

Checkers Computer Software Application  
Software Test Plan  
Version 2.0  
November 21, 2022  
The Systems Squad

Team Members:

Kylie Hall  
Brittany Brenneman  
Xan Weatherholtz

## Table of Contents

<b>1. Introduction</b>	<b>3</b>
1.1 Purpose	3
1.2 Scope	3
1.3 Definitions, Acronyms, and Abbreviations	3
1.4 Document References	4
1.5 System Overview	4
<b>2. Requirements to Be Tested</b>	<b>4</b>
<b>3. Testing Approach</b>	<b>4</b>
<b>4. Test Process</b>	<b>5</b>
<b>5. Reporting and Corrective Action</b>	<b>5</b>
<b>6. Test Environment</b>	<b>5</b>
<b>7. Test Procedures</b>	<b>5</b>
<b>8. Miscellaneous</b>	<b>57</b>
8.1 Referencing Squares on the Checkerboard	57

### Revision History

Date	Version	Description	Author(s)
November 9, 2022	1.0	Initial Version	Kylie Hall, Brittany Brenneman, and Xan Weatherholtz
November 21, 2022	2.0	Revision of Initial Version	Kylie Hall, Brittany Brenneman, and Xan Weatherholtz

---

## 1. Introduction

### 1.1 Purpose

The purpose of this document is to formally state the procedures to be used for testing the software product and identify specific test cases. It will provide all testing processes, approaches, environments, and procedures that will be performed for each requirement to be tested.

### 1.2 Scope

The Software Test Plan (STP) establishes a thoroughly detailed plan for the testing of all software requirements in the Checkers Computer Software Application. First, in Section 2 (*Requirements to Be Tested*) the document will state all requirements that will be tested from the SRS document where none will be excluded for this project. Secondly, in Section 3 the approaches and techniques used for testing in this project will be stated. Thirdly, in Section 4 the use of test processes will be discussed including unit testing, integration testing, validation testing, and system testing. Fourthly, in Section 5 the process of reporting and correcting any errors, defects, or bugs found during testing will be stated. Fifthly, in Section 6 all test environments will be recorded including any resources necessary to do such testing including hardware, interfaces, and software. Lastly, in Section 7 all test cases will be documented including the test number, author(s), the date, revisions, test purpose, procedure, and the measure of success.

### 1.3 Definitions, Acronyms, and Abbreviations

Acronym	Meaning
DLL	Dynamic Link Library
E-Mail	Electronic Mail

RAM	Random-Access Memory
SRS	Software Requirements Specification
STP	Software Test Plan
USB	Universal Serial Bus

## 1.4 Document References

Document Title	Version	Date	Author(s)
Software Requirements Specification	2.0	September 14, 2022	Kylie Hall, Brittany Brenneman, and Xan Weatherholtz

## 1.5 System Overview

The software system being developed is a standard or classic checkers game application that requires two users to play from one computer and will require the user to use a mouse to select each move. It will automatically display an 8x8 frame size with 24 disk-shaped autogenerated playing pieces placed on the user's designated starting side. The system will include two sets of 12 playing pieces, one set being red and the other set is black for each user to monitor which pieces belong to them. Additionally, both users must input their names which will determine which set they will be assigned, while also serving as a way to keep the score of any pieces conquered throughout the duration of each game. The first user to input their name will be assigned black and the second user will be assigned red. Furthermore, the user assigned to black will go first and start the game. The game will end once a player has collected all of the other player's pieces, or if a player decides to quit the game the winner is decided based on which player has the most pieces left or collected. The system will offer a one-use undo option per game for each player and a reset option to clear the score and names to begin a new match. The application will be delivered in a hard copy format through a USB flash drive where no installation is required and must be compatible with Windows DLLs.

## 2. Requirements to Be Tested

The requirements tested in this document will include all requirements from the SRS document where none will be excluded from testing.

## 3. Testing Approach

The requirements tested will be done using a combination of white box and black box testing. White box testing will test the internal workings and program logic of the software which is useful to verify input-output flow and the usability of the software. Black box testing will test for the validation of behavioral aspects of the

software which is useful to validate the uncovered behavior or performance errors, interface errors, and errors in data structures. Both white box and black box testing approaches will be used complementary to each other in testing procedures.

## 4. Test Process

Unit testing, integration testing, validation testing, and system testing will all be used within this STP. Unit testing will be written before the code is written to ensure the internal processing logic and data structures align with this predetermined test procedure. Unit testing will be performed on a personal laptop using Dell hardware with an 11th generation Intel i5 processor, 8.00 GB RAM, and \_\_\_\_ using Windows 11 Pro software on the St. Mary's College of Maryland Campus. Integration testing will be used to bring together many aspects of internal logic to overall test a specific function. Integration testing will be performed on a personal laptop using Dell hardware using Windows 11 Pro Software on the St. Mary's College of Maryland Campus. Validation testing will be used specifically in the form of black box testing to ensure all functional, behavioral, and performance requirements have been met in a test procedure. System testing will be used to test software in the environment it will be incorporated into during deployment and is based on system engineering.

## 5. Reporting and Corrective Action

The process used to record errors found during testing is to create a new Corrective Test Procedures chart that will include all test procedures that did not pass including a new column labeled "Pass/Fail". The software tester will prioritize all defects. This new chart will be included in this document and shared with all members of the Checkers Computer Software Application project through e-mail. When a test procedure passes on the Corrective Test Procedures list, the column where "Pass/Fail" is stated will be changed to pass and moved to the bottom of the table.

## 6. Test Environment

The first testing environment focusing on unit, integration, and validation testing will be on a personal laptop using Dell hardware with an 11th generation 2.4 gigahertz Intel Core i5 processor, with 8.00 gigabytes RAM, and 235 gigabytes in storage size which uses Windows 11 Pro software. The location of testing on the personal Windows computer will be conducted in Schaefer Hall's math lounge on the campus of St. Mary's College of Maryland. Necessary interfaces needed to test in this environment include a trackpad or mouse and a keyboard. The second testing environment will be the system testing environment which includes an Acer monitor and a Dell desktop with an 11th generation Intel Core i7 processor, 8.00 gigabytes RAM and 256 gigabytes in storage size with Windows 11 software. The location of testing in the system testing environment will be conducted in room 160 in Schaefer Hall on the campus of St. Mary's College of Maryland. Necessary interfaces needed to test in this environment include a mouse and keyboard.

## 7. Test Procedures

The purpose of this section is to formally specify test procedures to apply to all requirements referenced from the SRS. For this section, in the "Test Procedures" column there will be references to the specific squares on the 8x8 checkerboard. To do this, each column will be referenced with the letters a to h where a is the leftmost column in the perspective of the player one side and h is the rightmost always in the perspective of player 1.

**Checkers Computer Software Application**  
**Software Test Plan**  
**The Systems Squad**

Additionally, for the rows, such will be referenced with the numbers 1-8 where the topmost row is 8, and the bottom most row is 1. Please view section 8.1 *Referencing Squares on the Checkerboard* which will clarify this information in a diagram.

Test #	Author	Date	Date of Last Revision	Revision	Test Purpose	Test Procedures	Measure of Success
CDCO-001	Kylie Hall	11/2/22		1.0	Test for validation of the correct display of the checkerboard.	<ol style="list-style-type: none"> <li>1. Double-left-click on the Checkers Software Application to open the software.</li> <li>2. Click the button labeled "Continue"</li> <li>3. Left-click the next button labeled "Play"</li> <li>4. Examine the Checkerboard on the screen</li> </ol>	Examine the output. The expected output should display an 8x8 square in the middle of the screen with a total of 64 squares.
CDCP-002	Kylie Hall	11/2/22		1.0	Test for the validation of the color pattern on the checkerboard.	<ol style="list-style-type: none"> <li>1. Double-left-click on the Checkers Software Application to open the software.</li> <li>2. Left-click the button labeled "Continue"</li> <li>3. Left-click the next button labeled "Play"</li> </ol>	The program should display 2 alternating colors of dark gray and light gray where the 2 colors only touch in rows and columns and the same color square only touches diagonally.

**Checkers Computer Software Application  
Software Test Plan  
The Systems Squad**

Test #	Author	Date	Date of Last Revision	Revision	Test Purpose	Test Procedures	Measure of Success
						4. Examine the Checkerboard on the screen	
CDCPP-003	Kylie Hall	11/2/22	11/20/22	2.0	Test for validation of the placement of the color pattern on the checkerboard.	<ol style="list-style-type: none"> <li>1. Double-left-click on the Checkers Software Application to open the software.</li> <li>2. Left-click the button labeled "Continue"</li> <li>3. Left-click the next button labeled "Play"</li> <li>4. Examine the Checkerboard on the screen</li> </ol>	If the pattern of the checkerboard displays the light gray square beginning at the top left-most corner of the board and the right bottom-most corner, and the dark gray shall be at the top right-most corner and left bottom-most corner.
CDCPPP-004	Kylie Hall	11/3/22	11/20/22	2.0	Test for validation of the placement of the playing pieces on the board.	<ol style="list-style-type: none"> <li>1. Double-left-click on the Checkers Software Application to open the software.</li> <li>2. Left-click the button labeled "Continue"</li> <li>3. Left-click the next button labeled "Play"</li> <li>4. Examine the Checkerboard on the screen</li> </ol>	There are 12 disk-shaped black pieces the size to fit in one square are on the bottom of the board only on the dark gray squares.

**Checkers Computer Software Application**  
**Software Test Plan**  
**The Systems Squad**

Test #	Author	Date	Date of Last Revision	Revision	Test Purpose	Test Procedures	Measure of Success
CDCD-005	Kylie Hall	11/3/2022	11/20/22	2.0	Test for validation to see if a yellow star appears on a piece that becomes a king.	<ol style="list-style-type: none"> <li>1. Double-left-click on the Checkers Software Application to open the software.</li> <li>2. Left-click the button labeled "Continue"</li> <li>3. Left-click the next button labeled "Play"</li> <li>4. Left-click the first black piece from g3 to h4..</li> <li>5. Left-click the red piece from f6 to g5.</li> <li>6. Jump the red piece by moving h4 to f6.</li> <li>7. Left-click the red piece h6 to g5.</li> <li>8. Left-click the black piece on square h3 to f4.</li> <li>9. Left-click red piece g7 to h6.</li> <li>10. Left-click the black piece g3 to f4.</li> <li>11. Left-click the red piece h8 to g7.</li> <li>12. Jump the red piece by Left-clicking f6 to h8.</li> </ol>	A yellow star appears on the black piece on the square h8.



**Checkers Computer Software Application**  
**Software Test Plan**  
**The Systems Squad**

Test #	Author	Date	Date of Last Revision	Revision	Test Purpose	Test Procedures	Measure of Success
GDMDM-006	Kylie Hall	11/7/22	11/20/22	2.0	Test for validation that the menu is displayed on the checkerboard game screen	<ol style="list-style-type: none"> <li>1. Double-left-click on the Checkers Software Application to open the software.</li> <li>2. Left-click the button labeled "Continue"</li> <li>3. Left-click the next button labeled "Play"</li> <li>4. Left-click on the "file" option in the top left corner of the screen.</li> <li>5. Left-click on the "edit" option in the top left corner of the screen.</li> </ol>	A drop down menu is visible after clicking on the "file" and "edit" menu options.
GDMRIM-007	Kylie Hall	11/7/22	11/20/22	2.0	Test for validation that the game can be restarted after the first move in a game.	<ol style="list-style-type: none"> <li>1. Double-left-click on the Checkers Software Application to open the software.</li> <li>2. Left-click the button labeled "Continue"</li> <li>3. Left-click the next button labeled "Play"</li> <li>4. Move the black piece on the square g3 to h4.</li> <li>5. Left-click on the "file" option in the top left corner of the screen.</li> </ol>	The game restarts to the stage of the first user entering their playing name.

**Checkers Computer Software Application**  
**Software Test Plan**  
**The Systems Squad**

Test #	Author	Date	Date of Last Revision	Revision	Test Purpose	Test Procedures	Measure of Success
						6. Left-click on the “Reset” option.	
GDMUNIM-008	Kylie Hall	11/7/22	11/20/22	2.0	Test for validation that the second player can undo their first turn made in a game.	<ol style="list-style-type: none"> <li>1. Double-left-click on the Checkers Software Application to open the software.</li> <li>2. Left-click the button labeled “Continue”</li> <li>3. Left-click the next button labeled “Play”</li> <li>4. Left-click the black piece on the square g3to h4.</li> <li>5. Left-click the red piece from square f6 to g5.</li> <li>6. Left-click on the “Edit” option in the top left corner of the screen.</li> <li>7. Left-click on the “Undo” option.</li> </ol>	The game places the red piece from the square g5 back to the square f6 of the last turn and the black piece does not move.
GDMQFM-009	Kylie Hall	11/7/22	11/20/22	2.0	Test for validation that the first player can quit the game after the first move.	<ol style="list-style-type: none"> <li>1. Double-left-click on the Checkers Software Application to open the software.</li> <li>2. Left-click the button labeled “Continue”.</li> <li>3. Left-click the next button labeled “Play”.</li> </ol>	The application exits.

**Checkers Computer Software Application**  
**Software Test Plan**  
**The Systems Squad**

Test #	Author	Date	Date of Last Revision	Revision	Test Purpose	Test Procedures	Measure of Success
						<ol style="list-style-type: none"> <li>4. Left-click the black piece on the square g3 to h4.</li> <li>5. Left-click on the “File” option in the top left corner of the screen.</li> <li>6. Left-click on the “Exit” option.</li> </ol>	
UDFUN-010	Kylie Hall	11/7/22	11/20/22	2.0	Test for validation that the player names are visible on the checkerboard screen.	<ol style="list-style-type: none"> <li>1. Double-left-click on the Checkers Software Application to open the software.</li> <li>2. In the only text box on the screen, use the keyboard to type “John”.</li> <li>3. Left-click the button labeled “Continue”.</li> <li>4. In the only text box on the screen, use the keyboard to type “Jane”.</li> <li>5. Left-click the next button labeled “Play”.</li> </ol>	The name John is visible below the checkerboard on the screen and Jane is visible above the checkerboard on the screen.
UDFHUN-011	Kylie Hall	11/7/22		1.0	Test for validation that the first player’s name is highlighted with the color yellow at the start of the game.	<ol style="list-style-type: none"> <li>1. Double-left-click on the Checkers Software Application to open the software.</li> <li>2. In the only text box on the screen,</li> </ol>	If the name John is highlighted with the color yellow at the bottom of the screen then the test passes.

**Checkers Computer Software Application**  
**Software Test Plan**  
**The Systems Squad**

Test #	Author	Date	Date of Last Revision	Revision	Test Purpose	Test Procedures	Measure of Success
						<p>use the keyboard to type “John”.</p> <p>3. Left-click the button labeled “Continue”.</p> <p>4. In the only text box on the screen, use the keyboard to type “Jane”.</p> <p>5. Left-click the next button labeled “Play”.</p>	
UDFDS-012	Kylie Hall	11/7/22		1.0	Test for validation that the number of games won by each user is displayed on the checkerboard screen.	<p>1. Double-left-click on the Checkers Software Application to open the software.</p> <p>2. Left-click the button labeled “Continue”</p> <p>3. Left-click the next button labeled “Play”</p> <p>4. Examine the Checkerboard on the screen</p>	If there is text visible in the top right screen showing the text below then the test passes. player1 wins: <u>0</u> player2 wins: <u>0</u>
UDFDSF-013	Kylie Hall	11/7/22	11/20/22	2.0	Test for validation that the number of games won by a player is updated each time a game is won.	<p>1. Double-left-click on the Checkers Software Application to open the software.</p> <p>2. Left-click the button labeled “Continue”</p>	If the number of games won for player2 displays the number 1 and the number of games won for player1 is 0 when the “restart” option is clicked from the dropdown

**Checkers Computer Software Application**  
**Software Test Plan**  
**The Systems Squad**

Test #	Author	Date	Date of Last Revision	Revision	Test Purpose	Test Procedures	Measure of Success
						3. Left-click the next button labeled "Play" 4. Left-click the black piece on square g3 to h4. 5. Left-click the red piece on square d6 to e5. 6. Left-click the black piece on square h4 to g5. 7. Left-click the red piece on square f6 to h4. 8. Left-click the black piece from square c3 to d4. 9. Left-click the red piece on the square b6 to a5. 10. Left-click the black piece from square a3 to b4. 11. Left-click the red piece on square g7 to f6. 12. Left-click the black piece on square b4 to c5. 13. Left-click the red piece on square e7 to d6. 14. Left-click the black piece on square f2 to g3. 15. Left-click the red piece on square d6 to b4.	menu, then this test passes.

**Checkers Computer Software Application**  
**Software Test Plan**  
**The Systems Squad**

Test #	Author	Date	Date of Last Revision	Revision	Test Purpose	Test Procedures	Measure of Success
						16. Left-click the black piece on square g1 to f2. 17. Left-click the red piece on square e5 to c3. 18. Left-click the black piece on square e3 to f4. 19. Left-click the red piece on square c7 to d6. 20. Left-click the black piece on square f4 to e5. 21. Left-click the red piece on square f6 to d4. 22. Left-click the black piece on square f2 to e3. 23. Left-click the red piece on square d4 to f2. 24. Left-click the black piece on square d2 to e3. 25. Left-click the red piece on square f2 to g1. 26. Left-click the black piece on square e1 to d2. 27. Left-click the red piece on square c3 to e1. 28. Left-click the black piece on square b2 to c.	

**Checkers Computer Software Application**  
**Software Test Plan**  
**The Systems Squad**

Test #	Author	Date	Date of Last Revision	Revision	Test Purpose	Test Procedures	Measure of Success
						<p>29. Left-click the red piece on square e1 to d2.</p> <p>30. Left-click the black piece on square a1 to b2.</p> <p>31. Left-click the red piece on square d2 to f4.</p> <p>32. Left-click the black piece on square c1 to d2.</p> <p>33. Left-click the red piece on square h4 to f2.</p> <p>34. Left-click the black piece on square c3 to d4.</p> <p>35. Left-click the red piece on square f2 to e1.</p> <p>36. Left-click the black piece on square h2 to g3.</p> <p>37. Left-click the red piece on square e1 to a1.</p> <p>38. Left-click the black piece on square d4 to e5.</p> <p>39. Left-click the red piece on squares f4 to h2.</p> <p>40. Left-click the black piece on square e5 to c7.</p> <p>41. Left-click the red piece on square b8 to d6.</p>	

**Checkers Computer Software Application**  
**Software Test Plan**  
**The Systems Squad**

Test #	Author	Date	Date of Last Revision	Revision	Test Purpose	Test Procedures	Measure of Success
						42. Left-click on the “File” option in the top left of the screen. 43. Left-click on the “Restart” option in the “ file “ dropdown menu.	
UDFLFUN-014	Kylie Hall	11/7/22		1.0	Test for validation that the first user can input a name up to 20 characters long.	1. Double-left-click on the Checkers Software Application to open software. 2. In the only text box on the screen, use the keyboard to type “12345678901234567890abcdefgh”.	If the only text in the text box shows “12345678901234567890” then the test passes.
UDFDBF-015	Kylie Hall	11/7/22		1.0	Test for validation that a button labeled “Continue” is available when entering the first player name.	1. Double-left-click on the Checkers Software Application to open the software.	If a button labeled “Continue” is visible on the screen below the only text box then this test passes.
UDFDBS-016	Kylie Hall	11/7/22		1.0	Test for validation that the first user can click a button labeled “Continue” that will display a new screen.	1. Double-left-click on the Checkers Software Application to open the software.	If a new screen prompting for the input of the second user is displayed on the screen then the test passes.



**Checkers Computer Software Application**  
**Software Test Plan**  
**The Systems Squad**

Test #	Author	Date	Date of Last Revision	Revision	Test Purpose	Test Procedures	Measure of Success
						2. Left-click on the button labeled "Continue"	
UDFDSU-017	Kylie Hall	11/7/22		1.0	Test for validation that the second user has an available text box to enter a name.	1. Double-left-click on the Checkers Software Application to open the software. 2. Left-click on the button labeled "Continue"	If there is one text box available on this screen prompting for the second player name then this test passes.
UDFLSUN-018	Kylie Hall	11/7/22		1.0	Test for validation that the second user can input a name up to 20 characters long.	1. Double-left-click on the Checkers Software Application to open the software. 2. In the only text box on the screen, use the keyboard to type "12345678901234567890abcdefgh".	If the only text in the text box shows "12345678901234567890" then the test passes.
UDFLCS-019	Kylie Hall	11/7/22		1.0	Test for validation that a button labeled "Play" is available when entering the second player name.	1. Double-left-click on the Checkers Software Application to open the software. 2. Left-click on the button labeled "Continue"	If a button labeled "Play" is visible on the screen below the only text box then this test passes.

**Checkers Computer Software Application**  
**Software Test Plan**  
**The Systems Squad**

Test #	Author	Date	Date of Last Revision	Revision	Test Purpose	Test Procedures	Measure of Success
UDFCSF-020	Kylie Hall	11/7/22	11/20/22	2.0	Test for validation that the button labeled “Play” will generate the checkerboard screen after being selected.	<ol style="list-style-type: none"> <li>1. Double-left-click on the Checkers Software Application to open the software.</li> <li>2. Left-click on the button labeled “Continue”</li> <li>3. Left-click on the button labeled “Play”</li> </ol>	If a new screen is generated and is displaying the checkerboard game with 12 black pieces on the bottom of the board only on the dark gray squares and 12 red pieces on the top of the board only on the dark gray squares then this test passes.
ESDEWD-021	Kylie Hall	11/7/22		1.0	Test for validation that after a game, the endgame screen displays the winner of that round.	<ol style="list-style-type: none"> <li>1. Double-left-click on the Checkers Software Application to open the software.</li> <li>2. Left-click the button labeled “Continue”</li> <li>3. Left-click the next button labeled “Play”</li> <li>4. Left-click the black piece on square g3 to h4.</li> <li>5. Left-click the red piece on square d6 to e5.</li> <li>6. Left-click the black piece on square h4 to g5.</li> <li>7. Left-click the red piece on square f6 to h4.</li> </ol>	If there is a message on the screen that displays “Player2 Won this Round!” then the test passes.

**Checkers Computer Software Application**  
**Software Test Plan**  
**The Systems Squad**

Test #	Author	Date	Date of Last Revision	Revision	Test Purpose	Test Procedures	Measure of Success
						8. Left-click the black piece from square c3 to d4. 9. Left-click the red piece on the square b6 to a5. 10. Left-click the black piece from square a3 to b4. 11. Left-click the red piece on square g7 to f6. 12. Left-click the black piece on square b4 to c5. 13. Left-click the red piece on square e7 to d6. 14. Left-click the black piece on square f2 to g3. 15. Left-click the red piece on square d6 to b4. 16. Left-click the black piece on square g1 to f2. 17. Left-click the red piece on square e5 to c3. 18. Left-click the black piece on square e3 to f4. 19. Left-click the red piece on square c7 to d6. 20. Left-click the black piece on square f4 to e5.	

**Checkers Computer Software Application**  
**Software Test Plan**  
**The Systems Squad**

Test #	Author	Date	Date of Last Revision	Revision	Test Purpose	Test Procedures	Measure of Success
						21. Left-click the red piece on square f6 to d4. 22. Left-click the black piece on square f2 to e3. 23. Left-click the red piece on square d4 to f2. 24. Left-click the black piece on square d2 to e3. 25. Left-click the red piece on square f2 to g1. 26. Left-click the black piece on square e1 to d2. 27. Left-click the red piece on square c3 to e1. 28. Left-click the black piece on square b2 to c. 29. Left-click the red piece on square e1 to d2. 30. Left-click the black piece on square a1 to b2. 31. Left-click the red piece on square d2 to f4. 32. Left-click the black piece on square c1 to d2. 33. Left-click the red piece on square h4 to f2.	

**Checkers Computer Software Application**  
**Software Test Plan**  
**The Systems Squad**

Test #	Author	Date	Date of Last Revision	Revision	Test Purpose	Test Procedures	Measure of Success
						34. Left-click the black piece on square c3 to d4. 35. Left-click the red piece on square f2 to e1. 36. Left-click the black piece on square h2 to g3. 37. Move the red piece on square e1 to a1. 38. Left-click the black piece on square d4 to e5. 39. Left-click the red piece on squares f4 to h2. 40. Left-click the black piece on square e5 to c7. 41. Left-click the red piece on square b8 to d6.	
ESDPAQ-022	Kylie Hall	11/7/22		1.0	Test for validation that after a game, the endgame screen displays "Use the Menu to play again or quit!".	1. Double-left-click on the Checkers Software Application to open the software. 2. Left-click the button labeled "Continue" 3. Left-click the next button labeled "Play" 4. Left-click the black piece on square g3 to h4.	If there is a message on the screen displaying "Use the Menu to play again or quit!" then this test passes.

**Checkers Computer Software Application**  
**Software Test Plan**  
**The Systems Squad**

Test #	Author	Date	Date of Last Revision	Revision	Test Purpose	Test Procedures	Measure of Success
						5. Left-click the red piece on square d6 to e5. 6. Left-click the black piece on square h4 to g5. 7. Left-click the red piece on square f6 to h4. 8. Left-click the black piece from square c3 to d4. 9. Left-click the red piece on the square b6 to a5. 10. Left-click the black piece from square a3 to b4. 11. Left-click the red piece on square g7 to f6. 12. Left-click the black piece on square b4 to c5. 13. Left-click the red piece on square e7 to d6. 14. Left-click the black piece on square f2 to g3. 15. Left-click the red piece on square d6 to b4. 16. Left-click the black piece on square g1 to f2. 17. Left-click the red piece on square e5 to c3.	

**Checkers Computer Software Application**  
**Software Test Plan**  
**The Systems Squad**

Test #	Author	Date	Date of Last Revision	Revision	Test Purpose	Test Procedures	Measure of Success
						18. Left-click the black piece on square e3 to f4. 19. Left-click the red piece on square c7 to d6. 20. Left-click the black piece on square f4 to e5. 21. Left-click the red piece on square f6 to d4. 22. Left-click the black piece on square f2 to e3. 23. Left-click the red piece on square d4 to f2. 24. Left-click the black piece on square d2 to e3. 25. Left-click the red piece on square f2 to g1. 26. Left-click the black piece on squares e1 to d2. 27. Left-click the red piece on square c3 to e1. 28. Left-click the black piece on square b2 to c. 29. Left-click the red piece on square e1 to d2. 30. Left-click the black piece on square a1 to b2.	

**Checkers Computer Software Application**  
**Software Test Plan**  
**The Systems Squad**

Test #	Author	Date	Date of Last Revision	Revision	Test Purpose	Test Procedures	Measure of Success
						31. Left-click the red piece on square d2 to f4. 32. Left-click the black piece on squares c1 to d2. 33. Left-click the red piece on square h4 to f2. 34. Left-click the black piece on squares c3 to d4. 35. Left-click the red piece on square f2 to e1. 36. Left-click the black piece on square h2 to g3. 37. Left-click the red piece on square e1 to a1. 38. Left-click the black piece on squares d4 to e5. 39. Left-click the red piece on squares f4 to h2. 40. Left-click the black piece on squares e5 to c7. 41. Left-click the red piece on squares b8 to d6.	
ESDWPB-023	Kylie Hall	11/7/22		1.0	Test for validation that if the user prompts to play again, the user of the previous game	1. Double-left-click on the Checkers Software Application to open the software.	If “player2” is now displayed below the checkerboard and is highlighted yellow then this test passes.



**Checkers Computer Software Application**  
**Software Test Plan**  
**The Systems Squad**

Test #	Author	Date	Date of Last Revision	Revision	Test Purpose	Test Procedures	Measure of Success
					goes first in the next round and plays the black pieces.	<ol style="list-style-type: none"> <li>2. Left-click the button labeled "Continue"</li> <li>3. Left-click the next button labeled "Play"</li> <li>4. Left-click the black piece on squares g3 to h4.</li> <li>5. Left-click the red piece on squares d6 to e5.</li> <li>6. Left-click the black piece on squares h4 to g5.</li> <li>7. Left-click the red piece on squares f6 to h4.</li> <li>8. Left-click the black piece from square c3 to d4.</li> <li>9. Left-click the red piece on squares b6 to a5.</li> <li>10. Left-click the black piece from square a3 to b4.</li> <li>11. Left-click the red piece on squares g7 to f6.</li> <li>12. Left-click the black piece on squares b4 to c5.</li> <li>13. Left-click the red piece on squares e7 to d6.</li> <li>14. Left-click the black piece on squares f2 to g3.</li> </ol>	

**Checkers Computer Software Application**  
**Software Test Plan**  
**The Systems Squad**

Test #	Author	Date	Date of Last Revision	Revision	Test Purpose	Test Procedures	Measure of Success
						15. Left-click the red piece on squares d6 to b4. 16. Left-click the black piece on squares g1 to f2. 17. Left-click the red piece on squares e5 to c3. 18. Left-click the black piece on squares e3 to f4. 19. Left-click the red piece on squares c7 to d6. 20. Left-click the black piece on squares f4 to e5. 21. Left-click the red piece on squares f6 to d4. 22. Left-click the black piece on squares f2 to e3. 23. Left-click the red piece on squares d4 to f2. 24. Left-click the black piece on squares d2 to e3. 25. Left-click the red piece on squares f2 to g1. 26. Left-click the black piece on squares e1 to d2. 27. Left-click the red piece on squares c3 to e1.	

**Checkers Computer Software Application**  
**Software Test Plan**  
**The Systems Squad**

Test #	Author	Date	Date of Last Revision	Revision	Test Purpose	Test Procedures	Measure of Success
						28. Left-click the black piece on squares b2 to c. 29. Left-click the red piece on squares e1 to d2. 30. Left-click the black piece on squares a1 to b2. 31. Left-click the red piece on squares d2 to f4. 32. Left-click the black piece on squares c1 to d2. 33. Left-click the red piece on squares h4 to f2. 34. Left-click the black piece on squares c3 to d4. 35. Left-click the red piece on squares f2 to e1. 36. Left-click the black piece on squares h2 to g3. 37. Left-click the red piece on squares e1 to a1. 38. Left-click the black piece on squares d4 to e5. 39. Left-click the red piece on squares f4 to h2. 40. Left-click the black piece on squares e5 to c7.	

**Checkers Computer Software Application**  
**Software Test Plan**  
**The Systems Squad**

Test #	Author	Date	Date of Last Revision	Revision	Test Purpose	Test Procedures	Measure of Success
						41. Left-click the red piece on squares b8 to d6. 42. Left-click on the “File” option in the top left of the screen. 43. Left-click on the “Restart” option in the “file” dropdown menu.	
SOCPCQ-024	Kylie Hall	11/7/22		1.0	Test for validation that the first player can move their first piece by left-clicking to pick it up and left-clicking to put it down on a playable square.	1. Double-left-click on the Checkers Software Application to open the software. 2. Left-click on the button labeled “Continue” 3. Left-click on the button labeled “Play” 4. Left-click on the black piece on square g3. 5. Left-click on square f4.	If the black piece has been released from step 5 and is now on the square f4 then the test passes.
URNU-025	Kylie Hall	11/7/22		1.0	Test for validation that the software requests for two different player names which only allows multiplayer.	1. Checkers Software Application to open software. 2. Left-click on the button labeled “Continue”	If the software displays two player names labeled “player1” and “player2” on the screen above and below the checkerboard then this test passes.

**Checkers Computer Software Application**  
**Software Test Plan**  
**The Systems Squad**

Test #	Author	Date	Date of Last Revision	Revision	Test Purpose	Test Procedures	Measure of Success
						3. Left-click on the button labeled "Play"	
URFCP-026	Brittany Brenneman	11/8/22		1.0	Test for validation that the first player plays the black pieces.	<ol style="list-style-type: none"> <li>1. Double-left-click on the Checkers Software Application to open the software.</li> <li>2. Left-click on the button labeled "Continue"</li> <li>3. Left-click on the button labeled "Play"</li> </ol>	If the software displays black pieces and the bottom of the checkerboard and the name "player1" is below the bottom of the checkerboard then this test passes.
URSCP-027	Kylie Hall	11/7/22		1.0	Test for validation that the second player plays the red pieces.	<ol style="list-style-type: none"> <li>1. Double-left-click on the Checkers Software Application to open the software.</li> <li>2. Left-click on the button labeled "Continue".</li> <li>3. Left-click on the button labeled "Play".</li> </ol>	If the software displays red pieces and the top of the checkerboard and the name "player2" is above the top of the checkerboard then this test passes.
MCSB-028	Kylie Hall	11/7/22		1.0	Test the bounds of the array to ensure a black piece cannot be moved on light gray squares.	<ol style="list-style-type: none"> <li>1. Double-left-click on the Checkers Software Application to open the software.</li> <li>2. Left-click on the button labeled "Continue".</li> </ol>	If the black piece is placed back at its original square g3 then this test passes.

**Checkers Computer Software Application**  
**Software Test Plan**  
**The Systems Squad**

Test #	Author	Date	Date of Last Revision	Revision	Test Purpose	Test Procedures	Measure of Success
						<ol style="list-style-type: none"> <li>Left-click on the button labeled "Play".</li> <li>Left-click the black piece on squares g3 to g4.</li> </ol>	
MAMNKCP-029	Brittany Brenneman	11/8/22	11/20/22	2.0	Test for validation that a selected single piece can move diagonally forward.	<ol style="list-style-type: none"> <li>Double-left-click on the Checkers Software Application to open the software.</li> <li>Left-click on the button labeled "Continue".</li> <li>Left-click on the button labeled "Play".</li> <li>Left-click a single black piece on squares g3 to f4.</li> <li>Left-click a single red piece on squares d6 to e5</li> </ol>	If the single black moves diagonally forward from the square g3 to the square f4 and the single red piece moves diagonally forward from the square d6 to the square e5 toward the opponent's side, this test passes.
MAMWOC-030	Brittany Brenneman	11/8/22		1.0	Test for validation that a single piece moves diagonally forward without capturing an opponent's piece.	<ol style="list-style-type: none"> <li>Double-left-click on the Checkers Software Application to open the software.</li> <li>Left-click on the button labeled "Continue".</li> <li>Left-click on the button labeled "Play".</li> </ol>	If the single piece only moves one square diagonally forward toward the opponent's side, this test passes

**Checkers Computer Software Application**  
**Software Test Plan**  
**The Systems Squad**

Test #	Author	Date	Date of Last Revision	Revision	Test Purpose	Test Procedures	Measure of Success
						<ol style="list-style-type: none"> <li>Left-click a single black piece on square g3 to f4.</li> <li>Left-click a single red piece on square d6 to e5</li> </ol>	
MAG-031	Brittany Brenneman	11/8/22		1.0	Test for validation that each turn is alternating between the first user and second user.	<ol style="list-style-type: none"> <li>Double-left-click on the Checkers Software Application to open the software.</li> <li>In the only text box on the screen, use the keyboard to type "John".</li> <li>Left-click on the button labeled "Continue".</li> <li>In the only text box on the screen, use the keyboard to type "Jane".</li> <li>Left-click on the button labeled "Play".</li> <li>Left-click a single black piece on squares a3 to b4.</li> <li>Left-click a single red piece on squares b6 to a5.</li> </ol>	If the software alternates from highlighting the name "John" in step 6 to highlighting the name "Jane" in step 7 then this test passes.
MKPB-032	Brittany Brenneman	11/8/22	11/20/22	2.0	Test for validation that a king piece moves in the	<ol style="list-style-type: none"> <li>Double-left-click on the Checkers Software Application to open the software.</li> </ol>	If the red king piece moves in a backward direction from the square e1

**Checkers Computer Software Application**  
**Software Test Plan**  
**The Systems Squad**

Test #	Author	Date	Date of Last Revision	Revision	Test Purpose	Test Procedures	Measure of Success
					backward direction.	<ol style="list-style-type: none"> <li>2. Left-click on the button labeled “Continue”.</li> <li>3. Left-click on the button labeled “Play”.</li> <li>4. Left-click the black piece on square g3 to h4.</li> <li>5. Left-click the red piece on squares b6 to a5.</li> <li>6. Left-click the black piece on squares e3 to f4.</li> <li>7. Left-click the red piece on squares d6 to c5.</li> <li>8. Left-click the black piece on square d2 to e3.</li> <li>9. Left-click the red piece on squares e7 to d6.</li> <li>10. Left-click the black piece on squares f2 to g3.</li> <li>11. Left-click the red piece on squares c7 to b6.</li> <li>12. Left-click the black piece on square c3 to d4.</li> <li>13. Left-click the red piece on square d6 to e5.</li> <li>14. Left-click the black piece on squares f4 to d6.</li> </ol>	to the square d2 this test passes.



**Checkers Computer Software Application**  
**Software Test Plan**  
**The Systems Squad**

Test #	Author	Date	Date of Last Revision	Revision	Test Purpose	Test Procedures	Measure of Success
						15. Left-click the red piece on squares c5 to b4. 16. Left-click the black piece on square g3 to f4. 17. Left-click the red piece on squares b4 to c3. 18. Left-click the black piece on square f4 to e5. 19. Left-click the red piece on square b6 to c5. 20. Left-click the black piece on squares d4 to b6. 21. Left-click the red piece on square c3 to d2. 22. Left-click the black piece on squares e1 to f2. 23. Left-click the red piece on square d2 to e1. 24. Left-click the black piece on square f2 to g3. 25. Left-click the red piece on square e1 to d2.	

**Checkers Computer Software Application**  
**Software Test Plan**  
**The Systems Squad**

Test #	Author	Date	Date of Last Revision	Revision	Test Purpose	Test Procedures	Measure of Success
MKPF-033	Brittany Brenneman	11/8/22	11/20/22	2.0	Test for validation that a king piece moves in the forward direction.	<ol style="list-style-type: none"> <li>1. Double-left-click on the Checkers Software Application to open the software.</li> <li>2. Left-click on the button labeled "Continue".</li> <li>3. Left-click on the button labeled "Play".</li> <li>4. Left-click the black piece on square g3 to h4.</li> <li>5. Left-click the red piece on square b6 to a5.</li> <li>6. Left-click the black piece on square e3 to f4.</li> <li>7. Left-click the red piece on square d6 to c5.</li> <li>8. Left-click the black piece on square d2 to e3.</li> <li>9. Left-click the red piece on square e7 to d6.</li> <li>10. Left-click the black piece on square f2 to g3.</li> <li>11. Left-click the red piece on square c7 to b6.</li> <li>12. Left-click the black piece on square c3 to d4.</li> </ol>	If the red king piece moves in a forward direction from the square d2 to the square e1 toward the opponent's side, this test passes.

**Checkers Computer Software Application**  
**Software Test Plan**  
**The Systems Squad**

Test #	Author	Date	Date of Last Revision	Revision	Test Purpose	Test Procedures	Measure of Success
						13. Left-click the red piece on square d6 to e5. 14. Left-click the black piece on square f4 to d6. 15. Left-click the red piece on square c5 to b4. 16. Left-click the black piece on square g3 to f4. 17. Left-click the red piece on square b4 to c3. 18. Left-click the black piece on square f4 to e5. 19. Left-click the red piece on square b6 to c5. 20. Left-click the black piece on square d4 to b6. 21. Left-click the red piece on square c3 to d2. 22. Left-click the black piece on square e1 to f2. 23. Left-click the red piece on square d2 to e1. 24. Left-click the black piece on square f2 to g3. 25. Left-click the red piece on square e1 to d2.	

**Checkers Computer Software Application**  
**Software Test Plan**  
**The Systems Squad**

Test #	Author	Date	Date of Last Revision	Revision	Test Purpose	Test Procedures	Measure of Success
						26. Left-click the black piece on square a3 to b2. 27. Left-click the red piece on square d2 to e1.	
MIMOB-034	Brittany Brenneman	11/8/22	11/20/22	2.0	Test the bounds of the array to ensure that piece movement cannot take place out of the checkerboard.	1. Double-left-click on the Checkers Software Application to open the software. 2. Left-click on the button labeled "Continue". 3. Left-click on the button labeled "Play". 4. Left-click the black piece on square h2 to the right out of the checkerboard 5. Left-click the red piece on square a7 to the left out of the checkerboard 6. Left-click the black piece on square g1 to the bottom out of the checkerboard 7. Left-click the red piece on square b8 to the top out of the checkerboard 8. Left-click the black piece on	If the software does not allow the users to move pieces on dark gray squares positioned on the border of the game board to an area out of the checkerboard, then the test passes.

**Checkers Computer Software Application**  
**Software Test Plan**  
**The Systems Squad**

Test #	Author	Date	Date of Last Revision	Revision	Test Purpose	Test Procedures	Measure of Success
						<p>square e1 to the bottom out of the checkerboard</p> <p>9. Left-click the red piece on square d8 to the top out of the checkerboard</p> <p>10. Left-click the black piece on square c1 to the bottom out of the checkerboard</p> <p>11. Left-click the red piece on square f8 to the top out of the checkerboard</p> <p>12. Left-click the black piece on square a1 to the bottom out of the checkerboard</p> <p>13. Left-click the red piece on square h8 to the top out of the checkerboard</p> <p>14. Left-click the black piece on square a1 to the left out of the checkerboard</p> <p>15. Left-click the red piece on square h8 to the right out of the checkerboard</p> <p>16. Left-click the black piece on square a3 to the</p>	

**Checkers Computer Software Application**  
**Software Test Plan**  
**The Systems Squad**

Test #	Author	Date	Date of Last Revision	Revision	Test Purpose	Test Procedures	Measure of Success
						<p>left out of the checkerboard</p> <p>17. Left-click the red piece on square h6 to the right out of the checkerboard</p>	
MIMAP-035	Brittany Brenneman	11/8/22		1.0	Test for validation that when the user plays an invalid move out of bounds, the screen displays “My pieces need to stay on the board!”	<ol style="list-style-type: none"> <li>1. Double-left-click on the Checkers Software Application to open the software.</li> <li>2. Left-click on the button labeled “Continue”.</li> <li>3. Left-click on the button labeled “Play”.</li> <li>4. Left-click on the black piece on square h2.</li> <li>5. Left-click outside of the border of the checkerboard to the right of square h2.</li> </ol>	If there is a message on the screen displaying “My pieces need to stay on the board!” then this test passes.
MIMAPC-036	Brittany Brenneman	11/8/22		1.0	Test for validation that when the user plays an invalid move that is not in a diagonally forward direction, the screen displays “My piece can	<ol style="list-style-type: none"> <li>1. Double-left-click on the Checkers Software Application to open the software.</li> <li>2. Left-click on the button labeled “Continue”.</li> </ol>	If there is a message on the screen displaying “My piece can only move sideways, forward, and diagonally!” then this test passes.

**Checkers Computer Software Application**  
**Software Test Plan**  
**The Systems Squad**

Test #	Author	Date	Date of Last Revision	Revision	Test Purpose	Test Procedures	Measure of Success
					only move sideways, forward, and diagonally!"	<ol style="list-style-type: none"> <li>Left-click on the button labeled "Play".</li> <li>Left-click the black piece from square g3 to g4.</li> </ol>	
MIMAPB-037	Brittany Brenneman	11/8/22		1.0	Test for validation that when the user plays an invalid move in the backward direction, the screen displays "My piece can't move backward unless it's a king!"	<ol style="list-style-type: none"> <li>Double-left-click on the Checkers Software Application to open the software.</li> <li>Left-click on the button labeled "Continue".</li> <li>Left-click on the button labeled "Play".</li> <li>Left-click the black piece on square g3 to h4.</li> <li>Left-click the red piece on square b6 to a5.</li> <li>Left-click the black piece on square h4 to g3.</li> <li>Left-click the red piece from square a5 to b6.</li> </ol>	If there is a message on the screen displaying "My piece can't move backward unless it's a king!" then this test passes.
CUC-038	Brittany Brenneman	11/8/22		1.0	Test the array's bounds to ensure the captures cannot take place out of bounds in the array.	<ol style="list-style-type: none"> <li>Checkers Software Application to open the software.</li> <li>Left-click on the button labeled "Continue"</li> </ol>	If the software does not allow the user to capture out of bounds then this test passes.

**Checkers Computer Software Application**  
**Software Test Plan**  
**The Systems Squad**

Test #	Author	Date	Date of Last Revision	Revision	Test Purpose	Test Procedures	Measure of Success
						<ol style="list-style-type: none"> <li>3. Left-click on the button labeled "Play"</li> <li>4. Left-click the black piece on squares g3 to h4.</li> <li>5. Left-click the red piece on squares b6 to a5.</li> <li>6. Left-click the black piece on squares h4 to g5</li> <li>7. Left-click the red piece on squares d6 to c5.</li> <li>8. Left-click the black piece on squares g5</li> </ol>	
CCR-039	Brittany Brenneman	11/8/22	11/20/22	2.0	Test for validation that a captured piece is removed from the game board for every capture.	<ol style="list-style-type: none"> <li>1. Double-left-click on the Checkers Software Application to open the software.</li> <li>2. Left-click on the button labeled "Continue".</li> <li>3. Left-click on the button labeled "Play".</li> <li>4. Left-click the black piece on square g3 to h4.</li> <li>5. Left-click the red piece on squares b6 to a5.</li> <li>6. Left-click the black piece on squares e3 to f4.</li> </ol>	If the software removes the captured red piece on square e5 from the game board after the black piece jumps from square f4 to square d6, then this test passes



**Checkers Computer Software Application**  
**Software Test Plan**  
**The Systems Squad**

Test #	Author	Date	Date of Last Revision	Revision	Test Purpose	Test Procedures	Measure of Success
						7. Left-click the red piece on squares d6 to c5. 8. Left-click the black piece on square d2 to e3. 9. Left-click the red piece on squares e7 to d6. 10. Left-click the black piece on squares f2 to g3. 11. Left-click the red piece on squares c7 to b6. 12. Left-click the black piece on square c3 to d4. 13. Left-click the red piece on square d6 to e5. 14. Left-click the black piece on squares f4 to d6. 15. Left-click the red piece on squares c5 to b4. 16. Left-click the black piece on square g3 to f4. 17. Left-click the red piece on squares b4 to c3. 18. Left-click the black piece on squares f4 to e5. 19. Left-click the red piece on squares b6 to c5.	

**Checkers Computer Software Application**  
**Software Test Plan**  
**The Systems Squad**

Test #	Author	Date	Date of Last Revision	Revision	Test Purpose	Test Procedures	Measure of Success
						20. Left-click the black piece on squares d4 to b6. 21. Left-click the red piece on square c3 to d2. 22. Left-click the black piece on squares b6 to c7. 23. Left-click the red piece on squares d8 to b6. 24. Left-click the black piece on squares h4 to g5. 25. Left-click the red piece on square h6 to f4.	
CRUC-040	Brittany Brenneman	11/8/22		1.0	Test for validation that the number of an opponent's captured pieces for both users is displayed as "captured" on the checkerboard screen.	1. Double-left-click on the Checkers Software Application to open the software. 2. Left-click on the button labeled "Continue". 3. Left-click on the button labeled "Play". 4. Left-click the black piece on square g3 to h4. 5. Left-click the red piece on squares b6 to a5. 6. Left-click the black piece on squares e3 to f4.	If each player has a value of 1 for the "captured" score as seen below then this test passes. Player 1 captured: <u>1</u> Player 2 captured: <u>1</u>

**Checkers Computer Software Application**  
**Software Test Plan**  
**The Systems Squad**

Test #	Author	Date	Date of Last Revision	Revision	Test Purpose	Test Procedures	Measure of Success
						7. Left-click the red piece on squares d6 to c5. 8. Left-click the black piece on square d2 to e3. 9. Left-click the red piece on squares e7 to d6. 10. Left-click the black piece on squares f2 to g3. 11. Left-click the red piece on squares c7 to b6. 12. Left-click the black piece on squares c3 to d4. 13. Left-click the red piece on squares d6 to e5. 14. Left-click the black piece on squares f4 to d6. 15. Left-click the red piece on squares c5 to b4. 16. Left-click the black piece on square g3 to f4. 17. Left-click the red piece on squares b4 to c3. 18. Left-click the black piece on square f4 to e5. 19. Left-click the red piece on square b6 to c5.	

**Checkers Computer Software Application**  
**Software Test Plan**  
**The Systems Squad**

Test #	Author	Date	Date of Last Revision	Revision	Test Purpose	Test Procedures	Measure of Success
						20. Left-click the black piece on squares d4 to b6. 21. Left-click the red piece on square c3 to d2. 22. Left-click the black piece on squares b6 to c7. 23. Left-click the red piece on squares d8 to b6.	
GPMA-041	Brittany Brenneman	11/9/22		1.0	Test for validation that the software will help the user play a valid move when the user is selecting a non-playable square on the checkerboard.	1. Double-left-click on the Checkers Software Application to open the software. 2. Left-click on the button labeled "Continue". 3. Left-click on the button labeled "Play". 4. Left-click the black piece on square g3 to h4. 5. Left-click the red piece on squares b6 to a5. 6. Left-click the black piece on squares h4 to h6.	If the software displays a message on the screen stating "My piece can only move sideways, forward, and diagonally!" then this test passes.

**Checkers Computer Software Application**  
**Software Test Plan**  
**The Systems Squad**

Test #	Author	Date	Date of Last Revision	Revision	Test Purpose	Test Procedures	Measure of Success
EGWD-042	Kylie Hall	11/8/22		1.0	Validate a winner is declared after 12 opponent pieces are captured.	<ol style="list-style-type: none"> <li>1. Double-left-click on the Checkers Software Application to open the software.</li> <li>2. Left-click the button labeled "Continue"</li> <li>3. Left-click the next button labeled "Play"</li> <li>4. Left-click the black piece on square g3 to h4.</li> <li>5. Left-click the red piece on square d6 to e5.</li> <li>6. Left-click the black piece on square h4 to g5.</li> <li>7. Left-click the red piece on square f6 to h4.</li> <li>8. Left-click the black piece from square c3 to d4.</li> <li>9. Left-click the red piece on square b6 to a5.</li> <li>10. Left-click the black piece from square a3 to b4.</li> <li>11. Left-click the red piece on square g7 to f6.</li> <li>12. Left-click the black piece on square b4 to c5.</li> </ol>	If there is now a display screen with the text "Player2 Won!" then this test passes.

**Checkers Computer Software Application**  
**Software Test Plan**  
**The Systems Squad**

Test #	Author	Date	Date of Last Revision	Revision	Test Purpose	Test Procedures	Measure of Success
						13. Left-click the red piece on square e7 to d6. 14. Left-click the black piece on square f2 to g3. 15. Left-click the red piece on square d6 to b4. 16. Left-click the black piece on square g1 to f2. 17. Left-click the red piece on square e5 to c3. 18. Left-click the black piece on square e3 to f4. 19. Left-click the red piece on square c7 to d6. 20. Left-click the black piece on square f4 to e5. 21. Left-click the red piece on square f6 to d4. 22. Left-click the black piece on square f2 to e3. 23. Left-click the red piece on square d4 to f2. 24. Left-click the black piece on square d2 to e3. 25. Left-click the red piece on square f2 to g1.	

**Checkers Computer Software Application**  
**Software Test Plan**  
**The Systems Squad**

Test #	Author	Date	Date of Last Revision	Revision	Test Purpose	Test Procedures	Measure of Success
						<p>26. Left-click the black piece on square e1 to d2.</p> <p>27. Left-click the red piece on square c3 to e1.</p> <p>28. Left-click the black piece on square b2 to c.</p> <p>29. Left-click the red piece on square e1 to d2.</p> <p>30. Left-click the black piece on square a1 to b2.</p> <p>31. Left-click the red piece on square d2 to f4.</p> <p>32. Left-click the black piece on square c1 to d2.</p> <p>33. Left-click the red piece on square h4 to f2.</p> <p>34. Left-click the black piece on square c3 to d4.</p> <p>35. Left-click the red piece on square f2 to e1.</p> <p>36. Left-click the black piece on square h2 to g3.</p> <p>37. Move the red piece on square e1 to a1.</p> <p>38. Left-click the black piece on square d4 to e5.</p>	

**Checkers Computer Software Application**  
**Software Test Plan**  
**The Systems Squad**

Test #	Author	Date	Date of Last Revision	Revision	Test Purpose	Test Procedures	Measure of Success
						39. Left-click the red piece on squares f4 to h2. 40. Left-click the black piece on square e5 to c7. 41. Left-click the red piece on square b8 to d6.	
EGD-043	Kylie Hall	11/9/22		1.0	Validate if each player has one piece left then the game ends and a tie is declared.	1. Double-left-click on the Checkers Software Application to open the software. 2. Left-click on the button labeled "Continue" 3. Left-click on the button labeled "Play" 4. Left-click on the black piece from square g3 to f4. 5. Left-click on the red piece from square d6 to e5. 6. Left-click on the black piece from square f4 to d6. 7. Left-click on the red piece from square c7 to e5. 8. Left-click on the black piece from square c3 to d4. 9. Left-click on the red square from square e5 to c3.	If there is a screen displaying "It's a Draw!" then this test passes.



**Checkers Computer Software Application**  
**Software Test Plan**  
**The Systems Squad**

Test #	Author	Date	Date of Last Revision	Revision	Test Purpose	Test Procedures	Measure of Success
						10. Left-click on the black square from square b2 to d4. 11. Left-click on the red piece on square f6 to e5. 12. Left-click on the black piece on square d4 to f6. 13. Left-click on the red piece on square g7 to e5. 14. Left-click on the black piece on square e3 to f4. 15. Left-click on the red piece on square e5 to g3. 16. Left-click on the black piece on square h2 to f4. 17. Left-click on the red piece on square h6 to g5. 18. Left-click on the black piece on square f4 to h6. 19. Left-click on the red piece on square f8 to g7. 20. Left-click on the black piece on square h6 to f8. 21. Left-click on the red piece on square b6 to c5. 22. Left-click on the black piece on square f2 to e3.	

**Checkers Computer Software Application**  
**Software Test Plan**  
**The Systems Squad**

Test #	Author	Date	Date of Last Revision	Revision	Test Purpose	Test Procedures	Measure of Success
						<p>23. Left-click on the red piece on square c5 to d4.</p> <p>24. Left-click on the black piece on square a3 to b4.</p> <p>25. Left-click on the red piece on square d4 to f2.</p> <p>26. Left-click on the black piece on square f8 to e7.</p> <p>27. Left-click on the red piece on square b8 to c7.</p> <p>28. Left-click on the black piece on square g1 to h2.</p> <p>29. Left-click on the red piece on square f2 to g1.</p> <p>30. Left-click on black piece on square e1 to f2.</p> <p>31. Left-click on the red piece on square d8 to e7.</p> <p>32. Left-click on the black piece on square c1 to b2.</p> <p>33. Left-click on the red piece on square h8 to g7.</p> <p>34. Left-click on the black piece on square d6 to h6.</p> <p>35. Left-click on the red piece on square g1 to c5.</p>	

**Checkers Computer Software Application**  
**Software Test Plan**  
**The Systems Squad**

Test #	Author	Date	Date of Last Revision	Revision	Test Purpose	Test Procedures	Measure of Success
						36. Left-click on the black piece on square h6 to g7. 37. Left-click on the red piece on square c5 to b4. 38. Left-click on the black piece on square a1 to b2. 39. Left-click on the red piece on square a7 to b6. 40. Left-click on the black piece on square h2 to g3. 41. Left-click on the red piece from square c7 to d6. 42. Left-click on the black piece from square g7 to f6. 43. Left-click on the red piece from square b4 to c3. 44. Left-click on the black piece from square b2 to d4. 45. Left-click on the red piece from square b6 to c5. 46. Left-click on the black piece from square g3 to f4. 47. Left-click on the red piece from square d6 to e5. 48. Left-click on the black piece from square f4 to d6.	

**Checkers Computer Software Application**  
**Software Test Plan**  
**The Systems Squad**

Test #	Author	Date	Date of Last Revision	Revision	Test Purpose	Test Procedures	Measure of Success
						49. Left-click on the red piece from square c5 to e3. 50. Left-click on the black piece from square f6 to e5. 51. Left-click on the red piece from square e3 to d2. 52. Left-click on the black piece from square e5 to d4. 53. Left-click on the red piece from square d2 to c1. 54. Left-click on the black piece from square d4 to c3. 55. Left-click on the red piece from square c1 to d2. 56. Left-click on the black piece from square d6 to c5. 57. Left-click on the red piece from square d2 to b4.	
HRCCH-044	Kylie Hall	11/9/22	11/20/22	2.0	This test validates the software is compatible with standard classroom Dell XPS desktop computers.	1. Double-left-click on the Checkers Software Application on the classroom Dell XPS desktop computer to open the software. 2. Perform test procedures listed	If the software opens, shows the startup screen and all test procedures pass, then the software is compatible with the target classroom computer

**Checkers Computer Software Application**  
**Software Test Plan**  
**The Systems Squad**

Test #	Author	Date	Date of Last Revision	Revision	Test Purpose	Test Procedures	Measure of Success
						in STP version 2.0	
HRRHUI-045	Kylie Hall	11/9/22	11/20/22	2.0	This test validates the software is able to be interacted with a mouse to open the application and viewed on a monitor.	1. Double-left-click on the Checkers Software Application on the classroom Dell XPS desktop computer to open the software.	If the software launches and shows the startup screen requesting the name of player one then this test passes.
SRSC-046	Kylie Hall	11/9/22	11/20/22	2.0	This test validates the software is compatible with Windows 10 operating system software.	1. Double-left-click on the Checkers Software Application on a personal computer with a Windows 10 operating system to open the software.	If the software launches and shows the startup screen requesting the name of player one then this test passes.
ISP-047	Kylie Hall	11/9/22		1.0	This test validates the program runs standalone without interacting with a network in any manner.	1. On the home screen of the Dell XPS computer use the mouse to left-click on the windows application option. 2. Left-click on the “Settings” icon. 3. Left-click to turn off all internet connections (wireless fidelity	If the software launches and shows the startup screen requesting the name of player one then this test passes.

**Checkers Computer Software Application**  
**Software Test Plan**  
**The Systems Squad**

Test #	Author	Date	Date of Last Revision	Revision	Test Purpose	Test Procedures	Measure of Success
						<p>also known as Wifi) as well as Bluetooth.</p> <p>4. Double-left-click on the Checkers Software Application to open the software.</p>	
IUWDLL-048	Kylie Hall	11/9/22		1.0	This test validates that the program is self-sufficient and uses only the standard Windows DLLs.	<p>1. Double-left-click on the Checkers Software Application to open the software.</p>	If the software launches and shows the startup screen requesting the name of player one then this test passes.
IHI-049	Kylie Hall	11/9/22		1.0	This test validates that the program accepts a keyboard and mouse as human interfaces.	<p>1. Double-left-click on the Checkers Software Application to open the software.</p> <p>2. Left-click on the only text box on the screen.</p> <p>3. Type in this input “John”.</p>	If the words “John” are displayed in the text box on the monitor then this test passes.
PLP-050	Kylie Hall	11/9/22	11/20/22	2.0	Test the validation of the Checkers Computer Software Application launching within 5.0 seconds.	<p>1. Start timer</p> <p>2. Double-left-click on the Checkers Software Application to open the software.</p> <p>3. Stop timer when the first name prompt appears</p>	If the launch of the application is complete by showing the startup screen prompting for the name of the first player within 0 to 5.0 seconds then this test passes.

**Checkers Computer Software Application  
Software Test Plan  
The Systems Squad**

Test #	Author	Date	Date of Last Revision	Revision	Test Purpose	Test Procedures	Measure of Success
PLCS-051	Brittany Brenneman	11/9/22	11/20/22	2.0	Test the validation of the Checkers Computer Software Application launching the checkerboard screen within 3.0 seconds	<ol style="list-style-type: none"> <li>1. Double-left-click on the Checkers Software Application to open the software.</li> <li>2. Left-click on the button labeled "Continue".</li> <li>3. Start timer</li> <li>4. Left-click on the button labeled "Play".</li> <li>5. Stop timer when checkerboard screen appears</li> </ol>	If the software launches the checkerboard screen from the user input screen within 0 to 3.0 seconds, then this test passes.
PUR-052	Kylie Hall	11/9/22	11/20/22	2.0	Test the validation of the Checkers Computer Software Application user interface responding to inputs by a user within 0.5 seconds.	<ol style="list-style-type: none"> <li>1. Double-left-click on the Checkers Software Application to open the software.</li> <li>2. Left-click on the button labeled "Continue".</li> <li>3. Left-click on the button labeled "Play".</li> <li>4. Start timer</li> <li>5. Left-click on the black piece on squares g3 to f4.</li> <li>6. Stop timer</li> </ol>	If the software responds to the user placing the checker piece by highlighting "player2" in yellow within 0 to 0.5 seconds then this test passes.

**Checkers Computer Software Application  
Software Test Plan  
The Systems Squad**

Test #	Author	Date	Date of Last Revision	Revision	Test Purpose	Test Procedures	Measure of Success
DSD-053	Kylie Hall	11/9/22		1.0	Test the USB flash drive which contains the Checkers Computer Software Application to ensure the file exists and can be run on the Dell XPS computer.	<ol style="list-style-type: none"> <li>1. Insert the USB flash drive into the USB insert on the Dell XPS computer.</li> <li>2. When the file opens on the monitor, double-left-click on the file named "Checkers Game".</li> </ol>	If the software launches and shows the startup screen requesting the name of player one then this test passes.



## 8. Miscellaneous

### 8.1 Referencing Squares on the Checkerboard

