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 **Click on EASY GAME button** (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 **Click on HARD GAME button** (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 **Click on QUIT button**	GUI closes	GUI closes
testEasyGameMatch Author: Dr. Balik	$ java -cp bin MatchGameGUI -t **Click on EASY GAME button** **Click on card in row 0, col 0** **Click on card in row 1, col 0**	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 **Click on HARD GAME button** **Click on card in row 0, col 0** **Click on card in row 1, col 0**	GUI *briefly* displays 2 of clubs at row 0, col 0 2 of diamonds at row 1, col 0 and then *redisplays* white cards at the same positions Correct Guesses: 0 Total Guesses: 1 Average: 0.00	GUI *briefly* displays 2 of clubs at row 0, col 0 2 of diamonds at row 1, col 0 and then *redisplays* white cards at the same positions Correct Guesses: 0 Total Guesses: 1 Average: 0.00

testEasyGameNotMatch Author: Riya Gunda	$ java -cp bin MatchGameGUI -t **Click on EASY GAME button** **Click on card in row 0, col 0** **Click on card in row 1, col 1**	GUI displays 2 of clubs at row 0, col 0 3 of diamonds at row 1, col 0 and then *redisplays* white cards at the same positions Correct Guesses: 0 Total Guesses: 1 Average: 0.00	GUI displays 2 of clubs at row 0, col 0 3 of diamonds at row 1, col 0 and then *redisplays* white cards at the same positions Correct Guesses: 0 Total Guesses: 1 Average: 0.00
testHardGameMatch Author: Riya Gunda	$ java -cp bin MatchGameGUI -t **Click on HARD GAME button** **Click on card in row 0, col 0** **Click on card in row 3, col 0**	GUI *briefly* displays 2 of clubs at row 0, col 0 2 of spades at row 3, col 0 Correct Guesses: 1 Total Guesses: 1 Average: 1.00	GUI *briefly* displays 2 of clubs at row 0, col 0 2 of spades at row 3, col 0 Correct Guesses: 1 Total Guesses: 1 Average: 1.00
testHardGameMatchAndNotMatch Author: Riya Gunda	$ java -cp bin MatchGameGUI -t **Click on HARD GAME button** **Click on card in row 0, col 0** **Click on card in row 3, col 0** **Click on card in row 1, col 0** **Click on card in row 3, col 5**	GUI *briefly* displays 2 of clubs at row 0, col 0 2 of spades at row 3, col 0 Correct Guesses: 1 Total Guesses: 1 Average: 1.00 2 of clubs at row 0, col 0 7 of spades at row 3, col 0 and then *redisplays* white cards at the same positions Correct Guesses: 1 Total Guesses: 2 Average: 0.500	GUI *briefly* displays 2 of clubs at row 0, col 0 2 of spades at row 3, col 0 Correct Guesses: 1 Total Guesses: 1 Average: 1.00 2 of clubs at row 0, col 0 7 of spades at row 3, col 0 and then *redisplays* white cards at the same positions Correct Guesses: 1 Total Guesses: 2 Average: 0.500

| testEasyGameThreeNonMatchesOneMatch | $ java -cp bin MatchGameGUI -t

Click on EASY GAME button
Click on card in row 0, col 0
Click on card in row 1, col 1

Click on card in row 0, col 5
Click on card in row 3, col 1

Click on card in row 2, col 10
Click on card in row 1, col 3

Click on card in row 0, col 6
Click on card in row 1, col 6 | GUI displays
2 of clubs at row 0, col 0
3 of diamonds at row 1, col 0
and then *redisplays* white cards at the same positions
Correct Guesses: 0
Total Guesses: 1
Average: 0.00

7 of clubs at row 0, col 5
3 of spades at row 3, col 1
and then *redisplays* white cards at the same positions
Correct Guesses: 0
Total Guesses: 2
Average: 0.00

Q of hearts at row 1, col 10
5 of diamonds at row 1, col 3
and then *redisplays* white cards at the same positions
Correct Guesses: 0
Total Guesses: 3
Average: 0.00

8 of clubs at row 0, col 6
8 of diamonds at row 1, col 6
Correct Guesses: 1
Total Guesses: 4
Average: 0.250 | GUI displays
2 of clubs at row 0, col 0
3 of diamonds at row 1, col 0
and then *redisplays* white cards at the same positions
Correct Guesses: 0
Total Guesses: 1
Average: 0.00

7 of clubs at row 0, col 5
3 of spades at row 3, col 1
and then *redisplays* white cards at the same positions
Correct Guesses: 0
Total Guesses: 2
Average: 0.00

Q of hearts at row 1, col 10
5 of diamonds at row 1, col 3
and then *redisplays* white cards at the same positions
Correct Guesses: 0
Total Guesses: 3
Average: 0.00

8 of clubs at row 0, col 6
8 of diamonds at row 1, col 6
Correct Guesses: 1
Total Guesses: 4
Average: 0.250 |

testFullGridEndGameEasy	$ java - cp bin MatchGameGUI -t **Click on card in row 0, col 0** **Click on card in row 1, col 0** **Click on card in row 2, col 0** **Click on card in row 3, col 0** **Click on card in row 0, col 1** **Click on card in row 1, col 1** **Click on card in row 2, col 1** **Click on card in row 3, col 1** **…** **Click on card in row 0, col 12** **Click on card in row 1, col 12**	GUI displays Correct Guesses: 26 Total Guesses: 26 Average: 1.00 Game over!	GUI displays Correct Guesses: 26 Total Guesses: 26 Average: 1.00 Game over!