E-commerce End-to-End Process

1. Account Access & Verification

The shopping journey begins as soon as a visitor enters the e-commerce platform. The system immediately verifies their login status.

- **New User:** If no account is found, the visitor is redirected to the registration/login screen. They enter their details, which are validated, and a new profile is created. A verification email is also sent.

- **Returning but Logged-Out User:** If the user already has an account but isn't signed in, they are prompted to log in with credentials checked against stored records.

- **Logged-In User:** If an active session exists, the customer is taken directly to the main shopping interface.

2. Browsing & Shopping Cart Actions

Once access is granted, the buyer can start exploring products.

- **Search & Browse:** Customers may navigate categories or use the search feature to find desired products.

- **Product Page:** Selecting an item opens a detail page with specifications, reviews, images, and other essential information.

- **Cart Addition:** Items can be added to the cart directly from the product page.

- **Next Step:** Shoppers may either continue exploring and add more products or head to the checkout process.

3. Checkout & Payment Flow

This phase ensures the order details and payment are completed.

- **Shipping & Billing Info:** The system asks customers to enter delivery and billing details, validating accuracy before proceeding.

- **Order Summary:** A final review page displays product totals, taxes, and shipping charges for user confirmation.

- **Payment Handling:**

  - **On Success:** The payment is accepted, and a unique order ID is created.

  - **On Failure:** A payment error message is displayed, and the customer is asked to retry or choose another payment method. The process loops back to the payment stage.

4. Fulfillment & Delivery

Once a payment clears, the order is sent for processing and shipment.

- **Inventory Adjustment:** The system updates stock records to reflect the purchase.

- **Confirmation Notice:** A detailed confirmation email is sent to the customer.

- **Processing Queue:** The order is placed in the fulfillment pipeline.

- **Picking & Packing:** Warehouse staff retrieve the items, pack them, and prepare them for shipping.

- **Delivery Stages:**

  - A shipping label is printed.

  - The package is handed over to a courier.

  - The system updates the order status to **"Shipped."**

5. Process Completion

The cycle concludes once the product successfully reaches the customer, marking the end of the e-commerce workflow from login to delivery.