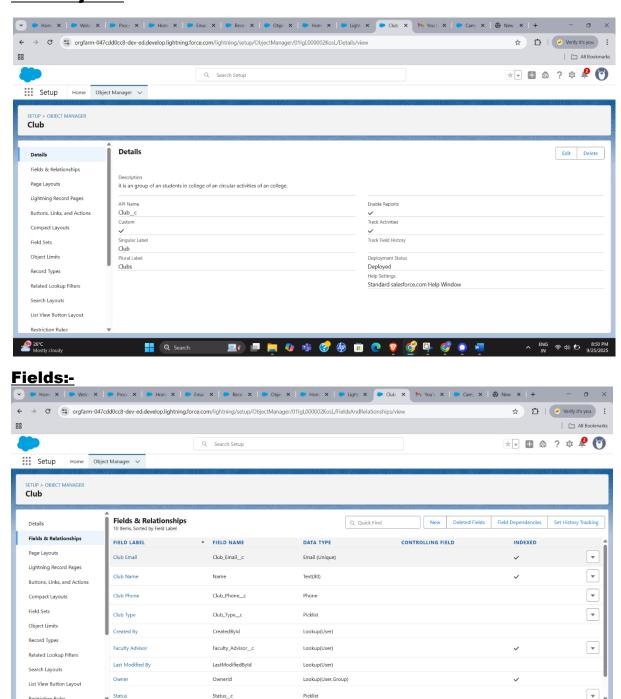# Phase 3: Data Modeling & Relationships(Campus CRM + Student Club)

Screenshots:-

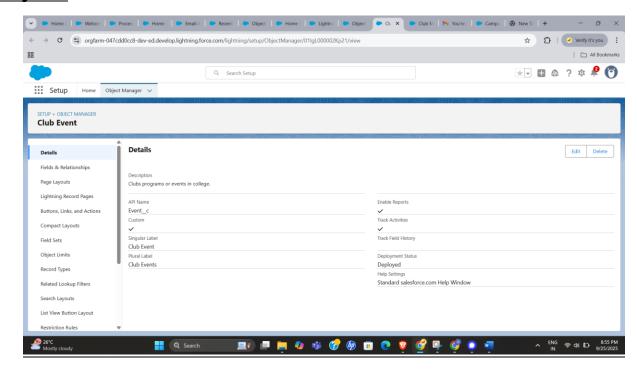### Club Object:-

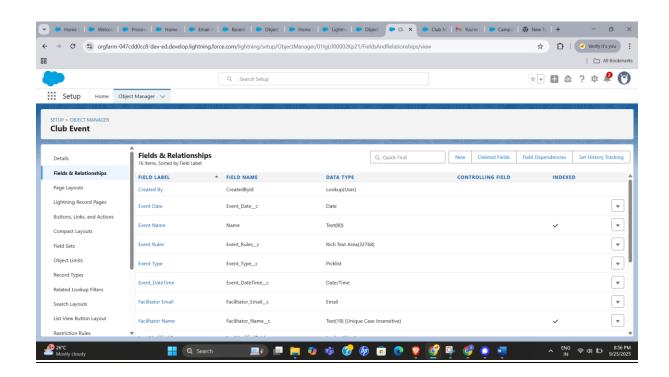
Fields:-
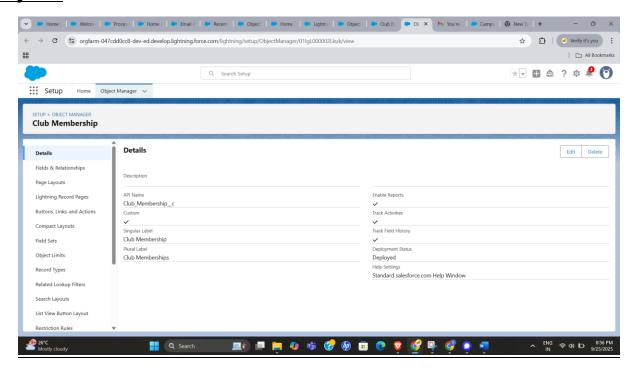
Club Event(custom object):-
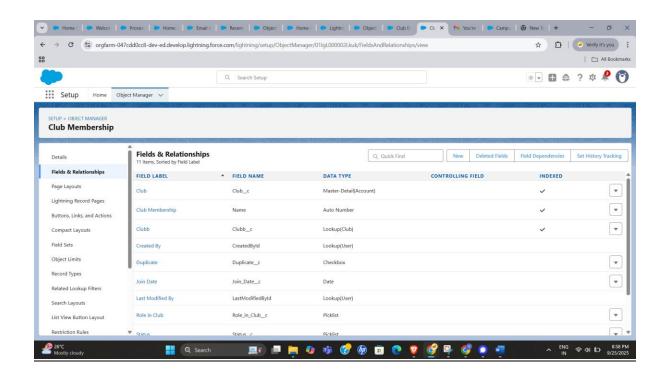
Object:-

Fields & Relationships:-

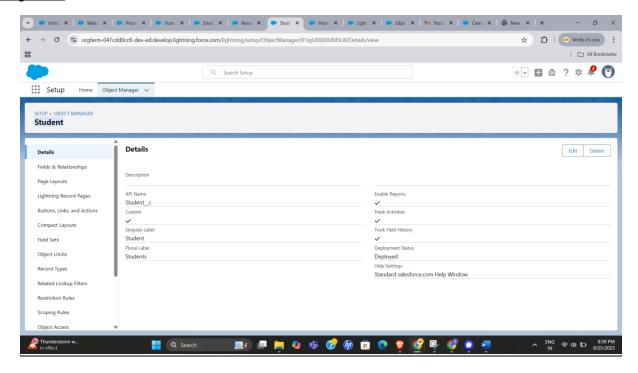## Club Membership (custom object):-

Object:-
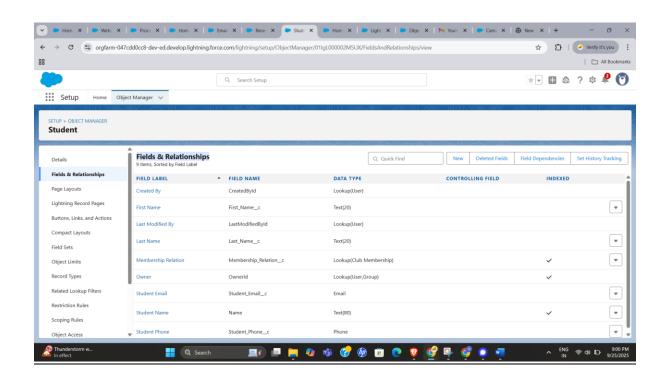

Fields & Relationships :-

Student (custom object):-

Object:-

Fields & Relationships:-

Schema Builder:-

Documentation:-

Standard & Custom Objects

- **Standard Objects Utilized:**
    - **Club :** Used to represent Clubs.
    - **Student:** Used to represent Students, linked to Clubs through memberships.

- **Custom Objects Created:**
    - **ClubMembership__c:** Junction object to link Students (Contact) and Clubs (Account).
    - **ClubEvent__c:** Custom object to represent Events hosted by Clubs.

- **Notes:** External Objects were not implemented in Developer Edition but are explained below for extension.

Fields

- **Student :** Name__c, Email__c, Phone__c,Address__c

- **Club :** Club_Type__c, Faculty_Advisor__c, Club_Email__c, Description__c
- **ClubMembership__c:** Role_in_Club__c, Joining_Date__c, Membership_Status__c, Notes__c
- **ClubEvent__c:** Event_DateTime__c, Registration_Deadline__c, Venue__c, Event_Type__c, Status__c,

Record Types

- **ClubEvent__c:**
  - Workshop
  - Seminar
  - Competition
  - Cultural Event
- **Notes:** Record types were created to allow separate page layouts and picklist variations for different scenarios.

Page Layouts

- **Club :**
  - Fields grouped as Club Information, Faculty Advisor, and Contact Info.
  - Related lists: Events, Memberships.
- **Student :**
  - Sections: Personal Details, Academic Info, Memberships, Event Participation.
  - Related list: Club Memberships.
- **ClubEvent__c:**
  - Event Details, Venue, Capacity, Status.
  - Related lists: Volunteers, Registered Students.
- **Volunteer__c:** Volunteer details with linked Student and Event.
- **ClubMembership__c:** Joining Date, Role, Membership Status, linked Student and Club.

Compact Layouts

- **Club:** Displayed Club Name, Club Type, Faculty Advisor, Active Status.
- **Student :** Displayed Name, Branch, Year, Skills.
- **ClubEvent__c:** Displayed Event Name, Date, Venue, Status.

- **ClubMembership__c:** Displayed Student Name, Role, Membership Status.

Schema Builder

- Used to visualize object relationships.

- Showed **Student** linked to **Club** through **ClubMembership__c (junction object)**.

- **ClubEvent__c** linked to **Club** , and **Volunteer__c** connected with both **Event and Student**.

- This schema diagram was saved and included in project documentation for clarity.

Lookup vs Master-Detail vs Hierarchical Relationships

- **Master-Detail Relationships Implemented:**

  o ClubMembership__c → Club

  o ClubMembership__c → Student

- **Lookup Relationships Implemented:**

  o ClubEvent__c → Club

- **Hierarchical Relationship:** Not applicable (only works on User object). A **hierarchical relationship** is a ranked structure with levels of authority.

Junction Objects

- **ClubMembership__c:** Primary junction object linking Students and Clubs.

- Enabled many-to-many relationship:

  o One Student can join multiple Clubs.

  o One Club can have multiple Students.

External Objects

- Not implemented in Developer Edition.

- Explained as a possible extension:

  o External Object "ExternalEvent__x" could be integrated using Salesforce Connect to sync events hosted by partner institutions.

  o Read-only access to external data while keeping CampusConnect records clean.

Key Outcomes of Phase 3

- Robust **data model** created to represent Clubs, Students, Memberships, Events, and Volunteers.

- **Many-to-many relationships** managed through ClubMembership junction object.

- Different **page layouts and record types** enhanced user experience for students, club leaders, and faculty.

- Compact layouts and schema visualization simplified navigation and reporting.

- Extended explanation included for External Objects and Hierarchical relationships, even if not implemented.