**Test Function Document**

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| Project Name: Assignment1 | |
| Automation Title: test\_login\_logout | Version: 1.0 |
| Testing Phase: Phase 1 | Date of Test: 22 nov 2023 |
| Module Name: Login-Logout | |

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| Function Title: login | | | | Test Designed by: Alexandru Gurita | | | |
| Test Priority (Low/Medium/High): Medium | | | | Test Designed Date: 16 Nov 2023 | | | |
| Description: The login function prompts the user to enter a username and a password, then checks the information against a json of users. If the information matches, the user is returned. If the user exists but the password is incorrect, the function displays an error message and returns None. If the user doesn’t exist, the user is asked if he would like to register. If not, the function returns None. If yes, the user is prompted to input a password. If the password has at least one capital letter, one numeral, one special character and is of length 8 or more, a new user is added to the json and the function returns the user object (username and wallet: 0). If not, the function returns None | | | | Test Executed by: Alexandru Gurita | | | |
| Test Execution date: 16 nov 2023 | | | |
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| Pre-conditions: None | | | | | | | |
| Dependencies: check\_password, write\_to\_file | | | | | | | |
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| S. No | Equivalence Class | Test case data | Expected Results | | Actual Results | Status (Pass/Fail) | Notes |
| 1 | Login existing user with correct password | ["Ramanathan", "Notaproblem23\*"] | Function returns "{"username": Ramanathan, "wallet": 100}" | | Function returns "{"username": Ramanathan, "wallet": 100}" | Pass |  |
| 2 | Login existing user with incorrect password | ["Ramanathan", "Notaproblem23\*!"] | Function returns "None" | | Function returns "None" | Pass |  |
| 3 | Login new user without registering | ["NewUser", "", "N"] | Function returns "None" | | Function returns "None" | Pass | Test with N as answer |
| 4 | Login new user without registering | ["NewUser", "", "X"] | Function returns "None" | | Function returns "None" | Pass | Test with a different input than N or Y as an answer |
| 5 | Register new user with valid password | ["NewUser", "", "Y", "ValidPassword1!"] | Function returns “{"username": new\_user\_valid\_password[0], "wallet": 0}”  +write\_to\_file\_stub was called once +check\_password\_stub\_correct was called once with the password we provided | | Function returns “{"username": new\_user\_valid\_password[0], "wallet": 0}”  +write\_to\_file\_stub was called once +check\_password\_stub\_correct was called once with the password we provided | Pass |  |
| 6 | Register new user with invalid password | ["NewUser", "", "Y", "invalidpassword"] | Function returns "None"  +check\_password\_stub\_incorrect was called once with the password we provided | | Function returns "None"  +check\_password\_stub\_incorrect was called once with the password we provided | Pass |  |

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| Function Title: check\_password | | | | Test Designed by: Alexandru Gurita | | | |
| Test Priority (Low/Medium/High): Low | | | | Test Designed Date: 16 Nov 2023 | | | |
| Description: The check\_password function checks if the password has at least one capital letter, one numeral, one special character and is of length 8 or more. If yes, it returns True. If not, it returns False | | | | Test Executed by: Alexandru Gurita | | | |
| Test Execution date: 16 nov 2023 | | | |
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| Pre-conditions: It was called from login with a string | | | | | | | |
| Dependencies: none | | | | | | | |
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| S. No | Equivalence Class | Test case data | Expected Results | | Actual Results | Status (Pass/Fail) | Notes |
| 1 | Check password with no capital letter | password1! | Function returns "False" | | Function returns "False" | Pass |  |
| 2 | Check password with no numeral | Password! | Function returns "False" | | Function returns "False" | Pass |  |
| 3 | Check password with length < 8 | Pass1! | Function returns "False" | | Function returns "False" | Pass |  |
| 4 | Check password with no special character | Password1 | Function returns "False" | | Function returns "False" | Pass |  |
| 5 | Check valid password | Password1! | Function returns "True" | | Function returns "True" | Pass |  |

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| Function Title: logout | | | | Test Designed by: Alexandru Gurita | | | |
| Test Priority (Low/Medium/High): Medium | | | | Test Designed Date: 16 Nov 2023 | | | |
| Description: The logout function receives a parameter of type Cart. It then checks if the cart has any items. If not, it returns True. If it does, it prints the items and asks for confirmation on the Logout | | | | Test Executed by: Alexandru Gurita | | | |
| Test Execution date: 16 nov 2023 | | | |
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| Pre-conditions: None | | | | | | | |
| Dependencies: Cart class | | | | | | | |
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| S. No | Equivalence Class | Test case data | Expected Results | | Actual Results | Status (Pass/Fail) | Notes |
| 1 | Logout when the cart is empty | Mocked cart\_instance with 0 items | Function returns "False" | | Function returns "False" | Pass |  |
| 2 | Logout with a non-empty cart and no confirmation | Mocked cart\_instance with 3 items + [‘N’] user input | Function returns "False"  +mock\_retrieve\_item was called once | | Function returns "False"  +mock\_retrieve\_item was called once | Pass |  |
| 3 | Logout with a non-empty cart and confirmation | Mocked cart\_instance with 3 items + [‘Y’] user input | Function returns "False"  +mock\_retrieve\_item was called once  +mock\_clear\_items was called once | | Function returns "False"  +mock\_retrieve\_item was called once  +mock\_clear\_items was called once | Pass |  |
| 4 | Logout function test with a string input | “not\_a\_cart\_instance” | Function throws an AttributeError | | Function throws an AttributeError | Pass |  |
| 5 | Logout function test with an integer input | 1 | Function throws an AttributeError | | Function throws an AttributeError | Pass |  |
| 6 | Logout function test with a float input | 1.0 | Function throws an AttributeError | | Function throws an AttributeError | Pass |  |
| 7 | Logout function test with a list input | [1, 2, 3] | Function throws an AttributeError | | Function throws an AttributeError | Pass |  |
| 8 | Logout function test with an empty input |  | Function throws a TypeError | | Function throws a TypeError | Pass |  |