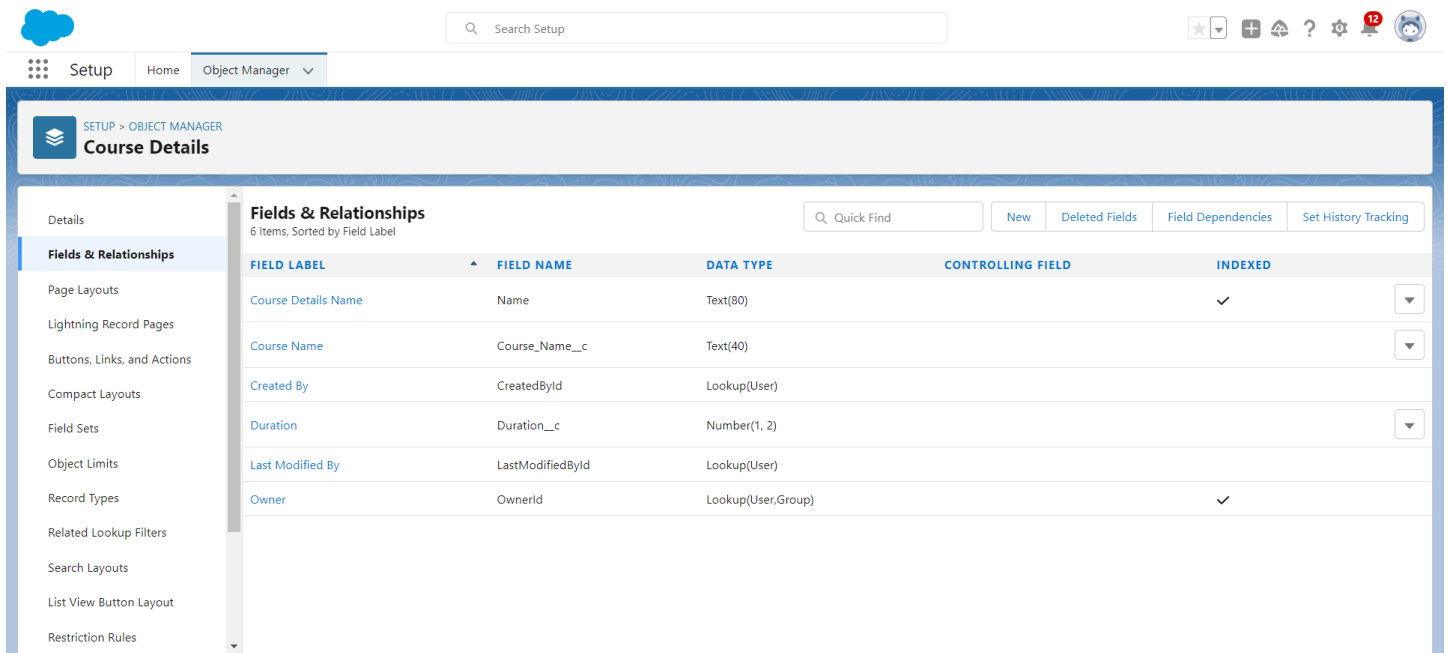


The screenshot shows the Salesforce Setup interface for the 'Candidate' object. The left sidebar contains a navigation menu with options like Details, Fields & Relationships, Page Layouts, Lightning Record Pages, Buttons, Links, and Actions, Compact Layouts, Field Sets, Object Limits, Record Types, Related Lookup Filters, Search Layouts, List View Button Layout, and Restriction Rules. The main content area is titled 'Fields & Relationships' and shows a table of 7 items, sorted by Field Label. The table has columns for FIELD LABEL, FIELD NAME, DATA TYPE, CONTROLLING FIELD, and INDEXED. The fields listed are Candidate Name, Candidate Name, Candidate Roll Number, Created By, Last Modified By, Owner, and Semester Name.

| FIELD LABEL | FIELD NAME | DATA TYPE | CONTROLLING FIELD | INDEXED |
|-----------------------|--------------------------|--------------------|-------------------|---------|
| Candidate Name | Candidate_Name__c | Text(40) | | |
| 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) | | ✓ |

The fields for Candidate Object are created.

3.2.3 Course Details Object:

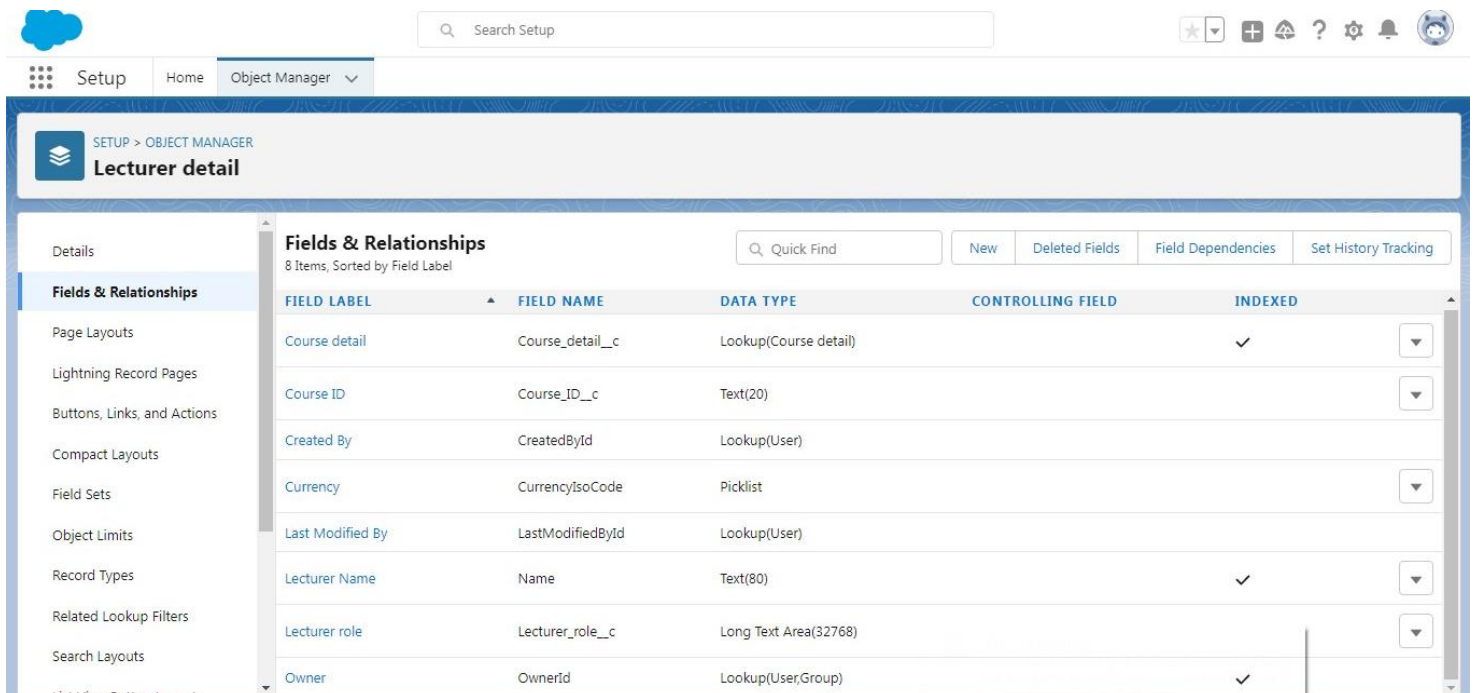


The screenshot shows the Salesforce Setup interface. The top navigation bar includes the Setup icon, a search bar, and various utility icons. The left sidebar shows the Setup menu with 'Object Manager' selected. The main content area is titled 'SETUP > OBJECT MANAGER Course Details'. The 'Fields & Relationships' section is active, displaying a table of 6 items sorted by Field Label. The table columns are FIELD LABEL, FIELD NAME, DATA TYPE, CONTROLLING FIELD, and INDEXED. The fields listed are Course Details Name, Course Name, Created By, Duration, Last Modified By, and Owner.

| FIELD LABEL | FIELD NAME | DATA TYPE | CONTROLLING FIELD | INDEXED |
|---------------------|------------------|--------------------|-------------------|---------|
| Course Details Name | Name | Text(80) | | ✓ |
| Course Name | Course_Name__c | Text(40) | | |
| Created By | CreatedById | Lookup(User) | | |
| Duration | Duration__c | Number(1, 2) | | |
| Last Modified By | LastModifiedById | Lookup(User) | | |
| Owner | OwnerId | Lookup(User,Group) | | ✓ |

The fields for course details object is created.

3.2.4 Lecturer Detail Object:



The screenshot shows the Salesforce Setup interface. The top navigation bar includes the Setup icon, a search bar, and various utility icons. The left sidebar shows the Setup menu with 'Object Manager' selected. The main content area is titled 'SETUP > OBJECT MANAGER Lecturer detail'. The 'Fields & Relationships' section is active, displaying a table of 8 items sorted by Field Label. The table columns are FIELD LABEL, FIELD NAME, DATA TYPE, CONTROLLING FIELD, and INDEXED. The fields listed are Course detail, Course ID, Created By, Currency, Last Modified By, Lecturer Name, Lecturer role, and Owner.

| FIELD LABEL | FIELD NAME | DATA TYPE | CONTROLLING FIELD | INDEXED |
|------------------|------------------|-----------------------|-------------------|---------|
| Course detail | Course_detail__c | Lookup(Course detail) | | ✓ |
| Course ID | Course_ID__c | Text(20) | | |
| Created By | CreatedById | Lookup(User) | | |
| Currency | CurrencyIsoCode | Picklist | | |
| Last Modified By | LastModifiedById | Lookup(User) | | |
| Lecturer Name | Name | Text(80) | | ✓ |
| Lecturer role | Lecturer_role__c | Long Text Area(32768) | | |
| Owner | OwnerId | Lookup(User,Group) | | ✓ |

The fields for Lecturer details object is created.

3.2.5 Internal Marks :

The screenshot shows the Salesforce Setup interface. The top navigation bar includes the Salesforce logo, a search bar, and various utility icons. The left sidebar shows the navigation menu with 'Setup' selected. The main content area is titled 'Internal results' and displays the 'Fields & Relationships' section for the 'Internal results' object. The table lists 9 fields, sorted by Field Label. The fields are: Candidate, Candidate Roll Number, Course, Created By, Internal results Name, Last Modified By, Marks, Owner, and Status. Each field has a corresponding field name, data type, and controlling field. The 'Internal results Name' field is highlighted in blue.

| FIELD LABEL | FIELD NAME | DATA TYPE | CONTROLLING FIELD | INDEXED |
|-----------------------|--------------------------|------------------------|-------------------|---------|
| Candidate | Candidate__c | Lookup(Candidate) | | ✓ |
| Candidate Roll Number | Candidate_Roll_Number__c | Formula (Text) | | |
| Course | Course__c | Lookup(Course Details) | | ✓ |
| Created By | CreatedById | Lookup(User) | | |
| Internal results Name | Name | Text(80) | | ✓ |
| Last Modified By | LastModifiedById | Lookup(User) | | |
| Marks | Marks__c | Number(18, 0) | | |
| Owner | OwnerId | Lookup(User,Group) | | ✓ |
| Status | Status__c | Text(5) | | |

The fields for Internal Marks object is created.

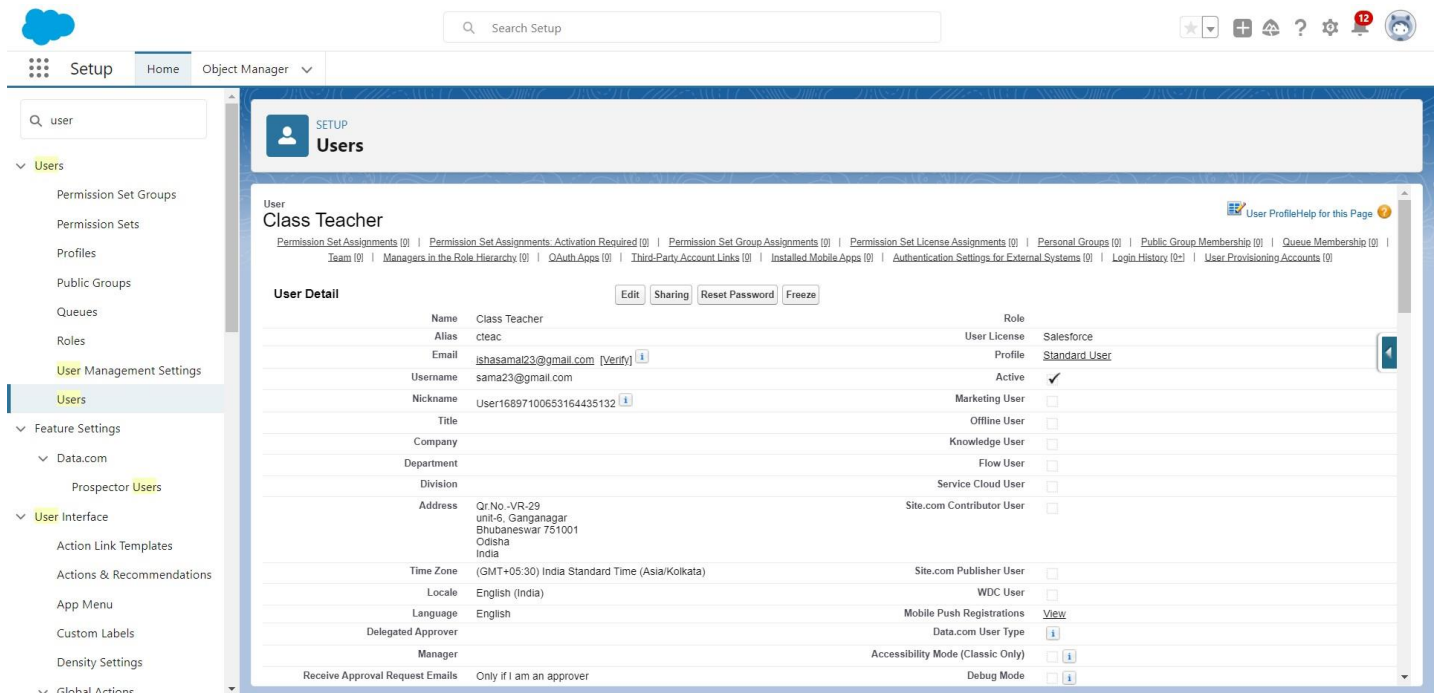
4. CREATION OF TABS :

The screenshot shows the Salesforce Setup interface. The top navigation bar includes the Salesforce logo, a search bar, and various utility icons. The left sidebar shows the navigation menu with 'Candidate Internal ...' selected. The main content area displays the 'Semesters' tab. The table lists 2 items, sorted by Semester Name. The items are: 1. 5th Semester and 2. 4th Semester. Each item has a checkbox and a dropdown menu.

| | Semester Name |
|---|---------------|
| 1 | 5th Semester |
| 2 | 4th Semester |

All required Tabs are created.

5. CREATION A USER

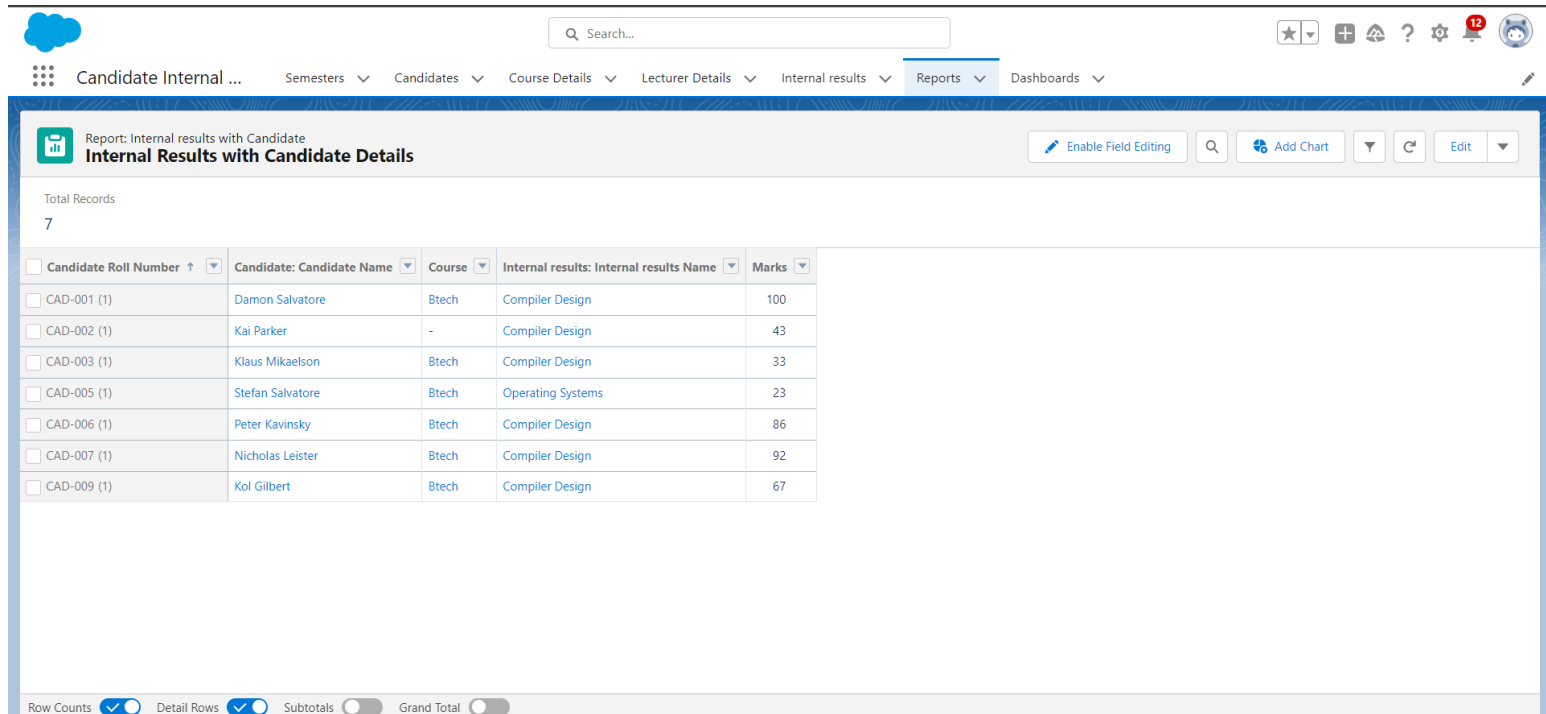


The screenshot shows the Salesforce Setup interface. The left sidebar contains navigation options: Setup, Home, Object Manager, and a search bar. The main content area is titled 'Users' and displays the profile for 'Class Teacher'. The profile details include Name, Alias, Email, Username, Nickname, Title, Company, Department, Division, Address, Time Zone, Locale, Language, Delegated Approver, Manager, and various roles and permissions. The 'User Detail' section includes buttons for Edit, Sharing, Reset Password, and Freeze. The 'User License' section shows 'Salesforce' and 'Standard User'. The 'Active' checkbox is checked. The 'Marketing User' checkbox is unchecked. The 'Offline User' checkbox is unchecked. The 'Knowledge User' checkbox is unchecked. The 'Flow User' checkbox is unchecked. The 'Service Cloud User' checkbox is unchecked. The 'Site.com Contributor User' checkbox is unchecked. The 'Site.com Publisher User' checkbox is unchecked. The 'WDC User' checkbox is unchecked. The 'Mobile Push Registrations' checkbox is checked. The 'Data.com User Type' is set to 'i'. The 'Accessibility Mode (Classic Only)' checkbox is checked. The 'Debug Mode' checkbox is checked. The 'Receive Approval Request Emails' checkbox is checked.

User Detail

| Field | Value |
|-----------------------------------|--|
| Name | Class Teacher |
| Alias | ctec |
| Email | ishasama23@gmail.com [Verify] |
| Username | sama23@gmail.com |
| Nickname | User16897100653164435132 |
| Title | |
| Company | |
| Department | |
| Division | |
| Address | Or.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 | |
| Role | Salesforce |
| User License | 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 | <input checked="" type="checkbox"/> |
| Data.com User Type | i |
| Accessibility Mode (Classic Only) | <input checked="" type="checkbox"/> |
| Debug Mode | <input checked="" type="checkbox"/> |
| Receive Approval Request Emails | Only if I am an approver |

4. CREATION OF REPORT :



The screenshot shows the Salesforce Reports interface. The left sidebar contains navigation options: Candidate Internal ..., Semesters, Candidates, Course Details, Lecturer Details, Internal results, Reports, and Dashboards. The main content area is titled 'Report: Internal results with Candidate' and displays a table of internal results with candidate details. The table has columns for Candidate Roll Number, Candidate Name, Course, Internal results Name, and Marks. The table contains 7 rows of data. The 'Total Records' section shows 7 records. The 'Row Counts' section shows 7 rows. The 'Detail Rows' section shows 7 rows. The 'Subtotals' section shows 0 rows. The 'Grand Total' section shows 0 rows.

Report: Internal results with Candidate

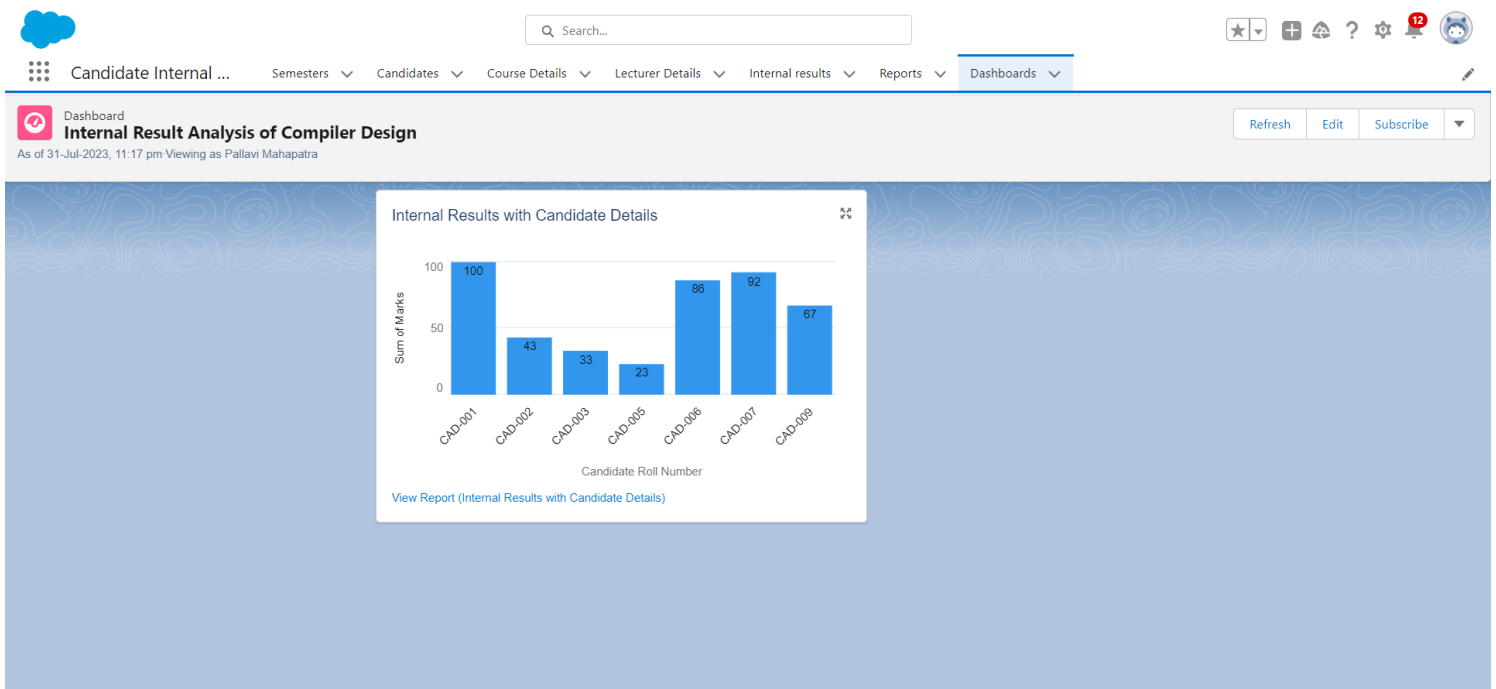
Internal Results with Candidate Details

Total Records: 7

| Candidate Roll Number | Candidate: Candidate Name | Course | Internal results: Internal results Name | Marks |
|-----------------------|---------------------------|--------|---|-------|
| CAD-001 (1) | Damon Salvatore | Btech | Compiler Design | 100 |
| CAD-002 (1) | Kai Parker | - | Compiler Design | 43 |
| CAD-003 (1) | Klaus Mikaelson | Btech | Compiler Design | 33 |
| CAD-005 (1) | Stefan Salvatore | Btech | Operating Systems | 23 |
| CAD-006 (1) | Peter Kavinsky | Btech | Compiler Design | 86 |
| CAD-007 (1) | Nicholas Leister | Btech | Compiler Design | 92 |
| CAD-009 (1) | Kol Gilbert | Btech | Compiler Design | 67 |

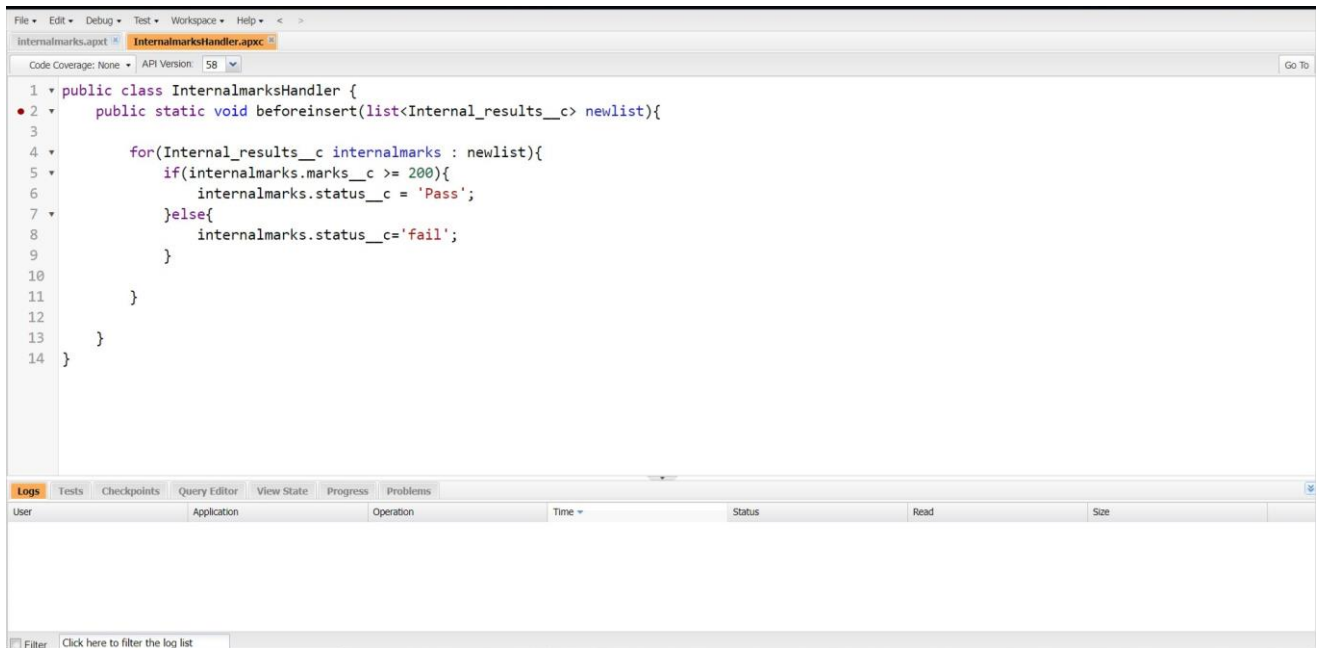
Row Counts: 7 Detail Rows: 7 Subtotals: 0 Grand Total: 0

5. CREATION OF DASHBOARD :



Internal Result Analysis Dashboard

6. CREATION OF FIELD UPDATE USING TRIGGER

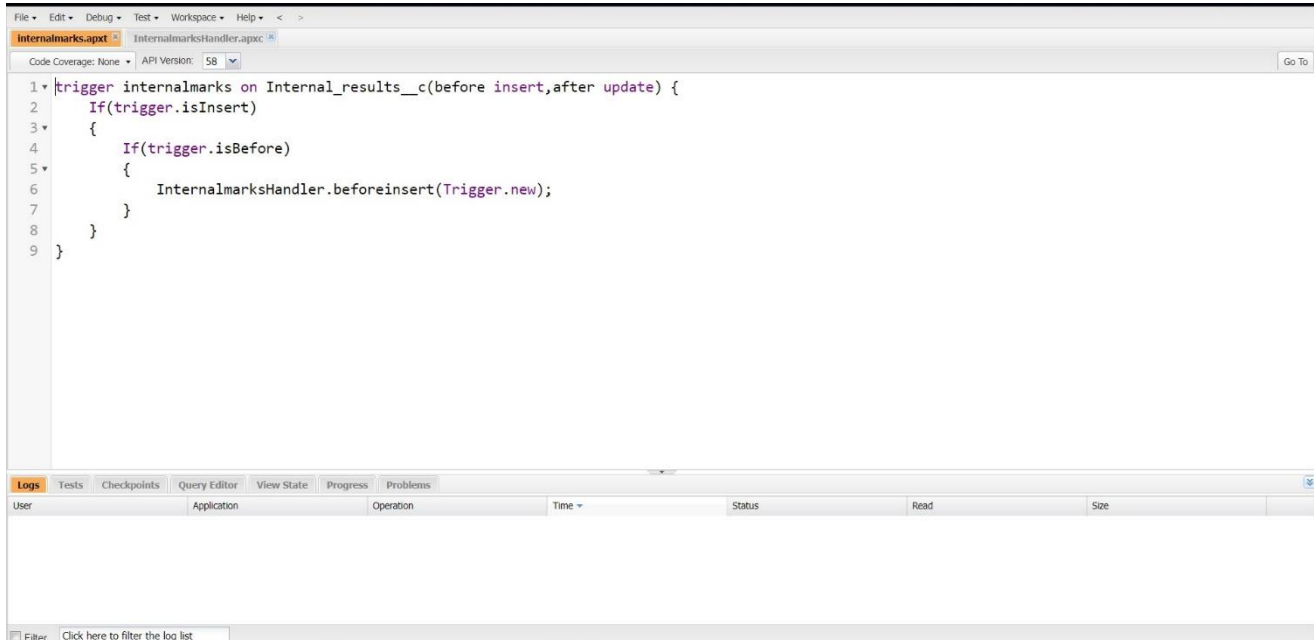


The screenshot shows an IDE window with the file 'InternalmarksHandler.apxc' open. The code is as follows:

```
1 public class InternalmarksHandler {  
2     public static void beforeinsert(list<Internal_results__c> newlist){  
3  
4         for(Internal_results__c internalmarks : newlist){  
5             if(internalmarks.marks__c >= 200){  
6                 internalmarks.status__c = 'Pass';  
7             }else{  
8                 internalmarks.status__c='fail';  
9             }  
10        }  
11    }  
12 }  
13 }  
14 }
```

Below the code editor, there is a 'Logs' tab and a table with columns: User, Application, Operation, Time, Status, Read, and Size. The table is currently empty.

Apex class named as InternalmarksHandler



The screenshot shows an IDE window with the file 'Internalmarks.apxc' open. The code is as follows:

```
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 }
```

Below the code editor, there is a 'Logs' tab and a table with columns: User, Application, Operation, Time, Status, Read, and Size. The table is currently empty.

Apex trigger named as Internalmarks

7. TRAILHEAD PROFILE PUBLIC URL

Trailhead ID: <https://www.salesforce.com/trailblazer/pmahapatra19>

8. ADVANTAGES

- Provides a secure environment for storing and managing student data.
- Offers performance analysis to identify areas where students need additional support.
- Improves communication between students, parents, and faculty.
- Enhances the overall quality of education.
- Elevates the holistic standard of education.

9. DISADVANTAGES

- To utilise the software efficiently, one must receive the necessary instruction and training.
- The cost of implementing result management software varies.
- Results processing might be delayed or affected by technological problems like system failures or software flaws because result management software can be complicated.

10. APPLICATIONS

- The result tracking salesforce software facilitates easy communication between teachers, parents, and students by enabling them to access their child's results, attendance, and other information online.
- It can also help identify areas where students need additional support and enhance education overall.
- The programme can enable student evaluation and feedback, allowing teachers and administrators to gauge student satisfaction and pinpoint areas in need of improvement.

11. CONCLUSION

A CRM system that uses Salesforce to track candidate outcomes, including internal marks, provides educational institutions with a game-changing answer. This project enables enhanced student involvement, well-informed decision-making, and a higher quality educational experience by streamlining result administration, enhancing communication, and offering analytical analytics.

12. FUTURE SCOPES

- In the medical field, result management software can aid specialists in keeping track of patient information, test results, and medical records. Additionally, it can increase the efficiency and precision of diagnosis and therapy.
- In the public sector, result management software can assist in ensuring the accuracy, transparency, and accessibility of public data, such as polling or election results.
- In business, result management software can assist organisations in managing performance measures, sales data, and customer feedback.
- In sports, result management software can assist coaches and trainers in monitoring the development of athletes, coming to informed judgements, and enhancing performance.
- Result management software helps speed up the research process, increase accuracy, and help researchers organise and analyse data more effectively.