

I. Test Summary Report:

	TEST CASE ID	TEST CASE DESCRIPTION	STATUS (PASS/FAIL)	Execution Time
Check Login Functionality	TC01	Verify login with valid data	PASS	00:00:38
	TC02	Verify login with invalid email	PASS	00:00:37
	TC03	Verify login with invalid password	PASS	00:00:37
	TC04	Verify login with empty email	PASS	00:00:37
	TC05	Verify login with empty password	PASS	00:00:37
Check Register Functionality	TC06	Verify registration with valid data	PASS	00:00:20
	TC07	Verify registration with special characters in name	FAIL	00:00:19
	TC08	Verify registration with existing email	PASS	00:00:22
	TC09	Verify registration with empty name	PASS	00:00:22
	TC10	Verify registration with full name	PASS	00:00:22
	TC11	Verify registration with name of exact 32 characters	PASS	00:00:19
	TC12	Verify registration with invalid email format	PASS	00:00:19
	TC13	Verify registration with short password	PASS	00:00:22
	TC14	Verify registration with long password	FAIL	00:00:19

	TC15	Verify registration with password of exact 4 characters	PASS	00:00:20
Check Add to Cart Functionality	TC16	Test adding a single product	PASS	00:00:49
	TC17	Test adding multiple products	PASS	00:01:22
	TC18	Test adding a product with negative quantity	FAIL	00:00:43
	TC19	Test adding the same product multiple times	PASS	00:00:49
Check Checkout Functionality	TC20	Test checkout with available user information	PASS	00:01:37
	TC21	Test checkout with new user information	PASS	00:01:53
	TC22	Test checkout as a guest user	PASS	00:01:35
Check Form Submission	TC23	Test submission of product return form with valid data	PASS	00:00:43
	TC24	Test submission of product return form with invalid order date	FAIL	00:00:42
	TC25	Test submission of product return form with invalid information	FAIL	00:00:44
Check Search Functionality	TC26	Test search with a valid keyword	PASS	00:00:25
	TC27	Test search with whitespace only	PASS	00:00:24
	TC28	Test search with special characters	PASS	00:00:19

	TC29	Test search with lowercase keyword	PASS	00:00:26
	TC30	Test search with uppercase keyword	PASS	00:00:25
	TC31	Test search with a keyword containing whitespace	PASS	00:00:25
Navigation	TC32	Verify Navigation between Main Pages in Menu Bar	PASS	00:01:19
Data Validation	TC33	Test data validation with random quantity	PASS	00:00:45
	TC34	Test data validation with fixed quantity	PASS	00:00:44

Total Test Cases

Executed: 34

Total Pass: 29

Total Fail: 5

Pass Rate: 85%

II. Test Case Summary

a. Check Login Functionality

TEST CASE ID	DESCRIPTION	STEPS	EXPECTED RESULT
TC001	Verify valid login and logout	1. Navigate to the OpenCart demo site 2. Scroll to and click the "My Account" link 3. Enter testZoe@gmail.com as the email 4. Enter 123456 as the password 5. Click the login button 6. Scroll to the "Subscriptions"	User is logged in and redirected to the homepage, and after logging out, the message "Account Logout" is displayed.

		link 7. Click the "Logout" link	
TC02	Verify login with invalid email	1. Navigate to the OpenCart demo site 2. Scroll to and click the "My Account" link 3. Enter admin@gmail.com as the email 4. Enter 123456 as the password 5. Click the login button 6. The error message displayed	An error message stating "Warning: No match for E-Mail Address and/or Password." is displayed.
TC03	Verify login with invalid password	1. Navigate to the OpenCart demo site 2. Scroll to and click the "My Account" link 3. Enter testZoe@gmail.com as the email 4. Enter 1 as the password 5. Click the login button 6. The error message displayed	An error message stating "Warning: No match for E-Mail Address and/or Password." is displayed.
TC04	Verify login with empty email	1. Navigate to the OpenCart demo site 2. Scroll to and click the "My Account" link 3. Leave the email field empty 4. Enter 123456 as the password 5. Click the login button 6. The error message displayed	An error message stating "Warning: No match for E-Mail Address and/or Password." is displayed.
TC05	Verify login with empty password	1. Navigate to the OpenCart demo site 2. Scroll to and click the "My Account" link 3. Enter testZoe@gmail.com as the email 4. Leave the password field empty 5. Click the login button 6. Capture the error message displayed	An error message stating "Warning: No match for E-Mail Address and/or Password." is displayed.

b. Check Register Functionality

TEST CASE ID	DESCRIPTION	STEPS	EXPECTED RESULT
TC06	Verify registration with valid data	<ol style="list-style-type: none"> 1. Navigate to the OpenCart registration page 2. Wait for the page to load 3. Enter Zoe as the first name 4. Enter Nguyen as the last name 5. Enter testZoeadmin1abc@gmail.com as the email 6. Enter 123456 as the password 7. Scroll to the newsletter section 8. Click to agree to the terms 9. Click the continue button 10. Verify the account creation message 	The message "Your Account Has Been Created!" is displayed.
TC07	Verify registration with special characters in name	<ol style="list-style-type: none"> 1. Navigate to the OpenCart registration page 2. Wait for the page to load 3. Enter @@@@ as the first name 4. Enter ##### as the last name 5. Enter testZoe132342aasdd@gmail.com as the email 6. Enter 123456 as the password 7. Scroll to the newsletter section 8. Click to agree to the terms 9. Click the continue button 10. Verify the account creation message 	The message "Your Account Has Been Created!" is NOT displayed because Name can not contain special character
TC08	Verify registration with existing email	<ol style="list-style-type: none"> 1. Navigate to the OpenCart registration page 2. Wait for the page to load 3. Enter Zoe as the first name 4. Enter Nguyen as the last name 5. Enter testZoe@gmail.com as the email (already registered) 6. Enter 123456 as the password 7. Scroll to the newsletter section 8. Click to agree to the terms 9. Click the continue button 10. Verify the error message for existing email 	The message "Warning: E-Mail Address is already registered!" is displayed.

TC09	Verify registration with empty name	<ol style="list-style-type: none"> 1. Navigate to the OpenCart registration page 2. Wait for the page to load 3. Enter an empty string as the first name 4. Enter an empty string as the last name 5. Enter testZoe122223@gmail.com as the email 6. Enter 123456 as the password 7. Scroll to the newsletter section 8. Click to agree to the terms 9. Click the continue button 10. Verify the error message for empty first name 	The message "First Name must be between 1 and 32 characters!" is displayed.
TC10	Verify registration with full name	<ol style="list-style-type: none"> 1. Navigate to the OpenCart registration page 2. Wait for the page to load 3. Enter a first name with 33 characters ("A" * 33) 4. Enter a last name with 33 characters ("B" * 33) 5. Enter testZoe122223@gmail.com as the email 6. Enter 123456 as the password 7. Scroll to the newsletter section 8. Click to agree to the terms 9. Click the continue button 10. Verify the error message for the first name 	The message "First Name must be between 1 and 32 characters!" is displayed.
TC11	Verify registration with name of exact 32 characters	<ol style="list-style-type: none"> 1. Navigate to the OpenCart registration page 2. Wait for the page to load 3. Enter a first name with 32 characters ("A" * 32) 4. Enter a last name with 32 characters ("B" * 32) 5. Enter testZoe123abcdef12344@gmail.com as the email 6. Enter 123456 as the password 7. Scroll to the newsletter section 8. Click to agree to the terms 9. Click the continue button 10. Verify that the account creation success message is displayed 	The message "Your Account Has Been Created!" is displayed

TC12	Verify registration with invalid email format	<ol style="list-style-type: none"> 1. Navigate to the OpenCart registration page 2. Wait for the page to load 3. Enter a first name with 32 characters ("A" * 32) 4. Enter a last name with 32 characters ("B" * 32) 5. Enter an invalid email (testZoe122223) 6. Enter 123456 as the password 7. Scroll to the newsletter section 8. Click to agree to the terms 9. Click the continue button 10. Verify that the error message for the email is displayed 	An error message indicating that the email format is invalid is displayed.
TC13	Verify registration with short password	<ol style="list-style-type: none"> 1. Navigate to the OpenCart registration page 2. Wait for the page to load 3. Enter Zoe as the first name 4. Enter Nguyen as the last name 5. Enter email testZoe122223@gmail.com as the email 6. Enter 123 as the password 7. Scroll to the newsletter section 8. Click to agree to the terms 9. Click the continue button 10. Verify that the error message for the password is displayed 	The message "Password must be between 4 and 20 characters!" is displayed..
TC14	Verify registration with long password	<ol style="list-style-type: none"> 1. Navigate to the OpenCart registration page 2. Wait for the page to load 3. Enter a first name (e.g., "Zoe") 4. Enter a last name (e.g., "Nguyen") 5. Enter a valid email (e.g., testZoe1245bca23355@gmail.com) 6. Enter a long password ("1" * 32) 7. Scroll to the newsletter section 8. Click to agree to the terms 9. Click the continue button 10. Verify that the registration success message is NOT displayed 	The test asserts that the registration does not succeed. If the success message ("Your Account Has Been Created!") appears, the test should fail because it indicates that the application did not enforce the password length rule properly.
TC15	Verify registration with password of	<ol style="list-style-type: none"> 1. Navigate to the OpenCart demo site. 2. Click on the "Register" link to open the registration form. 	The header "Your Account Has Been Created!" is displayed

	exact 4 characters	3. Enter Zoe as the first name. 4. Enter Nguyen as the last name. 5. Enter testZoeabcc123iiuh@gmail.com as the email. 6. Enter 1234 as the password. 7. Scroll to the newsletter section and agree to the terms. 8. Click the "Continue" button. 9. Capture the registration header displayed.	
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c. Check Add to Cart Functionality

TEST CASE ID	DESCRIPTION	STEPS	EXPECTED RESULT
TC16	Test adding a single product	1. Navigate to the OpenCart demo site. 2. Wait for the page to load. 3. Clear the search box and enter "iphone". 4. Click the search button. 5. Scroll to the first product and click on "iPhone". 6. Clear the quantity input and enter 1. 7. Click the "Add to Cart" button. 8. Click the cart button to view the cart dropdown. 9. Click the "View Cart" button to go to the cart details page. 10. Capture the product name displayed in the cart. 11. Verify the product name matches "iPhone".	The product name "iPhone" is displayed in the cart, confirming it has been successfully added.
TC17	Test adding multiple products	1. Navigate to the OpenCart demo site. 2. Wait for the page to load. 3. Clear the search box and enter "iphone". 4. Click the search button. 5. Scroll to the first product and click on "iPhone". 6. Set quantity to 1 and click "Add to Cart".	Both "iPhone" and "MacBook" are displayed in the cart, confirming they have been successfully added.

		<ol style="list-style-type: none"> 7. Search for "macbook". 8. Click the search button. 9. Scroll to the first product and click on "MacBook". 10. Set quantity to 1 and click "Add to Cart". 11. Click the cart button to view the cart dropdown. 12. Click the "View Cart" button to go to the cart details page. 13. Capture the product names displayed in the cart. 14. Verify both "iPhone" and "MacBook" are in the cart. 	
TC18	Test adding a product with negative quantity	<ol style="list-style-type: none"> 1. Navigate to the OpenCart demo site. 2. Wait for the page to load. 3. Clear the search box and enter "iphone". 4. Click the search button. 5. Scroll to the first product and click on "iPhone". 6. Clear the quantity field and enter -1. 7. Click the "Add to Cart" button. 8. Capture any error messages displayed. 9. Verify that the success message is not displayed. 	An error message is displayed, and the success message "Success: You have added" should not be shown.
TC19	Test adding the same product multiple times	<ol style="list-style-type: none"> 1. Navigate to the OpenCart demo site. 2. Wait for the page to load. 3. Clear the search box and enter "iphone". 4. Click the search button. 5. Scroll to the first product and click on "iPhone". 6. Clear the quantity field and enter 1. 7. Click the "Add to Cart" button. 8. Click "Add to Cart" again. 9. View the cart and verify the quantity of the product. 	The quantity of the iPhone in the cart should be "x 2".

d. Check Checkout Functionality

TEST CASE ID	DESCRIPTION	STEPS	EXPECTED RESULT
TC20	Test checkout with available user information	<ol style="list-style-type: none">1. Navigate to the OpenCart demo site.2. Click on the "My Account" link.3. Close any pop-up if it appears.4. Enter email and password, then log in.5. Search for "HTC Touch" and select the product.6. Set the quantity to 2 and add to cart.7. Open the cart.8. Click the checkout button.9. Select pre-existing shipping address.10. Choose shipping method and confirm.11. Select payment method and confirm.12. Click the confirm order button.	A message stating "Your order has been placed!" should be displayed on the page.
TC21	Test checkout with new user information	<ol style="list-style-type: none">1. Navigate to the demo OpenCart site.2. Click on 'My Account' link.3. Login with email admin123567890@gmail.com and password 123456.4. Search for "HTC Touch".5. Click on the "HTC Touch HD" product.6. Set quantity to 2 and click "Add to Cart".7. Click the cart button.8. Click the checkout button.9. Select "New Address".10. Enter shipping details:<ul style="list-style-type: none">- First Name: "Zoeec"- Last Name: "Nguyen"- Company: "abc"- Address: "HCM"- City: "HCM"- Postcode: "1111"11. Select country and region from	The message "Your order has been placed!" should be displayed.

		<p>dropdowns.</p> <p>12. Click on "Continue" for shipping address.</p> <p>13. Select a shipping method and click "Continue".</p> <p>14. Choose payment method and click "Continue".</p> <p>15. Confirm the order by clicking the "Confirm" button.</p> <p>16. Verify the order confirmation message.</p>	
TC22	Test checkout as a guest user	<p>1. Navigate to the demo OpenCart site.</p> <p>2. Search for "HTC Touch".</p> <p>3. Click on the search button.</p> <p>4. Click on the "HTC Touch HD" product.</p> <p>5. Set quantity to 2 and click "Add to Cart".</p> <p>6. Click the cart button.</p> <p>7. Click the checkout button.</p> <p>8. Select "Guest Checkout".</p> <p>9. Enter guest information:</p> <ul style="list-style-type: none"> - First Name: "Zoeee" - Last Name: "Nguyen" - Email: "admin123567890@gmail.com" - Address: "HCM" - City: "HCM" - Postcode: "1111" <p>10. Select country and region from dropdowns.</p> <p>11. Click on "Continue" for shipping address.</p> <p>12. Select a shipping method and click "Continue".</p> <p>13. Choose payment method and click "Continue".</p> <p>14. Confirm the order by clicking the "Confirm" button.</p> <p>15. Verify the order confirmation message.</p>	The message "Your order has been placed!" should be displayed.

e. Check Form Submission

TEST CASE ID	DESCRIPTION	STEPS	EXPECTED RESULT
TC23	Test submission of product return form with valid data	<ol style="list-style-type: none"> 1. Navigate to the demo OpenCart site. 2. Scroll to the "Returns" link in the footer. 3. Close any popup if present. 4. Click on the "Returns" link. 5. Fill in the form with valid data: <ul style="list-style-type: none"> - First Name: "Zoe" - Last Name: "Nguyen" - Email: "testZoe@gmail.com" - Telephone: "0123456789" - Order ID: "11111" - Order Date: "2024-10-26" - Product: "iphone" - Model: "product 11" 6. Select the reason for return and confirm the product is opened. 7. Click the submit button. 8. Verify the "Product Returns" message is displayed. 	The message "Product Returns" should be displayed.
TC24	Test submission of product return form with invalid order date	<ol style="list-style-type: none"> 1. Navigate to the demo OpenCart site. 2. Scroll to the "Returns" link in the footer. 3. Close any popup if present. 4. Click on the "Returns" link. 5. Fill in the form with valid data: <ul style="list-style-type: none"> - First Name: "Zoe" - Last Name: "Nguyen" - Email: "testZoe@gmail.com" - Telephone: "0123456789" - Order ID: "11111" - Order Date: "2024-11-10" (future date) <ul style="list-style-type: none"> - Product: "iphone" - Model: "product 11" 6. Select the reason for return and confirm the product is opened. 7. Click the submit button. 8. Verify that the "Product Returns" message is not displayed. 	The message "Product Returns" should not be displayed.

TC25	Test submission of product return form with invalid information	<ol style="list-style-type: none"> 1. Navigate to the demo OpenCart site. 2. Scroll to the "Returns" link in the footer. 3. Close any popup if present. 4. Click on the "Returns" link. 5. Fill in the form with invalid data: <ul style="list-style-type: none"> - First Name: "@@@" - Last Name: "@@@" - Email: "testZoe@gmail.com" - Telephone: "0123456789" - Order ID: "11111" - Order Date: "2024-11-10" - Product: "iphone" - Model: "product 11" 6. Select the reason for return and confirm the product is opened. 7. Click the submit button. 8. Verify that the "Product Returns" message is not displayed. 	The message "Product Returns" should not be displayed.
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f. Check Search Functionality

TEST CASE ID	DESCRIPTION	STEPS	EXPECTED RESULT
TC26	Test search with a valid keyword	<ol style="list-style-type: none"> 1. Navigate to the demo OpenCart site. 2. Clear any pre-existing text in the search box and enter the keyword "iPhone". 3. Click the search button. 4. Verify that at least one product is displayed. 	The number of product items should be greater than zero.
TC27	Test search with whitespace only	<ol style="list-style-type: none"> 1. Navigate to the demo OpenCart site. 2. Clear any pre-existing text in the search box and enter a whitespace string. 3. Click the search button. 4. Verify that the message indicating no products were found is displayed. 	The message "There is no product that matches the search criteria." should be displayed.
TC28	Test search with special characters	<ol style="list-style-type: none"> 1. Navigate to the demo OpenCart site. 2. Clear any pre-existing text in the search box and enter special 	The message "There is no product that matches the

		characters (@@##\$). 3. Click the search button. 4. Verify that the message indicating no products were found is displayed.	search criteria." should be displayed.
TC29	Test search with lowercase keyword	1. Navigate to the demo OpenCart site. 2. Clear any pre-existing text in the search box and enter the keyword iphone (lowercase). 3. Click the search button. 4. Verify that at least one product is displayed.	The number of product items should be greater than zero.
TC30	Test search with uppercase keyword	1. Navigate to the demo OpenCart site. 2. Clear any pre-existing text in the search box and enter the keyword IPHONE (uppercase). 3. Click the search button. 4. Verify that at least one product is displayed.	The number of product items should be greater than zero.
TC31	Test search with a keyword containing whitespace	1. Navigate to the demo OpenCart site. 2. Clear any pre-existing text in the search box and enter the keyword HTC Touch. 3. Click the search button. 4. Verify that at least one product is displayed.	At least one product matching the keyword HTC Touch should be displayed.

g. Navigation

TEST CASE ID	DESCRIPTION	STEPS	EXPECTED RESULT
TC32	Verify Navigation between Main Pages in Menu Bar	1. Navigate to the demo OpenCart site. 2. Click on the "Desktops" menu. 3. Click on "Mac (1)". 4. Click on "Laptops & Notebooks". 5. Click on "Components". 6. Click "Show All Components". 7. Click on "Tablets". 8. Click on "Software". 9. Click on "Phones & PDAs". 10. Click on "Cameras".	The final page title should contain "MP3 Players".

		11. Click on "MP3 Players". 12. Click "Show All MP3 Players".	
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h. Data Validation

i. TEST CASE ID	DESCRIPTION	STEPS	EXPECTED RESULT
TC33	Test data validation with random quantity	1. Navigate to the demo OpenCart site. 2. Search for the product "iPhone". 3. Click on the first product link. 4. Clear the quantity input and enter a random integer (1-100). 5. Retrieve the displayed price. 6. Add the product to the cart. 7. Click on the cart button to view the cart. 8. Retrieve the total value displayed in the cart. 9. Calculate the expected total based on the random quantity and product price. 10. Assert that the calculated total matches the displayed total.	The displayed total in the cart should match the calculated total based on the quantity and price.
TC34	Test data validation with fixed quantity	1. Navigate to the demo OpenCart site. 2. Search for the product "iPhone". 3. Click on the first product link. 4. Clear the quantity input and enter a fixed quantity of "2". 5. Retrieve the displayed price. 6. Add the product to the cart. 7. Click on the cart button to view the cart. 8. Retrieve the total value displayed in the cart. 9. Calculate the expected total based on the fixed quantity and product price. 10. Assert that the calculated	The displayed total in the cart should match the calculated total based on the fixed quantity and price.

		total matches the displayed total	
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