

## Phase 3: Data Modeling & Relationships

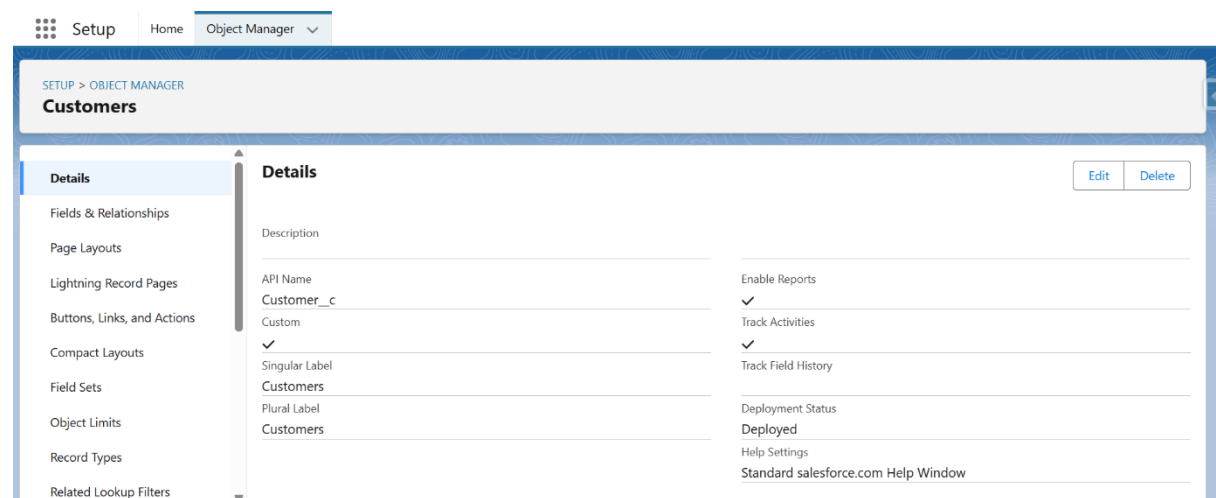
### Objective:

Design a robust data structure for the Smart Retail Customer Insights Tracker to store customer, product, and purchase information. This ensures proper relationships for automation, reporting, and UI features in later phases.

### 1. Customer Object (Customer\_\_c)

#### Purpose:

Stores all essential customer information, enabling tracking of purchases and loyalty points.



#### Fields:

Created custom fields such as email, phone, tier and loyalty points in the customer custom object.

Field Name	Data Type	Description
Name	Text	Customer full name
Email	Email	Customer email address
Phone	Phone	Customer contact number
Tier	Picklist	Customer category (Silver, Gold, Platinum)
Loyalty Points	Number	Total points accumulated by the customer

Fields & Relationships				Quick Find		New	Deleted Fields	Field Dependencies	Set History Tracking
8 Items, Sorted by Field Label									
Customer Name	Name	Text(80)	✓						
Email	Email__c	Email							
Last Modified By	LastModifiedById	Lookup(User)							
Loyalty Points	Loyalty_Points__c	Number(18, 0)							
Owner	OwnerId	Lookup(User,Group)	✓						
Phone	Phone__c	Phone							
Tier	Tier__c	Picklist							

## Relationships:

- Acts as the parent in the Purchase relationship.

## Outcome:

- Supports customer tracking and loyalty points automation.

## 2. Product Object (Product\_\_c)

### Purpose:

Stores details of all products available for purchase.

SETUP > OBJECT MANAGER

Products

Details

Fields & Relationships

Page Layouts

Lightning Record Pages

Buttons, Links, and Actions

Compact Layouts

Field Sets

Object Limits

Record Types

Related Lookup Filters

Details

Description

API Name

Product\_\_c

Custom

✓

Singular Label

Products

Plural Label

Products

Enable Reports

✓

Track Activities

✓

Track Field History

Deployment Status

Deployed

Help Settings

Standard salesforce.com Help Window

Edit

Delete

Field Name	Data Type	Description
Name	Text	Product name
Product Code	Text	Unique code identifying the product

Field Name	Data Type	Description
Category	Picklist	Product category (Electronics, Clothing, etc.)
Price	Currency	Product price
Quantity	Number	Quantity available in stock

Fields & Relationships			<input type="text" value="Quick Find"/>		New	Deleted Fields	Field Dependencies	Set History Tracking
8 Items, Sorted by Field Label								
Created By	CreatedById	Lookup(User)						
Last Modified By	LastModifiedById	Lookup(User)						
Owner	OwnerId	Lookup(User,Group)						
Price	Price__c	Currency(18, 0)						
Product Code	Product_Code__c	Auto Number						
Product Name	Name	Text(80)						
Stock Quantity	Stock_Quantity__c	Number(18, 0)						

**Relationships:**

- Acts as the parent in the Purchase relationship.

**Outcome:**

- Supports linking products to purchases, tracking stock, and reporting.

**3. Purchase Object (Purchase\_\_c)**

**Purpose:**

Records each purchase transaction, linking Customers to Products.

SETUP > OBJECT MANAGER

Purchase

Details

Fields & Relationships

Page Layouts

Lightning Record Pages

Buttons, Links, and Actions

Compact Layouts

Field Sets

Object Limits

Record Types

Related Lookup Filters

Details

Description

API Name

Purchase\_\_c

Custom

✓

Singular Label

Purchase

Plural Label

Purchases

Enable Reports

✓

Track Activities

✓

Track Field History

Deployment Status

Deployed

Help Settings

Standard salesforce.com Help Window

Edit

Delete

**Fields:**

Field Name	Data Type	Description
Customer Lookup	Lookup	Links purchase to Customer__c
Product Lookup	Lookup	Links purchase to Product__c
Quantity	Number	Quantity purchased
Total Amount	Formula	Quantity × Product Price
Loyalty Points	Number	Points earned from this purchase

Fields & Relationships			
9 Items, Sorted by Field Label			
<input type="text" value="Quick Find"/> <a href="#">New</a> <a href="#">Deleted Fields</a> <a href="#">Field Dependencies</a> <a href="#">Set History Tracking</a>			
Customers	Customers__c	Lookup(Customers)	✓
Last Modified By	LastModifiedById	Lookup(User)	
Owner	OwnerId	Lookup(User,Group)	✓
Products	Products__c	Lookup(Products)	✓
Purchase Date	Purchase_Date__c	Date	
Purchase Number	Name	Auto Number	✓
Quantity	Quantity__c	Number(18, 0)	

### Relationships:

- Lookup to Customer
- Lookup to Product

### Outcome:

- Tracks purchases accurately and supports automation.