

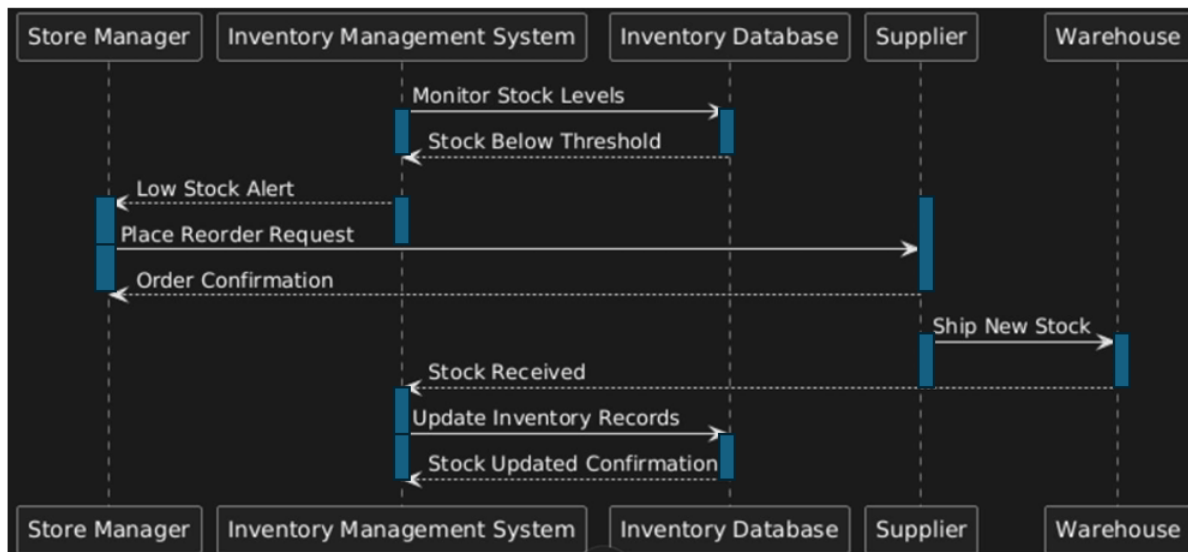
Software Engineering Principles

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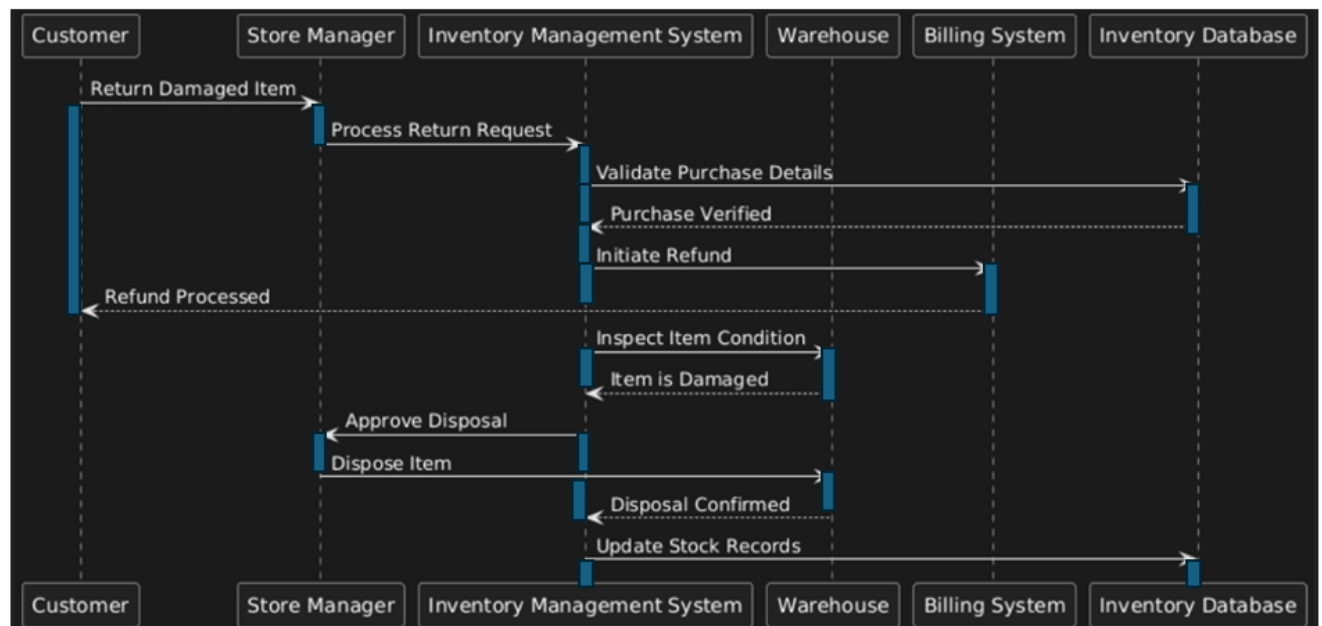
Reg.no.: 23MIC0058

Sequence Diagram

Scenario 1: Low Stock Alert s Reorder Process:



Scenario 2: Damaged Item Return s Restocking:



Test Cases:

Test Case ID: TC001

Test Scenario: Verify real-time inventory tracking and low stock alert functionality.

Test Case Description: Ensure that the inventory tracking module accurately updates stock levels and triggers an alert when the quantity of an item falls below a predefined threshold.

Test Steps:

1. Login as an Inventory Manager.
2. Navigate to the Inventory Dashboard.
3. Select an inventory item with a set low stock threshold (e.g., 10 units).
4. Update the stock level for that item to a quantity below the threshold (e.g., 8 units).
5. Verify that the system triggers a low stock alert notification on the dashboard.
6. Confirm that an email/SMS notification (if configured) is sent to the inventory manager.

Test Data:

- Inventory Item: "Item A" with a threshold set at 10 units.
- Update Value: New stock level set to 8 units.

Test Expected Result:

- The system should automatically update the item's stock level in real time.
- A low stock alert should be triggered and visibly displayed on the dashboard.
- An additional notification (email/SMS) should be sent to alert the inventory manager.

Actual Result:

- Stock level updated to 8 units, triggering a low stock alert and sending a notification.

Pass/Fail: Pass

Test Case ID: TC002

Test Scenario: Verify Order Management Functionality for Order Placement and Cancellation.

Test Case Description: Ensure that the order management module allows authorized users to create a new order with valid data, receive a confirmation with a unique order ID, and subsequently cancel the order, with the system updating the order status accordingly.

Test Steps:

1. Log in as a Sales Staff member.
2. Navigate to the Order Management module.
3. Create a new order by entering customer details and selecting items (e.g., Item A and Item B with specified quantities).
4. Click the "Submit Order" button.
5. Verify that a confirmation message with a unique order ID is displayed.
6. Locate the newly created order in the order list.
7. Select the order and click the "Cancel Order" option.
8. Confirm the cancellation action when prompted.
9. Verify that the order status updates to "Canceled" and the order is removed from the pending orders list.

Test Data:

- Customer Name: John Doe
- Order Items:
 - Item A, Quantity: 5
 - Item B, Quantity: 2

Test Expected Result:

- The system should display a confirmation message with a unique order ID upon order submission.

- On order cancellation, the order status should update to "Canceled," and the order should no longer appear in the list of active or pending orders.
- Actual Result:
- Order is successfully created with a confirmation message and unique order ID, then canceled as expected with the system reflecting the status change.

Pass/Fail: Pass