

# **Store & Inventory Management**

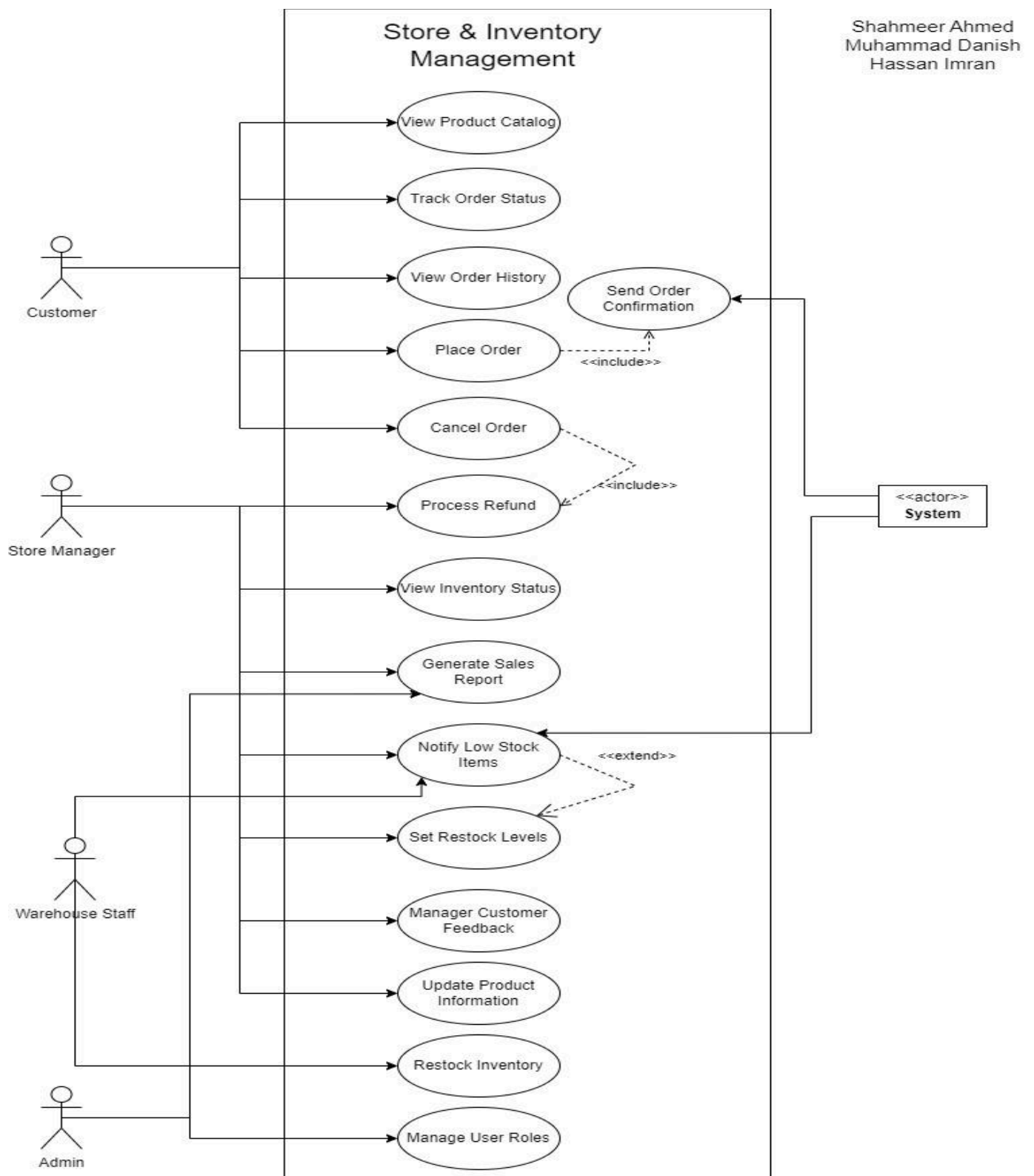
## **Semester Project**

### **Software Development and Architecture**

#### **Deliverable # 3 : Use Cases**

<b>Name</b>	<b>Roll Number</b>
<b>Shahmeer Ahmed</b>	<b>22I-1048</b>
<b>Hassan Imran</b>	<b>22I-0813</b>
<b>Muhammad Danish</b>	<b>22I-1305</b>

# Use Case Diagram:



# Fully Dressed Use Cases :

## 1. View Product Catalog

<b>Component</b>	<b>Description</b>
<b>Use Case Name</b>	View Product Catalog
<b>Scope</b>	TradeTrack eCommerce System
<b>Level</b>	User-goal
<b>Primary Actor</b>	Customer
<b>Stakeholders and Interests</b>	Customer: Wants to browse products easily. Store: Wants to present available products clearly.
<b>Preconditions</b>	The customer has access to the eCommerce platform.
<b>Postconditions</b>	The customer successfully views the product catalog.
<b>Main Success Scenario</b>	<b>Actor Action</b> 1. Customer navigates to the product catalog. 2. Customer browses and filters products. 3. Customer searches for specific items. 4. Customer views product details.
<b>Extensions</b>	- If the product data fails to load, the system displays an error message.
<b>Group Member</b>	Hassan Imran (22I-0813)

## 2. Place Order

Component	Description
Use Case Name	Place Order
Scope	TradeTrack eCommerce System
Level	User-goal
Primary Actor	Customer
Stakeholders and Interests	Customer: Wants to place an order for products efficiently. Store: Ensures that orders are processed smoothly.
Preconditions	Customer is logged in and has added items to the shopping cart.
Postconditions	Order is successfully placed and confirmed.
Main Success Scenario	<b>Actor Action</b> <ol style="list-style-type: none"><li>1. Customer reviews items in the shopping cart.</li><li>2. Customer proceeds to checkout.</li><li>3. Customer enters payment and shipping details.</li><li>4. Customer confirms the order.</li></ol>
Extensions	<ul style="list-style-type: none"><li>- If payment fails, the system prompts the customer to retry or choose a different payment method.</li><li>- If stock is unavailable, the system notifies the customer of stock issues.</li></ul>
Group Member	Hassan Imran (22I-0813)

### 3. Track Order Status

Component	Description
Use Case Name	Track Order Status
Scope	TradeTrack eCommerce System
Level	User-goal
Primary Actor	Customer
Stakeholders and Interests	Customers want to track the progress of their order. Store: Ensures clear communication on order progress.
Preconditions	Customer has placed an order.
Postconditions	The customer successfully tracks the order status.
Main Success Scenario	<b>Actor Action</b> <ol style="list-style-type: none"><li>1. Customers log into their account.</li><li>2. Customer navigates to 'Order History'.</li><li>3. Customer views order status.</li><li>4. Customer selects order to track detailed progress.</li></ol>
Extensions	- If the order status fails to load, the system displays an error message.
Group Member	Hassan Imran (22I-0813)

## 4. Cancel Order

<b>Component</b>	<b>Description</b>
<b>Use Case Name</b>	Cancel Order
<b>Scope</b>	TradeTrack eCommerce System
<b>Level</b>	User-goal
<b>Primary Actor</b>	Customer
<b>Stakeholders and Interests</b>	Customer: Wants the ability to cancel an order before it is shipped. Store: Needs to prevent order cancellations after shipment.
<b>Preconditions</b>	The customer has placed an order, and the order has not yet been shipped.
<b>Postconditions</b>	The order is successfully canceled, and the customer is notified.
<b>Main Success Scenario</b>	<b>Actor Action</b> 1. Customer navigates to order history. 2. Customer selects order to cancel. 3. Customer confirms cancellation request.
<b>Extensions</b>	- If the order has already shipped, the system prevents cancellation and informs the customer.
<b>Group Member</b>	Hassan Imran (22I-0813)

## 5. View Order History

Component	Description
Use Case Name	View Order History
Scope	TradeTrack eCommerce System
Level	User-goal
Primary Actor	Customer
Stakeholders and Interests	Customer: Wants to view details of past orders for reference. Store: Ensures accurate record-keeping.
Preconditions	The customer is logged in.
Postconditions	Customers successfully view their order history.
Main Success Scenario	<b>Actor Action</b> <ol style="list-style-type: none"><li>1. Customer logs into the system.</li><li>2. Customer navigates to 'Order History'.</li><li>3. Customer views a list of past orders.</li><li>4. Customer clicks on a specific order to view details.</li></ol>
Extensions	- If the customer has no order history, the system informs the customer accordingly.
Group Member	Hassan Imran (22I-0813)

## 6. Notify Low Stock Levels

Component	Description
Use Case Name	Notify Low Stock Levels
Scope	TradeTrack Inventory Management System
Level	System-goal
Primary Actor	System
Stakeholders and Interests	<p>Store Manager: Needs to be informed of low stock levels to restock and avoid running out of products.</p> <p>Warehouse Staff: Requires timely information to prepare for restocking.</p>
Preconditions	<p>The system is actively monitoring inventory levels.</p> <p>Products are already in the inventory with set threshold levels for low stock alerts.</p>
Postconditions	<p>Store Manager and/or Warehouse Staff are notified of items with low stock.</p> <p>Inventory continues to be tracked, and items with low stock are flagged for further action.</p>
Main Success Scenario	<p><b>Actor Action</b></p> <ol style="list-style-type: none"><li>1. System detects that a product's stock level has fallen below the predefined threshold.</li><li>2. System automatically generates a low stock notification.</li><li>3. System sends the notification to the Store Manager and/or Warehouse Staff.</li></ol>



**Extensions**

- If the notification cannot be sent due to a system error, the system retries after a set period.
- If multiple products are low in stock, the system can consolidate notifications into a summary alert.

**Group Member**

Shahmeer Ahmed (22I-1048)

## 7. Generate Sales Report

Component	Description
Use Case Name	Generate Sales Report
Scope	TradeTrack Reporting System
Level	User-goal
Primary Actor	Store Manager
Stakeholders and Interests	Store Manager: Wants to review sales performance data. Business Analysts: Need data for financial planning and decision-making.
Preconditions	The store has sales data recorded in the system.
Postconditions	The system generates the sales report with performance data.
Main Success Scenario	<b>Actor Action</b> <ol style="list-style-type: none"><li>1. Store manager logs into the system.</li><li>2. Store manager navigates to the reporting section.</li><li>3. Store manager selects the sales report type.</li><li>4. Store manager runs the report.</li></ol>
Extensions	- If sales data is unavailable, the system notifies the manager that no report can be generated.
Group Member	Shahmeer Ahmed (22I-1048)

## 8. Set Restock Levels

Component	Description
Use Case Name	Set Restock Levels
Scope	TradeTrack Inventory Management System
Level	User-goal
Primary Actor	Store Manager
Stakeholders and Interests	Store Manager: Wants to maintain sufficient stock to avoid stockouts.
Preconditions	Inventory data is available in the system.
Postconditions	Reorder levels are set, and the system monitors stock levels for reordering.
Main Success Scenario	<b>Actor Action</b> <ol style="list-style-type: none"><li>1. Store manager logs into the system.</li><li>2. Store manager navigates to the inventory settings.</li><li>3. Store manager selects the option to set restocklevels.</li><li>4. Store manager enters reorder threshold values for different products.</li></ol>
Extensions	- If stock data is incomplete, the system warns the manager before setting reorder levels.
Group Member	Shahmeer Ahmed (22I-1048)

## 9. Restock Inventory

Component	Description
Use Case Name	Restock Inventory
Scope	TradeTrack Inventory Management System
Level	User-goal
Primary Actor	Warehouse Staff
Stakeholders and Interests	Warehouse Staff: Wants to update inventory after receiving stock. Store Manager: Needs inventory data updated accurately after restocking.
Preconditions	New stock has been received at the warehouse.
Postconditions	Inventory is successfully updated in the system.
Main Success Scenario	<b>Actor Action</b> 1. Warehouse staff logs into the system. 2. Warehouse staff selects 'Restock Inventory'. 3. Warehouse staff enters the details of the received stock. 4. Warehouse staff submits the stock update.
Extensions	- If the stock information is incomplete, the system prompts the staff for more details.
Group Member	Shahmeer Ahmed (22I-1048)

## 10. Process Refund

Component	Description
Use Case Name	Process Refund
Scope	TradeTrack Refund System
Level	User-goal
Primary Actor	Store Manager
Stakeholders and Interests	Customer: Expects timely processing of refunds. Store Manager: Needs to ensure refunds are processed correctly and promptly.
Preconditions	The customer has returned a product and requested a refund.
Postconditions	Refunds are processed and confirmed.
Main Success Scenario	<b>Actor Action</b> 1. Store manager logs into the system. 2. Store manager navigates to the refund section. 3. Store manager reviews the return request. 4. Store manager approves the refund.
Extensions	- If the refund request is invalid (e.g., beyond the return period), the system denies the refund and notifies the customer.
Group Member	Shahmeer Ahmed (22I-1048)

## 11. Manage User Roles

Component	Description
Use Case Name	Manage User Roles
Scope	TradeTrack User Management System
Level	User-goal
Primary Actor	System Administrator
Stakeholders and Interests	System Administrator: Needs to assign and manage roles for staff. Store Manager: Wants to ensure appropriate access for different user roles.
Preconditions	The system administrator is logged in and has access to user management.
Postconditions	User roles are successfully updated in the system.
Main Success Scenario	<b>Actor Action</b> 1. Administrator logs into the system. 2. Administrator navigates to 'User Roles'. 3. Administrator selects a user and assigns or updates their role. 4. Administrator confirms and saves changes.
Extensions	- If an invalid role is selected, the system notifies the administrator and prevents changes.
Group Member	Muhammad Danish (22I-1305)

## 12. Update Product Information

Component	Description
Use Case Name	Update Product Information
Scope	TradeTrack Product Management System
Level	User-goal
Primary Actor	Store Manager
Stakeholders and Interests	Store Manager: Needs to update product details accurately. Customers: Expect up-to-date information on product availability, price, and descriptions.
Preconditions	The product exists in the system and requires an update.
Postconditions	Product information is successfully updated in the system.
Main Success Scenario	<b>Actor Action</b> <ol style="list-style-type: none"><li>1. Store manager logs into the system.</li><li>2. Store manager navigates to the 'Product Information' section.</li><li>3. Store manager selects a product to update.</li><li>4. Store manager updates the necessary fields (e.g., price, description, availability).</li><li>5. Store manager submits the changes.</li></ol>
Extensions	- If required fields are missing, the system prompts the manager to complete the information.
Group Member	Muhammad Danish (22I-1305)

### 13. Send Order Confirmation

Component	Description
Use Case Name	Send Order Confirmation
Scope	TradeTrack eCommerce System
Level	User-goal
Primary Actor	System (Automated Process)
Stakeholders and Interests	Customer: Expects confirmation of their purchase. Store Manager: Wants to ensure order confirmations are sent promptly to maintain customer satisfaction.
Preconditions	An order has been successfully placed.
Postconditions	The customer receives an order confirmation via email or message.
Main Success Scenario	<b>Actor Action</b> 1. Customer places an order. 2. System processes the payment and verifies order details. 3. Customer receives an email or message confirming the order.
Extensions	- If the confirmation fails to send, the system logs the error and retries or alerts the store manager.
Group Member	Muhammad Danish (22I-1305)



## 14. View Inventory Status

Component	Description
Use Case Name	View Inventory Status
Scope	TradeTrack Inventory Management System
Level	User-goal
Primary Actor	Store Manager, Warehouse Staff
Stakeholders and Interests	Store Manager: Needs to monitor current inventory levels for stock planning. Warehouse Staff: Needs to check inventory status for restocking or order processing.
Preconditions	Inventory data is available in the system.
Postconditions	The store manager or warehouse staff can view the real-time inventory status.
Main Success Scenario	<b>Actor Action</b> 1. Store managers or warehouse staff log into the system. 2. User navigates to 'Inventory Status'. 3. Users view the current stock levels for all products. 4. User applies filters (e.g., location, product category) if needed.
Extensions	- If inventory data fails to load, the system alerts the user and logs the issue for further investigation.
Group Member	Muhammad Danish (22I-1305)

## 15. Manage Customer Feedback

Component	Description
Use Case Name	Manage Customer Feedback
Scope	TradeTrack Feedback Management System
Level	User-goal
Primary Actor	Store Manager
Stakeholders and Interests	Store Manager: Wants to review and respond to customer feedback. Customers: Expect their feedback to be acknowledged and responded to.
Preconditions	Customers have left feedback in the system.
Postconditions	Customer feedback is reviewed and responded to by the store manager.
Main Success Scenario	<b>Actor Action</b> 1. Store manager logs into the system. 2. Store manager navigates to the 'Customer Feedback' section. 3. Store manager reviews feedback. 4. Store manager responds to the feedback (if required).
Extensions	- If there is no feedback, the system notifies the manager accordingly.
Group Member	Muhammad Danish (22I-1305)