**TEST DOCUMENT** **Group 13 Dylan, Zsanett, James, and Daniel**

**Manual Testing:**

Manually testing this program simply requires running of the program and following the steps below to test the various methods utilized to play the game. The tests can each be run consecutively without restarting the game each time, however to switch from single player to multiplayer the program must be re-launched. While these are guidelines to follow the AI decisions are variable and some adjustment may have to be made. \**Note that for the purposes of these tests position (1,1) refers to the bottom left corner of the game board and position (8,8) refers to the top right corner with the coordinates set as (x,y).\**

Single Player Tests:

1. Human Player Win/Loss: Check the scoreboard to view the current stats. Check again upon completing test 8 to ensure they have been updated.
2. Square Select Highlighting: Click on the square of the frog you wish to move. It should highlight with a blue square around it indicating it has been selected.
3. Square Deselect Highlighting: Re-click the selected square and it should remove the highlighting indicating that the frog has been deselected.
4. Move: Move blue frog in position (2, 3) to (3, 4) by clicking first on (2,3) to select that frog and then on (3,4) to move it. The frog should move and the panel should repaint to indicate that the Board object in the model has been changed. **This frog will now be known as frog1.**
5. AI Jump: The AI should move from (3,6) to (4,5) to meet the blue player. From there move the blue frog at position (6,3) to (7,4). The AI is expected to jump frog1 and land on the space (2,3).
6. AI Continuous Jump: Move frog at (5,2) to (6,3). The AI will make some move. Move frog at (6,3) to (5,4). The AI will make some move. Move frog at (4,1) to (5,2). The AI should move the frog at (2,3) to (4,1) \**The first jump\** get kinged and then jump to (6,3) \**The second jump\** before performing one more jump to (8,5) *\*The final jump\*.*
7. AI Gets Kinged: Already tested in AI continuous jump.
8. Human Player Win/Loss: Play the game to completion. The result should be shown on the scoreboard with an updated wins, losses and games played. Have fun! ☺

Multiplayer Tests:

1. Test Basics: Single Player Tests 2-4 can be repeated and should yield the same result.
2. Test Human Player Jump: Frog1 should now be in position (3,4) (if it’s not then do so now). Move the green frog at (3, 6) to (4,5). You can then choose to defend the blue frog and jump the green frog or just make a random blue move and then jump frog1. It will be assumed for the next test that you jumped frog1.
3. Human Continuous Jump: Follow the same steps as in test AI continuous jump making non-interfering moves on behalf of the AI. The result should be the same as the AI test.
4. Human Gets Kinged: Already tested if you follow the steps in the previous jump.
5. Human Player Win: When all of the pieces of one player is taken or no pieces are able to be moved by one player then the game is over and it will no longer allow pieces to be moved around the board.

**Automated Testing:**

There is a test class to run in the test folder of the src tree. Running it will perform basic initialization and game command tests.