Project Title : " Inventory & Order Tracking Dashboard "

📑 Phase 3: Data Modeling & Relationships

1. **Objects to be Created**

   - Product (API: Product__c)

     Represents items in the inventory.

     Fields:

     - Product Code (Text)

     - Unit Price (Currency)

     - Stock Quantity (Number)

   - Order (API: Order__c)

     Represents a customer's order.

     Fields:

     - Customer Name (Text)

     - Order Date (Date)

     - Status (Picklist: Pending, Shipped, Delivered)

   - Order Item (API: Order_Item__c)

     Acts as a junction object between Orders and Products.

     Fields:

     - Lookup to Order (Order__c)

     - Lookup to Product (Product__c)

     - Quantity (Number)

     - Total Price (Formula = Quantity × Product.Unit Price)

SETUP > OBJECT MANAGER
product

Details	**Fields & Relationships** 8 Items, Sorted by Field Label		Quick Find	New Deleted Fields Field Dependencies Set History Tracking	
Fields & Relationships	**FIELD LABEL** ▲	**FIELD NAME**	**DATA TYPE**	**CONTROLLING FIELD**	**INDEXED**
Page Layouts	Created By	CreatedById	Lookup(User)		
Lightning Record Pages	Currency	CurrencyIsoCode	Picklist		▼
Buttons, Links, and Actions	Last Modified By	LastModifiedById	Lookup(User)		
Compact Layouts	Owner	OwnerId	Lookup(User,Group)	✓	
Field Sets	product code	product_code__c	Text(10) (Unique Case Insensitive)	✓	▼
Object Limits	product Name	Name	Text(80)	✓	▼
Record Types	stock quantity	stock_quantity__c	Number(18, 0)		▼
Related Lookup Filters	unit price	unit_price__c	Currency(18, 0)		▼
Search Layouts					
List View Button Layout					

Fields & Relationships
8 Items, Sorted by Field Label

FIELD LABEL	FIELD NAME	DATA TYPE	CONTROLLING FIELD	INDEXED	
Created By	CreatedById	Lookup(User)			
Currency	CurrencyIsoCode	Picklist			▼
Customer Name	Customer_Name__c	Text(9)			▼
Last Modified By	LastModifiedById	Lookup(User)			
Order Date	Order_Date__c	Date			▼
Order Name	Name	Auto Number		✓	▼
Owner	OwnerId	Lookup(User,Group)		✓	
Status	Status__c	Picklist			▼

Fields & Relationships
9 Items, Sorted by Field Label

FIELD LABEL	FIELD NAME	DATA TYPE	CONTROLLING FIELD	INDEXED	
Created By	CreatedById	Lookup(User)			
Currency	CurrencyIsoCode	Picklist			▼
Last Modified By	LastModifiedById	Lookup(User)			
order	order__c	Lookup(order)		✓	▼
Order Item Name	Name	Auto Number		✓	▼
Owner	OwnerId	Lookup(User,Group)		✓	
product	product__c	Lookup(product)		✓	▼
Quantity	Quantity__c	Number(18, 0)			▼
Total Price	Total_Price__c	Formula (Currency)			▼

2. Relationships Between Objects

Salesforce uses Lookups to connect objects.

- Product (1) ⟷ (Many) Order Items

    Each product can appear in many order items.

    Order Item has a lookup field pointing to Product.

- Order (1) ⟷ (Many) Order Items

    Each order can contain many order items.

    Order Item has a lookup field pointing to Order.

📌 Together, this creates a many-to-many relationship between Products and Orders via the Order Item junction object.

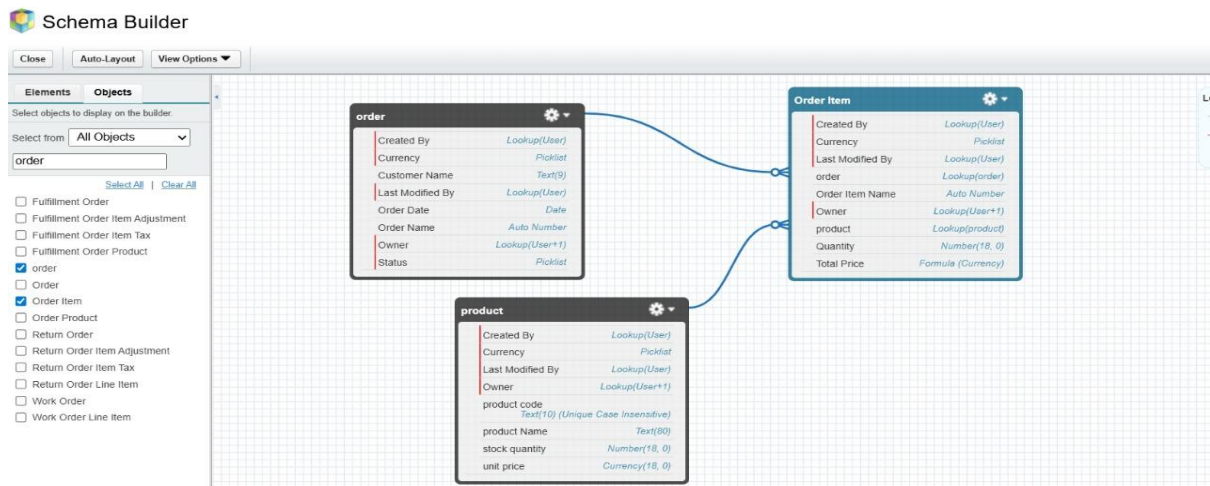## 3. Schema Builder Visualization

Go to Setup → Schema Builder.

Select Product, Order, and Order Item.

You will see:

> Order Item connected to Product (lookup).

> Order Item connected to Order (lookup).

This diagram shows how the three objects interact.

4. Page Layouts & Tabs

Add all new fields into their Page Layouts so they are visible when creating/editing records.

Create Tabs for each object (Product, Order, Order Item) so they appear in the App Launcher.

Details

Fields & Relationships

Page Layouts

Lightning Record Pages

Buttons, Links, and Actions

Compact Layouts

Field Sets

Object Limits

Record Types

Related Lookup Filters

Save ▼ | Quick Save | Preview As... ▼ | Cancel | ⟲ Undo | ⟳ Redo | 🗐 Layout Properties

🔍 Quick Find Field Name   ✖

Fields	Section	Last Modified By	product
Buttons	Blank Space	order	Quantity
Quick Actions	Created By	Order Item Name	Total Price
Mobile & Lightning Actions	Currency	Owner	
Expanded Lookups			
Related Lists			
Report Charts			

Edit | Delete | Clone | Change Owner | Change Record Type | Printable View | Sharing | Sharing Hierarchy | Edit Labels

‖ Information (Header visible on edit only)

🔒 Order Item Name GEN-2004-001234   Owner   Sample Text
order Sample Text
product Sample Text
Quantity 6,157
🔒 Total Price INR 123.45
Currency Sample Text

‖ System Information (Header visible on edit only)

Details

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Record Types

Related Lookup Filters

Search Layouts

List View Button Layout

Save ▼ | Quick Save | Preview As... ▼ | Cancel | ⟲ Undo | ⟳ Redo | 🗐 Layout Properties

🔍 Quick Find Field Name   ✖

Fields	Section	Last Modified By	stock quantity
Buttons	Blank Space	Owner	unit price
Quick Actions	Created By	product code	
Mobile & Lightning Actions	Currency	product Name	
Expanded Lookups			
Related Lists			
Report Charts			

Actions in this section are predefined by Salesforce. You can override the predefined actions to set a customized list of actions on Lightning Experience and mobile app pages that use this layout. If you customize the actions in the Actions in the Salesforce Classic Publisher section, and have saved the layout, then this section inherits that set of actions by default when you click to override.

product Detail   Standard Buttons   Custom Buttons
Edit | Delete | Clone | Change Owner | Change Record Type | Printable View | Sharing | Sharing Hierarchy | Edit Labels

‖ Information (Header visible on edit only)

★ ● product Name Sample Text   Owner   Sample Text
product code Sample Text
unit price INR 123.45
stock quantity 46,325
Currency Sample Text

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5. **Sample Records**

Insert test data for better understanding:

- Products:

  Laptop (Stock: 10, Price: ₹50,000)

  Mouse (Stock: 50, Price: ₹500)

  Keyboard (Stock: 20, Price: ₹1,500)

  Headphones (Stock: 8, Price: ₹2,000)

- Orders:

  Order 1: Customer = John, Status = Pending

  Order 2: Customer = Priya, Status = Delivered

- Order Items:

  Order 1 → Laptop × 2 (Total Price = ₹1,00,000)

  Order 1 → Mouse × 1 (Total Price = ₹500)

Order 2 → Keyboard × 2 (Total Price = ₹3,000)

6. **Outcome of Phase 3**

At the end of this phase:

Database model is ready.

Objects (Product, Order, Order Item) are created with proper fields.

Relationships are established using lookups.

Sample records are inserted for testing.

Salesforce is now ready for Phase 4