

# E-commerce Complete Workflow

## 1. User Login & Registration

The customer journey begins when they arrive on the e-commerce platform. The system first checks whether the user is authenticated.

- **First-Time Visitor:** If no account exists, the user is redirected to the signup/login page. They must fill in registration details, which are verified by the system. Upon approval, a new account is created, and a confirmation mail is sent.
- **Existing but Logged-Out User:** If the customer already has an account but is not signed in, they are taken to the login page. Credentials entered are matched against stored records.
- **Active User Session:** If the person is already signed in, they are taken straight to the main store features.

## 2. Product Exploration & Cart Management

After successful authentication, customers move into the shopping section.

- **Finding Products:** They can browse product categories or use the search bar to quickly locate desired items.
- **Viewing Details:** Clicking a product opens a dedicated page with descriptions, specifications, images, and reviews.
- **Adding to Cart:** Items can be placed in the shopping cart from the product page.
- **Continue Shopping or Checkout:** Shoppers may either keep browsing and add more items or proceed to the checkout process.

### 3. Checkout & Payment Processing

The checkout step gathers the necessary details to complete the purchase.

- **Customer Details:** Buyers provide shipping and billing addresses, which the system validates for accuracy.
- **Order Review:** The platform calculates the final payable amount, including taxes and delivery charges, and shows the user a summary to confirm.
- **Payment Stage:**
  - **If Successful:** A unique order reference ID is generated, and the purchase is logged.
  - **If Failed:** An error message appears, prompting the customer to retry or switch to another payment method. The flow then returns to payment processing.

### 4. Order Processing & Shipping

Once payment goes through, the order moves into fulfillment.

- **Stock Update:** Inventory levels are adjusted to reflect the recent purchase.
- **Order Acknowledgment:** The customer receives a confirmation mail with complete order details.
- **Fulfillment Queue:** The order is placed in a queue for warehouse processing.
- **Packaging:** Warehouse staff locate the products, pack them securely, and prepare them for dispatch.
- **Delivery Cycle:**
  - A shipping label is created.
  - The package is handed over to the delivery partner.
  - The order status is updated to “Shipped.”
  - A tracking number is emailed to the customer.

- The courier delivers the parcel.
- The status changes to “Delivered.”

## **5. Workflow Completion**

The process officially ends once the product reaches the customer, concluding the journey from login to final delivery.