

# Project Title: Smart Customer Retention & Loyalty Management System

## Phase 3: Data Modeling & Relationships

### Step 1: Standard & Custom Objects

#### Standard Objects (already available)

- **Account** → represents a company or organization.
- **Contact** → represents individual customers belonging to Accounts.

👉 You don't need to create these; just know you will link them later.

#### Create New Custom Objects

##### A. Loyalty Transaction

1. Click ⚙ Setup → Object Manager → Create → Custom Object.
2. Fill details:
  - Label: Loyalty Transaction
  - Plural Label: Loyalty Transactions
  - API Name: Loyalty\_Transaction\_\_c
  - Record Name: Transaction ID → Data Type: **Auto Number**
  - Format: TX-{0000}
  - Allow Reports:  Allow Activities:  Track Field History:
3. Save.

##### B. Engagement Activity

1. Setup → Object Manager → New Custom Object.
2. Fill details:
  - Label: Engagement Activity
  - Plural Label: Engagement Activities
  - API Name: Engagement\_Activity\_\_c
  - Record Name: Activity Name (Text).
  - Allow Reports:  Allow Activities:
3. Save.

The image contains two screenshots of the Salesforce Setup interface, specifically the Object Manager section.

**Screenshot 1: Engagement Activity**

- API Name:** Engagement\_Activity\_c
- Custom:** ✓
- Singular Label:** Engagement Activity
- Plural Label:** Engagement Activities
- Enable Reports:** ✓ (Track Activities, Track Field History)
- Deployment Status:** Deployed
- Help Settings:** Standard salesforce.com Help Window

**Screenshot 2: Loyalty Transaction**

- API Name:** Loyalty\_Transaction\_c
- Custom:** ✓
- Singular Label:** Loyalty Transaction
- Plural Label:** Loyalty Transactions
- Enable Reports:** ✓ (Track Activities, Track Field History)
- Deployment Status:** Deployed
- Help Settings:** Standard salesforce.com Help Window

## Step 2: Fields

### A. On Customer Retention Data

1. Go to **Object Manager** → **Customer Retention Data** → **Fields & Relationships** → **New**.
2. Create these fields:
  - **Customer Email** → Data Type: Email.
  - **Enrollment Date** → Data Type: Date.
  - **Total Purchases** → Data Type: Currency.

## B. On Loyalty Transaction

1. Object Manager → Loyalty Transaction → Fields & Relationships → New.
2. Create:
  - **Transaction Type** → Picklist (Credit, Debit).
  - **Points Changed** → Number.
  - **Transaction Date** → Date/Time.

## C. On Engagement Activity

1. Object Manager → Engagement Activity → Fields & Relationships → New.
2. Create:
  - **Activity Type** → Picklist (Email, Call, Meeting, Survey).
  - **Activity Date** → Date/Time.

- o Notes → Long Text Area.

FIELD LABEL	FIELD NAME	DATA TYPE	CONTROLLING FIELD	INDEXED
Activity Date	Activity_Date__c	Date/Time		
Activity Name	Name	Text(80)		✓
Activity Type	Activity_Type__c	Picklist		
Created By	CreatedById	Lookup(User)		
Last Modified By	LastModifiedById	Lookup(User)		
Notes	Notes__c	Long Text Area(32768)		
Owner	OwnerId	Lookup(User,Group)		✓

### Step 3: Record Types

1. Setup → Object Manager → Customer Retention Data → **Record Types** → New.
2. Create:
  - o Record Type Label: At-Risk Customer → API Name: At\_Risk\_Customer.
  - o Assign to profiles (System Admin, CSM).
3. Create another:
  - o Label: Loyalty-Enrolled Customer → API Name: Loyalty\_Enrolled\_Customer.
  - o Assign to profiles.

RECORD TYPE LABEL	DESCRIPTION	ACTIVE	MODIFIED BY
At-Risk Customer		✓	Harika Nayudu, 9/24/2025, 10:44 AM
Loyalty-Enrolled Customer			Harika Nayudu, 9/24/2025, 10:46 AM

### ◆ Step 4: Page Layouts

1. Go to **Object Manager** → **Customer Retention Data** → **Page Layouts**.
2. Create two layouts:

## At-Risk Layout

1. Click **New Page Layout**
2. Name it: At-Risk Layout.
3. In the layout editor:
  - o Drag fields like **Risk Score**, **Churn Flag**, and **Last Interaction Date** into the section called **Risk Information**.
4. Save.

## Loyalty-Enrolled Layout

1. Again, click **New Page Layout** → Name it: Loyalty-Enrolled Layout.
2. In the editor:
  - o Drag fields like **Loyalty Tier**, **Points Balance**, and **Total Purchases** into a section called **Loyalty Details**.
3. Save.

The screenshot shows the Salesforce Setup interface with the following details:

- Setup > OBJECT MANAGER**
- Customer Retention Data**
- Page Layouts** (selected)
- Page Layout Name**: 3 items, Sorted by Page Layout Name
- At-Risk Layout**, **Customer Retention Data Layout**, **Loyalty-Enrolled Layout**
- CREATED BY**: Harika Nayudu
- MODIFIED BY**: Harika Nayudu
- Quick Find**, **New**, **Page Layout Assignment**

## Assign Layouts to Record Types

1. Still inside **Page Layouts**, click the button **Page Layout Assignment** (top right).
2. Click it → then click **Edit Assignment**.
3. For:
  - o **At-Risk Customer Record Type** → assign the **At-Risk Layout**.
  - o **Loyalty-Enrolled Customer Record Type** → assign the **Loyalty-Enrolled Layout**.
4. Save.

## Step 5: Compact Layouts

1. Go to Object Manager → Customer Retention Data → **Compact Layouts** → **New**.
2. Name: CRD Compact Layout.
3. Select fields: Customer Name, Loyalty Tier, Risk Score, Last Interaction Date.
4. Save → Set as **Primary Compact Layout**.

The screenshot shows the Salesforce Setup interface with the following details:

- SETUP > OBJECT MANAGER**
- Customer Retention Data**
- Compact Layouts** (selected)
- CRD Compact Layout** (new layout created)
- Compact Layout Detail**:
  - Label**: CRD Compact Layout
  - API Name**: CRD\_Compact\_Layout
  - Included Fields**: Customer Name, Loyalty Tier, Risk Score, Last Interaction Date
  - Created By**: Harika Nayudu, 9/24/2025, 11:12 AM
  - Modified By**: Harika Nayudu, 9/24/2025, 11:12 AM
- Help for this Page**

SETUP > OBJECT MANAGER  
Customer Retention Data

Compact Layouts

LABEL	API NAME	PRIMARY	MODIFIED BY	LAST MODIFIED
CRD Compact Layout	CRD_Compact_Layout	✓	Nayudu Nayudu	9/24/2025, 11:12 AM
System Default	SYSTEM			

## ◆ Step 6: Schema Builder

1. Setup → Quick Find → **Schema Builder**.

2. From left panel, select objects:

- Customer Retention Data
- Loyalty Transaction
- Engagement Activity
- Account

3. Arrange them to clearly show relationships.

Loyalty Transaction → Customer Retention Data (Lookup).

Engagement Activity → Customer Retention Data (Master-Detail).

Customer Retention Data → Account (Lookup).

Schema Builder

Elements Objects

Select objects to display on the builder:

Customer Retention Data

- Churn Flag
- Created By
- Customer Email
- Customer Name
- Enrollment Date
- Last Interaction Date
- Last Modified By
- Loyalty Tier
- Owner
- Private Balance
- Rewards Type
- Risk Score
- Total Purchases

Engagement Activity

- Activity Date
- Activity Name
- Activity Type
- Category
- Customer
- Master-Detail(Customer Retention Data)
- Last Modified By
- Notes

Loyalty Transaction

- Created By
- Customer
- Master-Detail(Customer Retention Data)
- Last Modified By
- Loyalty Transaction
- Owner
- Profit Charged
- Transaction Date
- Transaction Type

Account

- Account Name
- Account Number
- Account Owner
- Account Record Type
- Account Site
- Active
- Annual Revenue
- Billing Address
- Clean Status
- Created By
- Customer
- Customer Priority
- Data Category
- Data com Key
- Description
- D-U-N-S Number
- Einstein Account Tier
- Employees
- Fax
- Last Support Plan
- Notes
- Last Modified By
- Phone

## Step 7: Relationships

### • Lookup Relationship

○ Loyalty Transaction → Customer Retention Data

○ (Steps: Loyalty Transaction → Fields & Relationships → New → Lookup → Related To Customer Retention Data).

Loyalty Transaction

**Fields & Relationships**

FIELD LABEL	FIELD NAME	DATA TYPE	CONTROLLING FIELD	INDEXED
Created By	CreatedById	Lookup(User)		
Customer	Customer__c	Lookup(Customer Retention Data)		
Last Modified By	LastModifiedById	Lookup(User)		

- **Master-Detail Relationship**

- Engagement Activity → Customer Retention Data
- (Steps: Engagement Activity → Fields & Relationships → New → Master-Detail → Related To Customer Retention Data).

Engagement Activity

**Fields & Relationships**

FIELD LABEL	FIELD NAME	DATA TYPE	CONTROLLING FIELD	INDEXED
Activity Date	Activity_Date__c	Date/Time		
Activity Name	Name	Text(80)		
Activity Type	Activity_Type__c	Picklist		
Created By	CreatedById	Lookup(User)		
Customer	Customer__c	Master-Detail(Customer Retention Data)		
Last Modified By	LastModifiedById	Lookup(User)		
Notes	Notes__c	Long Text Area(32768)		

- **Hierarchical Relationship**

- Only available on User object.
- Example: A Customer Success Manager user reports to Sales Manager user.

## Step 8: Junction Objects

1. Create new custom object: **Customer Loyalty Enrollment**.
  - Record Name: Auto Number (ENR-{0000}).
2. Add two Master-Detail fields:
  - Customer Retention Data.
  - Loyalty Program (create Loyalty Program object first).
3. This junction object now allows many-to-many between customers and loyalty programs.

The screenshot shows the Salesforce Setup interface with the following details:

**Setup > OBJECT MANAGER**

**Customer Loyalty Enrollment**

**Details**

**Description**

**API Name**: Customer\_Loyalty\_Enrollment\_c

**Custom**: ✓

**Singular Label**: Customer Loyalty Enrollment

**Plural Label**: Customer Loyalty Enrollments

**Enable Reports**: ✓

**Track Activities**: ✓

**Track Field History**

**Deployment Status**: Deployed

**Help Settings**: Standard salesforce.com Help Window

**Edit** | **Delete**

**Left Sidebar (Details)**:

- Fields & Relationships
- Page Layouts
- Lightning Record Pages
- Buttons, Links, and Actions
- Compact Layouts
- Field Sets
- Object Limits
- Record Types
- Related Lookup Filters