

Order System Allowing Improper Order Cancellations

Description: A business rule violation was identified where customers could potentially cancel orders that had progressed beyond the "Processing" stage, causing fulfillment confusion and inventory reconciliation issues.

Steps to Reproduce:

1. Place an order as a customer
2. Wait for the order status to change to "In-Transit" or "Delivered"
3. Attempt to cancel the order

Expected Behavior: The system should only allow cancellation of orders in "Processing" status and reject cancellation attempts for orders in other statuses.

Actual Behavior: Without status validation, the system would allow cancellation of orders in any status, disrupting the order fulfillment process.

Severity: High

Affected Component: OrderService

Root Cause: Insufficient order status validation in the cancellation process.

Fix Implemented: Added status validation in the `cancelOrder` method of `OrderService.java`