

PROJECT DOCUMENT

Course name: Software Engineering

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Project Title:

SnapShop-Jewellery Store Management System

TEST CASES

Test Case Fields:

- Test Case ID
- Test Title
- Related Requirement ID
- Pre-Conditions
- Test Steps
- Test Data
- Expected Result
- Actual Result
- Status (Pass/Fail)
- Remarks

1. UNIT TESTING – TEST CASES

Test Case 1: Navbar Link Redirection

Test Case ID: TC-UNIT-01

Test Title: Verify Navbar category links

Related Requirement ID: FR-01

Pre-Conditions:

Website homepage loaded

Test Steps:

- Click on Gold category
- Click on Silver category
- Click on Men category

Test Data: Navbar links

Expected Result: User redirected to correct category pages

Actual Result: User redirected correctly

Status: Pass

Remarks: None

Test Case 2: Logo Redirection

Test Case ID: TC-UNIT-02

Test Title: Verify SnapShop logo redirect

Related Requirement ID: FR-01

Pre-Conditions: Any page opened

Test Steps: Click on SnapShop logo
Test Data: Logo click
Expected Result: Homepage should open
Actual Result: Homepage opened successfully
Status: Pass
Remarks: None

Test Case 3: Sticky Navbar

Test Case ID: TC-UNIT-03
Test Title: Verify sticky navbar behavior
Related Requirement ID: FR-01
Pre-Conditions: Scrollable page loaded
Test Steps: Scroll down the page
Test Data: Page scroll
Expected Result: Navbar remains fixed at top
Actual Result: Navbar remains fixed
Status: Pass
Remarks: None

Test Case 4: Page Padding Validation

Test Case ID: TC-UNIT-04
Test Title: Verify global page padding
Related Requirement ID: FR-01
Pre-Conditions: Navbar visible
Test Steps: Inspect page layout
Test Data: Page UI
Expected Result: 180px top padding maintained
Actual Result: Padding correctly applied
Status: Pass
Remarks: None

Test Case 5: Footer Information Links

Test Case ID: TC-UNIT-05
Test Title: Verify footer information links
Related Requirement ID: FR-01
Pre-Conditions: Footer visible
Test Steps:

1. Click About Us link
2. Click Terms link
3. Click Refund Policy link

Test Data: Footer links
Expected Result: Correct pages open
Actual Result: Pages opened correctly
Status: Pass
Remarks: None

Test Case 6: Search Bar Toggle

Test Case ID: TC-UNIT-06

Test Title: Verify search bar toggle functionality

Related Requirement ID: FR-01

Pre-Conditions: Navbar visible

Test Steps:

1. Click search icon

2. Click again to hide

Test Data: Search icon

Expected Result: Search bar toggles visibility

Actual Result: Search bar toggled successfully

Status: Pass

Remarks: None

Test Case 7: Cart Navigation

Test Case ID: TC-UNIT-07

Test Title: Verify cart page navigation

Related Requirement ID: FR-01

Pre-Conditions: Cart icon visible

Test Steps: Click cart icon

Test Data: Cart icon

Expected Result: User navigated to cart page

Actual Result: Cart page opened

Status: Pass

Remarks: None

BLACK BOX TESTING – EQUIVALENCE PARTITIONING

Test Case 8: Search Keyword Input

Test Case ID: TC-BB-01

Test Title: Verify keyword search

Related Requirement ID: FR-02

Pre-Conditions: Products available

Test Steps:

Enter valid product name

Click search

Test Data: "Gold Ring"

Expected Result: Matching product displayed

Actual Result: Product displayed

Status: Fail

Remarks: Valid equivalence class

Test Case 9: Invalid Search Input

Test Case ID: TC-BB-02

Test Title: Verify invalid search input

Related Requirement ID: FR-02
Pre-Conditions: Search bar visible
Test Steps: Enter random text
Test Data: "xyz123"
Expected Result: No results found message
Actual Result: Message displayed
Status: Pass
Remarks: Invalid equivalence class handled correctly

BOUNDARY VALUE ANALYSIS – TEST CASES

Test Case 10: Empty Search Submission

Test Case ID: TC-BVA-01
Test Title: Verify empty search behavior
Related Requirement ID: FR-03
Pre-Conditions: Search bar empty
Test Steps:

Click search without input
Test Data: Empty
Expected Result: All products displayed
Actual Result: All products displayed
Status: Pass
Remarks: Lower boundary accepted

Test Case 11: Minimum Boundary Value For Order Quantity

Test Case ID: TC-BVA-02
Test Title: Verify cart quantity increment
Related Requirement ID: FR-03
Pre-Conditions: Item already in cart
Test Steps: Add same item again
Test Data: Duplicate item
Expected Result: Quantity increases
Actual Result: Quantity updated
Status: Pass
Remarks: Upper boundary handled

WHITE BOX TESTING – BRANCH COVERAGE

Test Case 12: TRUE Branch Execution

Test Case ID: TC-WB-01
Test Title: Verify cart item exists logic
Related Requirement ID: FR-04
Pre-Conditions: Item already in cart
Test Steps:

Add same item
Test Data: Existing item
Expected Result: Quantity increases
Actual Result: Quantity increases
Status: Pass
Remarks: TRUE branch covered

Test Case 13: FALSE Branch Execution

Test Case ID: TC-WB-02
Test Title: Verify new cart item addition
Related Requirement ID: FR-04
Pre-Conditions: Item not in cart
Test Steps:

Add new item
Test Data: New Item
Expected Result: Item added to cart
Actual Result: Item added
Status: Pass
Remarks: FALSE branch covered

INTEGRATION TESTING

Test Case 14: Add to Cart Integration

Test Case ID: TC-INT-01
Test Title: Verify cart updates from product page
Related Requirement ID: FR-05
Pre-Conditions: Product displayed
Test Steps:

Click Add to Cart
Test Data: Product item
Expected Result: Cart updated
Actual Result: Cart updated successfully
Status: Pass
Remarks: Integration successful

SYSTEM TESTING

Test Case 15: Full Checkout Flow

Test Case ID: TC-SYS-01
Test Title: Verify complete checkout cycle
Pre-Conditions: Cart has items
Test Steps:Checkout

Enter details
Place order
Test Data: Valid customer data
Expected Result: Order success page displayed
Actual Result: Order completed
Status: Pass
Remarks: System stable

Test Case 16: Verify Payment Gateway Integration

Test Case ID: TC-SYS-02
Test Title: Verify successful payment processing
Related Requirement ID: FR-06
Pre-Conditions: Checkout page open
Test Steps:

Enter payment details

Submit payment
Test Data: Valid credit/debit card
Expected Result: Payment completed, confirmation displayed
Actual Result: Payment completed successfully
Status: Pass
Remarks: Payment gateway functioning correctly

Test Case 17: Verify Order Confirmation Email

Test Case ID: TC-SYS-03
Test Title: Check order confirmation email delivery
Related Requirement ID: FR-07
Pre-Conditions: Order placed successfully
Test Steps:

Place order
Check registered email
Test Data: Customer email address
Expected Result: Email contains order details
Actual Result: Email received successfully
Status: Pass
Remarks: Email notification working

Test Case 18: Verify Product Stock Update

Test Case ID: TC-SYS-04
Test Title: Check stock decrement after order
Related Requirement ID: FR-08
Pre-Conditions: Product in stock
Test Steps:

Place order for product

Check stock quantity
Test Data: Product quantity 5
Expected Result: Stock reduced by ordered quantity
Actual Result: Stock updated correctly
Status: Pass
Remarks: Inventory updated successfully

Test Case 19: Verify Product Out-of-Stock Handling

Test Case ID: TC-SYS-05

Test Title: Check behavior when product is out of stock

Related Requirement ID: FR-08

Pre-Conditions: Product stock = 0

Test Steps:

Attempt to order product
Test Data: Product quantity 1
Expected Result: Alert "Out of Stock" displayed
Actual Result: Out of Stock alert displayed
Status: Pass
Remarks: Out-of-stock scenario handled

Test Case 20: Verify Order History Page

Test Case ID: TC-SYS-06

Test Title: Check display of past orders

Related Requirement ID: FR-09

Pre-Conditions: User logged in

Test Steps:

Open order history page
Test Data: Existing orders
Expected Result: All previous orders listed correctly
Actual Result: Order history displayed successfully
Status: Pass
Remarks: Order history page working

Test Case 21: Verify Product Details Page

Test Case ID: TC-SYS-07

Test Title: Check product details display

Related Requirement ID: FR-10

Pre-Conditions: Product exists

Test Steps:

Click on product

Test Data: Product ID

Expected Result: Product name, price, image, and description displayed

Actual Result: Product details displayed correctly

Status: Pass

Remarks: Product detail page functioning

Test Case 22: Verify Add to Wishlist Functionality

Test Case ID: TC-SYS-08

Test Title: Add product to wishlist

Related Requirement ID: FR-11

Pre-Conditions: User logged in

Test Steps:

Click "Add to Wishlist"

Test Data: Product item

Expected Result: Product added to wishlist

Actual Result: Added successfully

Status: Pass

Remarks: Wishlist working

Test Case 23: Verify Remove from Wishlist

Test Case ID: TC-SYS-09

Test Title: Remove product from wishlist

Related Requirement ID: FR-11

Pre-Conditions: Product in wishlist

Test Steps:

Click "Remove"

Test Data: Wishlist product

Expected Result: Product removed from wishlist

Actual Result: Removed successfully

Status: Pass

Remarks: Wishlist remove feature working

Test Case 24: Verify Coupon Code Application

Test Case ID: TC-SYS-10

Test Title: Apply discount coupon at checkout

Related Requirement ID: FR-12

Pre-Conditions: Valid coupon exists

Test Steps:

Enter coupon code

Click apply

Test Data: Coupon "SAVE10"

Expected Result: 10% discount applied
Actual Result: Discount applied correctly
Status: Pass
Remarks: Coupon functionality verified

Test Case 25: Verify Invalid Coupon Handling

Test Case ID: TC-SYS-11

Test Title: Apply invalid coupon code

Related Requirement ID: FR-12

Pre-Conditions: Coupon does not exist

Test Steps:

Enter invalid code
Click apply
Test Data: Coupon "INVALID123"
Expected Result: Error message displayed
Actual Result: Invalid coupon message shown
Status: Pass
Remarks: Handled invalid coupon

Test Case 26: Verify Responsive Layout

Test Case ID: TC-SYS-12

Test Title: Check UI responsiveness on mobile

Related Requirement ID: FR-13

Pre-Conditions: Access from mobile device

Test Steps:

Open homepage

Check page layout
Test Data: Mobile screen
Expected Result: Layout adapts correctly
Actual Result: Layout responsive
Status: Pass
Remarks: Mobile responsiveness verified

Test Case 27: Verify Social Media Links

Test Case ID: TC-SYS-13

Test Title: Check footer social links

Related Requirement ID: FR-14

Pre-Conditions: Footer visible

Test Steps:

Click Facebook/Twitter/Instagram links
Test Data: Footer links
Expected Result: Opens respective social media pages
Actual Result: Links working correctly
Status: Pass
Remarks: Social links functional

Test Case 28: Verify Contact Us Form Submission

Test Case ID: TC-SYS-14
Test Title: Submit Contact Us form
Related Requirement ID: FR-15
Pre-Conditions: Contact page open
Test Steps:

Fill form

Click submit
Test Data: Name, email, message
Expected Result: Form submitted successfully
Actual Result: Form submitted
Status: Pass
Remarks: Contact form working

Test Case 29: Verify Newsletter Subscription

Test Case ID: TC-SYS-15
Test Title: Subscribe to newsletter
Related Requirement ID: FR-16
Pre-Conditions: Homepage loaded
Test Steps:

Enter email

Click subscribe
Test Data: Valid email address
Expected Result: Subscription confirmation shown
Actual Result: Email subscribed successfully
Status: Pass
Remarks: Newsletter working

Test Case 30: Verify Logout Functionality

Test Case ID: TC-SYS-16
Test Title: User logout process
Related Requirement ID: FR-17
Pre-Conditions: User logged in
Test Steps:

Click logout
Test Data: Logged-in session
Expected Result: User redirected to homepage
Actual Result: User logged out successfully
Status: Pass
Remarks: Logout working

REGRESSION TESTING

Test Case 31: Cart After Update

Test Case ID: TC-REG-01
Test Title: Verify cart functionality after update
Pre-Conditions: Application updated
Test Steps:

Add item to cart
Test Data: Product
Expected Result: Cart works normally
Actual Result: Cart works correctly
Status: Pass
Remarks: No regression defects found

Test Case 32: Custom 404 Page

Test Case ID: TC-REG-02
Test Title: Verify 404 page after update
Pre-Conditions: Invalid URL entered
Test Steps:

Enter wrong URL
Test Data: /xyz
Expected Result: Custom 404 page shown
Actual Result: Page displayed correctly
Status: Pass
Remarks: No regression defects found