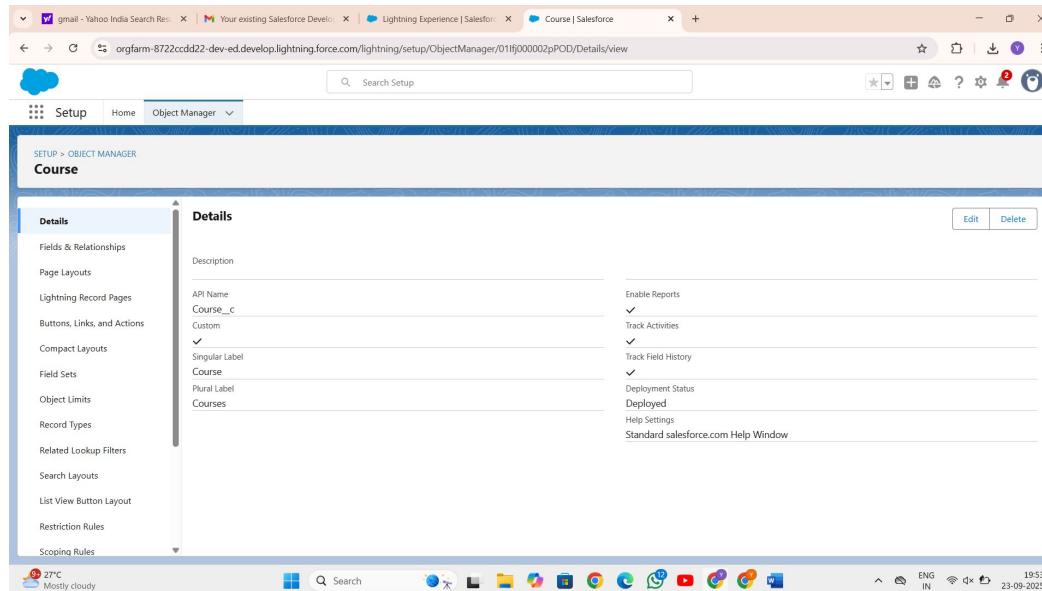
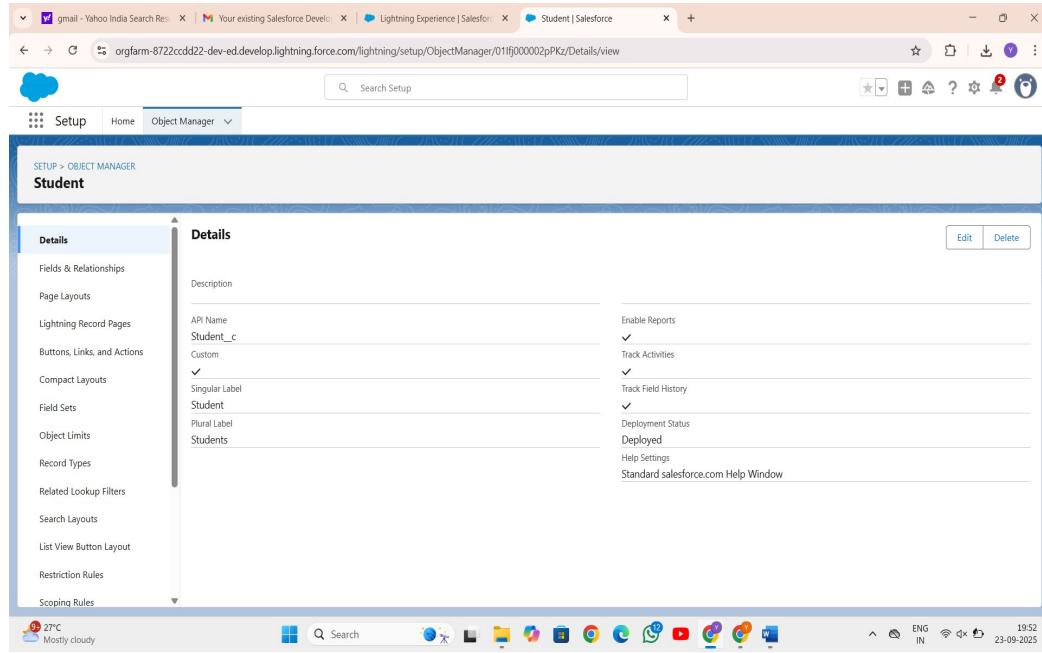


Phase 3: Data Modeling & Relationships

1. Standard & Custom Objects

In this project, we used standard objects like Account and Contact, and created custom objects such as Student, Course, Enrollment, Attendance, Grades and fee.

Custom objects were designed to represent our business data model, where Students can enroll in multiple Courses through the Enrollment object.



gmail - Yahoo India Search Results | Your existing Salesforce Development Environment | Lightning Experience | Salesforce | Enrollment | Salesforce

orgfarm-8722ccdd22-dev-ed.develop.lightning.force.com/lightning/setup/ObjectManager/01Ij0000002pPd/Details/view

Setup Home Object Manager

Search Setup

SETUP > OBJECT MANAGER
Enrollment

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
Restriction Rules
Scoping Rules

Details

Description
API Name: Enrollment__c
Custom
✓
Singular Label: Enrollment
Plural Label: Enrollments

Enable Reports
✓
Track Activities
✓
Track Field History
✓
Deployment Status: Deployed
Help Settings: Standard salesforce.com Help Window

Edit Delete

27°C Mostly cloudy

ENG IN 19:54 23-09-2025

This screenshot shows the 'Enrollment' object setup page. The left sidebar lists various configuration options. The main panel displays the 'Details' section for the 'Enrollment' object, including its API name ('Enrollment__c'), singular label ('Enrollment'), and plural label ('Enrollments'). It also shows tracking and reporting settings.

gmail - Yahoo India Search Results | Your existing Salesforce Development Environment | Lightning Experience | Salesforce | Attendance | Salesforce

orgfarm-8722ccdd22-dev-ed.develop.lightning.force.com/lightning/setup/ObjectManager/01Ij0000002pPs/Details/view

Setup Home Object Manager

Search Setup

SETUP > OBJECT MANAGER
Attendance

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Record Types
Related Lookup Filters
Search Layouts
List View Button Layout
Restriction Rules
Scoping Rules

Details

Description
API Name: Attendance__c
Custom
✓
Singular Label: Attendance
Plural Label: Attendances

Enable Reports
✓
Track Activities
✓
Track Field History
✓
Deployment Status: Deployed
Help Settings: Standard salesforce.com Help Window

Edit Delete

27°C Mostly cloudy

ENG IN 19:54 23-09-2025

This screenshot shows the 'Attendance' object setup page. The left sidebar lists various configuration options. The main panel displays the 'Details' section for the 'Attendance' object, including its API name ('Attendance__c'), singular label ('Attendance'), and plural label ('Attendances'). It also shows tracking and reporting settings.

gmail - Yahoo India Search Results | Your existing Salesforce Development Environment | Lightning Experience | Salesforce | Grade | Salesforce

orgfarm-8722ccdd22-dev-ed.develop.lightning.force.com/lightning/setup/ObjectManager/01Ij0000002pQ0v/Details/view

Setup Home Object Manager

Search Setup

SETUP > OBJECT MANAGER
Grade

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
Restriction Rules
Scoping Rules

Details

Description
API Name: Grade__c
Custom
✓
Singular Label: Grade
Plural Label: Grades

Enable Reports
✓
Track Activities
✓
Track Field History
✓
Deployment Status: Deployed
Help Settings: Standard salesforce.com Help Window

Edit Delete

27°C Mostly cloudy

ENG IN 19:55 23-09-2025

This screenshot shows the 'Grade' object setup page. The left sidebar lists various configuration options. The main panel displays the 'Details' section for the 'Grade' object, including its API name ('Grade__c'), singular label ('Grade'), and plural label ('Grades'). It also shows tracking and reporting settings.

2. Fields

Custom fields were added to capture additional data for each object. Examples include:

- Student: First Name, Last Name, Email, Phone, Department (Picklist), Roll Number.
- Course: Course Name, Course Code, Duration.
- Enrollment: Enrollment Date, Status.

Screenshot of the Salesforce Setup interface showing the Object Manager for the 'Fee' object.

Fields & Relationships

FIELD LABEL	FIELD NAME	DATA TYPE	CONTROLLING FIELD	INDEXED
Amount Paid	Amount_Paid__c	Currency(18, 0)		✓
Created By	CreatedById	Lookup(User)		
Fee ID	Fee_ID__c	Auto Number		
Fee Name	Name	Text(80)		✓
Last Modified By	LastModifiedById	Lookup(User)		
Mode of transaction	Mode_of_transaction__c	Picklist		
Owner	OwnerId	Lookup(User,Group)		✓
Payment date	Payment_date__c	Date		
Payment status	Payment_status__c	Picklist		
Randon balance	Randon_balance__c	Currency(18, 0)		

Screenshot of the Salesforce Setup interface showing the Object Manager for the 'Grade' object.

Fields & Relationships

FIELD LABEL	FIELD NAME	DATA TYPE	CONTROLLING FIELD	INDEXED
Course	Course__c	Lookup(Course)		✓
Created By	CreatedById	Lookup(User)		
GPA	GPA__c	Number(4, 2)		
Grade	Grade__c	Picklist		
Grade Name	Name	Text(80)		✓
Last Modified By	LastModifiedById	Lookup(User)		
Marks	Marks__c	Number(3, 0)		
Owner	OwnerId	Lookup(User,Group)		✓
Student	Student__c	Lookup(Student)		✓

Screenshot of the Salesforce Setup interface showing the Object Manager for the 'Course' object.

Fields & Relationships

FIELD LABEL	FIELD NAME	DATA TYPE	CONTROLLING FIELD	INDEXED
Course	Course__c	Lookup(Course)		✓
Course code	Course_code__c	Text(10) (Unique Case Insensitive)		✓
Course ID	Course_ID__c	Auto Number		
Course Name	Name	Text(80)		✓
Created By	CreatedById	Lookup(User)		
Credits	Credits__c	Number(18, 0)		
Duration	Duration__c	Text(60)		
Instructor	Instructor__c	Lookup(User)		✓
Last Modified By	LastModifiedById	Lookup(User)		

The screenshot shows the Salesforce Setup interface under the Object Manager for the 'Student' object. The left sidebar lists various configuration options like Details, Fields & Relationships, Page Layouts, etc. The main content area is titled 'Fields & Relationships' and displays a table of 18 items. The columns are FIELD LABEL, FIELD NAME, DATA TYPE, CONTROLLING FIELD, and INDEXED. The table includes fields such as Address, Age, Assigned Course, Created By, Date Of Birth, Email, Enrollment Year, First Name, and Graduation Date.

3. Record Types

Record types were created on the Course object to differentiate between Online and Offline courses. Each record type uses a specific page layout to show relevant fields.

The screenshot shows the Salesforce Setup interface under the Object Manager for the 'Course' object. The left sidebar lists configuration options. The main content area is titled 'Record Types' and displays a table of 2 items. The columns are RECORD TYPE LABEL, DESCRIPTION, ACTIVE, and MODIFIED BY. There are two entries: 'Offline' (for offline courses) and 'Online' (for online courses), both marked as active and modified by Verasi Lohitha on 9/23/2025.

4. Page Layouts

Page layouts were customized to organize fields and related lists in a user-friendly way. Different page layouts were assigned based on record type.

Screenshot of the Salesforce Setup interface for the Grade object.

Page Layouts section details:

Page Layout Name	Created By	Modified By
Grade Layout	Yerasi Lohitha, 9/23/2025, 3:40 AM	Yerasi Lohitha, 9/23/2025, 3:56 AM

Page Layout Assignment button is visible.

Screenshot of the Salesforce Setup interface for the Course object.

Page Layouts section details:

Page Layout Name	Created By	Modified By
Course Layout	Yerasi Lohitha, 9/23/2025, 3:22 AM	Yerasi Lohitha, 9/23/2025, 9:06 AM
Course Offline Layout	Yerasi Lohitha, 9/23/2025, 9:08 AM	Yerasi Lohitha, 9/23/2025, 9:09 AM
Course Online Layout	Yerasi Lohitha, 9/23/2025, 9:00 AM	Yerasi Lohitha, 9/23/2025, 9:06 AM

Screenshot of the Salesforce Setup interface for the Course object, showing the layout editor.

Layout Properties section details:

Field Name	Type	Description
Course ID	Text	Course ID
Duration	Text	Duration
Owner	Text	Owner
Instructor	Text	Instructor
Record Type	Text	Record Type
Create By	Text	Create By
Last Modified By	Text	Last Modified By
Credits	Text	Credits
Online URL	Text	Online URL
Course code	Text	Course code

Information section details:

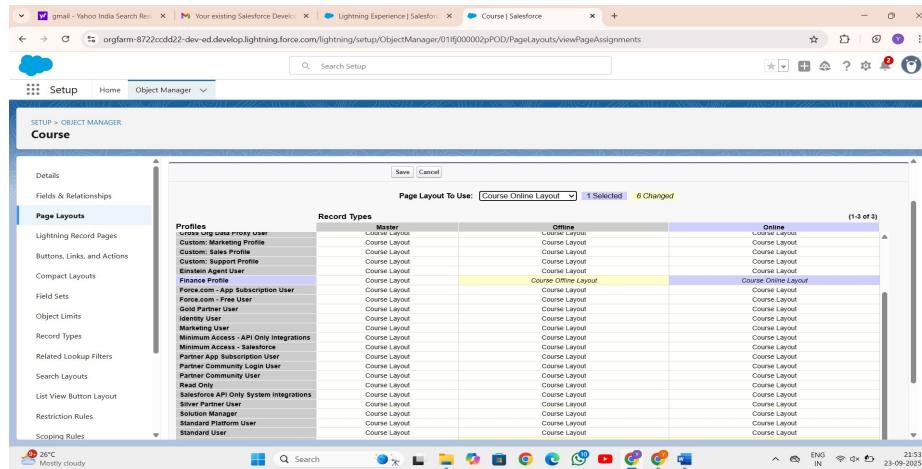
- Course Name: Sample Text
- Course code: Sample Text
- Online URL: www.salesforce.com
- Duration: 76.288
- Instructor: Sample Text
- Course: Sample Text
- Course ID: GEN-2004-001234
- Student: Sample Text

System Information section details:

- Created By: Sample Text
- Last Modified By: Sample Text

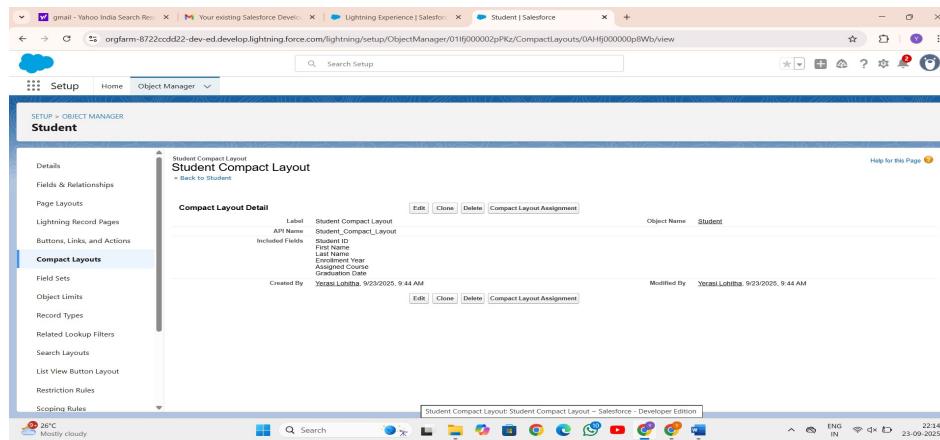
Custom Links section details:

- Mobile Cards (Salesforce mobile only)



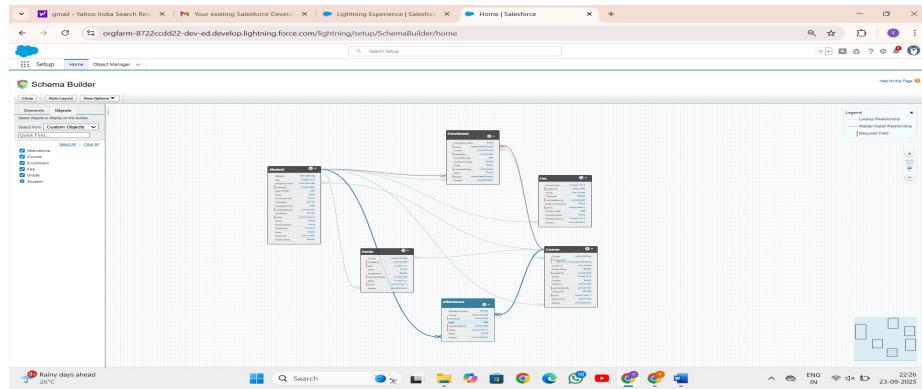
5. Compact Layouts

Compact layouts were configured to display key information (Name, Email, Department for Student) in the highlights panel.



6. Schema Builder

Schema Builder was used to visualize relationships between Student, Course, and Enrollment objects, making it easier to validate the data model.



7. Lookup vs Master-Detail vs Hierarchical Relationships

Relationships were created as follows:

- Student → Course: Many-to-Many relationship implemented using the Enrollment junction object.
- Lookup relationships were used where child records can exist independently.
- Master-Detail relationships were used for Enrollment to ensure cascading delete behavior and roll-up summary fields.

8. Junction Objects

Enrollment object was created as a junction object with two master-detail fields:

- Student (Master-Detail)
- Course (Master-Detail)

9. External Objects

An external object was configured to fetch reference data about available training materials from an external system, allowing real-time access without data duplication.

Action	Label	Deployed	External Data Source	Description
Edit Erase	Certification	✓	Resources	
Edit Erase	Library Resources	✓	Resources	
Edit Erase	Partner Courses	✓	Resources	
Edit Erase	Training Materials	✓	Resources	