System Test Plan: Hearts program

Introduction: The text in bold in the **Description** column represents the test inputs to the program. You can stop program execution by pressing Ctrl+C.

Test ID	Description	Expected Results	Actual Results
testInitialGUI Author: Dr. Balik	$ **java -cp bin HeartsGUI Player -t** **(Close window to stop execution)**	GUI entitled "CSC116 Hearts", with directions "Player's Turn", Player: 0, Computer 1: 0, Computer 2: 0, and Computer 3: 0 are displayed. The Player's card images are displayed in this order: 2, 6, 10, Ace of Clubs; 5, 9, King of Diamonds; 4, 8, Queen of Spades; 3, 7, Jack of Hearts.	GUI entitled "CSC116 Hearts", with directions "Player's Turn", Player: 0, Computer 1: 0, Computer 2: 0, and Computer 3: 0 are displayed. The Player's card images are displayed in this order: 2, 6, 10, Ace of Clubs; 5, 9, King of Diamonds; 4, 8, Queen of Spades; 3, 7, Jack of Hearts.
testPlayingFirstTrick Author: Dr. Balik	$ **java -cp bin HeartsGUI Player -t** **Click on 2 of Clubs** **(Close window to stop execution).**	Computer 1 plays 3 of Clubs, Computer 2 plays 4 of Clubs, Computer 3 plays 5 of Clubs and takes all the cards. Computer 3 then plays 9 of Clubs. Player: 0, Computer 1: 0, Computer 2: 0, and Computer 3: 0 are displayed.	Computer 1 plays 3 of Clubs, Computer 2 plays 4 of Clubs, Computer 3 plays 5 of Clubs and takes all the cards. Computer 3 then plays 9 of Clubs. Player: 0, Computer 1: 0, Computer 2: 0, and Computer 3: 0 are displayed.

| testPlayingWrong Suit

Author: Dr. Balik | $ **java -cp bin HeartsGUI Player -t**

Click on 2 of Clubs
Click on 4 of Spades

(Click OK and close window to stop execution). | Dialog box entitled Invalid Move with message "You must play a card of the same suit that started the trick." pops up. | Dialog box entitled Invalid Move with message "You must play a card of the same suit that started the trick." pops up. |
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| testLeadingHeartsTooS on

Author: Dr. Balik | $ **java -cp bin HeartsGUI Player -t**

Click on 2 of Clubs
Click on Ace of Clubs
Click on 3 of Hearts

(Click OK and close window to stop execution). | Dialog box entitled Invalid Move with message "You cannot start a trick with a Heart until one has been played during a trick." pops up. | Dialog box entitled Invalid Move with message "You cannot start a trick with a Heart until one has been played during a trick." pops up. |
| testLeadingAndWinnin gQueenOfSpades

Author: Dr. Balik | $ **java -cp bin HeartsGUI Player -t**

Click on 2 of Clubs
Click on Ace of Clubs
Click on Queen of Spades | Player: 13, Computer 1: 0, Computer 2: 0, and Computer 3: 0 are displayed. | Player: 13, Computer 1: 0, Computer 2: 0, and Computer 3: 0 are displayed. |

testWinHearts Author:Abby Blancett	$ **java -cp bin HeartsGUI Player -t** **Click on 2 of Clubs** **Click on Ace of Clubs** **Click on Queen of Spades** **Click on 4 of spades** **Click on 10 of clubs** **Click on 5 diamonds** **Click on 6 clubs**	Player: 16, Computer 1: 0, Computer 2: 0, and Computer 3: 0 are displayed.	Player: 16, Computer 1: 0, Computer 2: 0, and Computer 3: 0 are displayed.
testPlayHeart Author: Abby Blancett	$ **java -cp bin HeartsGUI Player -t** **Click on 2 of Clubs** **Click on Ace of Clubs** **Click on Queen of Spades** **Click on four of Spades** **Click on 6 for clubs** **Click on 5 of Diamonds** **Click on 8 of Spades** **Click on 9 of diamonds** **Click on 10 of Spades** **Click on king of diamonds** **Click on 3 of hearts**	Player: 16, Computer 1: 0, Computer 2: 4, and Computer 3: 0 are displayed.	Player: 16, Computer 1: 0, Computer 2: 4, and Computer 3: 0 are displayed.
testStartWrongCardAttempt Author: Abby Blancett	$ **java -cp bin HeartsGUI Player -t** **Click on 3 of Hearts**	Box stating: You must play the 2 of Clubs to start the trick	Box Stating: You must play the 2 of Clubs to start the trick

testNewHand Author Abby Blancett	**$ java -cp bin HeartsGUI Player -t** **Click on 2 of Clubs** **Click on Ace of Clubs** **Click on Queen of Spades** **Click on four of Spades** **Click on 6 for clubs** **Click on 5 of Diamonds** **Click on 8 of Spades** **Click on 9 of diamonds** **Click on 10 of Spades** **Click on king of diamonds** **Click on 3 of hearts** **Click on 8 of Spades** **Click on 9 of Diamonds** **Click on 10 of Diamonds** **Click on 3 of hearts** **Click on 7 of hearts** **Click on King of hearts**	Player: 19, Computer 1: 0, Computer 2:74, and Computer 3: 0 are displayed.	Player: 19, Computer 1: 0, Computer 2:74, and Computer 3: 0 are displayed.
testCustomPlayerName e Author: Abby Blancett	**$ java -cp bin HeartsGUI Player -t** **(Close window to stop execution)**	GUI entitled "CSC116 Hearts", with directions "Abby's Turn", Abby: 0, Computer 1: 0, Computer 2: 0, and Computer 3: 0 are displayed. Abby's card images are displayed in this order: 2, 6, 10, Ace of Clubs; 5, 9, King of Diamonds; 4, 8, Queen of Spades; 3, 7, Jack of Hearts.	GUI entitled "CSC116 Hearts", with directions "Abby's Turn", Abby: 0, Computer 1: 0, Computer 2: 0, and Computer 3: 0 are displayed. Abby's card images are displayed in this order: 2, 6, 10, Ace of Clubs; 5, 9, King of Diamonds; 4, 8, Queen of Spades; 3, 7, Jack of Hearts.