

## System Test Plan: Match Game program

**Introduction:** Each test case below assumes that the cards directory contains the card image files. 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 MatchGameGUI -t  (Ctrl+C to stop execution)	GUI entitled "Match Game" is displayed with 4 rows and 13 cols of greyed-out cards, EASY GAME, HARD GAME, and QUIT buttons. Status: Welcome to the Match Game -- choose an Easy or Hard Game! Correct Guesses: 0 Total Guesses: 0 Average: <blank>	GUI entitled "Match Game" is displayed with 4 rows and 13 cols of greyed-out cards, EASY GAME, HARD GAME, and QUIT buttons. Status: Welcome to the Match Game -- choose an Easy or Hard Game! Correct Guesses: 0 Total Guesses: 0 Average: <blank>
testEasyGame  Author: Dr. Balik	\$ java -cp bin MatchGameGUI -t  <b>Click on EASY GAME button</b>  (Ctrl+C to stop execution)	GUI displays 4 rows and 13 cols of white cards. Status: Easy Game -- match cards with same value!	GUI displays 4 rows and 13 cols of white cards. Status: Easy Game -- match cards with same value!

testHardGame  Author: Dr. Balik	\$ java -cp bin MatchGameGUI -t  <b>Click on HARD GAME button</b>  (Ctrl+C to stop execution)	GUI displays 4 rows and 13 cols of white card buttons. Status: Hard Game -- match cards with same value and color!	GUI displays 4 rows and 13 cols of white card buttons. Status: Hard Game -- match cards with same value and color!
testQuit  Author: Dr. Balik	\$ java -cp bin MatchGameGUI -t  <b>Click on QUIT button</b>	GUI closes	GUI closes
testEasyGameMatch  Author: Dr. Balik	\$ java -cp bin MatchGameGUI -t  <b>Click on EASY GAME button</b> <b>Click on card in row 0, col 0</b> <b>Click on card in row 1, col 0</b>	GUI displays 2 of clubs at row 0, col 0 2 of diamonds at row 1, col 0 Correct Guesses: 1 Total Guesses: 1 Average: 1.00	GUI displays 2 of clubs at row 0, col 0 2 of diamonds at row 1, col 0 Correct Guesses: 1 Total Guesses: 1 Average: 1.00
testHardGameNotMatch  Author: Dr. Balik	\$ java -cp bin MatchGameGUI -t  <b>Click on HARD GAME button</b> <b>Click on card in row 0, col 0</b> <b>Click on card in row 1, col 0</b>	GUI <i>briefly</i> displays 2 of clubs at row 0, col 0 2 of diamonds at row 1, col 0 and then <i>redisplay</i> s white cards at the same positions Correct Guesses: 0 Total Guesses: 1 Average: 0.00	GUI <i>briefly</i> displays 2 of clubs at row 0, col 0 2 of diamonds at row 1, col 0 and then <i>redisplay</i> s white cards at the same positions Correct Guesses: 0 Total Guesses: 1 Average: 0.00

testEasyGameNotMatch  Author: Levi Whitener	\$ java -cp bin MatchGameGUI -t  <b>Click on EASY GAME button</b> <b>Click on card in row 0, col 0</b> <b>Click on card in row 1, col 1</b>	GUI <i>briefly</i> displays 2 of clubs at row 0, col 0 3 of diamonds at row 1, col 1 and then <i>redisplay</i> s white cards at the same positions Correct Guesses: 0 Total Guesses: 1 Average: 0.00	GUI <i>briefly</i> displays 2 of clubs at row 0, col 0 3 of diamonds at row 1, col 1 and then <i>redisplay</i> s white cards at the same positions Correct Guesses: 0 Total Guesses: 1 Average: 0.00
testEasyGameAllMatch  Author: Levi Whitener	\$ java -cp bin MatchGameGUI -t  <b>Click on EASY GAME button</b> <b>Click on card in row 0, col 0</b> <b>Click on card in row 1, col 0</b> <b>Click on card in row 2, col 0</b> <b>Click on card in row 3, col 0</b> ...	GUI displays 2 of clubs at row 0, col 0 2 of diamonds at row 1, col 0 2 of diamonds at row 2, col 0 2 of diamonds at row 3, col 0 ... Correct Guesses: 26 Total Guesses: 26 Average: 1.00	GUI displays 2 of clubs at row 0, col 0 2 of diamonds at row 1, col 0 2 of diamonds at row 2, col 0 2 of diamonds at row 3, col 0 ... Correct Guesses: 26 Total Guesses: 26 Average: 1.00
testHardGameAllMatch  Author: Levi Whitener	\$ java -cp bin MatchGameGUI -t  <b>Click on HARD GAME button</b> <b>Click on card in row 0, col 0</b> <b>Click on card in row 3, col 0</b> <b>Click on card in row 1, col 0</b> <b>Click on card in row 2, col 0</b> ...	GUI displays 2 of clubs at row 0, col 0 2 of spades at row 3, col 0 2 of diamonds at row 1, col 0 2 of hearts at row 2, col 0 ... Correct Guesses: 26 Total Guesses: 26 Average: 1.00	GUI displays 2 of clubs at row 0, col 0 2 of spades at row 3, col 0 2 of diamonds at row 1, col 0 2 of hearts at row 2, col 0 ... Correct Guesses: 26 Total Guesses: 26 Average: 1.00

testEasyGameGuessCounter  Author: Levi Whitener	\$ java -cp bin MatchGameGUI -t  <b>Click on EASY GAME button</b> <b>Click on card in row 0, col 0</b> <b>Click on card in row 1, col 1</b> <b>Click on card in row 0, col 0</b> <b>Click on card in row 1, col 0</b> <b>Click on card in row 2, col 0</b> <b>Click on card in row 3, col 1</b> <b>Click on card in row 2, col 0</b> <b>Click on card in row 3, col 0</b> ...	GUI <i>briefly</i> displays 2 of clubs at row 0, col 0 3 of diamonds at row 1, col 1 and then <i>redisplay</i> s white cards at the same positions 2 of clubs at row 0, col 0 2 of diamonds at row 1, col 0 ... Correct Guesses: 26 Total Guesses: 51 Average: 0.510	GUI <i>briefly</i> displays 2 of clubs at row 0, col 0 3 of diamonds at row 1, col 1 and then <i>redisplay</i> s white cards at the same positions 2 of clubs at row 0, col 0 2 of diamonds at row 1, col 0 ... Correct Guesses: 26 Total Guesses: 51 Average: 0.510
testHardGameGuessCounter  Author: Levi Whitener	\$ java -cp bin MatchGameGUI -t  <b>Click on EASY GAME button</b> <b>Click on card in row 0, col 0</b> <b>Click on card in row 3, col 1</b> <b>Click on card in row 0, col 0</b> <b>Click on card in row 3, col 0</b> <b>Click on card in row 1, col 0</b> <b>Click on card in row 2, col 1</b> <b>Click on card in row 1, col 0</b> <b>Click on card in row 2, col 0</b> ...	GUI <i>briefly</i> displays 2 of clubs at row 0, col 0 3 of spades at row 3, col 1 and then <i>redisplay</i> s white cards at the same positions 2 of clubs at row 0, col 0 2 of spades at row 3, col 0 ... Correct Guesses: 26 Total Guesses: 52 Average: 0.50	GUI <i>briefly</i> displays 2 of clubs at row 0, col 0 3 of spades at row 3, col 1 and then <i>redisplay</i> s white cards at the same positions 2 of clubs at row 0, col 0 2 of spades at row 3, col 0 ... Correct Guesses: 26 Total Guesses: 52 Average: 0.50