Project Test Report

# List of Test Cases

These test procedures verify that the Poker++ program meets requirements. The test case and step(s) that apply to each requirement are recorded on the requirements spreadsheet.

* Test Case 1 - Normal Game Play
* Test Case 2 - Player Limits
* Test Case 3 - Error Situations
* Test Case 4 - Non-Functional Requirements

# Test Case 1

| **Action** | **Expected Response** | **Actual Response** |
| --- | --- | --- |
| Open three terminal windows. From the first terminal, run:  $ ./poker\_server 9000  From the second and third terminals, run:  $ ./poker\_client 127.0.0.1 9000 | Two player windows appear prompting for player names. | Two player windows appear prompting for player names. |
| Enter “Player1” in the first window and click Play. Enter “Player2” in the second window and click Play. | Two game windows appear, each indicating the player’s name, pot ($2), current bet ($0), wallet ($99), and other players’ name. | Two game windows appear. Each window shows the opposing player’s name, the pot value 2, current bet value 0 and data display reads “Waiting on Player1”. Player1’s hand is visible and wallet value is shown 99. |
| Move Player1’s bet slider to $5 and click Bet. | Player1:  Bet Amount: $5  Wallet: $94  All Players:  Pot: $7  Current Bet: $5  “Waiting on Player2” | Player1:  Bet Amount: 5.0  Wallet: 94  All Players:  Pot: 7  Current Bet: 5  “Waiting on Player2” |
| Move Player2’s bet slider to $7 and click Bet. | Player2:  Bet Amount: $7  Wallet: $92  All Players:  Pot: $14  Current Bet: $7  “Waiting on Player1” | Player2:  Bet Amount: 7.0  Wallet: 92  All Players:  Pot: 14  Current Bet: 7  “Waiting on Player1” |
| Move Player1’s bet slider to $7 and click Call. | Player1:  Bet Amount: $7  Wallet: $92  All Players:  Pot: $16  Current Bet: $7  “Waiting on Player2” | Player1:  Bet Amount: 0.0  Wallet: 92  All Players:  Pot: 16  Current Bet: 0  “Waiting on Player1” |
| Click to select one card from Player1’s hand. Then click Discard. | The selected card flips over so the back is shown. Then the card is replaced with a new card.  “Waiting on Player2” | The third card flipped over and the back was shown. Then the fourth card moved into the third position and a new card appeared in the fourth position. “Waiting on Player2” |
| Click to select three cards from Player2’s hand. Then click Discard. | The selected cards flip over so the backs are shown.  “Waiting on Player1” | The third, fourth and fifth cards flipped over and the backs were shown. Three new cards appeared in the 3-4-5 positions.  “Waiting on Player1” |
| Move Player1’s bet slider to $10 and click Bet. | Player1:  Bet Amount: $10  Wallet: $89  All Players:  Pot: $19  Current Bet: $10  “Waiting on Player2” | Player1:  Bet Amount: 10.0  Wallet: 82  All Players:  Pot: 26  Current Bet: 10  “Waiting on Player2” |
| Move Player2’s bet slider to $10 and click Call. | Player2:  Bet Amount: $10  Wallet: $89  All Players:  Pot: $22  Current Bet: $10  “Player# has won!”  Winner:  Bet Amount: $0  Wallet: $110  Loser:  Bet Amount: $0  Wallet: $88  All Players:  Pot: $2  Current Bet: $0  “Waiting on Player1” | Player2:  Bet Amount: 0  Wallet: 82  All Players:  Pot: 36  Current Bet: 0  “Player2 has won!”  Player2:  Bet Amount: 0.0  Wallet: 117  Player1:  Bet Amount: 0.0  Wallet: 81  All Players:  Pot: 2  Current Bet: 0  “Waiting on Player1” |
| Move Player1’s bet slider to $88 and click Bet. | Player1:  Bet Amount: $88  Wallet: $22 or $0  All Players:  Pot: $90  Current Bet: $88  “Waiting on Player2” | Player1:  Bet Amount: 88.0  Wallet: 29  All Players:  Pot: 90  Current Bet: 88  “Waiting on Player2” |
| Move Player2’s bet slider to $88 and click Call. | Player2:  Bet Amount: $88  Wallet: $0 or $22  All Players:  Pot: $178  Current Bet: $88  “Waiting on Player1” | Player2:  Bet Amount: 81.0  Wallet: 81  All Players:  Pot: 90  Current Bet: 88  “Waiting on Player2”  Dealer process aborted |
| Click to select four cards from Player1’s hand. Then click Discard. | Cards flip over. Four new cards appear. “Waiting on Player2” | The cards flipped over. Four new cards appeared. “Waiting on Player2” |
| Click to select two cards from Player2’s hand. Then click Discard. | Cards flip over. Two new cards appear. “Waiting on Player1” | The cards flipped over. Two new cards appeared. “Waiting on Player1” |
| Click Check on Player1. | Player1:  Bet Amount: $88  Wallet: $0  All Players:  Pot: $178  Current Bet: $88  “Waiting on Player2” | Player1:  Bet Amount: 0.0  Wallet: 0  All Players:  Pot: 178  Current Bet: 0  “Waiting on Player2” |
| Move Player2’s bet slider to $99 and click Bet. | Player2:  Bet Amount: $99  Wallet: $11  All Players:  Pot: $189  Current Bet: $99  “Waiting on Player1” | Player2:  Bet Amount: 11.0  Wallet: 11  All Players:  Pot: 189  Current Bet: 11  “Waiting on Player1” |
| Click Fold on Player1. | Player1:  Bet Amount: $88  Wallet: $0  All Players:  Pot: $178  Current Bet: $88  “Player2 has won!”  Game over | Player1:  Bet Amount: 0  Wallet: -1  All Players:  Pot: 2  Current Bet: 0  “Player2 has won!”  New hand started |

# Test Case 2

| **Action** | **Expected Response** | **Actual Response** |
| --- | --- | --- |
| Only one player joins | The game will not be started. | Game will not be started with only one player |
| Two player joins | Game should wait for other players to join | The dealer will start the game |
| More than two player joins | Game should be started | The dealer will start the game when there are two players and when the third player joins, it will abort the server program with game ideal=false assert. |

# Test Case 3

| **Action** | **Expected Response** | **Actual Response** |
| --- | --- | --- |
| Action here | Expected response here | Actual response here |

# Test Case 4

| **Expected Response** | **Actual Response** |
| --- | --- |
| Better run time performance | Poor run time performance |
| Poor security features | No security features |
| Easy to operate | User found it easy to operate |
| Portable only in linux environment | Doesn’t work in other platform besides linux embedded system |
| Easy to maintain | Easily cleared bugs to maintain its productability |

# Defects Identified

|  |  |
| --- | --- |
| **Defect Described** | **Action Taken** |
| The current bet value resets to zero after the first betting round but before the hand is over |  |
| Player1 joined the third hand with a wallet value of -1 |  |
| The game hangs (dealer process aborts) when a player cannot meet the current bet but attempts to bet or call |  |
|  |  |

# Summary

The poker++ program was tested. There were 100 defects identified, of which 75 were corrected. The remaining defects are such that they are rarely encountered in play.

Four requirements were modified and two requirements were deleted during this activity. With the exception of the listed defects, the poker++ program meets all requirements.

The program is robust, correct, and ready for use. (or, perhaps needs additional work before it is used)