Phase 3: Data Modeling & Relationships

Project: Smart Education Portal - Student Enrollment & Engagement Management System

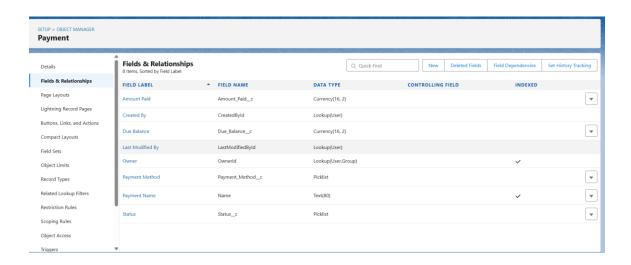
1. Objects

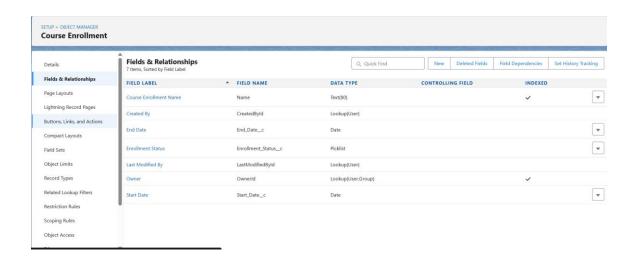
Custom Objects

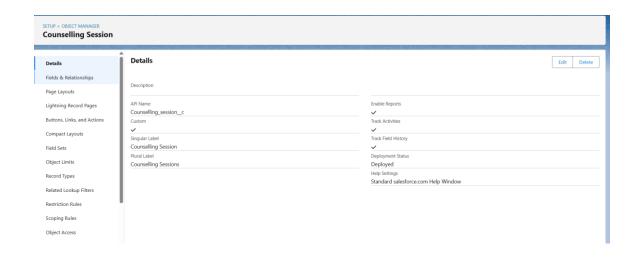
- Course_c → Stores course/program details (credits, duration, fees)
- Course_Enrollment_c → Junction object for linking students with courses
- Transcript_c → Student's academic record (grades, GPA)
- Counseling_Session_c → Scheduling for interviews/counseling meetings
- Payment $_c \rightarrow$ Tracks fee transactions, scholarships, and loans

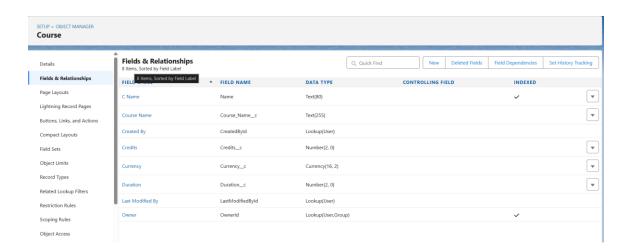
2. Key Fields

- Course c → Course Name, Duration, Credits, Fee Amount
- Course_Enrollment__c → Enrollment Status (Applied, Admitted, Enrolled, Dropped), Start/End Dates
- Transcript c → Semester, Grade, GPA, Remarks
- Counseling_Session__c → Session Date, Counselor Assigned, Session Status
- Payment__c → Payment Method (Online, Loan, Scholarship), Amount Paid, Due Balance, Status





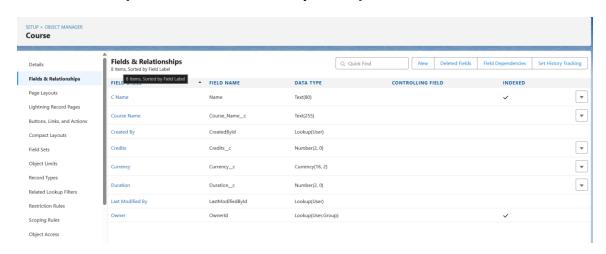


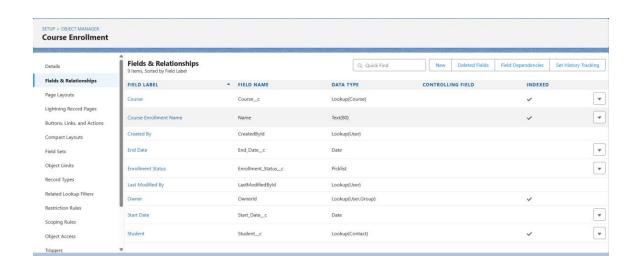


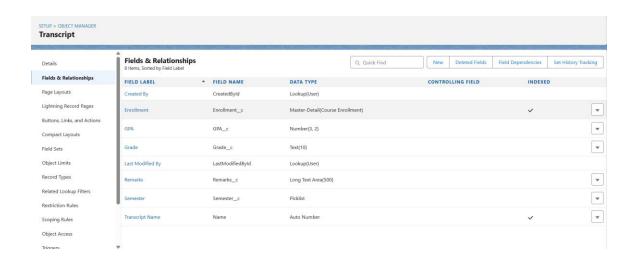
3. Relationships

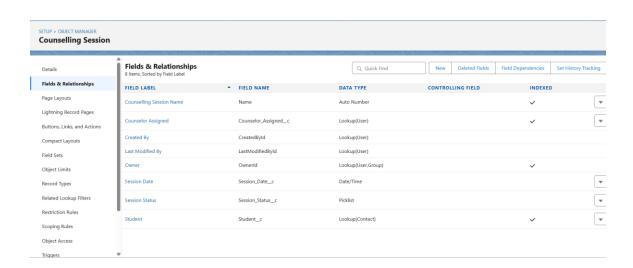
- Lead → Contact/Opportunity (Conversion flow: inquiry to student)
- Contact → Course_Enrollment_c (1:M, one student can enroll in many courses)

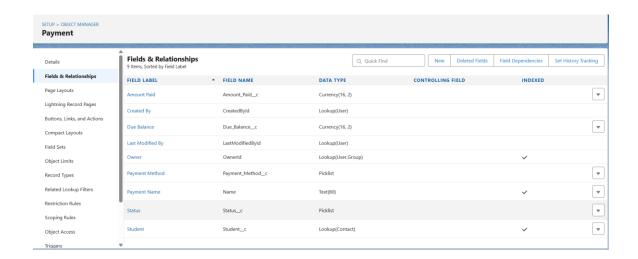
- Course_c \rightarrow Course_Enrollment_c (1:M, one course can have many students)
- Course_Enrollment_c \rightarrow Transcript_c (1:M, multiple transcripts linked to a course enrollment)
- Contact → Counseling_Session_c (1:M, one student can have many sessions)
- Contact → Payment_c (1:M, multiple payments per student)
- Contact → Case (1:M, student can raise multiple cases)











4. Schema Visualization

Using Salesforce Schema Builder, the relationships can be visualized as:

- Contact \leftrightarrow Course_Enrollment_c \leftrightarrow Course_c
- Course_Enrollment_c \leftrightarrow Transcript_c
- Contact \leftrightarrow Counseling_Session_c
- Contact \leftrightarrow Payment_c
- Contact ↔ Case

