

## Black Box Testing of the Checkout Process for ShopEase

Black Box Testing is a software testing method that evaluates the functionality of an application without looking at its internal code structure, implementation details, or workings. The tester focuses solely on the inputs provided to the software and the outputs it generates, based on the system's requirements and specifications.

### ❖ STEPS FOR BLACK BOX TESTING:

#### 1. Understand User Requirements:

Study the expected behavior of the checkout process, such as adding items to the cart, applying discounts, and completing payment.

#### 2. Focus on Key Functionalities:

Validate shopping cart behavior.

Test payment gateway integration.

Ensure the correct application of taxes, shipping costs, and discounts.

#### 3. Simulate Real-World Scenarios:

Perform tests that mimic common user actions and unexpected inputs to uncover usability and functionality issues.

### ❖ TEST CASE DESIGN :

#### 1. Add a valid item to the cart and proceed to checkout:

Expected Result: The item is added successfully, and the checkout page displays correctly.

#### 2. Attempt checkout with an empty shopping cart:

Expected Result: The user sees an appropriate message, such as "Your cart is empty."

#### 3. Apply a valid discount code during checkout:

Expected Result: The discount is applied correctly, and the total updates accordingly.

4. Enter invalid payment details (e.g., incorrect card number):

Expected Result: Payment is declined, and the user is notified of the issue.

5. Select different shipping options and verify updated totals:

Expected Result: Shipping costs update accurately based on the selected option.

6. Interrupt the payment process midway (e.g., close browser):

Expected Result: The order remains incomplete, and no payment is processed.

7. Test for session timeout during the checkout process:

Expected Result: The user is logged out or notified to refresh the session securely.

8. Enter invalid data in address fields (e.g., symbols):

Expected Result: The system displays appropriate validation messages for corrections.

9. Verify email notification for successful order placement:

Expected Result: The user receives a confirmation email with the correct order details.