Phase 3: Data Modelling & Relationships

1. Standard & Custom Objects

- **Standard Objects**: Salesforce provides built-in objects like Account, Contact, Product, Order, and Price Book for inventory and order management. These objects are essential for storing customer, product, and transaction information.
- **Custom Objects**: Created to capture project-specific data, such as Inventory Item, Supplier Details, or Shipment Details, to manage unique business processes not covered by standard objects.

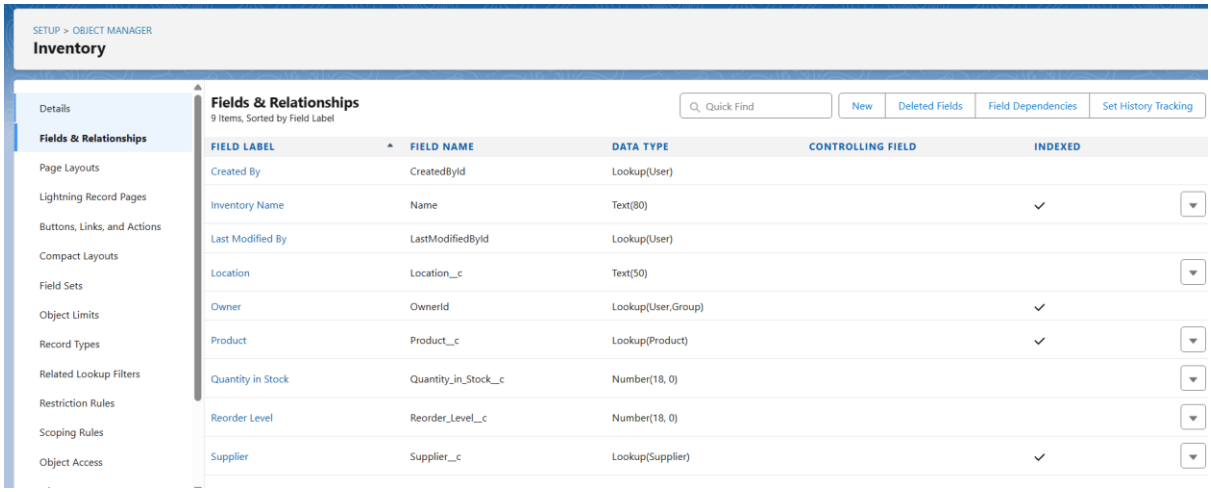
Object Type	Object Name	Purpose / Description
Standard Object	Account	Stores customer or company information
Standard Object	Contact	Stores individual contact details for accounts
Standard Object	Product	Stores product catalog information
Standard Object	Order	Tracks orders placed by customers
Custom Object	Inventory	Stores warehouse inventory details (quantity, location)
Custom Object	Supplier Details	Stores supplier information

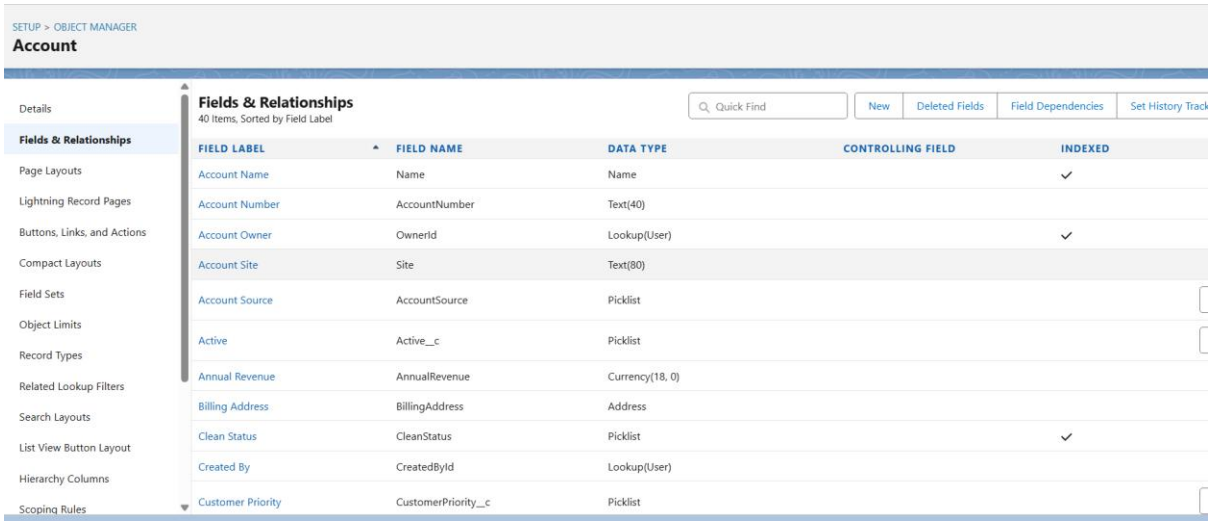
2. Fields

- Fields store individual data points within an object.
- Example: Product Name, Quantity Available, Price, Order Date, Delivery Status.
- Can be **standard fields** (predefined by Salesforce) or **custom fields** (created for project-specific needs)

Object	Field Name	Field Type	Description
Inventory Item	Inventory Name	Text	Name of the product
Inventory Item	Quantity in Stock	Number	Available quantity in inventory
Inventory Item	Reorder Level	Number	Minimum stock before reorder
Order	Order Number	Auto Number	Unique order identifier
Order	Order Date	Date	Date the order was placed

Object	Field Name	Field Type	Description
Order	Delivery Status	Picklist	Status of the order (Pending/Shipped)





3. Record Types

- Record Types allow different business processes, picklist values, and page layouts for the same object.
- Example: Order Record Type could differentiate between Online Orders and In-Store Orders.

4. Page Layouts

- Define which fields, buttons, and related lists appear when viewing a record.
- Example: For Inventory Item, display Item Name, Stock Quantity, and Reorder Level prominently for warehouse staff.

Object	Page Layout Name	Key Sections / Fields Shown
Inventory Item	Default Layout	Item Name, Stock Quantity, Reorder Level
Order	Order Layout	Order Number, Customer Name, Total Amount

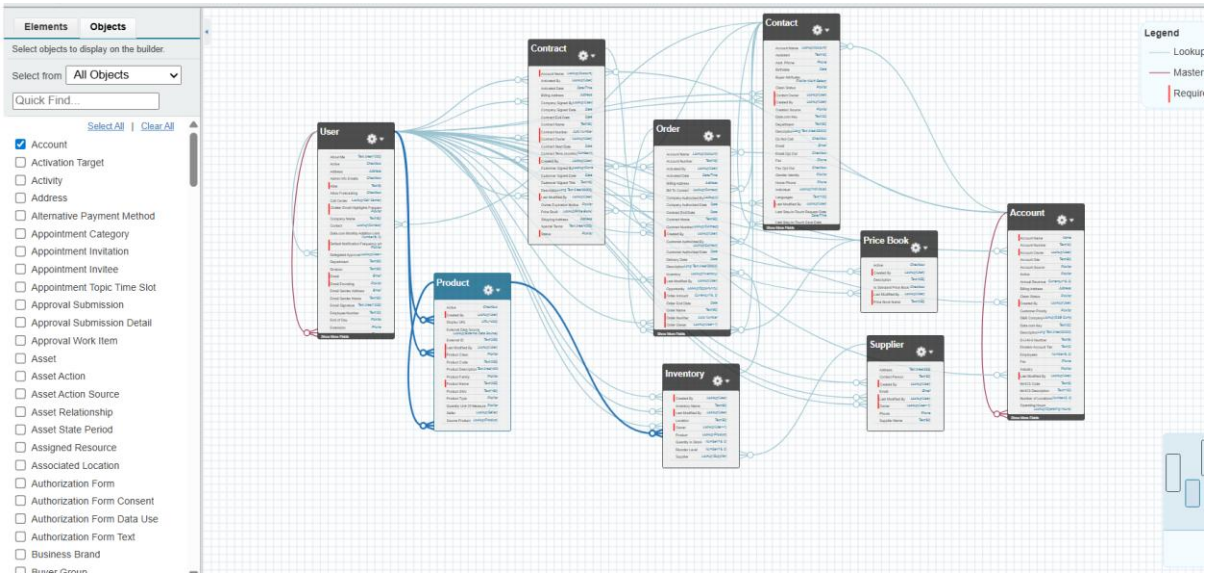
5. Compact Layouts

- Provide a summarized view of a record in highlights panels and mobile views.
- Example: Order Summary showing Order Number, Customer Name, and Total Amount at a glance.

Object	Compact Layout Name	Fields Displayed
Order	Order Summary	Order Number, Customer Name, Total Amount
Inventory Item	Inventory Summary	Item Name, Stock Quantity

6. Schema Builder

- **Purpose:** Visual representation of objects and their relationships.
- **Objects Displayed:** Account, Contact, Product, Order, Inventory , Supplier Details.
- **Relationships Shown:** Lookup, Master-Detail, Junction Objects.



7. Lookup vs Master-Detail vs Hierarchical Relationships

- **Lookup Relationship**: Links two objects loosely. Example: Linking Order to Customer.
- **Master-Detail Relationship**: Strong dependency where the child's lifecycle depends on the parent. Example: Order Item (child) depends on Order (parent).
- **Hierarchical Relationship**: Special relationship available for User objects, e.g., Manager → Employee.

Relationship Type	**Objects Involved**	**Description**
Lookup	Order → Account	Order linked to customer without strict dependency
Master-Detail	Order Item → Order	Order Item lifecycle depends on parent Order
Hierarchical	User → Manager	Special user hierarchy
Junction Object	Product ↔ Supplier via Product-Supplier	Tracks which suppliers provide which products

8. Junction Objects

- Used to create **many-to-many relationships**.
- Example: Product ↔ Supplier through a Product-Supplier junction object to track which suppliers provide which products.

9. External Objects

- Used to access data stored outside Salesforce via **Salesforce Connect**.
- Example: Linking external inventory databases to Salesforce for real-time stock updates without importing data.