

# Phase 3: Data Modeling & Relationships

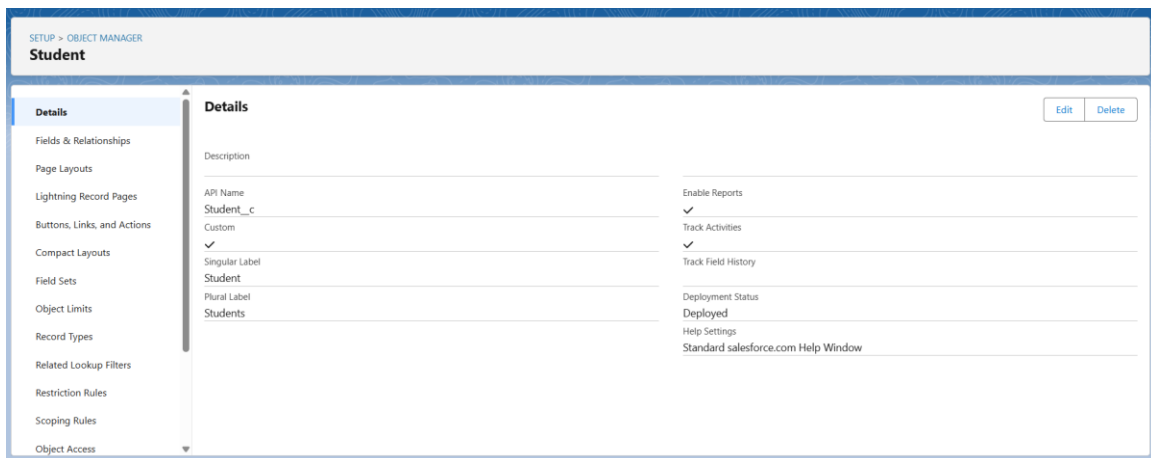
## - Completion Report

### 1. Standard & Custom Objects

Custom objects created for the Assignment & Exam Management System include:

#### Student\_\_c

- Student ID (Text, External ID, Unique)
- First Name, Last Name, Email, Phone
- Guardian (Lookup), Guardian Name, Guardian Contact
- Owner, Created By, Modified By



#### Guardian\_\_c

- Guardian ID (Auto Number, External ID, Unique)
- First Name, Last Name, Email (Unique), Phone
- Relationship to Student (Picklist)
- Owner, Created By, Modified By

SETUP > OBJECT MANAGER

## Guardian

**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

**Details**

Description

API Name  
Guardian\_\_c

Custom  
✓

Singular Label  
Guardian

Plural Label  
Guardians

Enable Reports  
✓

Track Activities  
✓

Track Field History  
✓

Deployment Status  
Deployed

Help Settings  
Standard salesforce.com Help Window

Edit Delete

## Course\_\_c

- Course Code (Unique), Name (Indexed)
- Credits, Instructor (Lookup), Schedule Info, Title
- Owner, Created By, Modified By

SETUP > OBJECT MANAGER

## Course

**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

**Details**

Description

API Name  
Course\_\_c

Custom  
✓

Singular Label  
Course

Plural Label  
Courses

Enable Reports  
✓

Track Activities  
✓

Track Field History

Deployment Status  
Deployed

Help Settings  
Standard salesforce.com Help Window

Edit Delete

## Assignments\_\_c

- Assignment Name (Text)
- Course (Lookup Course), Description (Long Text), Due Date
- Max Marks, Title
- Owner, Created By, Modified By

SETUP > OBJECT MANAGER

## Assignment

**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

**Details**

Edit Delete

Description

API Name  
Assignment\_\_c

Custom  
✓

Singular Label  
Assignment

Plural Label  
Assignments

Enable Reports  
✓

Track Activities  
✓

Track Field History  
✓

Deployment Status  
Deployed

Help Settings  
Standard salesforce.com Help Window

## Grade\_\_c

- Grade Number (Auto Number)
- Enrollment (Lookup), Student (Lookup), Subject (Lookup Course)
- Teacher (Lookup), Marks, Grade Date
- Owner, Created By, Modified By

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  
Restriction Rules  
Scoping Rules  
Object Access

**Details**

Edit Delete

Description

API Name  
Grade\_\_c

Custom  
✓

Singular Label  
Grade

Plural Label  
Grades

Enable Reports  
✓

Track Activities  
✓

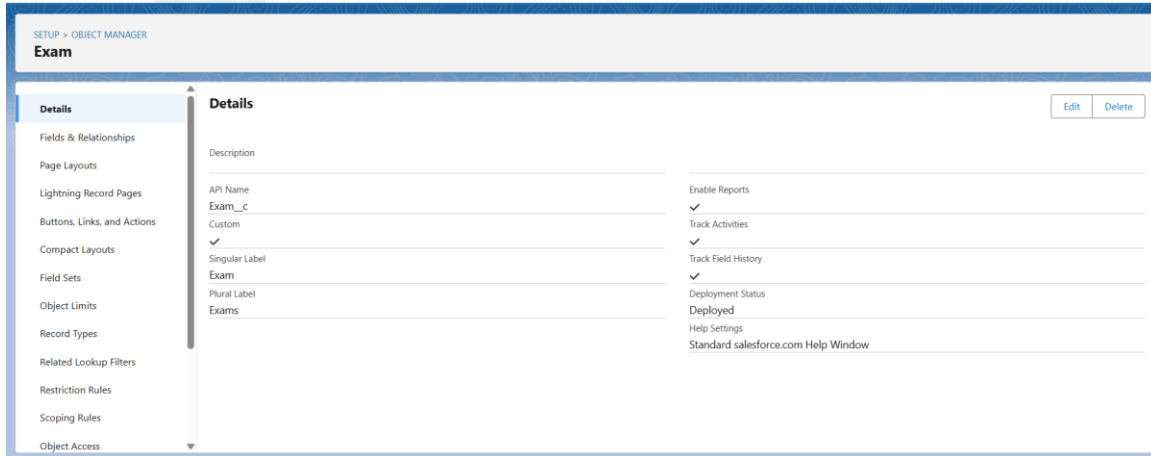
Track Field History

Deployment Status  
Deployed

Help Settings  
Standard salesforce.com Help Window

## Exam\_\_c

- Exam Name (Text), Exam Date, Exam Type (Picklist)
- Duration, Max Marks
- Course (Lookup Course)
- Owner, Created By, Modified By



SETUP > OBJECT MANAGER

**Exam**

**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

**Details**

Description

API Name  
Exam\_\_c

Custom

Singular Label  
Exam

Plural Label  
Exams

Enable Reports  
✓

Track Activities  
✓

Track Field History  
✓

Deployment Status  
Deployed

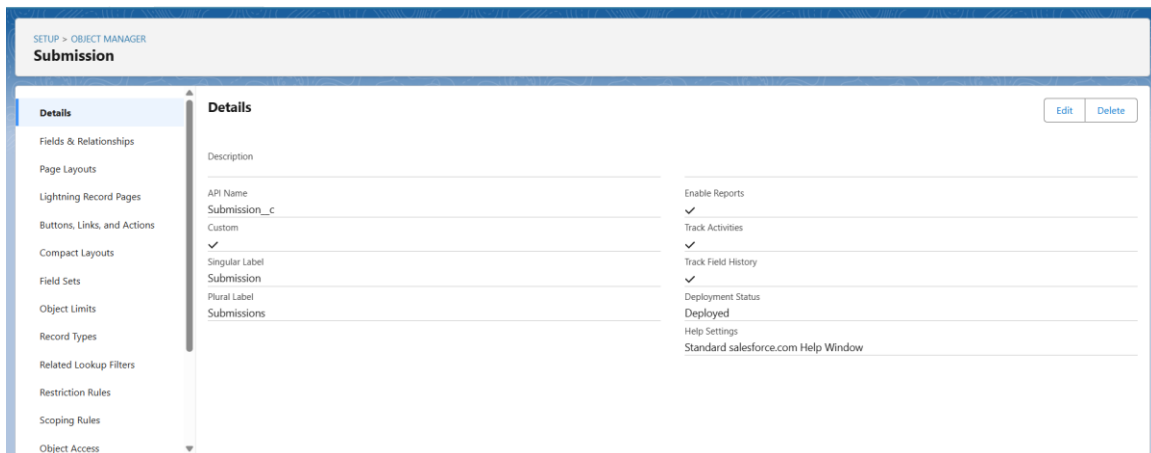
Help Settings  
Standard salesforce.com Help Window

Edit Delete

## Submissions\_\_c

- Submission Number (Auto Number), Submitted By (Lookup Student), Submitted Date
- Assignment (Lookup), Exam (Lookup)
- Owner, Created By, Modified By

**Process Flow:** Setup → Object Manager → New Custom Object → Add Fields. All objects were configured in the same way, with their respective fields as listed above.



SETUP > OBJECT MANAGER

**Submission**

**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

**Details**

Description

API Name  
Submission\_\_c

Custom

Singular Label  
Submission

Plural Label  
Submissions

Enable Reports  
✓

Track Activities  
✓

Track Field History  
✓

Deployment Status  
Deployed

Help Settings  
Standard salesforce.com Help Window

Edit Delete

## 2. Page Layouts

Configured for Student\_\_c as an example:

**Process Flow:** Setup → Object Manager → Student → Page Layouts → Student Layout → Drag fields into sections → Save.

Student Layout: Student Information section (Student ID, First Name, Last Name, Email, Phone), Guardian Info section (Guardian Name, Guardian Contact).

Related Lists added: Guardians, Enrollments, Grades.

Other objects (Guardian, Course, Assignment, Exam, Submissions, Grade) were configured similarly with relevant fields and related lists.

SETUP > OBJECT MANAGER

### Student

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

Student Layout

Save Quick Save Preview As... Cancel Undo Redo Layout Properties

Quick Find Field Name

Fields

Buttons	Section	First Name	Last Modified By	Student ID
Quick Actions	Blank Space	Guardian	Last Name	Student Name
Mobile & Lightning Actions		Created By	Guardian Contact	Owner
Expanded Lookups		Email	Guardian Name	Phone
Related Lists				
Report Charts				

Student Sample

Highlights Panel

Customize the highlights panel for this page layout.

Quick Actions in the Salesforce Classic Publisher

Actions in this section are currently inherited from the global publisher layout. You can [override the global publisher layout](#) to set a customized list of actions for the publisher on pages that use this layout.

Salesforce Mobile and Lightning Experience Actions

Actions in this section are available for Salesforce mobile and Lightning Experience. You can override the global publisher layout to set a customized list of actions for the publisher on pages that use this layout. If you override this section in the Publisher...

SETUP > OBJECT MANAGER

### Guardian

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

Guardian Layout

Save Quick Save Preview As... Cancel Undo Redo Layout Properties

Quick Find Field Name

Fields

Buttons	Section	First Name	Last Name
Quick Actions	Blank Space	Guardian ID	Owner
Mobile & Lightning Actions		Created By	Guardian Name
Expanded Lookups		Email	Last Modified By
Related Lists			Relationship to S...
Report Charts			

Information (Header visible on edit only)

Guardian Name	Sample Text	Owner	Sample Text
Guardian ID	GEN-2004-001234		
First Name	Sample Text		
Last Name	Sample Text		
Email	sarah.sample@company.com		
Phone	1-415-555-1212		
Relationship to Student	Sample Text		

System Information (Header visible on edit only)

Created By	Sample Text	Last Modified By	Sample Text
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Custom Links (Header visible on edit only)

Mobile Cards (Salesforce mobile only)

SETUP > OBJECT MANAGER

### Assignment

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

Assignment Layout

Save Quick Save Preview As... Cancel Undo Redo Layout Properties

Quick Find Field Name

Fields

Buttons	Section	Created By	Max Marks
Quick Actions	Blank Space	Description	Owner
Mobile & Lightning Actions		Assignment Name	Due Date
Expanded Lookups		Course	Title
Related Lists			Last Modified By
Report Charts			

Information (Header visible on edit only)

Assignment Name	Sample Text	Owner	Sample Text
Title	Sample Text		
Description	Sample Text		
Due Date	9/16/2025		
Max Marks	96.145		
Course	Sample Text		

System Information (Header visible on edit only)

Created By	Sample Text	Last Modified By	Sample Text
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Custom Links (Header visible on edit only)

Mobile Cards (Salesforce mobile only)

### **3. Lookup vs Master-Detail vs Hierarchical Relationships**

Lookup Relationship: Assignment linked to Course via Lookup.

Master-Detail Relationship: Exam- links to Student and Course.

Hierarchical Relationship: User roles such as Teacher under Academic\_Admin.