

# Phase 3 Report

## Data Modeling & Relationships

**Project:** College Placement & Internship Management System

**Batch:** 4

**Program:** TCS Last Mile SmartBridge

**Prepared by:** Lowrence Devu

### 1. Introduction

This phase focuses on creating custom objects, fields, and relationships for the College Placement & Internship Management System. The data model defines how students, applications, and job postings are linked in Salesforce, ensuring a structured and secure placement process.

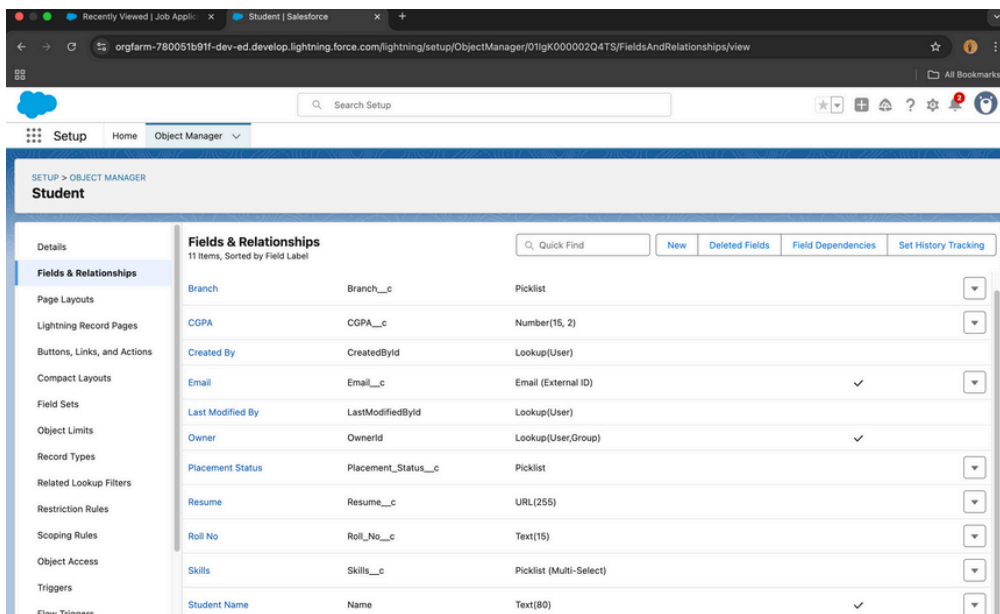
### 2. Objectives

- Create custom objects **Student** and **Application**.
- Define essential fields like Name, CGPA, Skills, and Placement Status.
- Establish relationships between Students, Applications, and Job Postings.
- Verify the schema using Schema Builder.
- Update profile permissions to ensure secure role-based access.
- Validate the model with sample data records.

### 3. Steps Performed

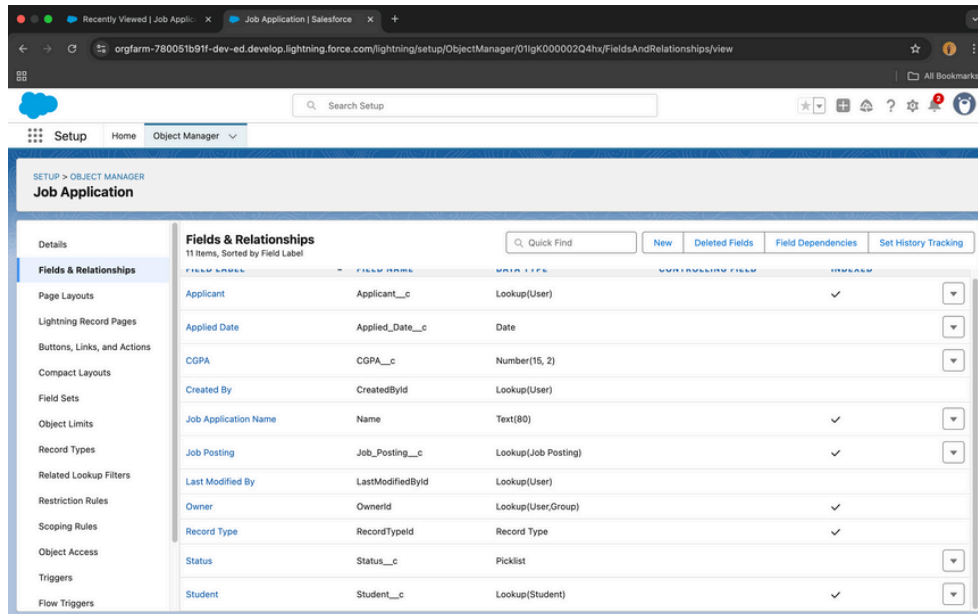
#### 3.1 Student Object

- Created custom object **Student** (Student\_\_c).
- Key fields:
  - Full Name (Text, Required)
  - Roll Number (Text, Unique)
  - CGPA (Number, 2 decimals)
  - Branch (Picklist: CSE, ECE, ME, etc.)
  - Skills (Multi-select Picklist)
  - Email (Email)
  - Phone (Phone)
  - Placement Status (Picklist: Applied, Shortlisted, Selected, Rejected)



## 3.2 Application Object

- Created custom object **Application** (Application\_\_c).
- Key fields:
  - Application Date (Date)
  - Status (Picklist: Applied, In Process, Selected, Rejected)
  - Remarks (Long Text Area)



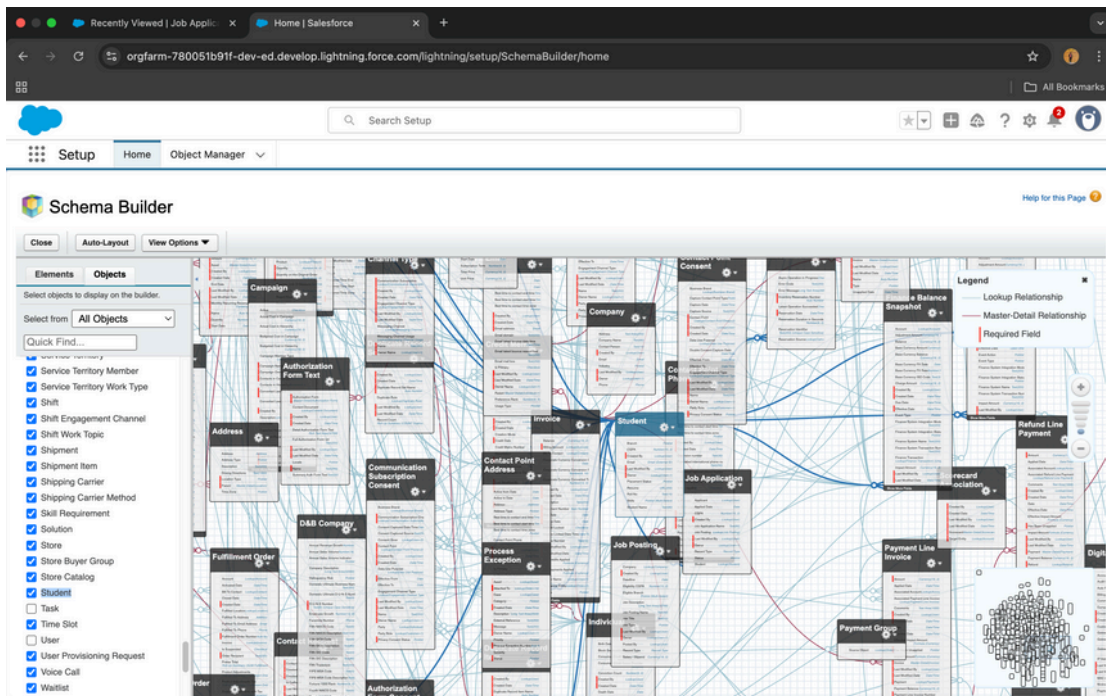
## 3.3 Relationships

- **Application → Student:** Lookup Relationship (each application linked to a student).
- **Application → Job Posting:** Master-Detail Relationship (each application linked to a job posting).
- One Student can have many Applications.
- One Job Posting can have many Applications.

| Job Application             |                               |                 |                     |                   |         |
|-----------------------------|-------------------------------|-----------------|---------------------|-------------------|---------|
| Details                     | Fields & Relationships        |                 |                     |                   |         |
| Fields & Relationships      | 11 Items, Sorted by Data Type |                 |                     |                   |         |
| Page Layouts                |                               |                 |                     |                   |         |
| Lightning Record Pages      |                               |                 |                     |                   |         |
| Buttons, Links, and Actions |                               |                 |                     |                   |         |
| Compact Layouts             |                               |                 |                     |                   |         |
|                             | FIELD LABEL                   | FIELD NAME      | DATA TYPE           | CONTROLLING FIELD | INDEXED |
|                             | Applied Date                  | Applied_Date__c | Date                |                   |         |
|                             | Job Posting                   | Job_Posting__c  | Lookup(Job Posting) | ✓                 | ✓       |
|                             | Student                       | Student__c      | Lookup(Student)     | ✓                 | ✓       |

### 3.4 Schema Builder Verification

- Verified objects and fields in Schema Builder.
- Confirmed one-to-many relationships between Student, Application, and Job Posting.



### 3.5 Profile Permissions

- Updated object-level permissions:

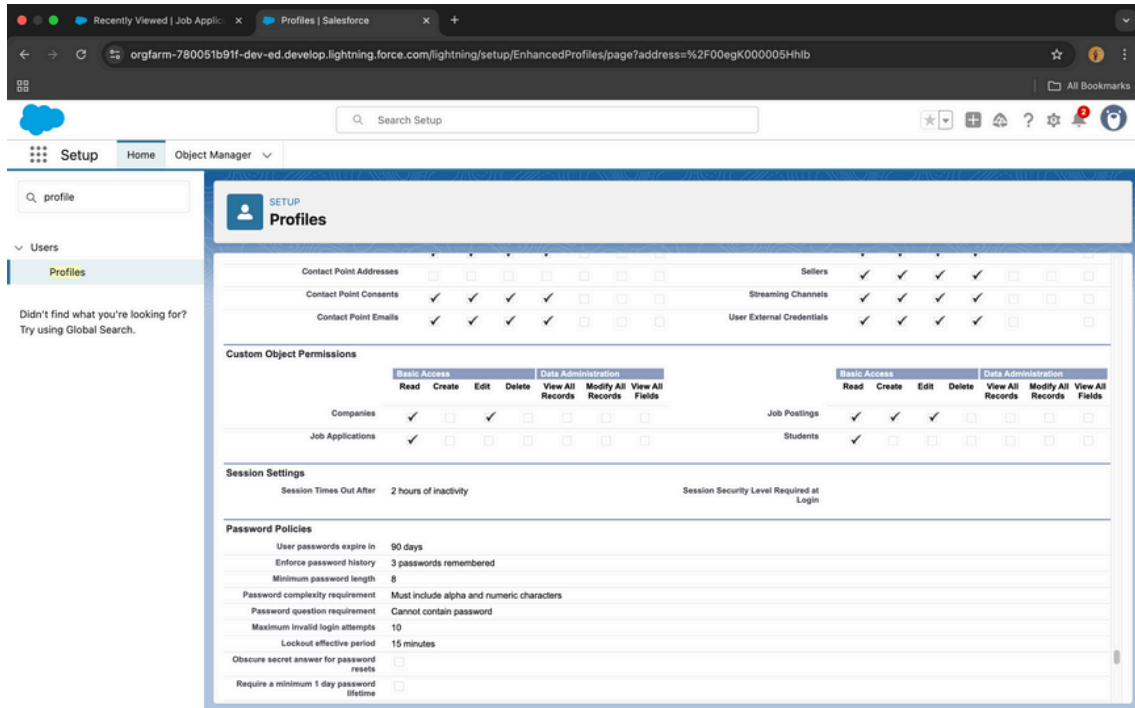
– **Placement Officer:** Full access to Students, Applications, and Job Postings.

The screenshot shows the Salesforce Profiles page for the 'Placement Officer' profile. The page lists various objects and their permissions, categorized into 'Basic Access' and 'Data Administration'. The 'Placement Officer' profile has full access (Read, Create, Edit, Delete) for 'Students', 'Job Applications', and 'Job Postings'. The 'Data Administration' section includes permissions for 'View All Records' and 'Modify All Fields'.

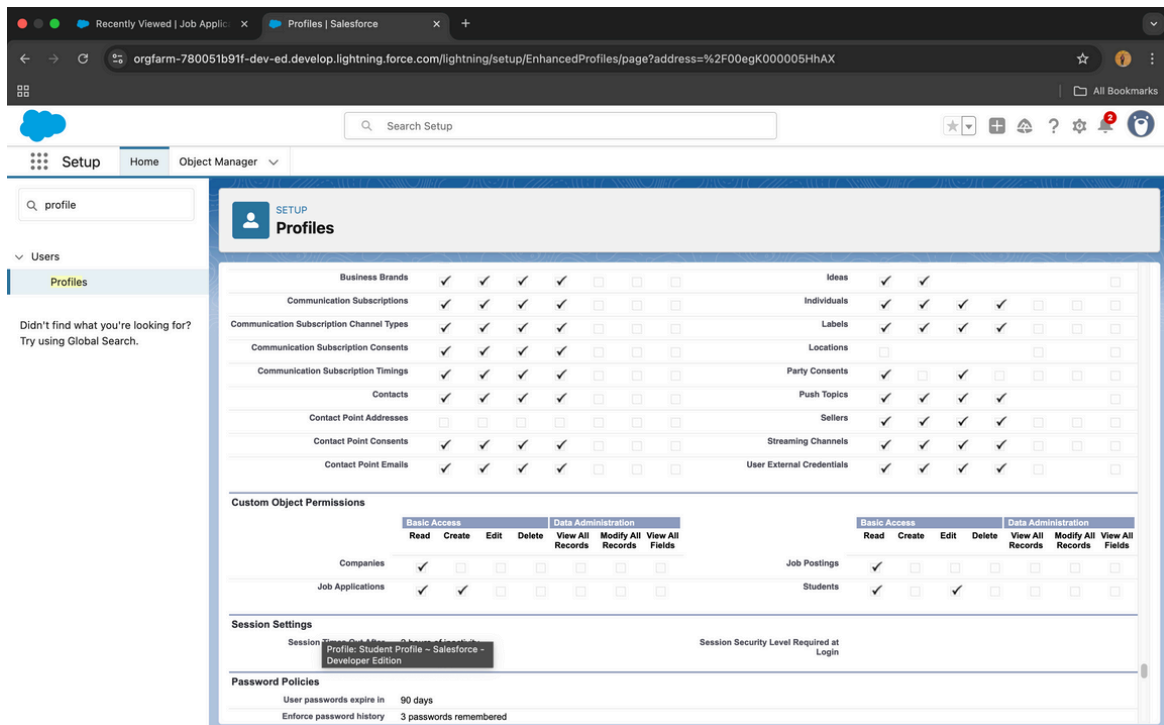
| Object           | Read | Create | Edit | Delete | View All Records | Modify All Fields |
|------------------|------|--------|------|--------|------------------|-------------------|
| Companies        | ✓    | ✓      | ✓    | ✓      | ✓                | ✓                 |
| Job Applications | ✓    | ✓      | ✓    | ✓      | ✓                | ✓                 |
| Job Postings     | ✓    | ✓      | ✓    | ✓      | ✓                | ✓                 |
| Students         | ✓    | ✓      | ✓    | ✓      | ✓                | ✓                 |

Session Settings: Session Times Out After 2 hours of inactivity. Session Security Level Required at Login.

--**Recruiter:** Read Students, Full access to Applications, Read Job Postings.



– **Student:** Edit own Student record, Create/Read/Edit Applications, Read Job Postings



### 3.6 Testing with Sample Data

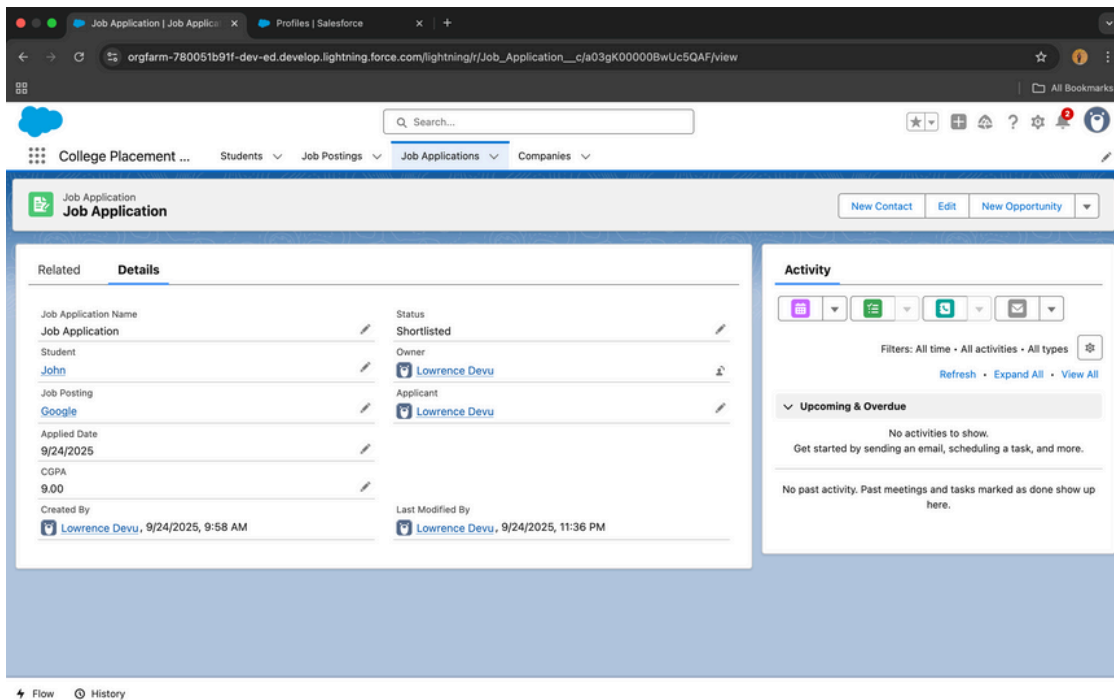
- Created test students (e.g., John, Priya).
- Created a Job Posting (Software Engineer @ TCS).
- Student logged in and applied → Application created.
- Recruiter logged in and reviewed Applications.
- Placement Officer monitored all records.

This screenshot shows the Salesforce interface for a student record. The top navigation bar includes 'College Placement ...', 'Students', 'Job Postings', 'Job Applications', and 'Companies'. The student's name 'John' is displayed at the top. The 'Details' tab is active, showing fields for Student Name, Roll No, Email, Branch, CGPA, Skills, Resume, Placement Status, and Owner. The 'Activity' tab on the right shows filters and a section for 'Upcoming & Overdue' activities.

| Field            | Value                              |
|------------------|------------------------------------|
| Student Name     | John                               |
| Roll No          | 1                                  |
| Email            | lowrencedevu@gmail.com             |
| Branch           | CSE                                |
| CGPA             | 9.00                               |
| Skills           | Python;Salesforce                  |
| Resume           |                                    |
| Placement Status | Applied                            |
| Created By       | Lowrence Devu, 9/23/2025, 11:18 AM |
| Last Modified By | Lowrence Devu, 9/24/2025, 11:36 PM |

This screenshot shows the Salesforce interface for a job posting record. The top navigation bar includes 'College Placement ...', 'Students', 'Job Postings', 'Job Applications', and 'Companies'. The job posting name 'Google' is displayed at the top. The 'Details' tab is active, showing fields for Job Posting Name, Job Title, Data Analyst, Job Type, Full-time, Eligibility CGPA, Eligible Branch, Deadline, Salary / Stipend, Job Description, Company, and Posted By. The 'Activity' tab on the right shows filters and a section for 'Upcoming & Overdue' activities.

| Field            | Value                   |
|------------------|-------------------------|
| Job Posting Name | Google                  |
| Job Title        | Data Analyst            |
| Job Type         | Full-time               |
| Eligibility CGPA | 8.00                    |
| Eligible Branch  | ECE;CSE;CSE(AI);CSE(DS) |
| Deadline         | 9/30/2025               |
| Salary / Stipend | \$20,000                |
| Job Description  |                         |
| Company          | Google                  |
| Posted By        | TDG                     |



## 4. Expected Outcomes

- Custom objects Student and Application created successfully.
- Fields defined for placement and internship tracking.
- Relationships established between Student, Application, and Job Posting.
- Schema verified with correct data model.
- Profiles configured for secure role-based access.
- Sample testing validated access for all roles.

## 5. Conclusion

Phase 3 defined the core data model for the College Placement & Internship Management System. The Student and Application objects were created, relationships established, and permissions configured. Testing confirmed correct functionality for different roles. This provides the backbone for Phase 4, which will focus on automation using flows, validation rules, and notifications.