# Phase 3: Data Modeling & Relationships

**Goal**: The goal of Phase 3 is to design a robust data model in Salesforce to manage the GreenHarvest ecosystem. The model connects **Farmers, Crops, Buyers, Orders, Requirements, and Logistics**, ensuring end-to-end visibility of agricultural transactions.

#### Standard & Custom Objects

Standard Objects: User, Report, Dashboard.

#### **Custom Objects:**

Farmer c – Stores farmer details and income.

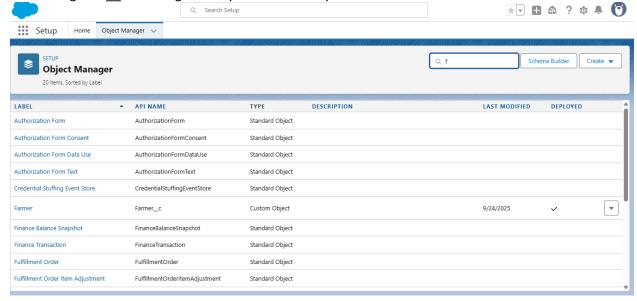
Crop\_\_c - Stores crop information (type, price, farmer).

Buyer c – Represents crop buyers.

Requirement\_\_c – Captures buyer crop requirements.

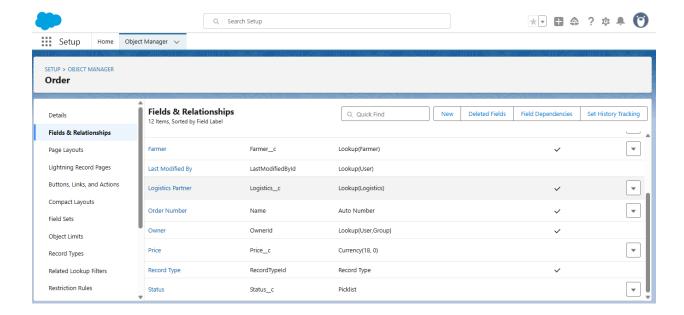
Order c – Acts as junction object linking farmers, buyers, and crops.

Logistics\_\_c – Manages transport and delivery details.



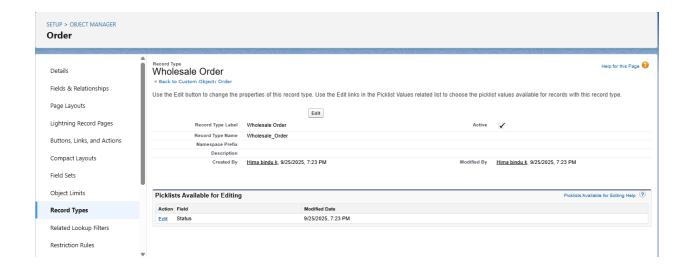
#### **Fields**

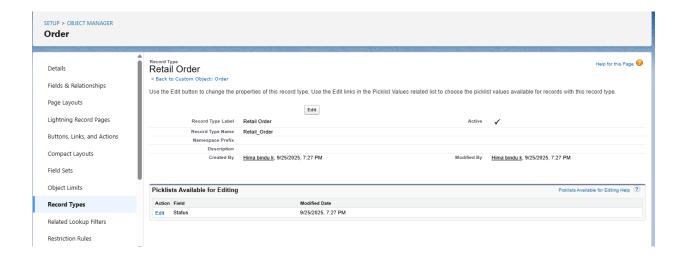
- Farmer\_\_c: Contact Number, Address, Total Income.
- **Crop\_\_c:** Crop Type, Price, Farmer (Lookup).
- Buyer\_c: Company Name, Contact Number.
- **Requirement\_\_c:** Crop Needed (Lookup → Crop), Quantity, Status, Buyer (Master-Detail).
- Order\_c: Farmer, Buyer, Crop, Logistics (Lookups), Price, Status (Picklist).
- Logistics\_c: Vehicle No, Transport Type, Contact Number.



## **Record Types**

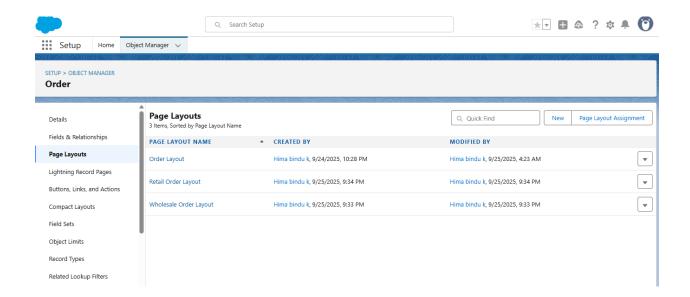
- Wholesale Order For bulk orders (includes fields like Bulk Discount %).
- Retail Order For smaller retail transactions (includes Payment Method, Delivery Address).





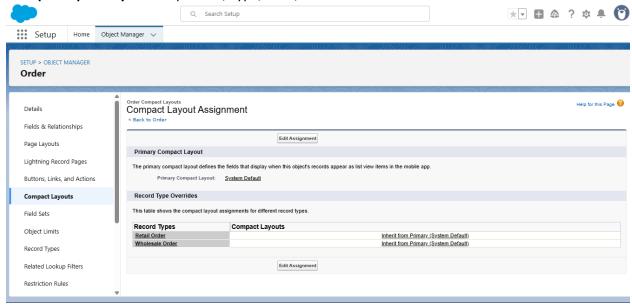
## **Page Layouts**

- Wholesale Order Layout: Focus on bulk transaction fields (Buyer, Farmer, Crop, Quantity, Price, Bulk Discount %, Status).
- **Retail Order Layout:** Focus on retail fields (Buyer, Crop, Quantity, Price, Payment Method, Delivery Address, Status).



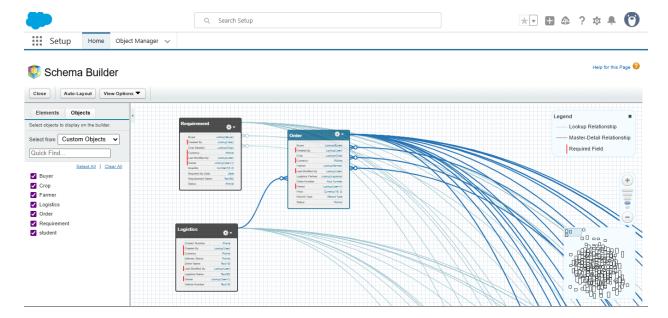
### **Compact Layouts**

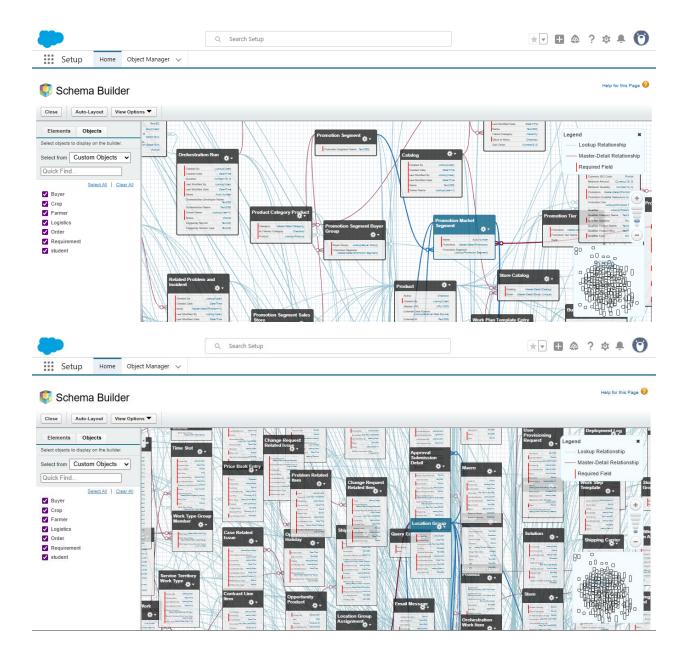
- Order Compact Layout: Order Name, Farmer, Buyer, Crop, Status, Price.
- Farmer Compact Layout: Farmer Name, Contact No, Village, Total Income.
- Crop Compact Layout: Crop Name, Type, Price, Farmer.



#### Schema Builder

The schema was validated using Salesforce Schema Builder. Relationships between all objects were displayed to confirm correct connectivity.





## Relationships

Farmer  $\leftrightarrow$  Crop  $\rightarrow$  Lookup (Crop belongs to a Farmer).

Buyer ↔ Requirement → Master-Detail (Requirement owned by Buyer).

Order ↔ Farmer, Buyer, Crop → Lookups (junction object).

Order  $\leftrightarrow$  Logistics  $\rightarrow$  Lookup.

User (Standard) → Hierarchical (role-based visibility).