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Module G: Play Five Card Draw Program
Due Date: 27 July, 2022
170D WOBC

TEST PLAN

Purpose:
This document will cover how to test my playfivecarddraw.py project using unit testing.

Testing:
I will use unit testing to test all appropriate functions to determine that all of my logic is correct and the program runs as it should, without crashing. I didn't include a test case for all hand ranking functions to save space. I sampled the playfivecarddraw.py ranking function and the rank_the_hand.py functions.

Tests: (these tests will be listed in order, from the unit test program)

1. test_generate_52_card_deck(): This function compares a deck created in the function and the test deck to ensure the generate_deck function produces the same deck each time it is called.

2. test_generate_player_hand(): This function checks that each player hand is five cards in length.

3. **test_create_player_object():** This function type checks the created player object. Needs to be a list of tuples.

4. **test_handle_the_bet():** This function test compares the balance of the pot with how much the test player bet. Example(test player bets: 100, the pot = 100, returns True)

5. test_hand_is_straight_flush(): This function passes a straight flush hand through the function in RankTheHand.py and verifies the hand is a straight flush.

6. **test_hand_is_not_straight_flush():** This function passes a player hand that is not a straight flush through the is_straight_flush function. The value will pass if the result is False.

7. test_hand_is_flush(): This function passes a valid flush hand through the is_flush function. If the value returns True, the test passes. Validating the card identifying function.

8. test_hand_is_not_flush(): This function passes an invalid flush hand through the is_flush function. If value returns False, the test passes. Validating the card identifying function.

9. test_rank_the_hand_valid_straight_flush(): This function replaces the test player hand with a straight flush. Then passes the information to the rank_the_hand function in main program. The hand rank is then verified by comparing the hand rank value.

10. test_rank_the_hand_invalid_straight_flush(): This function passes an invalid straight flush through the rank the hand function. The hand rank is then compared to a straight flush. Test passes if both values are different.

11. test_rank_the_hand_valid_four_kind(): This function passes a valid four of a kind hand to rank the hand function. If the hand is valid, the hand rank value will be updated and the test will pass.

12. test_rank_the_hand_invalid_four_kind(): This function passes an invalid four of a kind to the rank the hand function. If the hand rank returns not equal to four of a kind, the test passes.