Requirement ID	Requirement	Verified By
1.0	Starting a new game	
1.1	Display default game configuration	Test case 1, step 2
1.2	Ask user if they would like to change game	Test case 1, step 5
	configuration.	
1.3	Store new config values	Test case 2, step 6
1.4	Display starting life points	Test case 1, step 6
2.0	Betting turn	
2.1	Display two player card and one dealer card + card	Test case 3, step 7
	totals	
2.2	Prompt user for hit or stay	Test case 4, step 2
2.3	Display 2 <sup>nd</sup> dealer card and 3 <sup>rd</sup> player card (if hit)	Test case 4, step 4
		Test case 4, step 5
2.4	Calculate totals	Test case 4, step 6
3.0	Bet scoring	
3.1	Determine score deducted/added	Test case 6, step 4
	<ul> <li>Determine if player busted</li> </ul>	Test case 7, step 4
	<ul> <li>Determine if player tied</li> </ul>	Test case 8, step 4
	<ul> <li>Determine if player got closer to bust or</li> </ul>	Test case 9, step 5
	dealer did	
3.2	Display life points for dealer and player	Test case 6, step 4
		Test case 7, step 4
		Test case 8, step 4
		Test case 9, step 5
4.0	End Game	
4.1	Determine if player's life points hit zero	Test case 11, step 1
4.2	Determine if Dealer's life points hit zero	Test case 10, step 1
4.3	Display who wins	Test case 10, step 3
		Test case 11, step 3

## Test Case 1: Starting game with no modularity

- 1. Run program
- 2. Look to make sure default game configuration is displayed.
- 3. You will be asked whether you would like to change configuration.
- 4. Click the button that says "No".
- 5. No window asking for a new bust value should appear.
- 6. Window should now display life points, two player cards, one dealer card, and hand totals for each player.

## Test Case 2: Starting Game with Modularity

- 1. Run program
- 2. Look to make sure default game configuration is displayed.
- 3. You will be asked whether you would like to change configuration.

- 4. Click the button that says "Yes".
- 5. A prompt should appear asking for a new bust value.
- 6. Input "30".
- 7. Window should now display life points, two player cards, one dealer card, and hand totals for each player.

#### Test Case 3: Starting Game with no Modularity after a modular game

- 1. Run program
- 2. Look to make sure default game configuration is displayed.
- 3. You will be asked whether you would like to change configuration.
- 4. Click the button that says "Yes".
- 5. A prompt should appear asking for a new bust value.
- 6. Input "30".
- 7. Close program by pressing the "x" in the top corner.
- 8. Run program
- 9. Look to make sure default game configuration is displayed.
- 10. Make sure game configuration is set to 21.

For the next test cases, each will need to be done twice: once checking modular, another checking non modular games.

# Test Case 4: Betting: Testing "Hit" and Subsequent Display Changes

- 1. Go through either Test Case 1 or Test Case 2 (test for both modular and non)
- 2. A prompt should appear asking if you want to "hit" or "stay".
- 3. Click on the "hit" button.
- 4. A 3<sup>rd</sup> card should display for player.
- 5. A 2<sup>nd</sup> card should display for dealer.
- 6. Card totals should display accurate total of each hand.

### Test Case 5: Betting: Testing "Stay" and Subsequent Display Changes

- 1. Go through either Test Case 1 or Test Case 2 (test for both modular and non-modular).
- 2. A prompt should appear asking if you want to "hit" or "stay".
- 3. Click on the "stay" button.
- 4. Only a 2<sup>nd</sup> card should display for dealer.
- 5. Card totals should display accurate total of each hand.

# Test Case 6: Scoring: Player's score is over bust, Dealer is under: Test calculation of score and life point effect

- 1. Go through either Test Case 4 (test for modular and non-modular).
- 2. Continue to click on the "hit" button until your card total is over the set bust limit.

- 3. You will be prompted once again to make a decision, click the "stay" button.
- 4. Check that the difference between score and bust is added/subtracted from life points of each player.

Test Case 7: Scoring: Dealer's score is over bust, Player's score is under: Test calculation of score and life point effect

- 1. Go through either Test Case 4 (test for modular and non-modular).
- 2. Continue to click on the "hit" button until your card total is below bust and the dealer's total is above (you may need to restart a couple of times).
- 3. You will be prompted once again to make a decision, click the "stay" button.
- 4. Check that the difference between score and bust is added/subtracted from life points of each player.

Test Case 8: Scoring: Dealer's and player's score is over bust: Test calculation of score and life point effect

- 1. Go through either Test Case 4 (test for modular and non-modular).
- 2. Continue to click on the "hit" button until your card total is above bust and the dealer's total is above (you may need to restart a couple of times).
- 3. You will be prompted once again to make a decision, click the "stay" button.
- 4. Check that the difference between score and bust is added/subtracted from life points of each player.

Test Case 9: Scoring: Dealer's and player's score is equal: Test calculation of score and life point effect

- 1. Go through either Test Case 4 (test for modular and non-modular).
- 2. Continue to click on the "hit" button until your card total is below the dealer's total and the bust threshold (you may need to restart a couple of times).
- 3. You will be prompted once again to make a decision, click the "stay" button.
- 4. Repeat the above instructions until the player and dealer scores are equal (this is rare and may take a long time).
- 5. Check that no change is made to life points of each player.

Test Case 10: End Game: Dealer's life points go below zero.

- 1. Repeat test case 7 until the Dealer's life points go below zero.
- 2. Make sure a display appears stating that player is the winner.
- 3. Game ends and closes.

Test Case 11: End Game: Player's life points go below zero.

- 1. Repeat test case 6 until the Player's life points go below zero.
- 2. Make sure a display appears stating that Dealer is the winner.
- 3. Game ends and closes.