## **Phase 5: Apex Programming (Developer)**

# **Objective**

Implement custom business logic using Apex to handle complex scenarios such as bulk order processing, inventory updates, notifications, and integrations that can't be handled through Flows or Process Builder alone.

### 1. Apex Classes & Objects

- OrderHandler.cls → Central class for order processing logic.
- Methods: createOrder(), updateOrderStatus(), calculateInventory()
- InventoryManager.cls → Handle inventory calculations and stock updates.
- NotificationService.cls  $\rightarrow$  Send custom email/SMS notifications.
- DeliveryScheduler.cls → Calculate delivery dates and assign carriers.

### 2. Apex Triggers

#### **Before Insert / Update**

Order Trigger:

- Before insert: Assign unique Order ID, validate stock availability.
- Before update: Check if status changes to 'Dispatched' → ensure delivery record exists.

#### **After Insert / Update**

- After insert: Reduce inventory quantity based on ordered products.
- After insert: Send confirmation email to retailer.
- After update: If Order Status = Delivered → Notify retailer + create task for sales follow-up.

```
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        OrderHandler.apxc
        InventoryManager.apxc
        NotificationService.apxc
        DeliveryScheduler.apxc
        OrderTrigger.apxt
        OrderHandlerTest.apxc

 Code Coverage: None • API Version: 64 •
 1 • public class OrderHandler {
 3
            // Create a new order and return it
            public Order createOrder(Order ord){
 4 🔻
 5 ₹
                  if(ord.Status == null){
                      ord.Status = 'Draft';
 6
  7
 8
                 insert ord;
                 return ord;
 9
 10
            }
 11
Logs Tests Checkpoints Query Editor View State Progress Problems
```