**Case Study: Online Shopping System**

Create a simplified online shopping system in Java, incorporating fundamental concepts such as classes, inheritance, and exception handling.

**Requirements:**

1. **Create a Product Class:**
   * Implement a Product class with attributes productName (String), productId (int), price (double), and quantityInStock (int).
   * Include a method displayDetails to print details of the product.
2. **Derived Classes - Electronics and Clothing:**
   * Create two classes, Electronics and Clothing, that inherit from the Product class.
   * Add attributes specific to each type (e.g., brand and warrantyPeriod for electronics, size and material for clothing).
   * Override the displayDetails method in each derived class to include information about the specific attributes.
3. **Shopping Cart:**
   * Create a ShoppingCart class to manage the user's shopping cart.
   * Include methods to add products to the cart, display the cart contents, and calculate the total price.
4. **User Input and Exception Handling:**
   * In the testing phase, simulate user input for adding electronics and clothing to the shopping cart.
   * Implement exception handling to ensure valid inputs for product creation (e.g., non-empty product name, positive product ID).