**Group 4 Checkers**

Test Case Document

Revision 1.0

April 21, 2018

**FUNCTIONAL VERIFICATION TESTING**

**TEST CASE 1: Test to verify that the checkers program opens to frame titled “Play Checkers” and start panel loads successfully.**

* Method of Testing : Manual
* Browser : FireFox 3.6
* Feature / Requirement:

|  |  |  |
| --- | --- | --- |
| **S.N** | **EXECUTION STEPS** | **EXPECTED RESULTS** |
| 1 | Run checkers.jar. | Checkers program opens to frame titled “Play Checkers”, start panel loads and start sound is heard. |
| 2 | Verify Play Checkers frame loaded correctly. | Frame should look like: |

**TEST CASE 2: Verify that pressing “Start Game” loads Checkers panel**

* Method of Testing : Manual
* Browser : FireFox 3.6
* Feature / Requirement:

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| --- | --- | --- |
| **S.N** | **EXECUTION STEPS** | **EXPECTED RESULTS** |
| 1 | Run checkers.jar. | Checkers program opens to frame titled “Play Checkers”, start panel loads and start sound is heard. |
| 2 | Press “Start Game” Button. | Checkers panel is opened in place of start panel. |
| 3 | Verify that all components of the Game Frame loaded correctly. | The Checkers Panel should be displayed as the following: |
|  |  | 8x8 checker board is displayed on the left. |
|  |  | 1. The right panel contains:   Help icon  Sound Icon  New Game button  Difficulty label  Difficulty combo box  Mode label  1-Player radio button  2-Player radio button |
|  |  | Message text area is displayed below checkers board with text “Start a new game... Yellow is to move first...” |
|  |  | Game piece labels with icons are shows at the bottom. |

**TEST CASE 3: Verify that pressing the help icon opens the help frame.**

* Method of Testing : Manual
* Browser : FireFox 3.6
* Feature / Requirement:

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| --- | --- | --- |
| **S.N** | **EXECUTION STEPS** | **EXPECTED RESULTS** |
| 1 | Run checkers.jar. | Checkers program opens to frame titled “Play Checkers”, start panel loads and start sound is heard. |
| 2 | Press “Start Game” Button. | Checkers panel is opened in place of start panel. |
| 3 | Press the help icon. | Help opens in new frame titled “How To Play” with instructions “Please visit <https://www.itsyourturn.com/t_helptopic2030.html>.” Button sounds should be heard. |
| 4 | Close the help frame using the x button in the top right. | Help closes and frame titled “Play Checkers” remains open. |

**TEST CASE 4: Verify that pressing the speaker icon mutes the sound.**

* Method of Testing : Manual
* Browser : FireFox 3.6
* Feature / Requirement:

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| --- | --- | --- |
| **S.N** | **EXECUTION STEPS** | **EXPECTED RESULTS** |
| 1 | Run checkers.jar. | Checkers program opens to frame titled “Play Checkers”, start panel loads and start sound is heard. |
| 2 | Press “Start Game” Button. | Checkers panel is opened in place of start panel. |
| 3 | Press the speaker icon to mute all sounds. | International prohibition sign should be displayed on top of the speaker icon and all sounds should be turned off. |
| 4 | Verify that sounds are turned off. | Press the help icon , ensure that no button sound is heard. |

**TEST CASE 5: Verify that difficulty level combo box gives all difficulty options.**

* Method of Testing : Manual
* Browser : FireFox 3.6
* Feature / Requirement:

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| --- | --- | --- | --- |
| **S.N** | **EXECUTION STEPS** | **EXPECTED RESULTS** | |
| 1 | Run checkers.jar. | Checkers program opens to frame titled “Play Checkers”, start panel loads and start sound is heard. | |
| 2 | Press “Start Game” Button. | Checkers panel is opened in place of start panel. | |
| 3 | Click on Difficulty level combo box. | The following options should be available:   * Easy * Fairly Easy * Moderate * Bit Difficult * Tough |  |

**TEST CASE 6: Verify that selecting 2-Player mode hides difficulty level and selecting 1-Payer shows difficulty level.**

* Method of Testing : Manual
* Browser : FireFox 3.6
* Feature / Requirement:

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| --- | --- | --- |
| **S.N** | **EXECUTION STEPS** | **EXPECTED RESULTS** |
| 1 | Run checkers.jar. | Checkers program opens to frame titled “Play Checkers”, start panel loads and start sound is heard. |
| 2 | Press “Start Game” Button. | Checkers panel is opened in place of start panel. |
| 3 | Select 2-Player radio button | Difficulty level is removed from Checkers Panel |
| 4 | Select 1-Player radio button | Difficulty level is added back to Checkers Panel |

**TEST CASE 7: Verify that pressing new game starts a new game in single player mode.**

* Method of Testing : Manual
* Browser : FireFox 3.6
* Feature / Requirement:

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| --- | --- | --- |
| **S.N** | **EXECUTION STEPS** | **EXPECTED RESULTS** |
| 1 | Run checkers.jar. | Checkers program opens to frame titled “Play Checkers”, start panel loads and start sound is heard. |
| 2 | Press “Start Game” Button. | Checkers panel is opened in place of start panel. |
| 3 | Press “New Game” Button | New game is started in 1-Payer mode and game pieces are shown as below:    Message text under checkers board is updated to “Yellow to move”. |
| 4 | Make a valid move to a yellow game piece. | Yellow game piece moves as directed and then computer takes turn and makes a valid move to a red game piece. |

**TEST CASE 8: Verify that pressing new game starts a new game in two player mode.**

* Method of Testing : Manual
* Browser : FireFox 3.6
* Feature / Requirement:

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| --- | --- | --- |
| **S.N** | **EXECUTION STEPS** | **EXPECTED RESULTS** |
| 1 | Run checkers.jar. | Checkers program opens to frame titled “Play Checkers”, start panel loads and start sound is heard. |
| 2 | Press “Start Game” Button. | Checkers panel is opened in place of start panel. |
| 3 | Select 2-Player radio button | Difficulty level is removed from Checkers Panel |
| 4 | Press “New Game” Button | New game is started in 2-Payer mode and game pieces are shown as below:    Message text under checkers board is updated to “Yellow to move” |
| 5 | Make a valid move to a yellow game piece. | Yellow game piece moves as directed and Message text under checkers board is updated to “Red to move”. |
| 6 | Make a valid move to a red game piece. | Red game piece moves as directed and Message text under checkers board is updated to “Yellow to move”. |

**TEST CASE 9:**

* Method of Testing : Manual
* Browser : FireFox 3.6
* Feature / Requirement:

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| **S.N** | **EXECUTION STEPS** | **EXPECTED RESULTS** |
| 1 | Run checkers.jar. | Checkers program opens to frame titled “Play Checkers”, start panel loads and start sound is heard. |
| 2 | Press “Start Game” Button. | Checkers panel is opened in place of start panel. |