

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.
testLeadingHeartsTooSoon 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.
testLeadingAndWinningQueenOfSpades Author: Dr. Balik	\$ java -cp bin HeartsGUI Player -t Click on 2 of Clubs Click on Ace of Clubs Click on Queen of Spades (Close window to stop execution).	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.

testPlayingTricksWithHeartPlayed Author: Jayani Sivakumar	\$ java -cp bin HeartsGUI Player -t Click on 2 of Clubs Click on Ace of Clubs Click on Queen of Spades Click on 5 of Diamonds Click on 9 of Diamonds Click on King of Diamonds (Close window to stop execution).	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.
testMultipleTricksWithHeartPlayed Author: Jayani Sivakumar	\$ java -cp bin HeartsGUI Player -t Click on 2 of Clubs Click on Ace of Clubs Click on Queen of Spades Click on 5 of Diamonds Click on 9 of Diamonds Click on King of Diamonds Click on 6 of Clubs Click on 8 of Spades Click on Jack of Hearts (Close window to stop execution).	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.
testEndOfGameWithPlayerHavingHighestPoints Author: Jayani Sivakumar	\$ java -cp bin HeartsGUI Player -t Click on 2 of Clubs Click on Ace of Clubs Click on King of Diamonds Click on Queen of Spades Click on 10 of Clubs	Dialog box entitled Current Standings with message "Player: 20, Computer 1: 6, Computer 2: 0, and Computer 3: 0 are displayed." pops up	Dialog box entitled Current Standings with message "Player: 20, Computer 1: 6, Computer 2: 0, and Computer 3: 0 are displayed." pops up along with the button that says "Start Next Hand".

	Click on 9 of Diamonds Click on 8 of Spades Click on 5 of Diamonds Click on 4 of Spades Click on Jack of Hearts Click on 7 of Hearts Click on 6 of Clubs Click on 3 of Hearts (Close dialog box and close window to stop execution).	along with the button that says "Start Next Hand".	
testEndOfGameWithComputerHavingHighestPoints Author: Jayani Sivakumar	\$ java -cp bin HeartsGUI Player -t Click on 2 of Clubs Click on 6 of Clubs Click on 10 of Clubs Click on 5 of Diamonds Click on 4 of Spades Click on 9 of Diamonds Click on 8 of Spades Click on King of Diamonds Click on Queen of Spades Click on 3 of Hearts Click on 7 of Hearts Click on Jack of Hearts Click on Ace of Clubs (Close dialog box and close window to stop execution).	Dialog box entitled Current Standings with message "Player: 10, Computer 1: 16, Computer 2: 0, and Computer 3: 0 are displayed." pops up along with the button that says "Start Next Hand".	Dialog box entitled Current Standings with message "Player: 10, Computer 1: 16, Computer 2: 0, and Computer 3: 0 are displayed." pops up along with the button that says "Start Next Hand".

<p>testEndOfGameWith2 RoundsComputerHavi ngHighestPoints</p> <p>Author: Jayani Sivakumar</p>	<p>\$ java -cp bin HeartsGUI Player -t</p> <p>Round 1: Click on 2 of Clubs Click on 6 of Clubs Click on 10 of Clubs Click on 5 of Diamonds Click on 4 of Spades Click on 9 of Diamonds Click on 8 of Spades Click on King of Diamonds Click on Queen of Spades Click on 3 of Hearts Click on 7 of Hearts Click on Jack of Hearts Click on Ace of Clubs</p> <p>(Select Start Next Hand on the dialog box).</p> <p>Round 2: Click on 2 of Clubs Click on 6 of Clubs Click on 10 of Clubs Click on 5 of Diamonds Click on 4 of Spades Click on 9 of Diamonds Click on 8 of Spades Click on King of Diamonds Click on Queen of Spades Click on 3 of Hearts Click on 7 of Hearts Click on Jack of Hearts</p>	<p>After Round 1: Dialog box entitled Current Standings with message "Player: 10, Computer 1: 16, Computer 2: 0, and Computer 3: 0 are displayed." pops up along with the button that says "Start Next Hand".</p> <p>After Round 2: Dialog box entitled Current Standings with message "Player: 20, Computer 1: 32, Computer 2: 0, and Computer 3: 0 are displayed." pops up along with the button that says "Start Next Hand".</p>	<p>After Round 1: Dialog box entitled Current Standings with message "Player: 10, Computer 1: 16, Computer 2: 0, and Computer 3: 0 are displayed." pops up along with the button that says "Start Next Hand".</p> <p>After Round 2: Dialog box entitled Current Standings with message "Player: 20, Computer 1: 32, Computer 2: 0, and Computer 3: 0 are displayed." pops up along with the button that says "Start Next Hand".</p>
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	Click on Ace of Clubs (Close dialog box and close window to stop execution).		
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