# **Phase 3: Data Modeling & Relationships**

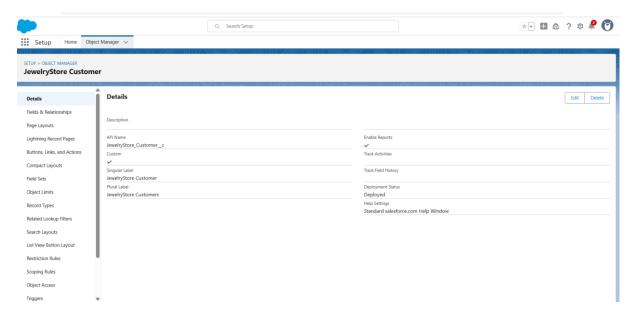
### **Step 1: Standard & Custom Objects**

Six custom objects were created to store business-critical data:

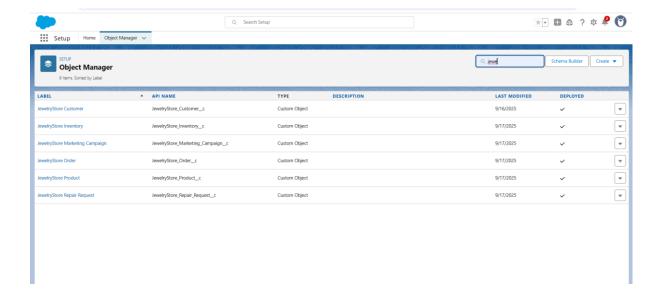
- **JewelleryStore Customer** Stores customer details such as preferences, anniversaries, and purchase history.
- **JewelleryStore Product** Stores product catalog details such as category, material, price, and SKU.
- **JewelleryStore Order** Stores orders placed by customers, including order date, payment status, and delivery status.
- **JewelleryStore Inventory** Tracks stock availability, reorder levels, and store location
- **JewelleryStore Marketing Campaign** Stores details of promotional campaigns such as campaign name, offers, and status.
- **JewelleryStore Repire Request** Stores after-sales service requests such as repairs, resizing, cleaning, and their status.

### **Steps followed:**

- Navigated to Setup  $\rightarrow$  Object Manager  $\rightarrow$  Create  $\rightarrow$  Custom Object
- · Provided label, name, and enabled reports/search
- Saved and created Tabs for each object



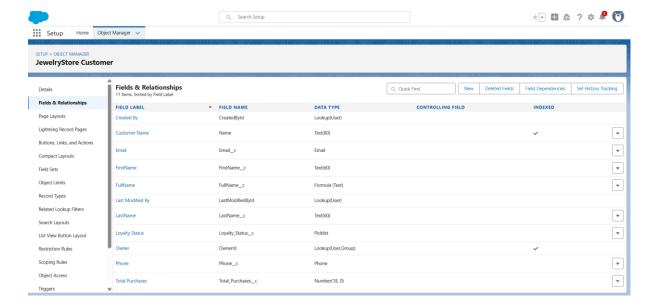
Same steps followed for all six custom object creation



### Step 2: Fields

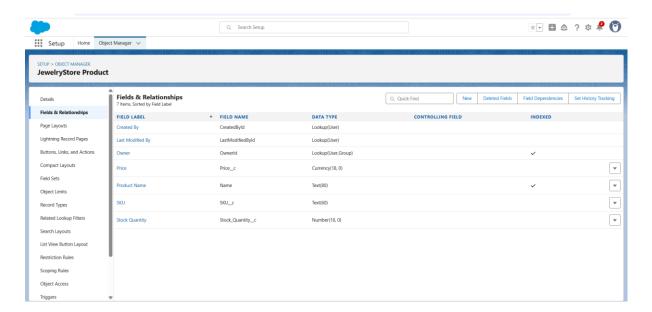
## **JewelleryStore Customer**

- JewelleryStore Customer Name (Text, 80) Standard Name field
- FirstName (Text, 60)
- LastName (Text, 60)
- **FullName** (Formula, Text → FirstName + LastName)
- **Email** (Email)
- **Phone** (Phone)
- Loyalty Status (Picklist: Gold, Silver, Bronze, Platinum)
- **Total Purchases** (Number, 18,0)
- **Owner** (Lookup → User/Group)
- Created By (Lookup → User)
- Last Modified By (Lookup → User)



### **JewelleryStore Product**

- **JewelleryStore Product Name** Name of the jewelry product (e.g., Diamond Ring, Gold ).
- **Price** Selling price of the product.
- **SKU** Unique identifier/code for the product.
- **Stock Quantity** Number of items available in inventory.
- Owner Salesforce user or group responsible for managing the product.
- Created By User who created the product record.
- Last Modified By User who last updated the product record.



### JewelleryStore Order

- **Customer** (Lookup JewelleryStore Customer)
- **Product** (Lookup → JewelleryStore Product)
- Order Date (Date)
- Payment Status (Picklist: Pending, Paid, Refunded)
- **Delivery Status** (Picklist: Pending, Shipped, Delivered)

#### **JewelleryStore Inventory**

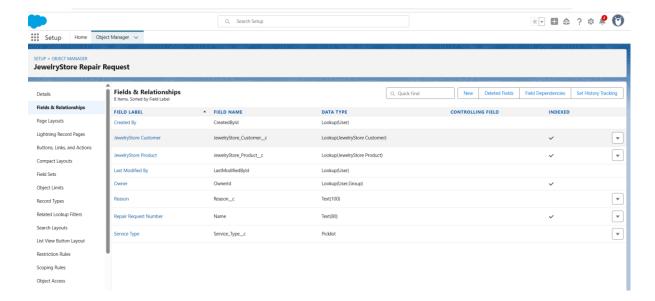
- **Product** (Lookup → JewelleryStore Product)
- Available Quantity (Number)
- Reorder Level (Number)
- Store Location (Text)
- Stock Status (Formula → IF(Available\_Quantity\_c > Reorder\_Level\_c, "Available", "Low Stock"))

### JewelleryStore Marketing Campaign

- Campaign Name (Text)
- Start Date (Date)
- End Date (Date)
- Offer Type (Picklist: Discount %, Free Gift, Exclusive Access)
- Campaign Status (Picklist: Planned, Active, Completed)

#### JewelleryStore Repair Request

- **Customer** (Lookup → JewelleryStore Customer)
- **Product** (Lookup → JewelleryStore Product)
- Request Type (Picklist: Repair, Cleaning, Resizing, Engraving)
- Request Status (Picklist: New, In Progress, Completed)
- Service Date (Date)

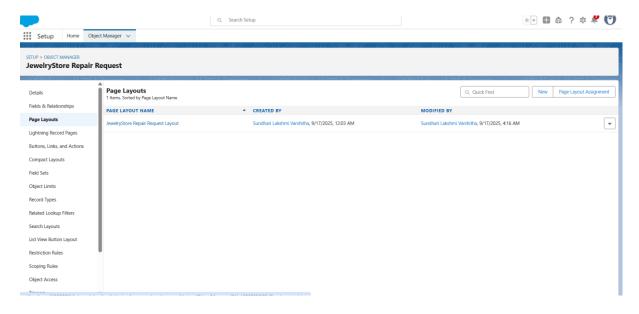


### 3. Record Types

- Used to **differentiate business processes** if needed.
- Example:
  - o **JewelleryStore Repair Request** → Record Types: *Repair Request*, *Cleaning Request*, *Resizing Request*
  - o **JewelleryStore Order** → Record Types: *Online Order*, *In-Store Order*

#### 4. Page Layouts

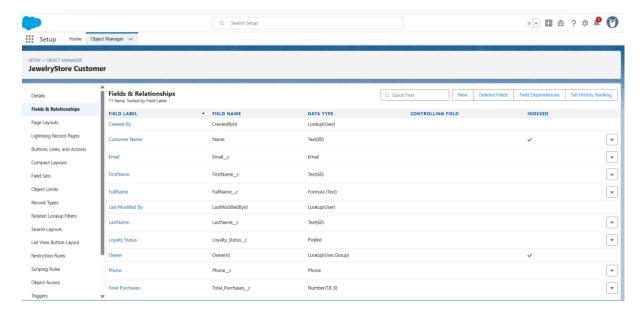
- Each object has **custom page layouts** to show only relevant fields to different users.
- Example:
  - o Sales team sees Customer Name, Email, Phone, Orders, Total Purchases.
  - o Service team sees Service Requests, Product details, Request Status.



#### 5. Compact Layouts

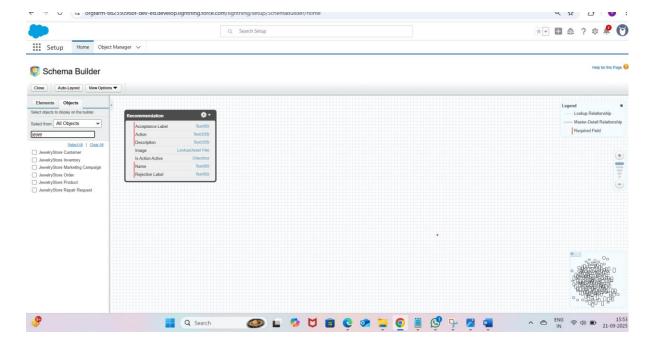
- Provides **summary info on record highlights** (used in mobile view or hover cards).
- Example:
  - JewelleryStore Customer Compact Layout: Full Name, Email, Phone, Loyalty Status, Total Purchases.
  - JewelleryStore Product Compact Layout: Product Name, Price, Stock Quantity.

But I used Compact Layout as System Default.



#### 6. Schema Builder

- Used to visualize all objects and their relationships.
- Shows custom and standard objects, field types, and lookup/master-detail links.
- Helps stakeholders understand data flow and connections.



### 7. Lookup vs Master-Detail vs Hierarchical Relationships

#### • Lookup Relationship:

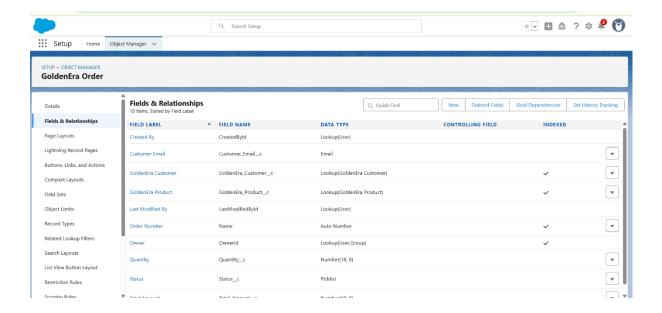
- o Simple connection between two objects.
- o Example: → JewelleryStore Customer

#### • Master-Detail Relationship:

- o Strong dependency, parent controls child record behavior.
- Example: JewelleryStore Inventory → Product (Product is parent, Inventory is child)

#### • Hierarchical Relationship:

- o Special relationship for **User object** only.
- o Example: Manager → Employee (not used heavily in this project)



### 8. Junction Objects

- Used for many-to-many relationships.
- Example (optional for future enhancement):
  - **o** JewelleryStore Customer ↔ JewelleryStore Marketing Campaign
  - A single customer can belong to multiple campaigns, and a campaign can target multiple customers.