UNIT TEST PLAN

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| **Synopsis:** | This document lists the unit test cases for the BlackJack Application |

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# unit test plan

## Unit Test Cases

### Confirm Winning Condition

|  |  |
| --- | --- |
| **Unit Test Objective** | As above |
| **Test Dependencies** | N/A |
| Test Execution Step(s) | 1. Enter amount you wish to bet 2. Select Hit/Stand options. 3. When our score is under 21 or under but greater than Dealers score |
| Expected Results | Out initial bet should be added to balance at end of turn |
| Data Setup / Teardown | N/A |
| Actual Results | **Console Output:**  Your Balance: €100  Enter the amount you wish to bet:  10  Your Hand:  4 of Clubs  8 of Spades  [Score: 12]  Dealers Hand:  7 of Spades  [HIDDEN]  Would you like to:  (1)HIT (2)STAND (3)DOUBLE DOWN  1  You drew a 6 of Spades  Your Hand:  4 of Clubs  8 of Spades  6 of Spades  [Score: 18]  Dealers Hand:  7 of Spades  [HIDDEN]  Would you like to:  (1)HIT (2)STAND (3)DOUBLE DOWN  2  Dealers Hand:  7 of Spades  Jack of Spades  [Your Hand Score: 18]  [Dealer HandScore: 17]  Your Hand won €10!  -------------------------------------------------------  Your Balance: €110  . |

### Confirm Losing Condition

|  |  |
| --- | --- |
| **Unit Test Objective** | As above |
| **Test Dependencies** | N/A |
| Test Execution Step(s) | 1. Enter amount you wish to bet 2. Select Hit/Stand options. 3. When our score is under 21 or but less than Dealers score |
| Expected Results | Out initial bet should NOT be added to balance at end of turn |
| Data Setup / Teardown | N/A |
| Actual Results | **Console Output:**  Your Balance: €110  Enter the amount you wish to bet:  5  Your Hand:  4 of Clubs  Queen of Hearts  [Score: 14]  Dealers Hand:  9 of Hearts  [HIDDEN]  Would you like to:  (1)HIT (2)STAND (3)DOUBLE DOWN  2  Dealers Hand:  9 of Hearts  9 of Spades  [Your Hand Score: 14]  [Dealer HandScore: 18]  Your Hand Lost! Dealer Wins this Hand!  -------------------------------------------------------  Your Balance: €105  Enter the amount you wish to bet:. |

### Confirm Bust Condition

|  |  |
| --- | --- |
| **Unit Test Objective** | As above |
| **Test Dependencies** | N/A |
| Test Execution Step(s) | 1. Enter amount you wish to bet 2. Keep selecting HIT, until we go over 21. |
| Expected Results | We receive a message that out Hand has bust. Out initial bet should NOT be added to balance at end of turn |
| Data Setup / Teardown | N/A |
| Actual Results | Your Balance: €105  Enter the amount you wish to bet:  10  Your Hand:  5 of Hearts  7 of Clubs  [Score: 12]  Dealers Hand:  7 of Spades  [HIDDEN]  Would you like to:  (1)HIT (2)STAND (3)DOUBLE DOWN  1  You drew a King of Spades  Dealers Hand:  7 of Spades  9 of Clubs  [Your Hand Score: 22]  [Dealer HandScore: 16]  BUST! Your Hand is values at 22!  -------------------------------------------------------  Your Balance: €95 |

### Confirm BlackJack Condition

|  |  |
| --- | --- |
| **Unit Test Objective** | As above |
| **Test Dependencies** | N/A |
| Test Execution Step(s) | 1. Enter amount you wish to bet 2. Keep selecting HIT, until we get exactly 21. |
| Expected Results | We receive a message that out Hand has hit BlackJack. Out initial bet should be refunded at a ratio of 3:2 |
| Data Setup / Teardown | We bet €20 and won €30 (blackJack winning ration 3:2) |
| Actual Results | -------------------------------------------------------  - Welcome to BLACK JACK -  -------------------------------------------------------  Your Balance: €100  Enter the amount you wish to bet:  10  Your Hand:  King of Hearts  3 of Hearts  [Score: 13]  Dealers Hand:  5 of Diamonds  [HIDDEN]  Would you like to:  (1)HIT (2)STAND (3)DOUBLE DOWN  3  Your bet has doubled to €20.0  You drew a 8 of Diamonds  Dealers Hand:  5 of Diamonds  7 of Diamonds  [Your Hand Score: 21]  [Dealer HandScore: 12]  Blackjack! For Your Hand! Your Hand won €30  -------------------------------------------------------  Your Balance: €130  Enter the amount you wish to bet: |

### Confirm Double Win Condition

|  |  |
| --- | --- |
| **Unit Test Objective** | As above |
| **Test Dependencies** | N/A |
| Test Execution Step(s) | 1. Enter amount you wish to bet 2. Select Double option 3. If you hand wins you should receive double the bet |
| Expected Results | We receive a message that out Hand has hit BlackJack. Out initial bet should be refunded at a ratio of 3:2 |
| Data Setup / Teardown | We bet €10 and won €20 |
| Actual Results | -------------------------------------------------------  - Welcome to BLACK JACK -  -------------------------------------------------------  Your Balance: €110  Enter the amount you wish to bet:  10  Your Hand:  8 of Clubs  4 of Diamonds  [Score: 12]  Dealers Hand:  6 of Clubs  [HIDDEN]  Would you like to:  (1)HIT (2)STAND (3)DOUBLE DOWN  3  Your bet has doubled to €20.0  You drew a 6 of Diamonds  Dealers Hand:  6 of Clubs  6 of Hearts  Dealer drew a 2 of Hearts  Dealer drew a 2 of Hearts  Dealer drew a 8 of Hearts  Dealer Bust!  [Your Hand Score: 18]  [Dealer HandScore: 24]  Dealer Bust! Your Hand won €20!  -------------------------------------------------------  Your Balance: €130 |

### Confirm Double Lose Condition

|  |  |
| --- | --- |
| **Unit Test Objective** | As above |
| **Test Dependencies** | N/A |
| Test Execution Step(s) | 1. Enter amount you wish to bet 2. Select Double option 3. If you hand Loses you should lose double your original bet. |
| Expected Results | We receive a message that out Hand has hit BlackJack. Out initial bet should be refunded at a ratio of 3:2 |
| Data Setup / Teardown | We bet €10 and lost €20 |
| Actual Results | -------------------------------------------------------  - Welcome to BLACK JACK -  -------------------------------------------------------  Your Balance: €110  Enter the amount you wish to bet:  10  Your Hand:  8 of Clubs  4 of Diamonds  [Score: 12]  Dealers Hand:  6 of Clubs  [HIDDEN]  Would you like to:  (1)HIT (2)STAND (3)DOUBLE DOWN  3  Your bet has doubled to €20.0  You drew a 6 of Diamonds  Dealers Hand:  6 of Clubs  6 of Hearts  Dealer drew a 2 of Hearts  Dealer drew a 2 of Hearts  Dealer drew a 8 of Hearts  Dealer Bust!  [Your Hand Score: 18]  [Dealer HandScore: 24]  Dealer Bust! Your Hand won €20!  -------------------------------------------------------  Your Balance: €130 |

### Confirm Split Condition

|  |  |
| --- | --- |
| **Unit Test Objective** | As above |
| **Test Dependencies** | N/A |
| Test Execution Step(s) | 1. Enter amount you wish to bet 2. Select Split option (only available when we have 2 cards of matchin rank) 3. Use HIT/Stand options on new split hand. |
| Expected Results | Another bet equal to initial bet will be place on new split hand.  After split a new card is drawn automatically.  After which pptions of Hit/Stand/Doubleavailable to initial and new split hand. |
| Data Setup / Teardown | We bet €10 and another €10 was laced on split hand.  Both hands won so a total of €20 was added to balance ( |
| Actual Results | -------------------------------------------------------  - Welcome to BLACK JACK -  -------------------------------------------------------  Your Balance: €100  Enter the amount you wish to bet:  10  Your Hand:  Jack of Clubs  Jack of Hearts  [Score: 20]  Dealers Hand:  Ten of Clubs  [HIDDEN]  Would you like to:  (1)HIT (2)STAND (3)DOUBLE DOWN, (4)SPLIT  4  Splitting Jack of Clubs, Jack of Hearts into 2 new hands!  Your Hand:  Jack of Clubs  Ten of Spades  [Score: 20]  Dealers Hand:  Ten of Clubs  [HIDDEN]  Would you like to:  (1)HIT (2)STAND (3)DOUBLE DOWN  2  Split Hand 1:  Jack of Hearts  King of Spades  [Score: 20]  Dealers Hand:  Ten of Clubs  [HIDDEN]  Would you like to:  (1)HIT (2)STAND (3)DOUBLE DOWN  2  Dealers Hand:  Ten of Clubs  6 of Spades  [Your Hand Score: 20]  [Dealer HandScore: 16]  Your Hand won €10!  [Split Hand 1 Score: 20]  [Dealer HandScore: 16]  Split Hand 1 won €10!  -------------------------------------------------------  Your Balance: €120 |