

Phase 3: Data Modeling & Relationships

🔑 **Goal: Build data structure.**

1. Standard & Custom Objects

- Standard objects are Salesforce's pre-configured objects like Account, Contact, Case, or Opportunity. Custom objects are created to store data specific to your business needs that standard objects cannot handle.
- **Use Case:** In a retail loyalty CRM, standard objects like Account and Contact can store and customer information. Custom objects like Feedback, Loyalty_Points, or Offer can track customer interactions, loyalty rewards, and promotional offers.

The screenshot displays the Salesforce Object Manager interface. At the top, there are navigation tabs for Setup, Home, and Object Manager. Below the tabs, the 'Object Manager' section is active, showing a search bar with 'offe' and buttons for 'Schema Builder' and 'Create'. A table lists two custom objects: 'Contact Offer' and 'Offer'. Below this, another section shows a search bar with 'feed' and buttons for 'Schema Builder' and 'Create', with a table listing one custom object: 'Feedback'. At the bottom, a third table lists one custom object: 'Purchase History'.

LABEL	API NAME	TYPE	DESCRIPTION	LAST MODIFIED	DEPLOYED
Contact Offer	Contact_Offer__c	Custom Object		9/22/2025	✓
Offer	Offer__c	Custom Object		9/21/2025	

LABEL	API NAME	TYPE	DESCRIPTION	LAST MODIFIED	DEPLOYED
Feedback	Feedback__c	Custom Object		9/19/2025	

LABEL	API NAME	TYPE	DESCRIPTION	LAST MODIFIED	DEPLOYED
Purchase History	Purchase_History__c	Custom Object		9/19/2025	

2. Fields

- Fields are the individual data points stored on objects. Fields can be of types like text, number, picklist, checkbox, or formula.
- **Use Case:** On the Feedback object, you might have fields like Rating (1–5), Comments (text area), and Feedback_Date. These fields allow detailed tracking of customer satisfaction per store visit.

SETUP > OBJECT MANAGER

Feedback

Details	Fields & Relationships	Q Quick Find	New	Deleted Fields	Field Dependencies	Set History Tracking
Fields & Relationships	13 Items, Sorted by Field Label					
Page Layouts						
Lightning Record Pages						
Buttons, Links, and Actions						
Compact Layouts						
Field Sets						
Object Limits						
Record Types						
Related Lookup Filters						

FIELD LABEL	FIELD NAME	DATA TYPE	CONTROLLING FIELD	INDEXED
Comments	Comments__c	Long Text Area(32000)		
Created By	CreatedById	Lookup(User)		
Customer	Customer__c	Master-Detail(Contact)		✓
Feedback Name	Name	Auto Number		✓
Last Modified By	LastModifiedById	Lookup(User)		
Purchase	Purchase__c	Lookup(Purchase History)		✓

3. Record Types

- Record Types enable the same object to have various business processes, picklist values, and page layouts depending on the type of record.
- Use Case:**
 - Feedback Object: You have three record types:
 - Complaint – for negative customer feedback requiring escalation.
 - Suggestion – for ideas or improvement requests from customers.
 - Positive Note – to track positive feedback or compliments.
 These record types allow the Feedback object to display different fields or picklist values depending on the type, making it easier for staff to categorize and act on feedback.
 - Offers Object: You have three record types:
 - Discount – e.g., percentage-based discounts.
 - Cashback – rewards returned to customers after purchase.
 - Freebie – complimentary items or promotional gifts.
 Record Types here allow configuring different fields (like discount %, cashback amount, or free item SKU) and page layouts for each offer type.

SETUP > OBJECT MANAGER

Feedback

Details	Record Types	Q Quick Find	New	Page Layout Assignment
Record Types	3 Items, Sorted by Record Type Label			
Fields & Relationships				
Page Layouts				
Lightning Record Pages				
Buttons, Links, and Actions				
Compact Layouts				
Field Sets				
Object Limits				
Record Types				
Related Lookup Filters				

RECORD TYPE LABEL...	DESCRIPTION	ACTIVE	MODIFIED BY
Complaint	Record type for customer complaints. Escalations apply.	✓	Bindu Anireddy, 9/22/2025, 8:41 AM
Praise	Record type for customer positive feedback.	✓	Bindu Anireddy, 9/22/2025, 8:41 AM
Suggestion	Record type for customer suggestions.	✓	Bindu Anireddy, 9/22/2025, 8:41 AM

SETUP > OBJECT MANAGER

Offer

Details

Fields & Relationships

Page Layouts

Lightning Record Pages

Buttons, Links, and Actions

Compact Layouts

Field Sets

Record Types

3 Items, Sorted by Record Type Label

Q Quick Find

NewPage Layout Assignment

RECORD TYPE LABEL... ^	DESCRIPTION	ACTIVE	MODIFIED BY	
Cashback	Record type for cashback-based offers.	✓	Bindu Anireddy, 9/22/2025, 12:15 AM	▼
Discount	Record type for discount-based offers.	✓	Bindu Anireddy, 9/22/2025, 12:14 AM	▼
Freebie	Record type for freebie-based offers (e.g., free gifts).	✓	Bindu Anireddy, 9/22/2025, 12:16 AM	▼

4. Page Layouts

- Page Layouts define how fields, related lists, and sections appear on a record page. They manage the user experience for creating, viewing, or editing records.
- **Use Case:** On the Customer object, a page layout can highlight loyalty points and feedback history for retail staff, while keeping administrative details like account creation info in a separate section.

SETUP > OBJECT MANAGER

Feedback

Details

Fields & Relationships

Page Layouts

Lightning Record Pages

Buttons, Links, and Actions

Compact Layouts

Field Sets

Page Layouts

4 Items, Sorted by Page Layout Name

Q Quick Find

New

Page Layout Assignment

PAGE LAYOUT NAME	CREATED BY	MODIFIED BY	
Complaint Layout	Bindu Anireddy, 9/22/2025, 12:04 AM	Bindu Anireddy, 9/24/2025, 5:37 AM	
Feedback Layout	Bindu Anireddy, 9/19/2025, 3:13 AM	Bindu Anireddy, 9/24/2025, 5:37 AM	
Praise Layout	Bindu Anireddy, 9/22/2025, 12:05 AM	Bindu Anireddy, 9/24/2025, 5:37 AM	
Suggestion Layout	Bindu Anireddy, 9/22/2025, 12:04 AM	Bindu Anireddy, 9/24/2025, 5:37 AM	

5. Compact Layouts

- Compact Layouts control which fields are seen in the highlights panel of a record (e.g., on mobile or Lightning Experience).
- **Use Case:** For a customer record, a compact layout can display the Name, Loyalty Tier, and Last Purchase Date at a glance, helping store staff quickly understand the customer profile.

SETUP > OBJECT MANAGER

Feedback

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

Compact Layouts
2 Items, Sorted by Label

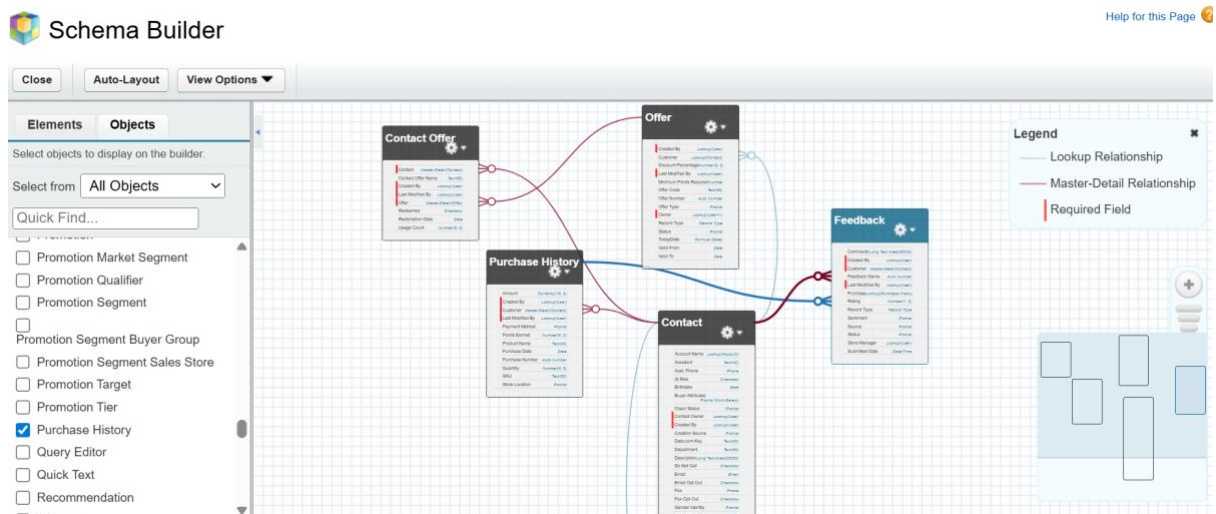
Q Quick Find

New Compact Layout Assignment

LABEL	API NAME	PRIMARY	MODIFIED BY	LAST MODIFIED
Feedback Compact Layout	Feedback_Compact_Layout		Bindu Anireddy	9/22/2025, 3:15 AM
System Default	SYSTEM	✓		

6. Schema Builder

- Schema Builder is a visual tool in Salesforce to outlook and govern objects, fields, and relationships in a drag-and-drop interface.
- **Use Case:** In your retail CRM, you can use Schema Builder to quickly visualize how Customer, Feedback, Offer, and Loyalty_Points objects are connected, making it easier to plan relationships.



7. Lookup vs Master-Detail vs Hierarchical

- **Lookup Relationship:** Loose connection between two objects; child can exist without parent.
- **Master-Detail Relationship:** Strong connection; child's existence depends on parent, and parent controls sharing & security.
- **Hierarchical Relationship:** Special lookup on the User object to define management chains.
- **Use Case:**
 - Customer → Feedback can be a **Lookup** (feedback can exist independently).

- Customer → Loyalty_Points can be **Master-Detail** (points are meaningless without a customer).
- User → Manager can use **Hierarchical** to define store employee reporting structure.

Feedback Custom Field

Customer

[Back to Feedback](#)

Validation Rules [1]

Custom Field Definition Detail

Edit

Set Field-Level Security

View Field Accessibility

Where is this used?

Field Information

Field Label	Customer	Object Name	Feedback
Field Name	Customer	Data Type	Master-Detail
API Name	Customer__c		
Description			
Help Text			
Data Owner			
Field Usage			
Data Sensitivity Level			
Compliance Categorization			
Created By	Bindu Anireddy , 9/19/2025, 3:16 AM	Modified By	Bindu Anireddy , 9/22/2025, 10:18 AM

Feedback Custom Field

Purchase

[Back to Feedback](#)

Validation Rules [0]

Custom Field Definition Detail

Edit

Set Field-Level Security

View Field Accessibility

Where is this used?

Field Information

Field Label	Purchase	Object Name	Feedback
Field Name	Purchase	Data Type	Lookup
API Name	Purchase__c		
Description			
Help Text			
Data Owner			
Field Usage			
Data Sensitivity Level			
Compliance Categorization			
Created By	Bindu Anireddy , 9/19/2025, 3:17 AM	Modified By	Bindu Anireddy , 9/19/2025, 3:17 AM

8. Junction Objects

- A junction object allows many-to-many relationships between two objects. It contains two master-detail relationships.
- **Use Case:** For a promotion program, Customer ↔ Offer can be many-to-many. The junction object Customer_Offer tracks which customers received which offers.

SETUP > OBJECT MANAGER

Contact Offer

Details

Fields & Relationships 8 Items, Sorted by Field Label

Quick Find

New Deleted Fields Field Dependencies Set History Tracking

FIELD LABEL	FIELD NAME	DATA TYPE	CONTROLLING FIELD	INDEXED
Contact	Contact__c	Master-Detail(Contact)		✓
Contact Offer Name	Name	Text(80)		✓
Created By	CreatedById	Lookup(User)		
Last Modified By	LastModifiedById	Lookup(User)		
Offer	Offer__c	Master-Detail(Offer)		✓
Redeemed	Redeemed__c	Checkbox		

9. External Objects

- External objects allow Salesforce to access data stored outside of Salesforce in real-time (via OData or other external sources).
- **Use Case:** If inventory is directed in an external ERP system, an external object Store_Inventory can bring in stock levels in real-time without storing the data in Salesforce.

SETUP

External Objects

Help for this Page

Use external objects to virtually represent external data as Salesforce objects. External objects map to a table in a data source outside the Salesforce org and enable access to that data via custom tabs and search. Each external object requires an [external data source](#) definition for connection details.

New External Object

Action	Label	Deployed	External Data Source	Description
Edit Erase	Category	<input type="checkbox"/>	SupplierCatalog	Categories
Edit Erase	Product	<input type="checkbox"/>	SupplierCatalog	Products

