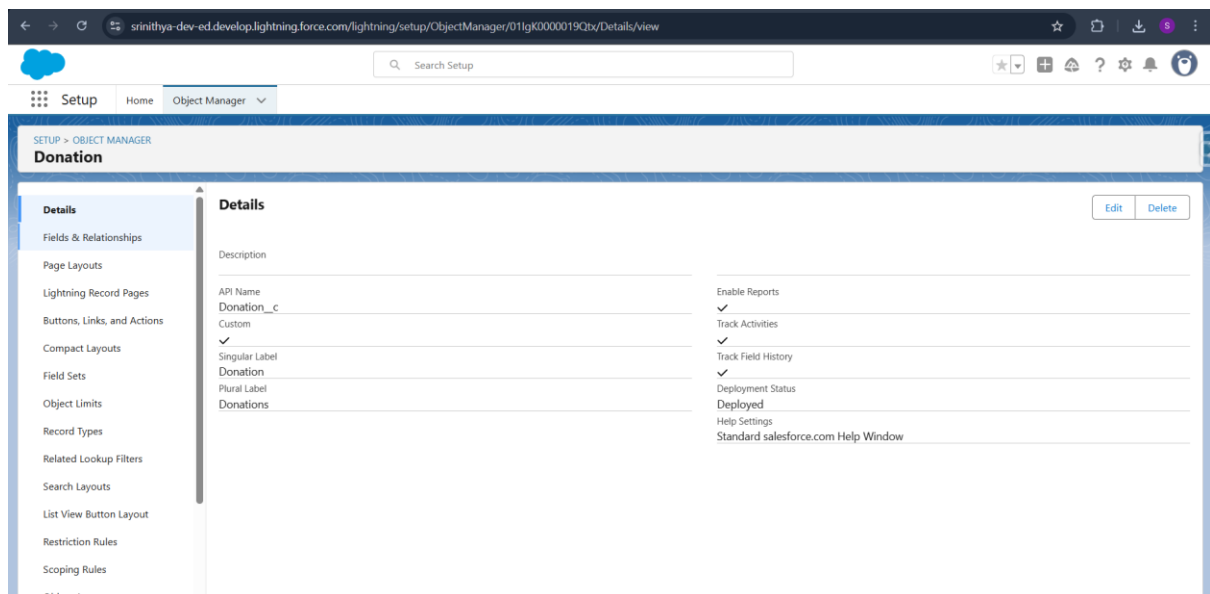# Phase 3: Data Modeling & Relationships

1. Core Custom Objects

We created **three core custom objects** to represent NGO operations:

- **Donation__c**
  - Tracks donor contributions (money, food, clothes, groceries, others).
  - Fields: Donor Name, Email, Phone, Donation Type, Amount, Occasion, Related Event, Date.

- **Volunteer__c**
  - Captures volunteer information and participation.
  - Fields: Name, Email, Skills, Availability, Participation Date, Task Assigned, Related Event.

- **Event__c**
  - Stores details about NGO events where donors and volunteers participate.
  - Fields: Event Name, Date, Location, Description.

2. Relationships Between Objects

- **Donation ↔ Event**
  - Lookup relationship: Each Donation can be linked to a specific Event.
  - Purpose: To track which donations were made for which events.

- **Volunteer ↔ Event**

- o Lookup relationship: Each Volunteer can be associated with an Event.

- o Purpose: To manage volunteer assignment per event.

- **Donation ↔ Volunteer (Indirect Relationship)**

- o No direct link, but both are connected through the Event object.

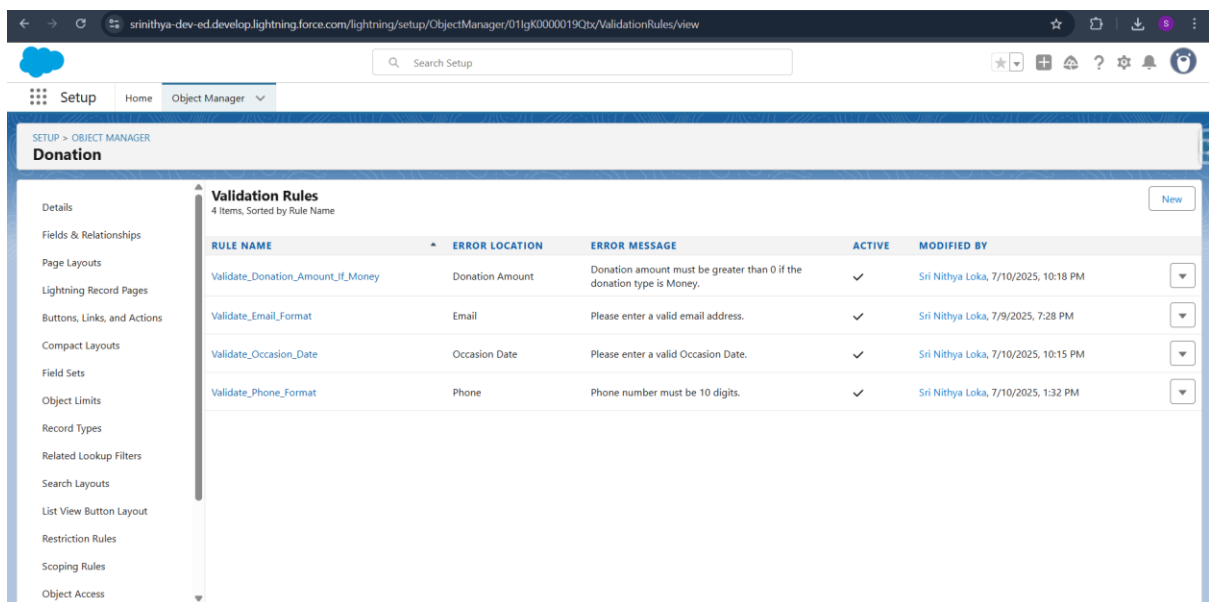- o Purpose: Allows reporting on donors and volunteers who supported the same event.

3. Record Types & Page Layouts (From Phase 2)

- **Donation__c**: One-Time, Monthly.

- **Volunteer__c**: Registration, Feedback.

- **Event__c**: Standard layout.

This ensures the correct fields appear based on context (e.g., monthly donations show recurring fields).

4. Validation Rules

- Donation amount > 0 if Donation Type = "Money".

- Donor Email must contain "@" and be unique.

- Phone number must be 10 digits.

- Occasion Date required if Occasion ≠ "None".

RULE NAME	ERROR LOCATION	ERROR MESSAGE	ACTIVE	MODIFIED BY
Validate_Donation_Amount_If_Money	Donation Amount	Donation amount must be greater than 0 if the donation type is Money.	✓	Sri Nithya Loka, 7/10/2025, 10:18 PM
Validate_Email_Format	Email	Please enter a valid email address.	✓	Sri Nithya Loka, 7/9/2025, 7:28 PM
Validate_Occasion_Date	Occasion Date	Please enter a valid Occasion Date.	✓	Sri Nithya Loka, 7/10/2025, 10:15 PM
Validate_Phone_Format	Phone	Phone number must be 10 digits.	✓	Sri Nithya Loka, 7/10/2025, 1:32 PM

5. Outcome of Phase 3

At the end of this phase, we have:

- A structured data model with **custom objects** for Donations, Volunteers, and Events.

- **Relationships** established between objects for integrated tracking.

- **Validation rules** ensuring clean and reliable data.

- A clear ERD representation of the system.