**Test Function Document**

| Project Name: Online Shopping Cart | |
| --- | --- |
| Automation Title: test\_checkout\_and\_payment | Version: 1.0 |
| Testing Phase: Phase 1 | Date of Test: 28 nov 2024 |
| Module Name: Checkout | |

| Function Title: checkout\_and\_payment | | | | Test Designed by: Ram | | | |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Test Priority (Low/Medium/High): Medium | | | | Test Designed Date: 28 Nov 2024 | | | |
| Description: The checkout\_and\_payment function takes a user’s login information represented as a dictionary containing the keys "username", "password" and "wallet" as input, and asks the user to give an input for either selecting a product by its number to add to their cart, displaying available products for purchase, checking their cart or logging out. | | | | Test Executed by: Ram | | | |
| Test Execution date: 28 nov 2024 | | | |
|  | | | | | | | |
| Pre-conditions: None | | | | | | | |
| Dependencies: global\_products, global\_cart, User, UserInterface.get\_user\_input, display\_products\_available\_for\_purchase, check\_cart, UserDataManager.load\_users, UserDataManager.save\_users, logout | | | | | | | |
|  | | | | | | | |
| S. No | Equivalence Class | Test case data | Expected Results | | Actual Results | Status (Pass/Fail) | Notes |
| 1 | IEC1 | login\_info =  1 | Function throws a TypeError exception | | Function threw a TypeError exception | Pass | Integer input.  Invalid EC label starts with IEC. Test name: test\_int\_input() |
| 2 | IEC2 | login\_info = 0.5 | Function throws a TypeError exception | | Function threw a TypeError exception | Pass | Float input. Test name: test\_float\_input() |
| 3 | IEC3 | login\_info = “notDict” | Function throws a TypeError exception | | Function threw a TypeError exception | Pass | String input.  Test name: test\_string\_input() |
| 4 | IEC4 | login\_info = [1] | Function throws a TypeError exception | | Function threw a TypeError exception | Pass | List input.  Test name: test\_list\_input() |
| 5 | VEC1 | login\_info = {‘username’: ’username’, ‘password’: ‘P@ssword’, ‘wallet’: 100.0} and choice = l | Function should call stub logout\_stub1 for function logout(global\_cart) once with the stub global\_cart\_stub1 and finish with exit code 0 | | Function called stub logout\_stub1 for function logout(global\_cart) once with the stub global\_cart\_stub1 and finished with exit code 0 | Pass | Valid input labels start with VEC. Test name: test\_EC1\_TC1() |
| 6 | VEC1 | login\_info = {‘username’: ’username’, ‘password’: ‘P@ssword’, ‘wallet’: 100.0} and choice = l, l | Function should call stub logout\_stub2 for function logout(global\_cart) twice with stub global\_cart\_stub1 and finish with exit code 0 | | Function called stub logout\_stub2 for function logout(global\_cart) twice with stub global\_cart\_stub1 and finished with exit code 0 | Pass | Test name: test\_EC1\_TC2() |
| 7 | VEC2 | login\_info = {‘username’: ’username’, ‘password’: ‘P@ssword’, ‘wallet’: 100.0} and choice = 1, l | Function should call global\_products\_stub1[0].get\_product\_unit for global\_products[0].get\_product\_unit, global\_cart\_stub1.add\_item(global\_products\_stub1[0].get\_product\_unit.return\_value) for global\_cart  .add\_item(global\_products[0].get\_product\_unit) and print “product1 added to your cart.” once. It should also call stub logout\_stub1 for function logout(global\_cart) once with the stub global\_cart\_stub1 and finish with exit code 0 | | Function called global\_products\_stub1[0].get\_product\_unit for global\_products[0].get\_product\_unit, global\_cart\_stub1.add\_item(global\_products\_stub1[0].get\_product\_unit.return\_value) for global\_cart  .add\_item(global\_products[0].get\_product\_unit) and printed “product1 added to your cart.” once. It also called stub logout\_stub1 for function logout(global\_cart) once with the stub global\_cart\_stub1 and finished with exit code 0 | Pass | Test name: test\_EC2\_TC1() |
| 8 | VEC2 | login\_info = {‘username’: ’username’, ‘password’: ‘P@ssword’, ‘wallet’: 100.0} and choice = 1, 1, l | Function should call global\_products\_stub1[0].get\_product\_unit for global\_products[0].get\_product\_unit, global\_cart\_stub1.add\_item(global\_products\_stub1[0].get\_product\_unit.return\_value) for global\_cart  .add\_item(global\_products[0].get\_product\_unit) and print “product1 added to your cart.” twice. It should also call stub logout\_stub1 for function logout(global\_cart) once with the stub global\_cart\_stub1 and finish with exit code 0 | | Function should call global\_products\_stub1[0].get\_product\_unit for global\_products[0].get\_product\_unit, global\_cart\_stub1.add\_item(global\_products\_stub1[0].get\_product\_unit.return\_value) for global\_cart  .add\_item(global\_products[0].get\_product\_unit) and print “product1 added to your cart.” twice. It also called stub logout\_stub1 for function logout(global\_cart) once with the stub global\_cart\_stub1 and finished with exit code 0 | Pass | Test name: test\_EC2\_TC2() |
| 9 | VEC2 | login\_info = {‘username’: ’username’, ‘password’: ‘P@ssword’, ‘wallet’: 100.0} and choice = 2, l | Function should print “Sorry, product2 is out of stock.” once, call stub logout\_stub1 for function logout(global\_cart) once with the stub global\_cart\_stub1 and finish with exit code 0 | | Function printed “Sorry, product2 is out of stock.” once, called  stub logout\_stub1 for function logout(global\_cart) once with the stub global\_cart\_stub1 and finished with exit code 0 | Pass | Test name: test\_EC2\_TC3() |
| 10 | VEC2 | login\_info = {‘username’: ’username’, ‘password’: ‘P@ssword’, ‘wallet’: 100.0} and choice = 2, 2, l | Function should print “Sorry, product2 is out of stock.” twice, call stub logout\_stub1 for function logout(global\_cart) once with the stub global\_cart\_stub1 and finish with exit code 0 | | Function printed “Sorry, product2 is out of stock.” twice, called  stub logout\_stub1 for function logout(global\_cart) once with the stub global\_cart\_stub1 and finished with exit code 0 | Pass | Test name: test\_EC2\_TC4() |
| 11 | VEC2 | login\_info = {‘username’: ’username’, ‘password’: ‘P@ssword’, ‘wallet’: 100.0} and choice = 1, 2, l | Function should call global\_products\_stub1[0].get\_product\_unit for global\_products[0].get\_product\_unit, global\_cart\_stub1.add\_item(global\_products\_stub1[0].get\_product\_unit.return\_value) for global\_cart  .add\_item(global\_products[0].get\_product\_unit), and print “product1 added to your cart.” and “Sorry, product2 is out of stock.”. It should also call stub logout\_stub1 for function logout(global\_cart) once with the stub global\_cart\_stub1 and finish with exit code 0 | | Function called global\_products\_stub1[0].get\_product\_unit for global\_products[0].get\_product\_unit, global\_cart\_stub1.add\_item(global\_products\_stub1[0].get\_product\_unit.return\_value) for global\_cart  .add\_item(global\_products[0].get\_product\_unit), and printed “product1 added to your cart.” and “Sorry, product2 is out of stock.”. It also called stub logout\_stub1 for function logout(global\_cart) once with the stub global\_cart\_stub1 and finished with exit code 0 | Pass | Test name: test\_EC2\_TC5() |
| 12 | VEC2 | login\_info = {‘username’: ’username’, ‘password’: ‘P@ssword’, ‘wallet’: 100.0} and choice = 2, 1, l | Function should call global\_products\_stub1[0].get\_product\_unit for global\_products[0].get\_product\_unit, global\_cart\_stub1.add\_item(global\_products\_stub1[0].get\_product\_unit.return\_value) for global\_cart  .add\_item(global\_products[0].get\_product\_unit), and print “Sorry, product2 is out of stock.” and “product1 added to your cart.”. It should also call stub logout\_stub1 for function logout(global\_cart) once with the stub global\_cart\_stub1 and finish with exit code 0 | | Function called global\_products\_stub1[0].get\_product\_unit for global\_products[0].get\_product\_unit, global\_cart\_stub1.add\_item(global\_products\_stub1[0].get\_product\_unit.return\_value) for global\_cart  .add\_item(global\_products[0].get\_product\_unit), and printed “Sorry, product2 is out of stock.” and “product1 added to your cart.”. It also called stub logout\_stub1 for function logout(global\_cart) once with the stub global\_cart\_stub1 and finished with exit code 0 | Pass | Test name: test\_EC2\_TC6() |
| 13 | VEC3 | login\_info = {‘username’: ’username’, ‘password’: ‘P@ssword’, ‘wallet’: 100.0} and choice = c, l | Function should call stub check\_cart\_stub1 for function check\_cart, load\_users\_stub1 for function UserDataManager.load\_users  and save\_users\_stub1 for function UserDataManager.save\_users once. It should also call stub logout\_stub1 for function logout(global\_cart) once with the stub global\_cart\_stub1 and finish with exit code 0 | | Function called stub check\_cart\_stub1 for function check\_cart, load\_users\_stub1 for function UserDataManager.load\_users  and save\_users\_stub1 for function UserDataManager.save\_users once. It also called stub logout\_stub1 for function logout(global\_cart) once with the stub global\_cart\_stub1 and finished with exit code 0 | Pass | Test name: test\_EC3\_TC1() |
| 14 | VEC3 | login\_info = {‘username’: ’username’, ‘password’: ‘P@ssword’, ‘wallet’: 100.0} and choice = 1, c, l | Function should call global\_products\_stub1[0].get\_product\_unit for global\_products[0].get\_product\_unit, global\_cart\_stub1.add\_item(global\_products\_stub1[0].get\_product\_unit.return\_value) for global\_cart  .add\_item(global\_products[0].get\_product\_unit) and print “product1 added to your cart.” once. It should also call stub check\_cart\_stub1 for function check\_cart, load\_users\_stub1 for function UserDataManager.load\_users  and save\_users\_stub1 for function UserDataManager.save\_users once. Finally, it should call stub logout\_stub1 for function logout(global\_cart) once with the stub global\_cart\_stub1 and finish with exit code 0 | | Function called global\_products\_stub1[0].get\_product\_unit for global\_products[0].get\_product\_unit, global\_cart\_stub1.add\_item(global\_products\_stub1[0].get\_product\_unit.return\_value) for global\_cart  .add\_item(global\_products[0].get\_product\_unit) and printed “product1 added to your cart.” once. It also called stub check\_cart\_stub1 for function check\_cart, load\_users\_stub1 for function UserDataManager.load\_users  and save\_users\_stub1 for function UserDataManager.save\_users once. Finally, it called stub logout\_stub1 for function logout(global\_cart) once with the stub global\_cart\_stub1 and finished with exit code 0 | Pass | Test name: test\_EC3\_TC2() |
| 15 | VEC3 | login\_info = {‘username’: ’username’, ‘password’: ‘P@ssword’, ‘wallet’: 100.0} and choice = 1, 1, c, l | Function should call global\_products\_stub1[0].get\_product\_unit for global\_products[0].get\_product\_unit, global\_cart\_stub1.add\_item(global\_products\_stub1[0].get\_product\_unit.return\_value) for global\_cart  .add\_item(global\_products[0].get\_product\_unit) and print “product1 added to your cart.” twice. It should also call stub check\_cart\_stub1 for function check\_cart, load\_users\_stub1 for function UserDataManager.load\_users  and save\_users\_stub1 for function UserDataManager.save\_users once. Finally, it should call stub logout\_stub1 for function logout(global\_cart) once with the stub global\_cart\_stub1 and finish with exit code 0 | | Function called global\_products\_stub1[0].get\_product\_unit for global\_products[0].get\_product\_unit, global\_cart\_stub1.add\_item(global\_products\_stub1[0].get\_product\_unit.return\_value) for global\_cart  .add\_item(global\_products[0].get\_product\_unit) and printed “product1 added to your cart.” twice. It also called stub check\_cart\_stub1 for function check\_cart, load\_users\_stub1 for function UserDataManager.load\_users  and save\_users\_stub1 for function UserDataManager.save\_users once. Finally, it called stub logout\_stub1 for function logout(global\_cart) once with the stub global\_cart\_stub1 and finished with exit code 0 | Pass | Test name: test\_EC3\_TC3() |
| 16 | VEC3 | login\_info = {‘username’: ’username’, ‘password’: ‘P@ssword’, ‘wallet’: 100.0} and choice = c, l | Function should call stub check\_cart\_stub2 for function check\_cart, stub logout\_stub1 for function logout(global\_cart) once with the stub global\_cart\_stub1 and finish with exit code 0 | | Function called stub check\_cart\_stub2 for function check\_cart, stub logout\_stub1 for function logout(global\_cart) once with the stub global\_cart\_stub1 and finished with exit code 0 | Pass | Test name: test\_EC3\_TC4() |
| 17 | VEC3 | login\_info = {‘username’: ’username’, ‘password’: ‘P@ssword’, ‘wallet’: 100.0} and choice = 1, c, l | Function should call global\_products\_stub1[0].get\_product\_unit for global\_products[0].get\_product\_unit, global\_cart\_stub1.add\_item(global\_products\_stub1[0].get\_product\_unit.return\_value) for global\_cart  .add\_item(global\_products[0].get\_product\_unit) and print “product1 added to your cart.” once. It should also call stub check\_cart\_stub2 for function check\_cart, stub logout\_stub1 for function logout(global\_cart) once with the stub global\_cart\_stub1 and finish with exit code 0 | | Function called global\_products\_stub1[0].get\_product\_unit for global\_products[0].get\_product\_unit, global\_cart\_stub1.add\_item(global\_products\_stub1[0].get\_product\_unit.return\_value) for global\_cart  .add\_item(global\_products[0].get\_product\_unit) and printed “product1 added to your cart.” once. It also called stub check\_cart\_stub2 for function check\_cart, stub logout\_stub1 for function logout(global\_cart) once with the stub global\_cart\_stub1 and finished with exit code 0 | Pass | Test name: test\_EC3\_TC5() |
| 18 | VEC3 | login\_info = {‘username’: ’username’, ‘password’: ‘P@ssword’, ‘wallet’: 100.0} and choice = 1, 1, c, l | Function should call global\_products\_stub1[0].get\_product\_unit for global\_products[0].get\_product\_unit, global\_cart\_stub1.add\_item(global\_products\_stub1[0].get\_product\_unit.return\_value) for global\_cart  .add\_item(global\_products[0].get\_product\_unit) and print “product1 added to your cart.” twice. It should also call stub check\_cart\_stub2 for function check\_cart, stub logout\_stub1 for function logout(global\_cart) once with the stub global\_cart\_stub1 and finish with exit code 0 | | Function called global\_products\_stub1[0].get\_product\_unit for global\_products[0].get\_product\_unit, global\_cart\_stub1.add\_item(global\_products\_stub1[0].get\_product\_unit.return\_value) for global\_cart  .add\_item(global\_products[0].get\_product\_unit) and printed “product1 added to your cart.” twice. It also called stub check\_cart\_stub2 for function check\_cart, stub logout\_stub1 for function logout(global\_cart) once with the stub global\_cart\_stub1 and finished with exit code 0 | Pass | Test name: test\_EC3\_TC6() |
| 19 | VEC3 | login\_info = {‘username’: ’username’, ‘password’: ‘P@ssword’, ‘wallet’: 100.0} and choice = 1, c, 1, c, l | Function should call global\_products\_stub1[0].get\_product\_unit for global\_products[0].get\_product\_unit, global\_cart\_stub1.add\_item(global\_products\_stub1[0].get\_product\_unit.return\_value) for global\_cart  .add\_item(global\_products[0].get\_product\_unit) and print “product1 added to your cart.” twice. It should also call stub check\_cart\_stub3 for function check\_cart twice, load\_users\_stub1 for function UserDataManager.load\_users once  and save\_users\_stub1 for function UserDataManager.save\_users once. Finally, it should call stub logout\_stub1 for function logout(global\_cart) once with the stub global\_cart\_stub1 and finish with exit code 0 | | Function called global\_products\_stub1[0].get\_product\_unit for global\_products[0].get\_product\_unit, global\_cart\_stub1.add\_item(global\_products\_stub1[0].get\_product\_unit.return\_value) for global\_cart  .add\_item(global\_products[0].get\_product\_unit) and printed “product1 added to your cart.” twice. It also called stub check\_cart\_stub3 for function check\_cart twice, load\_users\_stub1 for function UserDataManager.load\_users once  and save\_users\_stub1 for function UserDataManager.save\_users once. Finally, it called stub logout\_stub1 for function logout(global\_cart) once with the stub global\_cart\_stub1 and finished with exit code 0 | Pass | Test name: test\_EC3\_TC7() |
| 20 | VEC4 | login\_info = {‘username’: ’username’, ‘password’: ‘P@ssword’, ‘wallet’: 100.0} and choice = d, l | Function should call stub display\_products\_available\_for\_purchase\_stub1 for function display\_products\_available\_for\_purchase once, stub logout\_stub1 for function logout(global\_cart) with the stub global\_cart\_stub1 once and finish with exit code 0 | | Function called stub display\_products\_available\_for\_purchase\_stub1 for function display\_products\_available\_for\_purchase once, stub logout\_stub1 for function logout(global\_cart) with the stub global\_cart\_stub1 once and finished with exit code 0 | Pass | Test name: test\_EC4\_TC1() |
| 21 | VEC4 | login\_info = {‘username’: ’username’, ‘password’: ‘P@ssword’, ‘wallet’: 100.0} and choice = d, 1, c, l | Function should call stub display\_products\_available\_for\_purchase\_stub1 for function display\_products\_available\_for\_purchase once. Then it should call global\_products\_stub1[0].get\_product\_unit for global\_products[0].get\_product\_unit, global\_cart\_stub1.add\_item(global\_products\_stub1[0].get\_product\_unit.return\_value) for global\_cart  .add\_item(global\_products[0].get\_product\_unit) and print “product1 added to your cart.” once. It should also call stub check\_cart\_stub1 for function check\_cart, load\_users\_stub1 for function UserDataManager.load\_users  and save\_users\_stub1 for function UserDataManager.save\_users once. Finally, it should call stub logout\_stub1 for function logout(global\_cart) once with the stub global\_cart\_stub1 and finish with exit code 0 | | Function called stub display\_products\_available\_for\_purchase\_stub1 for function display\_products\_available\_for\_purchase once. Then it called global\_products\_stub1[0].get\_product\_unit for global\_products[0].get\_product\_unit, global\_cart\_stub1.add\_item(global\_products\_stub1[0].get\_product\_unit.return\_value) for global\_cart  .add\_item(global\_products[0].get\_product\_unit) and printed “product1 added to your cart.” once. It also called stub check\_cart\_stub1 for function check\_cart, load\_users\_stub1 for function UserDataManager.load\_users  and save\_users\_stub1 for function UserDataManager.save\_users once. Finally, it called stub logout\_stub1 for function logout(global\_cart) with the stub global\_cart\_stub1 once and finish with exit code 0 | Pass | Test name: test\_EC4\_TC2() |
| 22 | VEC5 | login\_info = {‘username’: ’username’, ‘password’: ‘P@ssword’, ‘wallet’: 100.0} and choice = invalid, l | Function should print “Invalid input. Please try again.”, call stub logout\_stub1 for function logout(global\_cart) with the stub global\_cart\_stub1 once and finished with exit code 0 | | Function printed “Invalid input. Please try again.”, called stub logout\_stub1 for function logout(global\_cart) with the stub global\_cart\_stub1 once and finished with exit code 0 | Pass | Test name: test\_EC5\_TC1() |
| 23 | VEC5 | login\_info = {‘username’: ’username’, ‘password’: ‘P@ssword’, ‘wallet’: 100.0} and choice = 0, l | Function should print “Invalid input. Please try again.”, call stub logout\_stub1 for function logout(global\_cart) with the stub global\_cart\_stub1 once and finished with exit code 0 | | Function printed “Invalid input. Please try again.”, called stub logout\_stub1 for function logout(global\_cart) with the stub global\_cart\_stub1 once and finished with exit code 0 | Pass | Test name: test\_EC5\_TC2() |
| 24 | VEC5 | login\_info = {‘username’: ’username’, ‘password’: ‘P@ssword’, ‘wallet’: 100.0} and choice = 3, l | Function should print “Invalid input. Please try again.”, call stub logout\_stub1 for function logout(global\_cart) with the stub global\_cart\_stub1 once and finished with exit code 0 | | Function printed “Invalid input. Please try again.”, called stub logout\_stub1 for function logout(global\_cart) with the stub global\_cart\_stub1 once and finished with exit code 0 | Pass | Test name: test\_EC5\_TC3() |