

Test Function Document

Project Name: Online Shopping Cart	
Automation Title:	Version: 1.0
Testing Phase: Phase 1	Date of Test: 27/11/2024
Module Name: Online Shopping Cart	

Function Title: checkout_and_payment()	Test Designed by: Benjamin Strandberg
Test Priority (Low/Medium/High): High	Test Designed Date: 27/11/2024
Description: The checkout_and_payment function is one of the main loops of the program, handling everything except user login and initial product browsing. All tests use a mocked ShoppingCart object, a mocked product database, a mocked user, mocked user_input and a mocked update_wallet function.	Test Executed by: Benjamin Strandberg
	Test Execution date: 29/11/2024

Pre-conditions: [A user needs to be logged in, there need to exist product content and a shopping cart object](#)

Dependencies: [ShoppingCart](#), [Product](#), [UserInterface](#), [UserDataManager](#)

S. No	Equivalence Class	Test case	Expected Results	Actual Results	Status (Pass/Fail)	Notes
1	EC4.5	test_log_out()	User is logged out, session ends	As expected	Pass	
2	EC2.1 EC4.2	test_empty_cart()	User can view an empty cart, not prompted to checkout	As expected	Pass	

3	EC1.1 EC2.2 EC4.2 EC4.3	test_insufficient_funds	User is informed that their funds is insufficient, cart remains unchanged	As expected	Pass	
4	EC1.3 EC2.2 EC4.2 EC4.3	test_successful_checkout	Successful checkout	As expected	Pass	
5	EC1.4 EC2.2 EC4.2 EC4.3	test_negative_wallet_checkout	Negative balance acts as insufficient funds	As expected	Pass	
6	EC1.1 EC2.2 EC4.2 EC4.3	test_checkout_exceeding_funds_by_very_small_amount	User is informed that their funds is insufficient, cart remains unchanged	As expected	Pass	
7	EC1.3 EC2.2 EC4.2 EC4.3	test_checkout_with_decimal_wallet	Successful checkout, decimal values handled properly	As expected	Pass	
8	EC1.3 EC2.2 EC4.2 EC4.4 EC4.3	test_checkout_after_cancel	Checkout successful after multiple checkouts cancelled by user	As expected	Pass	

9	EC1.3 EC2.2 EC4.2 EC4.3	test_checkout_very_extensive	Checkout successful, very large numbers handled properly	As expected	Pass	
10	EC1.3 EC2.2 EC4.2 EC4.3	test_checkout_large_quantity	Successful checkout with very high quantity of product	As expected	Pass	
11	EC1.3 EC2.2 EC3.1 EC4.2 EC4.3	test_add_item_checkout	Successful checkout after adding one item	As expected	Pass	
12	EC1.2 EC2.2 EC3.1 EC4.2 EC4.3	test_multiple_items_even_zero_checkout	Successful checkout after adding product so the user has exactly the right amount	As expected	Pass	
13	EC3.1 EC4.1	test_display_products	Products listed correctly in terminal	As expected	Pass	
14	EC1.3 EC2.2 EC3.1 EC4.2 EC4.4 EC4.6	test_remove	Product successfully removed from cart	As expected	Pass	

15	EC2.2 EC3.3 EC4.2 EC4.6	test_invalid_remove	User informed of product not existing in cart	As expected	Pass	
16	EC3.2 EC4.1	test_add_out_of_stock_product	User informed that product is out of stock	As expected	Pass	
17	EC3.3 EC4.1	test_add_non_existent_product	User informed that product is not in system	As expected	Pass	
18	EC1.3 EC2.2 EC3.1 EC4.1 EC4.2	test_add_multiple_units_no_checkout	Multiple units of the same product successfully added to cart	As expected	Pass	
19	Invalid Input	test_invalid_int_input	Raises TypeError	As expected	Pass	
20	Invalid Input	test_invalid_string_input	Raises TypeError	As expected	Pass	
21	Invalid Input	test_invalid_float_input	Raises TypeError	As expected	Pass	
22	Invalid Input	test_invalid_list_input	Raises TypeError	As expected	Pass	