**Q1: Verify that user can add to cart one or multiple products.**

**T01:** Add single product to cart.

**T02:** Add multiple products to cart.

**T03:** Add product with variation to cart.

**Test Technique one:**

**Design Table Technique:**

**Conditions:**

**C1:** Single/Multi products to cart **C2:** Add product with variation or not **Actions:**

**A1:** Single/Multiple Selected

**A2:** Product selected with variation or not

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **C & A** | **Scenario** | **TC1** | | **TC2** | | **TC3** | | **TC4** | |
| C1 | Single/Multi products to cart | | Single product | | Single product | | Multi Product | | Multi Product | |
| C2 | Add product with variation or not | | Variation | | not | | Variation | | not | |
| A1 | Single/Multiple Selected | | T | | T | | T | | T | |
| A2 | Product selected with variation or not | | T | | F | | T | | F | |

**Test Technique Two:**

**State Transition Technique:**

S1

Yes

S3

No

Yes

S2

No

S4

Product

Variations

Cart

Error

|  |  |  |  |
| --- | --- | --- | --- |
| **State** | **Added to Cart** | **Correct** | **Incorrect** |
| **S1** | Product | S3 | S2 |
| **S2** | Variation | S3 | S4 |
| **S3** | Cart |  |  |
| **S4** | Error |  |  |

**Test Technique 3:**

**Requirement traceability Matrix:**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **TC\_ID** | **T\_Scenario** | **Test\_Case** | **Pre\_condition** | **T\_Steps** | **Result** |
| **T\_ID\_01** | Add Single  product to cart | Adding product to cart | User is logged in.product is available in stock | * User to   navigates detail.   * User   clicks add to cart.   * System adds product to cart | Product is successfully  added to  cart |
| **T\_ID\_02** | Add multiple products to  cart | Adding product to cart | User is logged in.product is available in |  User to  navigates | Both products are |
|  |  |  | stock | detail.  User clicks add to cart.  system adds product A to cart System adds product B to cart | successfully added to cart. |
| **T\_ID\_03** | Add product with variations to cart | Adding product to cart | User is logged in product with variations | User navigates to product details page. User select variation  System adds product with selected variation to cart | Product with selected variation is successfully  added to  cart |

**Q2: Verify that user can add products to wish list.**

**T01:** Add single product to wish list.

**T02:** Add multiple products to wish list.

**T03:** Add product with sufficient and insufficient stock.

**Test Technique one:**

**Design Table Technique:**

**Condition:**

**C1:** Product not already in wish list.

**C2:** Single/Multi products to wish list.

**C3:** Sufficient/Insufficient products to.

**Actions:**

**A1:** Product added to wish list.

**A2:** Product selected single/multiple.

**A3:** Product availability.

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **C & A** | **Scenario** | **TC1** | **TC2** | **TC3** | **TC4** |
| **C1** | Product not already in wish list. | True | T | F | F |
| **C2** | Single/Multi products to wish list. | Single | M | S | M |
| **C3** | Sufficient/Insufficient products to. | Suffi | InSuffi | Suffi | InSuffi |
| **A1** | Product added to wish list. | T | T | T | T |
| **A2** | Product selected single/multiple. | T | T | T | T |
| **A3** | Product availability. | T | F | T | F |

**Test Technique Two:**

**State Transition Technique:**

S1

Yes

S3

No

S2

Yes

S4

Product

Stock

Wish

list

Error

|  |  |  |  |
| --- | --- | --- | --- |
| **State** | **Added to Cart** | **Correct** | **Incorrect** |
| **S1** | Product | S3 | S2 |
| **S2** | Stock | S3 | S4 |
| **S3** | Wish\_list |  |  |
| **S4** | Error |  |  |

**Test Technique 3:**

**Requirement traceability Matrix:**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **TC\_ID** | **T\_Scenario** | **Test\_Case** | **Pre\_condition** | **T\_Steps** | **Result** |
| **T\_ID\_01** | Add Single product to wish list | Adding single  product to wish list | User is logged in.  product is available in stock. | User to navigates detail.  User clicks add to wish list. | Product is successfully added to wish list. |
| **T\_ID\_02** | Add multiple products to wish list | Adding multiple  products to wish list | User is logged in.  Multiple products are available in stock | User to navigates detail page of products.  User clicks add to wish list. | Both products are successfully added to wish list. |
| **T\_ID\_03** | Add product  with sufficient stock. | Adding product to wish list with sufficient stock | User is logged in.  product is available with sufficient. | User navigates to product details page.  Click Add to wish list. | Product with selected sufficient successfully added to wish list. |
| **T\_ID\_04** | Add product with insufficient stock. | Adding product to  wish list with  insufficient stock | User is logged in.  product is available with insufficient. | User navigates to product details page.  Click Add to wish list. | Product with selected insufficient successfully added to wish list. |

**Test Technique 4:**

**Equivalence class partition:**

**Limit (1-50)**

|  |  |  |
| --- | --- | --- |
| **Text data** | **Divide data** | **Data after ECP** |
| **1** | 1-25 (20) valid | 20 |
| **2** | 26-50 (60) invalid | 60 |

**Test Technique 5:**

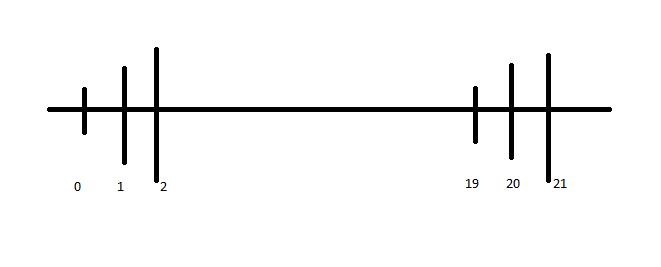
**Boundary**

**Value**

**Analysis:**

**Minimum**

**Maximum**



**Limit**

**(1-20)**

Min=1 (Pass)

Min-1 = 0 (Fail)

Min+1= 1 (pass)

Max = 20 (pass)

Max-1 = 19(pass)

Max +1= 21(Fail)

**Q3: Verify that user can buy products added to cart after signing in to the application (or as per the functionality of the website).**

**T01:** Successful Purchase.

**T02:** Purchase with insufficient Stock.

**T03:** Purchase with invalid payment information.

**Test Technique one:**

**Design Table Technique:**

**Condition:**

**C1:** User Enter valid info.

**C2:** Insufficient Stock.

**Actions:**

**A1:** Confirmed purchase.

**A2:** Check Availability.

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **C & A** | **Scenario** | **TC1** | **TC2** | **TC3** |
| **C1** | User Enter valid info. | T | T | F |
| **C2** | Insufficient Stock. | T | F | T |
| **A1** | Confirmed purchase. | T | T | F |
| **A2** | Check Availability. | T | F | F |

**Test Technique Two:**

**State Transition Technique:**

S2

Yes

S1

No

S3

No

No

No

S4

S5

InSuff

Purcha

Error

Valid

pay

Invalid

pay

|  |  |  |  |
| --- | --- | --- | --- |
| **State** | **Added to Cart** | **Correct** | **Incorrect** |
| **S1** | Valid Pay | S2 |  |
| **S2** | Purchase |  | S5 |
| **S3** | Insuff Stock |  | S2,S5 |
| **S4** | Invalid pay |  | S2 |
| **S5** | Error |  |  |

**Test Technique 3:**

**Requirement traceability Matrix:**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **TC\_ID** | **T\_Scenario** | **Test\_Case** | **Pre\_condition** | **T\_Steps** | **Result** |
| **T\_ID\_01** | Successful purchase | Product  Should be  successfully  Purchased | User is  registered. product is available in stock.  User has added product to cart. | User signed in to application.  User to navigates to cart page. User reviews cart contents and proceed to check out. | Successfully purchased. |
| **T\_ID\_02** | Purchase with insuffi stock | Product is not sufficient in | User is  registered. Product is | User to navigates detail page of cart. | Insufficient message displayed to |
|  |  | stock. | available in stock with  insufficient quantity. | System displays error massage of insufficient stock. | user successfully |
| **T\_ID\_03** | Purchase with invalid payment | Invalid payment Method | User is logged in.  product is available.  User has added product to cart. | User signed in to application.  User to navigates to cart page. User reviews cart contents and proceed to check out.  User enter invalid payment info. | Error  Message displayed to the user. |

**Q4. Verify that user can successfully buy more than one product that were added to his/her cart**

**T01:** Buying multiple products with same shipping address.

**T02:** Buying multiple products with coupon and discounts.

**T03:** Payment method to buy a product. **Test Technique one:**

**Design Table Technique:**

**Condition:**

**C1:** Support Multiple products to cart.

**C2:** Product has coupon and discounts.

**C3:** Availability of Money (Account, hand cash etc.).

**Actions:**

**A1:** Multiple products added to cart.

**A2:** Product contain discounts.

**A3:** Payment method.

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **C & A** | **Scenario** | **TC1** | **TC2** | **TC3** | **TC4** |
| **C1** | Support Multiple products to cart. | T | T | T | F |
| **C2** | Product has coupon and discounts. | T | F | T | F |
| **C3** | Availability of  Money (Account, hand cash etc.). | T | T | F | F |
| **A1** | Multiple products added to cart. | T | T | T | X |
| **A2** | Product contain discounts. | T | F | T |  |
| **A3** | Payment method. | T | T | F |  |

**Test Technique Two:**

**State Transition Technique:**

S1

S3

S2

S4

Multi\_

prod

Pay

method

Dis

&

Cou

Error

|  |  |  |  |
| --- | --- | --- | --- |
| **State** | **Added to Cart** | **Correct** | **Incorrect** |
| **S1** | Multi products | S2 | S3 |
| **S2** | Coupon & Discounts | S3 | S4 |
| **S3** | Payment method |  |  |
| **S4** | Error |  |  |

**Test Technique 3:**

**Requirement traceability Matrix:**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **TC\_ID** | **T\_Scenario** | **Test\_Case** | **Pre\_condition** | **T\_Steps** | **Result** |
| **T\_ID\_01** | Buying multiple products with same shipping address | Product shipped successfully to same address | User is  registered. Multiple product is available in stock.  User has added product to cart. | User signed in to application.  User to navigates to cart page. User reviews cart contents and proceed to check out.  User enter shipping address. User complete purchase | Successfully purchased. |
| **T\_ID\_02** | Buying product with coupon and discounts | Product with coupon and discounts. | User is  registered. Product is available in stock with  insufficient quantity. | User to navigates detail page of cart.  User apply coupons & discount to each product. User enter shipping address. User complete purchase | Successfully purchased. |
| **T\_ID\_03** | Buying products with  different payment methods | User could use different payment methods to buy a product. | User is logged in.  product is available.  User has added product to cart. | User signed in to application.  User to navigates to cart page. User reviews cart contents and proceed to check out.  User chose diff payment method. | Successfully purchased. |

**Q5: verify that user cannot add more than available inventory of the product**

**T01:** Adding product quantity exceeding available inventory.

**T02: exceeding available with coupons and discount.**

**T03:** exceeding available inventory with guest user.

**Test Technique one:**

**Design Table Technique:**

**Conditions:**

**C1:** user attempting product to cart that exceeds the available inventory.

**C2:** user attempting product to cart that exceeds the available inventory but with coupons and discount.

**C3:** exceeding available inventory with guest user.

**Actions:**

**A1:** option display to reduce quantity.

**A2:** option display to reduce quantity even with coupons and discount.

**A3: not added to cart guest user** is promoted to login.

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **C & A** | **Scenario** | **TC1** | **TC2** | **TC3** |
| **C1** | user attempting  product to cart that exceeds the available inventory. | T | F | F |
| **C2** | user attempting product to cart that exceeds the available | T | F | T |

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | inventory but with coupons and discount |  |  |  |
| **C3** | exceeding available inventory with guest user. | T | T | F |
| **A1** | option display to reduce quantity. | T | F | F |
| **A2** | option display to reduce quantity even with coupons and discount. | T | F | T |
| **A3** | **not added to cart guest user** is promoted to login. | T | T | F |

**Test Technique Two:**

**State Transition Technique:**

Yes

Yes

Yes

No

S5

No

Yes

No

No

Produc

t

added

Quantity

avaliable

Discount

&

coupone

Quantit

y

exceed

Guest

user

error

|  |  |  |  |
| --- | --- | --- | --- |
| **State** | **Added to Cart** | **Correct** | **Incorrect** |
| **S1** | Product added |  |  |
| **S2** | Quantity available | S1, S3 |  |
| **S3** | Discount &coupons | S4, S1 |  |
| **S4** | Quantity exceeds |  | S6 |
| **S5** | Guest user |  | S6, S4 |
| **S6** | error |  |  |

**Test Technique 3:**

**Requirement traceability Matrix:**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **TC\_ID** | **T\_Scenario** | **Test\_Case** | **Pre\_condition** | **T\_Steps** | **Result** |
| **T\_ID\_01** | Adding  Product  Quantity  Within  Available  Inventory | Add quantity | User is  registered, product is available in stock with a quantity of 5 | 1. User signs in to the application 2. User navigates to product details page 3. User attempts to add 3 units of the product to cart | Product is successfully added to cart, cart total is updated |
| **T\_ID\_02** | Adding  Product  Quantity  Exceeding  Available  Inventory | Quantity exceed stock | User is  registered, product is available in stock with a quantity of 5 | 1. User signs in to the application 2. User navigates to product details page 3. User attempts to add 6 units of the product to cart | Error message is displayed indicating that the requested quantity is not available |
| **T\_ID\_03** | Adding  Product  Quantity  Exceeding  Available Inventory with Guest  User | Item out of stock | Guest user, product is available in stock with a quantity of 5 | 1. Guest user navigates to product details page 2. Guest user attempts to add 6 units of the product to cart | Error message is displayed indicating that the requested quantity is not available |

**Test Technique 4:**

**Equivalence class partition:**

**Limit (1-50)**

|  |  |  |
| --- | --- | --- |
| **Text data** | **Divide data** | **Data after ECP** |
| **1** | 1-25 (20) valid | 20 |
| **2** | 26-50 (60) invalid | 60 |

**Test Technique 5:**

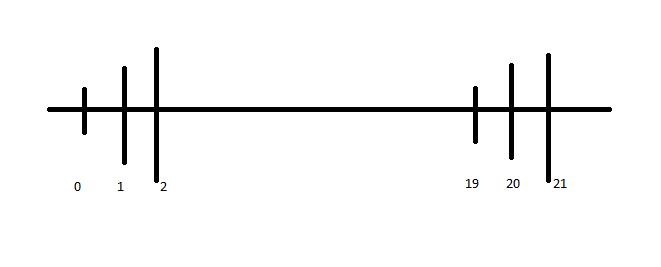
**Boundary**

**Value**

**Analysis:**

**Minimum**

**Maximum**



**Limit**

**(1-20)**

Min=1 (Pass)

Min-1 = 0 (Fail) Min+1= 1 (pass)

Max = 20 (pass)

Max-1 = 19(pass)

Max +1= 21(Fail) **Q6: Verify that the limit to the number of products a user can buy is working correctly by displaying error message and preventing user from buying more than the limit.**

**T01:** Buying multiple products within the limit

**T02:** Buying products exceeding the limit **Test Technique 01:**

**Design Table Technique:**

**Conditions:**

**C1:** Buying multiple products within the limit

**C2:** buying product exceeding limit **Actions:**

**A1:** Process succeeds

**A2:** option displayed to reduce quantity

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **C & A** | **Scenario** | **TC1** | **TC2** | **TC3** |
| **C1** | Buying multiple products within the  limit | T | F | F |
| **C2** | buying product exceeding limit | T | F | T |
| **A1** | Process succeeds | T | F | F |
| **A2** | option displayed to reduce quantity | T | F | F |

**Test Technique 2:**

**Requirement traceability Matrix:**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **TC\_ID** | **T\_Scenario** | **Test\_Case** | **Pre\_condition** | **T\_Steps** | **Result** |
| **T\_ID\_01** | Verify buying multiple products within the limit | Enter valid product selection within the purchase limit | User has an account and available balance | 1. Select multiple products within the allowed limit 2. Add products to cart  3. Proceed to checkout | Successful purchase, order confirmation displayed |
| **T\_ID\_02** | Verify buying products exceeding the limit | Enter more products than allowed limit | User has an account and available balance | 1. Select multiple products exceeding the purchase limit 2. Add products to cart  3. Proceed to checkout | A message "You have exceeded the purchase limit" is displayed |

**Test Technique 3:**

**Equivalence class partition:**

**Limit (1-50)**

|  |  |  |
| --- | --- | --- |
| **Text data** | **Divide data** | **Data after ECP** |
| **1** | 1-25 (20) valid | 20 |
| **2** | 26-50 (60) invalid | 60 |

**Test Technique 4:**

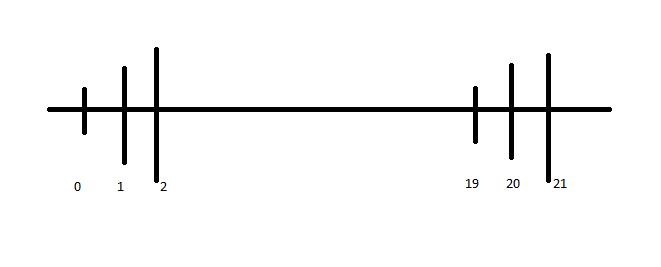
**Boundary**

**Value**

**Analysis:**

**Minimum**

**Maximum**



**Limit**

**(1-20)**

Min=1 (Pass)

Min-1 = 0 (Fail) Min+1= 1 (pass)

Max = 20 (pass)

Max-1 = 19(pass)

Max +1= 21(Fail)