

PROJECT: E-Commerce Platform (Sportswear Store) **MODULE:** Checkout Process / Order Management **AUTHOR:** Anastasiia Kovalenko

1. EPIC: Order Processing Optimization

Goal: To reduce cart abandonment rate by 15% and automate stock reservation logic.

2. USER STORY (US-104): "One-Click Buy" Feature

As a registered customer, **I want to** purchase items using a "Buy Now" button without re-entering my shipping details, **So that** I can save time and complete the order instantly.

3. ACCEPTANCE CRITERIA (AC)

Scenario 1: Successful Quick Order

- **Pre-condition:** User is logged in; User has a default address and payment method saved; Item is "In Stock".
- **Action:** User clicks "Buy Now" on the Product Page.
- **System Behavior:**
 1. System creates an Order with status **New**.
 2. System reserves the item SKU in the WMS (Warehouse Management System).
 3. User is redirected to the "Thank You" page.
 4. Confirmation email is sent within 60 seconds.

Scenario 2: Item Out of Stock (Error Handling)

- **Action:** User clicks "Buy Now", but the API returns `stock_qty = 0`.
 - **System Behavior:**
 1. Order is NOT created.
 2. An error modal appears: *"Sorry, this item just sold out. Notify me when available?"*
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4. TECHNICAL REQUIREMENTS (Non-Functional)

1. **API Response Time:** The checkout transaction must be processed in < 2000ms.
2. **Security:** All payment data must be tokenized (PCI DSS compliance).
3. **Cross-platform:** The button must be sticky on mobile viewports (iOS/Android).

Field Name	Data Type	Source (Front-end)	Destination (CRM)
order_id	INT	Generated	Orders Table
customer_phone	STRING	User Profile	Contacts Table
sku_code	STRING	Product Page	Order_Items Table
delivery_method	ENUM	Default Value	Logistics Table