Project Title – “Government Schemes Management System”

Phase 3: Data Modeling & Relationships

Standard & Custom Objects

- Account (Standard): Represents government offices, agencies, or organizations managing schemes.
- Contact (Standard): Stores citizens or scheme applicants.
- Scheme__c (Custom): Tracks government schemes (type, start/end dates, eligibility, budget).
- Scheme_Application__c (Custom): Stores applications submitted by citizens for schemes.
- Fund_Transaction__c (Custom): Tracks fund disbursements and receipts related to schemes.
- Grievance__c (Custom): Records complaints or feedback from citizens regarding schemes or fund transactions.

Data Flow: Account → Contact → Scheme__c -> Scheme_Application__c → Fund_Transaction__c → Grievance__c

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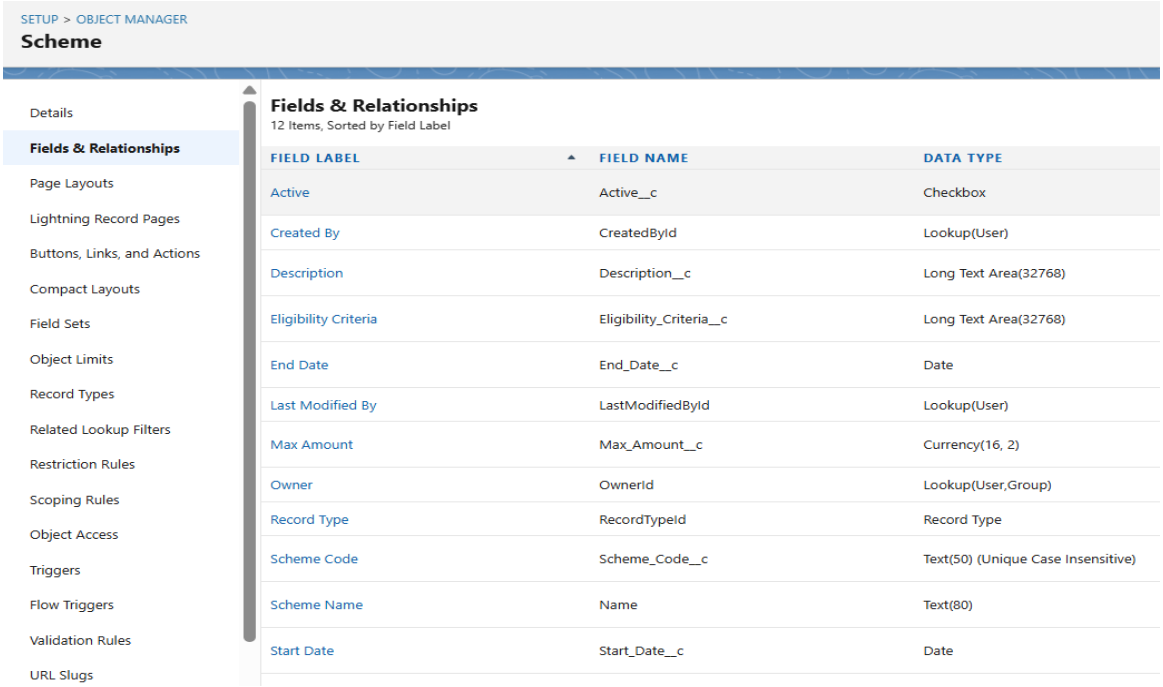
Master-Detail & Lookup Relationships

1. Scheme_Application__c → Scheme__c
    - Relationship Type: Lookup
    - Purpose: Each application belongs to a particular scheme.
2. Fund_Transaction__c → Scheme_Application__c
    - Relationship Type: Lookup
    - Purpose: Tracks payments/disbursements related to a specific application.
3. Grievance__c → Scheme_Application__c
    - Relationship Type: Lookup
    - Purpose: Links complaints to the corresponding citizen application.
4. Contact → Account
    - Relationship Type: Lookup (or optionally Master-Detail for stricter access)
    - Purpose: Each citizen belongs to a particular account/agency (for internal management).

Fields for Custom Objects

Scheme__c

- Scheme Code (Text, 50, unique, required)
- Scheme Name (Text, 80, required)
- Description (Long Text Area)
- Start Date (Date)
- End Date (Date)
- Active (Checkbox)
- Max Amount (Currency)
- Eligibility Criteria (Long Text Area)

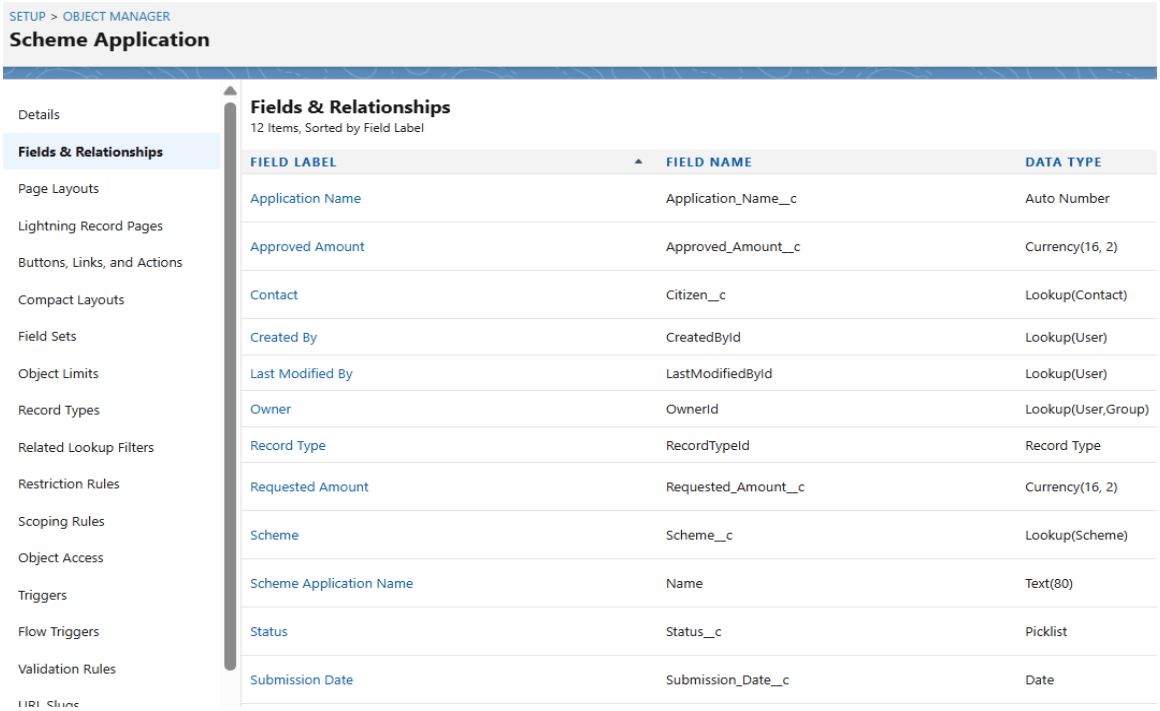


FIELD LABEL	FIELD NAME	DATA TYPE
Active	Active__c	Checkbox
Created By	CreatedById	Lookup(User)
Description	Description__c	Long Text Area(32768)
Eligibility Criteria	Eligibility_Criteria__c	Long Text Area(32768)
End Date	End_Date__c	Date
Last Modified By	LastModifiedById	Lookup(User)
Max Amount	Max_Amount__c	Currency(16, 2)
Owner	OwnerId	Lookup(User,Group)
Record Type	RecordTypeId	Record Type
Scheme Code	Scheme_Code__c	Text(50) (Unique Case Insensitive)
Scheme Name	Name	Text(80)
Start Date	Start_Date__c	Date

Scheme_Application__c

- Application Name (Auto Number)
- Requested Amount (Currency)
- Approved Amount (Currency)
- Contact (Lookup → Contact)
- Scheme (Lookup → Scheme__c)

- Status (Picklist: Submitted, Approved, Rejected, Pending)
- Submission Date (Date)



FIELD LABEL	FIELD NAME	DATA TYPE
Application Name	Application_Name__c	Auto Number
Approved Amount	Approved_Amount__c	Currency(16, 2)
Contact	Citizen__c	Lookup(Contact)
Created By	CreatedById	Lookup(User)
Last Modified By	LastModifiedById	Lookup(User)
Owner	OwnerId	Lookup(User,Group)
Record Type	RecordTypeId	Record Type
Requested Amount	Requested_Amount__c	Currency(16, 2)
Scheme	Scheme__c	Lookup(Scheme)
Scheme Application Name	Name	Text(80)
Status	Status__c	Picklist
Submission Date	Submission_Date__c	Date

Fund_Transaction__c

- Fund Transaction Name (Auto Number)
- Scheme Application (Lookup → Scheme_Application__c)
- Amount (Currency)
- Payment Date (Date)
- Payment Status (Picklist: Pending, Paid, Failed)

SETUP > OBJECT MANAGER

Fund Transaction

- Details
- **Fields & Relationships**
- Page Layouts
- Lightning Record Pages
- Buttons, Links, and Actions
- Compact Layouts
- Field Sets
- Object Limits
- Record Types
- Related Lookup Filters
- Search Layouts
- List View Button Layout
- Restriction Rules

Fields & Relationships

9 Items, Sorted by Field Label

FIELD LABEL	FIELD NAME	DATA TYPE
Amount	Amount__c	Currency(16, 2)
Created By	CreatedById	Lookup(User)
Fund Transaction Name	Name	Auto Number
Last Modified By	LastModifiedById	Lookup(User)
Owner	OwnerId	Lookup(User,Group)
Payment Date	Payment_Date__c	Date
Payment Status	Payment_Status__c	Picklist
Record Type	RecordTypeId	Record Type
Scheme Application	Application__c	Lookup(Scheme Application)

Grievance__c

- Grievance Name (Auto Number)
- Contact (Lookup → Contact)
- Scheme Application (Lookup → Scheme_Application__c)
- Category (Picklist: Scheme Complaint, Payment Complaint, General Feedback)
- Status (Picklist: Open, In Progress, Resolved)
- Resolution Notes (Long Text Area)

SETUP > OBJECT MANAGER

Grievance

- Details
- **Fields & Relationships**
- Page Layouts
- Lightning Record Pages
- Buttons, Links, and Actions
- Compact Layouts
- Field Sets
- Object Limits
- Record Types
- Related Lookup Filters
- Search Layouts
- List View Button Layout
- Restriction Rules
- Scoping Rules

Fields & Relationships

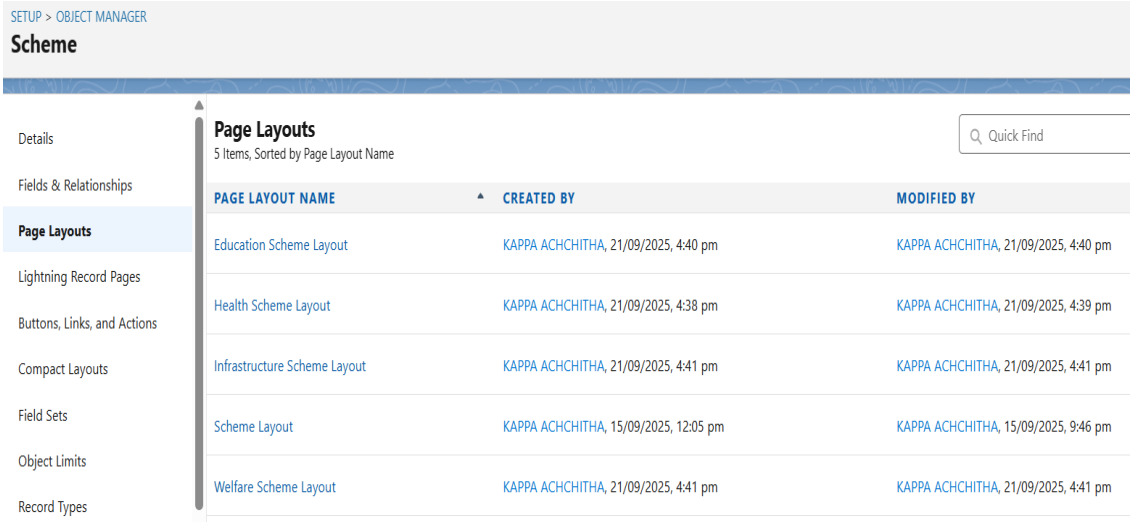
10 Items, Sorted by Field Label

FIELD LABEL	FIELD NAME	DATA TYPE
Category	Category__c	Picklist
Contact	Citizen__c	Lookup(Contact)
Created By	CreatedById	Lookup(User)
Grievance Name	Name	Auto Number
Last Modified By	LastModifiedById	Lookup(User)
Owner	OwnerId	Lookup(User,Group)
Record Type	RecordTypeId	Record Type
Resolution Notes	Resolution_Notes__c	Long Text Area(32768)
Scheme Application	Application__c	Lookup(Scheme Application)
Status	Status__c	Picklist

Page Layouts

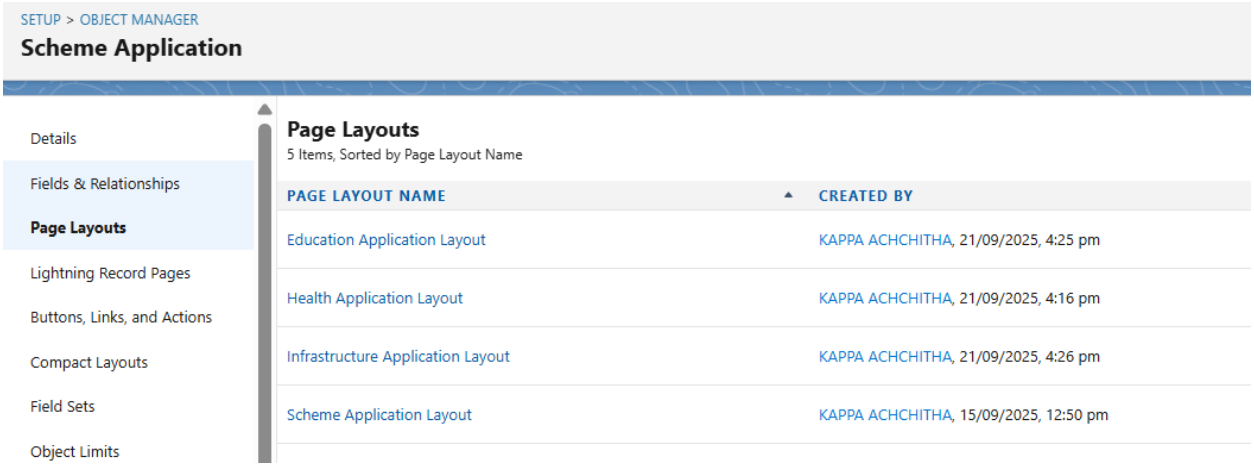
Scheme__c Layout

- Sections: Header (Scheme Code, Scheme Name), Details (Start/End Date, Description, Eligibility Criteria, Max Amount, Active)
- Related Lists: Applications, Fund Transactions, Grievances



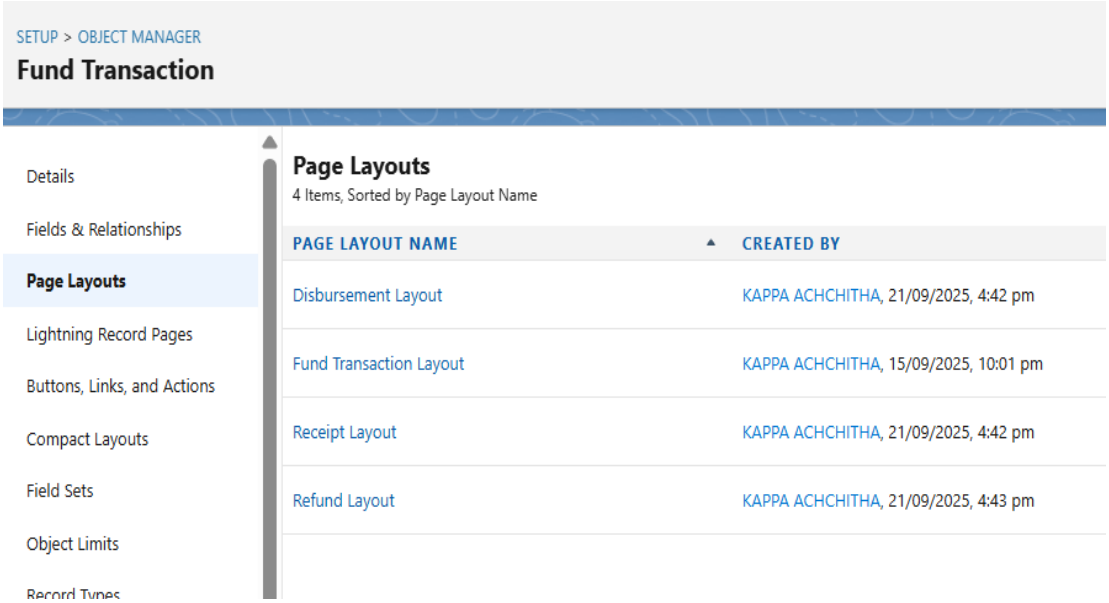
Scheme_Application__c Layout

- Sections: Header (Application Name, Contact), Application Details (Requested/Approved Amount, Status, Submission Date)
- Related Lists: Fund Transactions, Grievances



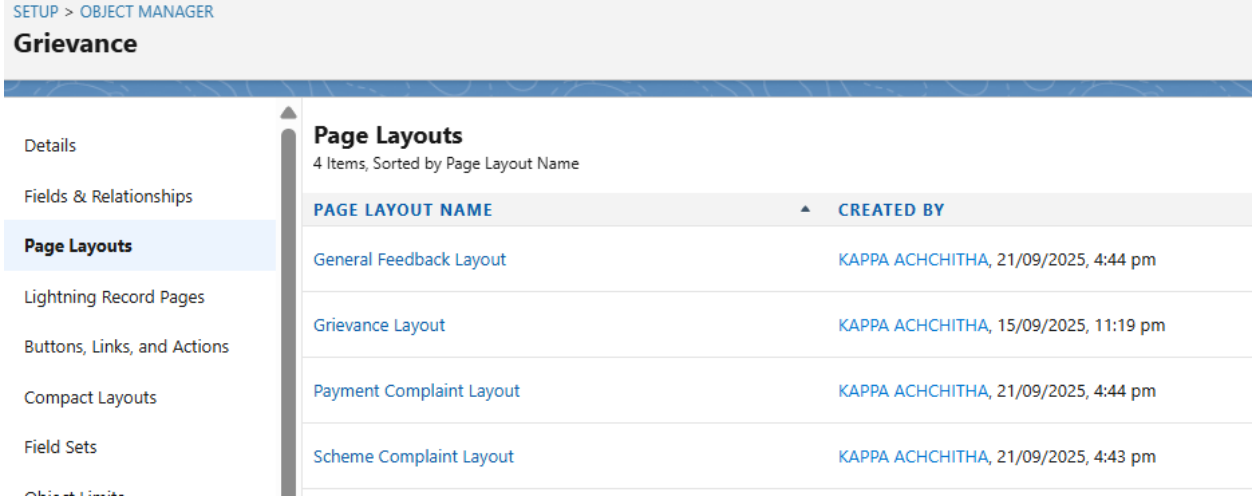
Fund_Transaction__c Layout

- Fields: Fund Transaction Name, Scheme Application, Amount, Payment Date, Payment Status



Grievance__c Layout

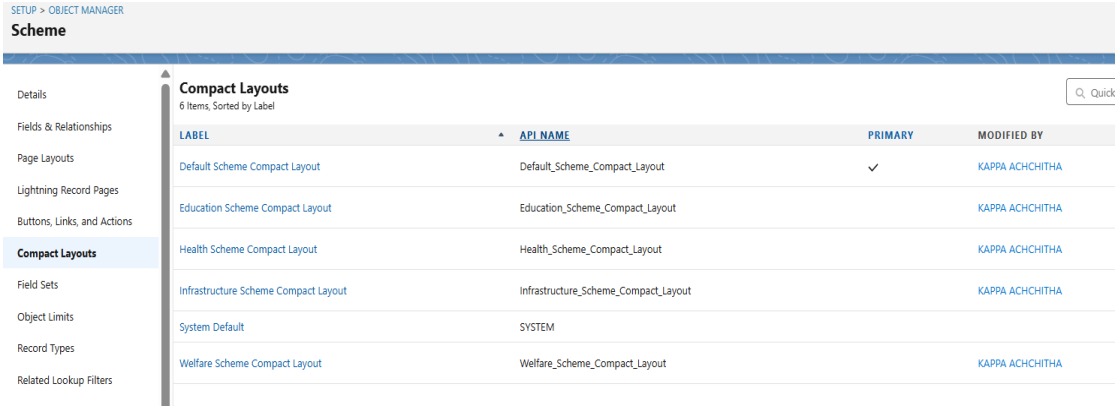
- Fields: Grievance Name, Contact, Scheme Application, Category, Status, Resolution Notes



Compact Layouts

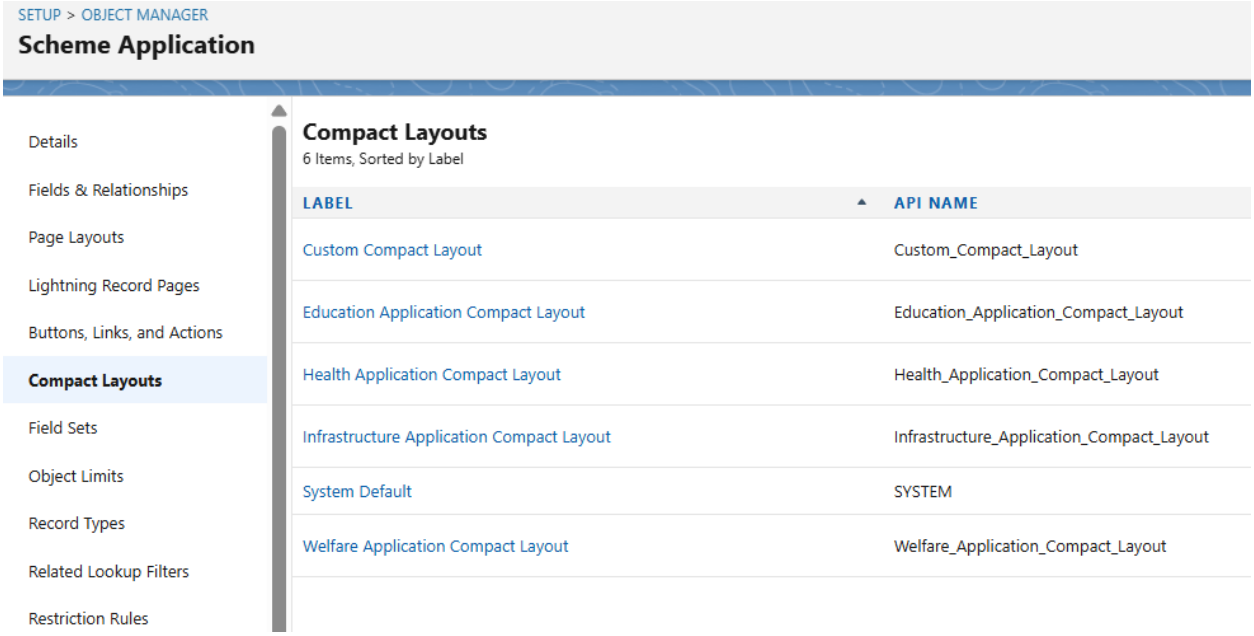
Scheme__c

- Display Fields: Scheme Code, Scheme Name, Active



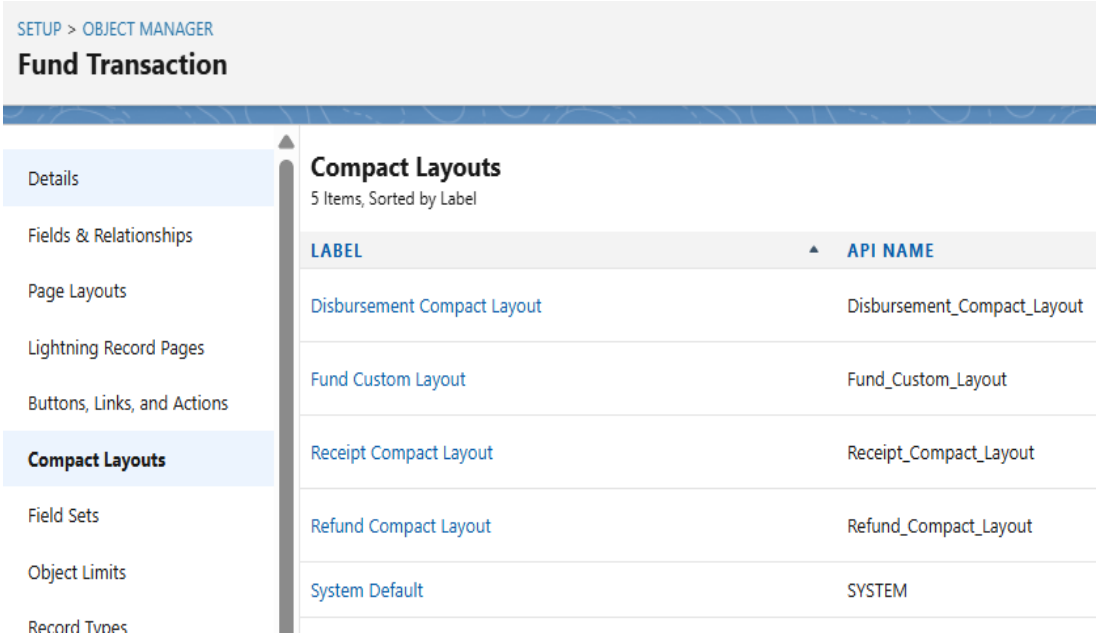
Scheme_Application__c

- Display Fields: Application Name, Status, Requested Amount



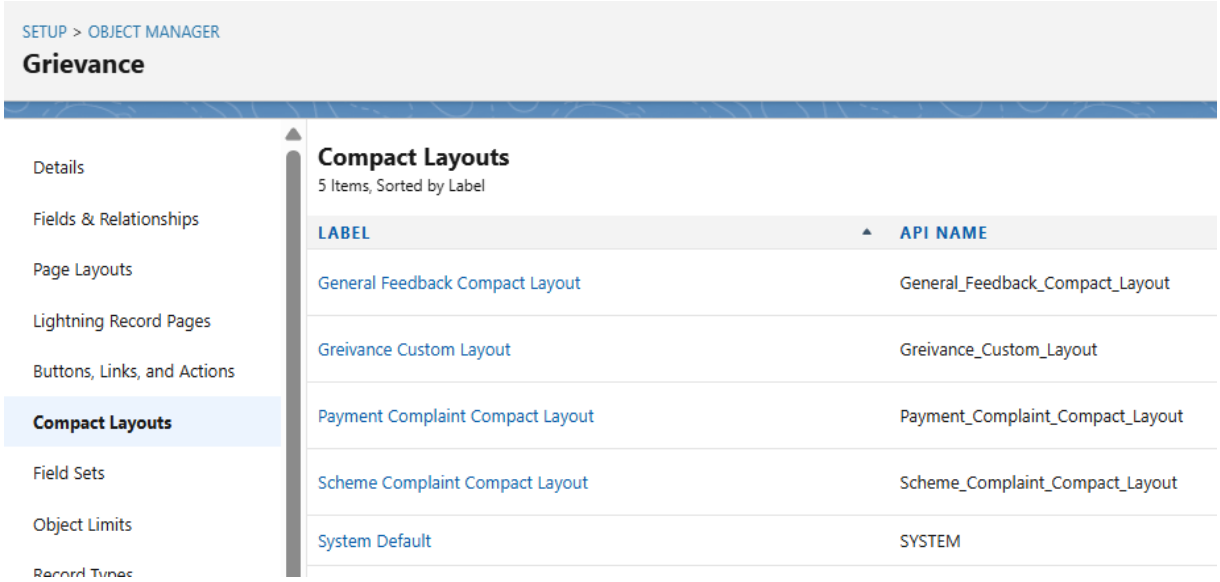
Fund_Transaction__c

- Display Fields: Fund Transaction Name, Amount, Payment Status



Grievance__c

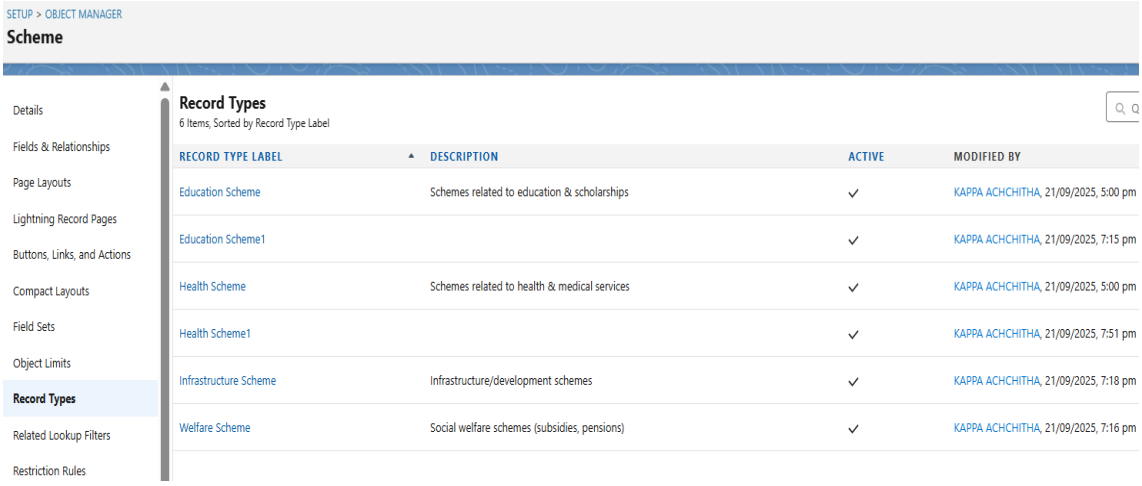
- Display Fields: Grievance Name, Category, Status



Record Types

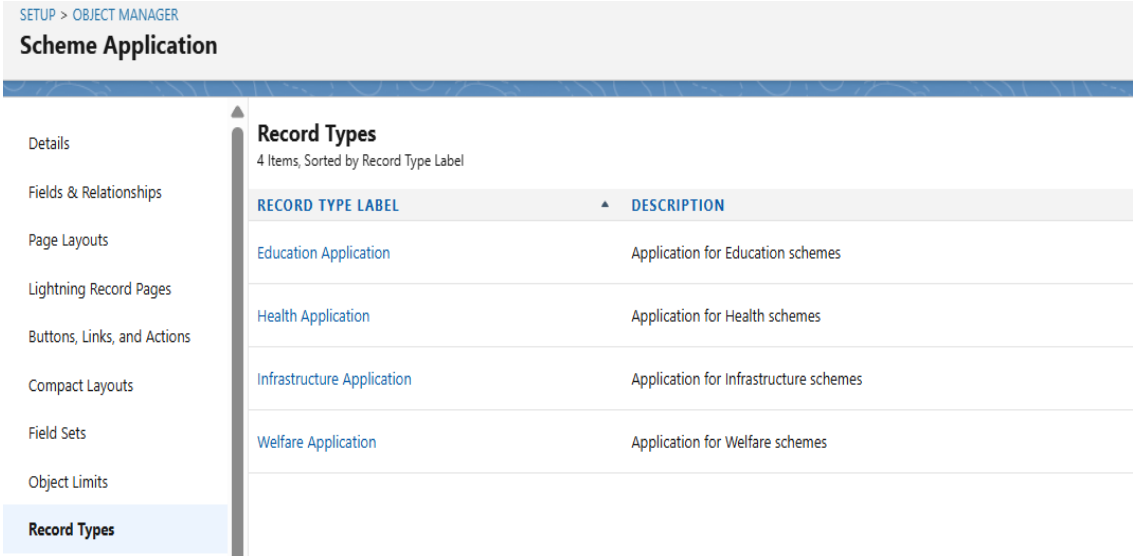
Scheme__c

- Health Scheme, Education Scheme, Welfare Scheme, Infrastructure Scheme



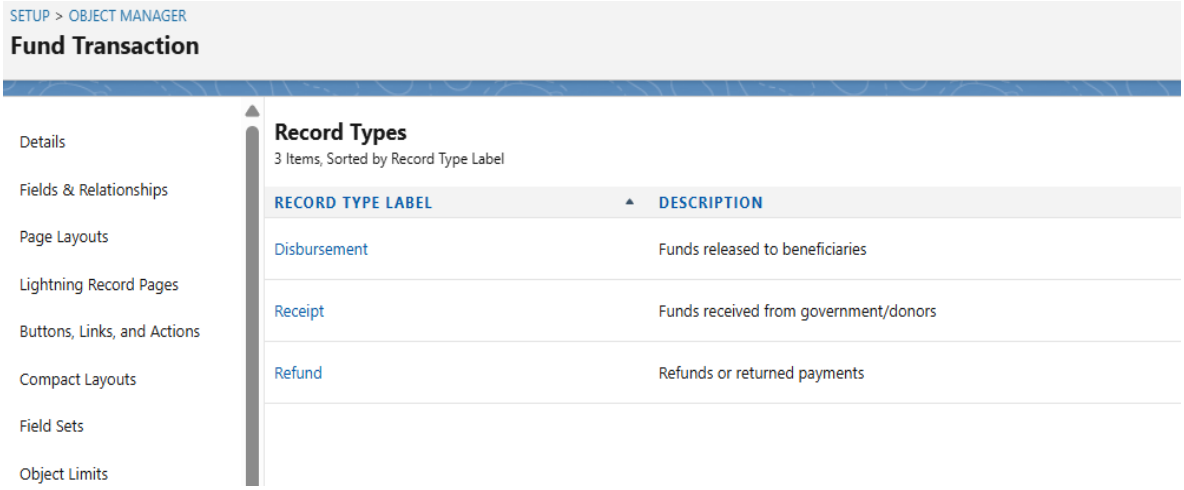
Scheme_Application__c

- Health Application, Education Application, Welfare Application, Infrastructure Application



Fund_Transaction__c

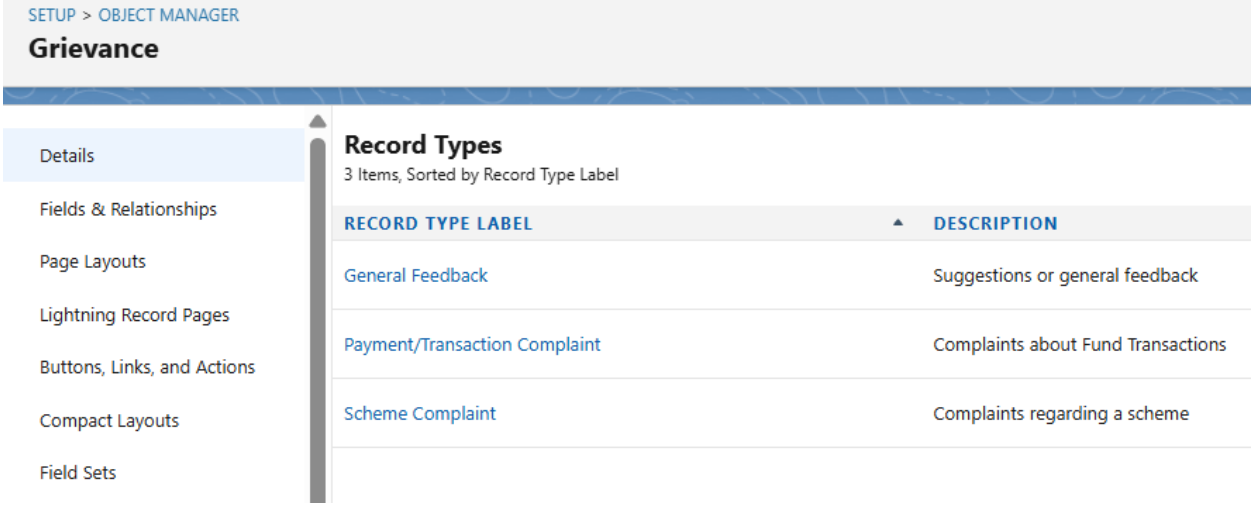
- Disbursement, Receipt, Refund



Grievance__c

- Scheme Complaint, Payment/Transaction Complaint, General Feedback

Note: Different record types allow for different page layouts, picklist values, and visibility for officers, auditors, and citizens.



Schema Builder

- Used to visually confirm relationships: Lookup and Master-Detail between objects.
- Steps:
    1. Setup → Object Manager → Schema Builder
    2. Select Objects: Scheme, Scheme Application, Fund Transaction, Grievance, Contact, Account

3. Arrange objects to visualize data flow and relationships
4. Verify that Master-Detail and Lookup relationships are correctly displayed

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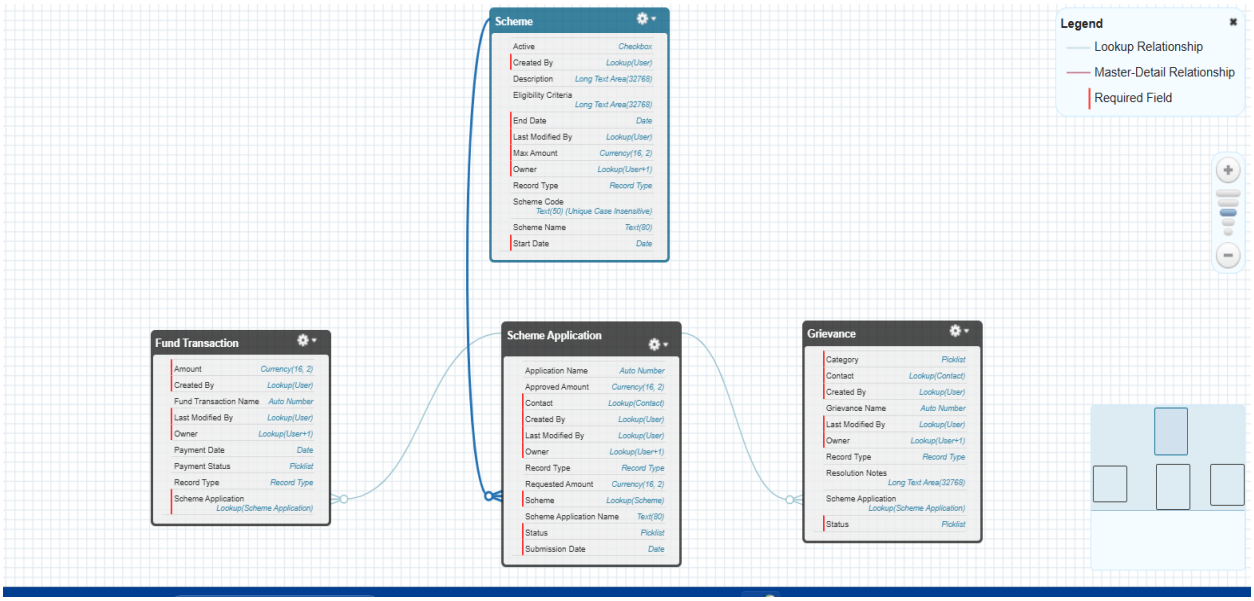
Lookup vs Master-Detail vs Hierarchical Relationships

- Lookup: Optional relationship; used for linking Scheme Application → Scheme, Grievance → Scheme Application.
- Master-Detail: Enforces ownership inheritance; can be used if Scheme Application must strictly belong to Scheme.
- Hierarchical: Only available for User object; not used in this project.



Junction Objects

- Not used; no many-to-many relationships needed. Each application, transaction, or grievance links to a single scheme/application.

External Objects

- Not used; no external data sources are integrated. All data is stored within Salesforce standard/custom objects.