

Phase 3 : Data Modeling & Relationships

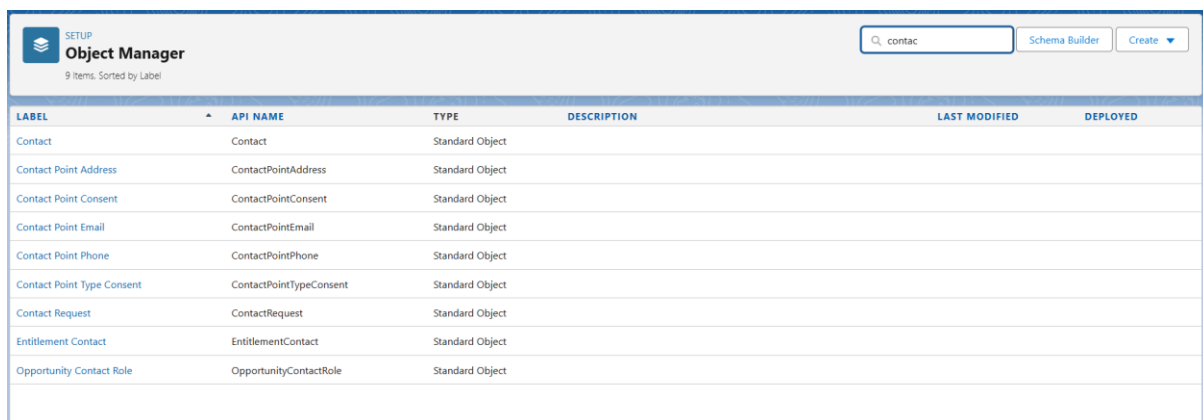
1. Standard & Custom Objects

- This is the foundation of your system. You will use a combination of standard and custom objects.

- **Standard Objects to Use:**

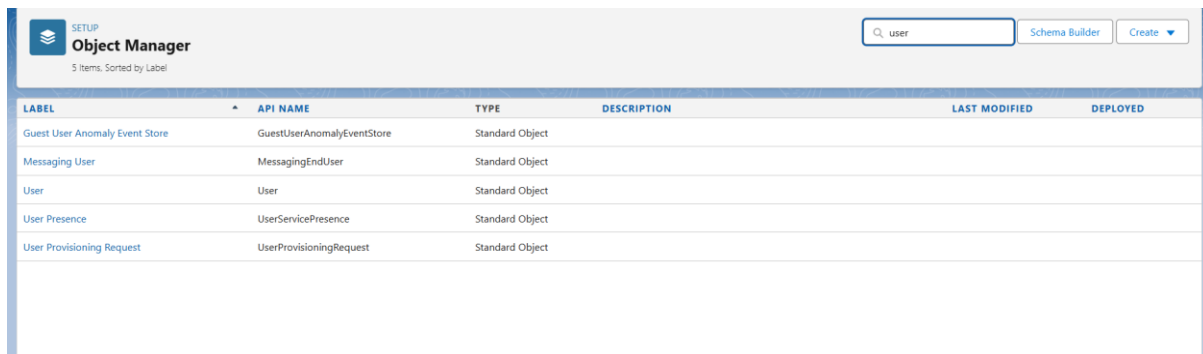
- Contact → who is being trained

- User → trainers



The screenshot shows the Salesforce Object Manager interface. The search bar contains 'contact', and the table displays 9 standard objects related to contacts. The interface includes a 'Schema Builder' button and a 'Create' dropdown menu.

LABEL	API NAME	TYPE	DESCRIPTION	LAST MODIFIED	DEPLOYED
Contact	Contact	Standard Object			
Contact Point Address	ContactPointAddress	Standard Object			
Contact Point Consent	ContactPointConsent	Standard Object			
Contact Point Email	ContactPointEmail	Standard Object			
Contact Point Phone	ContactPointPhone	Standard Object			
Contact Point Type Consent	ContactPointTypeConsent	Standard Object			
Contact Request	ContactRequest	Standard Object			
Entitlement Contact	EntitlementContact	Standard Object			
Opportunity Contact Role	OpportunityContactRole	Standard Object			



The screenshot shows the Salesforce Object Manager interface. The search bar contains 'user', and the table displays 5 standard objects related to users. The interface includes a 'Schema Builder' button and a 'Create' dropdown menu.


LABEL	API NAME	TYPE	DESCRIPTION	LAST MODIFIED	DEPLOYED
Guest User Anomaly Event Store	GuestUserAnomalyEventStore	Standard Object			
Messaging User	MessagingEndUser	Standard Object			
User	User	Standard Object			
User Presence	UserServicePresence	Standard Object			
User Provisioning Request	UserProvisioningRequest	Standard Object			


- **Custom Objects to Use:**

- Training Session → details of each training event

- Training Material → docs, slides, videos used

- Certificate → issued after successful completion

<div> <div>  <div> <div>SETUP</div> <div>Object Manager</div> <div>2 Items, Sorted by Label</div> </div> </div> <div> <input type="text" value="train"/> <div> <div>Schema Builder</div> <div>Create ▾</div> </div> </div> </div>					
LABEL	API NAME	TYPE	DESCRIPTION	LAST MODIFIED	DEPLOYED
Training Material	Training_Material__c	Custom Object		9/22/2025	✓
Training Session	Training_Session__c	Custom Object		9/22/2025	✓

<div> <div>  <div> <div>SETUP</div> <div>Object Manager</div> <div>1 Items, Sorted by Label</div> </div> </div> <div> <input type="text" value="cer"/> <div> <div>Schema Builder</div> <div>Create ▾</div> </div> </div> </div>					
LABEL	API NAME	TYPE	DESCRIPTION	LAST MODIFIED	DEPLOYED
Certificate	Certificate__c	Custom Object		9/22/2025	✓

2.Fields

These are the specific data points you will track on each object.

Action Steps:

1.Navigate to Setup > Object Manager.

2.Select each custom object (Training session, Training Material, Certificate) and use the Fields & Relationships section to add the following fields:

a)On the Training Session object :

- Name (Data type: Text)
- Date (Data type: Date)
- Duration (Data type: Number)
- Trainer (Data type: Lookup to User)

b) On the Training Material object :

- Name (Data type: Text)
- File Link (Data type: Url)
- Type (Data type: Picklist - Doc/ Video/ Slide)

c)On the Certificate object :

- Certificate Number (Data type: Number)
- Contact (Data type: Lookup to Contact)

SETUP > OBJECT MANAGER
Training Session

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
Created By	CreatedById	Lookup(User)		
Date	Date__c	Date		
Duration	Duration__c	Number(18, 0)		
Last Modified By	LastModifiedById	Lookup(User)		
Name	Name__c	Text(20)		
Owner	OwnerId	Lookup(User,Group)		✓
Trainer	Trainer__c	Lookup(User)		✓
Training Material Name	Name	Text(80)		✓

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
Flow Triggers

SETUP > OBJECT MANAGER
Certificate

Details

Fields & Relationships
6 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
Certificate Name	Name	Text(80)		✓
Certificate Number	Certificate_Number__c	Number(18, 0) (Unique)		✓
Contact	Contact__c	Lookup(Contact)		✓
Created By	CreatedById	Lookup(User)		
Last Modified By	LastModifiedById	Lookup(User)		
Owner	OwnerId	Lookup(User,Group)		✓

Page Layouts
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Buttons, Links, and Actions
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Triggers

3. Record Types & Page Layouts

- These allow you to customize the user experience for different processes. For example, you can create different page layouts on the Training Session object for a Technical Training vs Soft Skills Training to support the needs of the Admissions Team and Instructors.

- **Action Steps:**

1. Navigate to the Training Session object and create two Page Layouts: one named "Sections & Fields" and another named "Related Lists".

2. On the Training Session object, go to Record Types and create new record type: "Technical Training" and "Soft Skills Training", assigning the corresponding layout.

SETUP > OBJECT MANAGER
Training Session

Details
Fields & Relationships
Page Layouts
Lightning Record Pages
Buttons, Links, and Actions
Compact Layouts
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Related Lookup Filters
Restriction Rules
Scoping Rules
Object Access
Triggers

Page Layouts
3 Items, Sorted by Page Layout Name

Q, Quick Find New Page Layout Assignment

PAGE LAYOUT NAME	CREATED BY	MODIFIED BY
Related List	Nitin Dwivedi, 9/23/2025, 1:49 AM	Nitin Dwivedi, 9/23/2025, 1:49 AM
Sections and Fields	Nitin Dwivedi, 9/23/2025, 1:49 AM	Nitin Dwivedi, 9/23/2025, 1:49 AM
Training Session Layout	Nitin Dwivedi, 9/22/2025, 9:47 AM	Nitin Dwivedi, 9/23/2025, 1:15 AM

Compact Layouts

This controls the highlights panel at the top of a record. Action Steps:

For Contact :

- 1.Navigate to the Contact object and go to Compact Layouts.
- 2.Create a new layout named "Contact info".
- 3.Add key fields like Name and Email.
- 4.Use Compact Layout Assignment to make this the primary layout.

For Training Session :

- 1.Navigate to the Training Session Object and go to Compact layouts
- 2.Create a new layout named "session Info".
- 3.Add key fields like Name, Date and Trainer.

SETUP > OBJECT MANAGER
Training Session

Details
Fields & Relationships
Page Layouts
Lightning Record Pages
Buttons, Links, and Actions
Compact Layouts

Compact Layouts
2 Items, Sorted by Label

Q, Quick Find New Compact Layout Assignment

LABEL	API NAME	PRIMARY	MODIFIED BY	LAST MODIFIED
Session Info	Session_Info		Nitin Dwivedi	9/23/2025, 2:06 AM
System Default	SYSTEM	✓		

SETUP > OBJECT MANAGER

Contact

Details

Fields & Relationships

Page Layouts

Lightning Record Pages

Buttons, Links, and Actions

Compact Layouts

Compact Layouts
2 Items, Sorted by Label

Q, Quick Find

New

Compact Layout Assignment

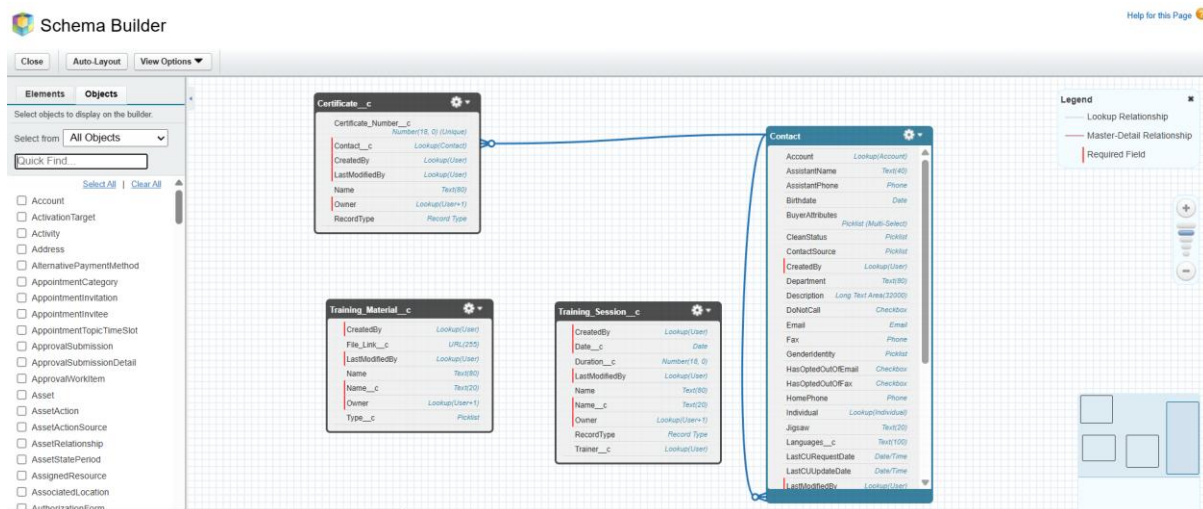
LABEL	API NAME	PRIMARY	MODIFIED BY	LAST MODIFIED
Contact Info	Contact_Info	✓	Nitin Dwivedi	9/23/2025, 2:08 AM
System Default	SYSTEM			

5.Schema Builder

Use this tool to visualize your completed data model

Action Steps:

- 1.Go to Setup > Schema Builder.
- 2.Select your objects: Training Session, Certificate, Training Material, Contacts.
- 3.Review the diagram to visually confirm the relationships you built.



6.Relationships & Junction Objects

These relationships will connect your objects to create the 360-degree view of the student mentioned in your project plan.

- Junction Object: Your Attendance object is the junction object. so each record must have a Contact and a Training Session.

Action Steps:

1.Lookup Relationship :

- o Certificate → Training Session.

- o Training Session → Trainer.

2.Master-Detail Relationship :

- o Attendance → Contact.

- o Attendance → Training Session.

7.External Objects

- o This is a conceptual topic for this project. External Objects allow you to view data from other systems. For example, if your platform used an external library management system, you could create an External Object to display a student's checked-out books within Salesforce without actually storing that data.