

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 → 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

SETUP > OBJECT MANAGER				
Payment				
Details	Fields & Relationships			
Fields & Relationships	8 Items, Sorted by Field Label			
Page Layouts	FIELD LABEL	FIELD NAME	DATA TYPE	INDEXED
Lightning Record Pages	Amount Paid	Amount_Paid__c	Currency(16, 2)	
Buttons, Links, and Actions	Created By	CreatedById	Lookup(User)	
Compact Layouts	Due Balance	Due_Balance__c	Currency(16, 2)	
Field Sets	Last Modified By	LastModifiedById	Lookup(User)	
Object Limits	Owner	OwnerId	Lookup(User/Group)	✓
Record Types	Payment Method	Payment_Method__c	Picklist	
Related Lookup Filters	Payment Name	Name	Text(80)	✓
Restriction Rules	Status	Status__c	Picklist	
Scoping Rules				
Object Access				
Triggers				

SETUP > OBJECT MANAGER

Course Enrollment

Details

Fields & Relationships
7 Items, Sorted by Field Label

Q, Quick Find New Deleted Fields Field Dependencies Set History Tracking

FIELD LABEL	FIELD NAME	DATA TYPE	CONTROLLING FIELD	INDEXED
Course Enrollment Name	Name	Text(80)		✓
Created By	CreatedById	Lookup(User)		
End Date	End_Date__c	Date		
Enrollment Status	Enrollment_Status__c	Picklist		
Last Modified By	LastModifiedById	Lookup(User)		
Owner	OwnerId	Lookup(User,Group)		✓
Start Date	Start_Date__c	Date		

Buttons, Links, and Actions

Compact Layouts

Field Sets

Object Limits

Record Types

Related Lookup Filters

Restriction Rules

Scoping Rules

Object Access

SETUP > OBJECT MANAGER

Counselling Session

Details

Details

Edit Delete

Description

API Name
Counselling_session__c

Custom
✓

Singular Label
Counselling Session

Plural Label
Counselling Sessions

Enable Reports
✓

Track Activities
✓

Track Field History
✓

Deployment Status
Deployed

Help Settings
Standard salesforce.com Help Window

Page Layouts

Lightning Record Pages

Buttons, Links, and Actions

Compact Layouts

Field Sets

Object Limits

Record Types

Related Lookup Filters

Restriction Rules

Scoping Rules

Object Access

SETUP > OBJECT MANAGER

Course

Details

Fields & Relationships
8 Items, Sorted by Field Label

Q, Quick Find New Deleted Fields Field Dependencies Set History Tracking

FIELD LABEL	FIELD NAME	DATA TYPE	CONTROLLING FIELD	INDEXED
C Name	Name	Text(80)		✓
Course Name	Course_Name__c	Text(255)		
Created By	CreatedById	Lookup(User)		
Credits	Credits__c	Number(2, 0)		
Currency	Currency__c	Currency(16, 2)		
Duration	Duration__c	Number(2, 0)		
Last Modified By	LastModifiedById	Lookup(User)		
Owner	OwnerId	Lookup(User,Group)		✓

Page Layouts

Lightning Record Pages

Buttons, Links, and Actions

Compact Layouts

Field Sets

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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 → Course_Enrollment__c (1:M, one course can have many students)
- Course_Enrollment__c → 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)

SETUP > OBJECT MANAGER

Course

Details

Fields & Relationships
8 Items, Sorted by Field Label

Q, Quick Find New Deleted Fields Field Dependencies Set History Tracking

FIELD LABEL	FIELD NAME	DATA TYPE	CONTROLLING FIELD	INDEXED
C Name	Name	Text(80)		✓
Course Name	Course_Name__c	Text(255)		
Created By	CreatedById	Lookup(User)		
Credits	Credits__c	Number(2, 0)		
Currency	Currency__c	Currency(16, 2)		
Duration	Duration__c	Number(2, 0)		
Last Modified By	LastModifiedById	Lookup(User)		
Owner	OwnerId	Lookup(User,Group)		✓

SETUP > OBJECT MANAGER

Course Enrollment

Details

Fields & Relationships
9 Items, Sorted by Field Label

Q, Quick Find New Deleted Fields Field Dependencies Set History Tracking

FIELD LABEL	FIELD NAME	DATA TYPE	CONTROLLING FIELD	INDEXED
Course	Course__c	Lookup(Course)		✓
Course Enrollment Name	Name	Text(80)		✓
Created By	CreatedById	Lookup(User)		
End Date	End_Date__c	Date		
Enrollment Status	Enrollment_Status__c	Picklist		
Last Modified By	LastModifiedById	Lookup(User)		
Owner	OwnerId	Lookup(User,Group)		✓
Start Date	Start_Date__c	Date		
Student	Student__c	Lookup(Contact)		✓

SETUP > OBJECT MANAGER

Transcript

Details

Fields & Relationships

Page Layouts

Lightning Record Pages

Buttons, Links, and Actions

Compact Layouts

Field Sets

Object Limits

Record Types

Related Lookup Filters

Restriction Rules

Scoping Rules

Object Access

Triggers

Fields & Relationships

8 Items, Sorted by Field Label

Q Quick Find

New

Deleted Fields

Field Dependencies

Set History Tracking

FIELD LABEL	FIELD NAME	DATA TYPE	CONTROLLING FIELD	INDEXED
Created By	CreatedById	Lookup(User)		
Enrollment	Enrollment__c	Master-Detail(Course Enrollment)		✓
GPA	GPA__c	Number(3, 2)		
Grade	Grade__c	Text(10)		
Last Modified By	LastModifiedById	Lookup(User)		
Remarks	Remarks__c	Long Text Area(500)		
Semester	Semester__c	Picklist		
Transcript Name	Name	Auto Number		✓

SETUP > OBJECT MANAGER

Counseling Session

Details

Fields & Relationships

Page Layouts

Lightning Record Pages

Buttons, Links, and Actions

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Fields & Relationships

8 Items, Sorted by Field Label

Q Quick Find

New

Deleted Fields

Field Dependencies

Set History Tracking

FIELD LABEL	FIELD NAME	DATA TYPE	CONTROLLING FIELD	INDEXED
Counseling Session Name	Name	Auto Number		✓
Counselor Assigned	Counselor_Assigned__c	Lookup(User)		✓
Created By	CreatedById	Lookup(User)		
Last Modified By	LastModifiedById	Lookup(User)		
Owner	OwnerId	Lookup(User,Group)		✓
Session Date	Session_Date__c	Date/Time		
Session Status	Session_Status__c	Picklist		
Student	Student__c	Lookup(Contact)		✓

SETUP > OBJECT MANAGER

Payment

Details

Fields & Relationships

Page Layouts

Lightning Record Pages

Buttons, Links, and Actions

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Fields & Relationships

9 Items, Sorted by Field Label

Q Quick Find

New

Deleted Fields

Field Dependencies

Set History Tracking

FIELD LABEL	FIELD NAME	DATA TYPE	CONTROLLING FIELD	INDEXED
Amount Paid	Amount_Paid__c	Currency(16, 2)		
Created By	CreatedById	Lookup(User)		
Due Balance	Due_Balance__c	Currency(16, 2)		
Last Modified By	LastModifiedById	Lookup(User)		
Owner	OwnerId	Lookup(User,Group)		✓
Payment Method	Payment_Method__c	Picklist		
Payment Name	Name	Text(80)		✓
Status	Status__c	Picklist		
Student	Student__c	Lookup(Contact)		✓

4. Schema Visualization

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

- Contact ↔ Course_Enrollment__c ↔ Course__c
- Course_Enrollment__c ↔ Transcript__c
- Contact ↔ Counseling_Session__c
- Contact ↔ Payment__c
- Contact ↔ Case

