

## Programming Exam # 2 Grading Criteria

### Part 1 – 4.0%

- A. **0.2%** The Part 1 html file is named ttt.html (**not** ttt.jsp)
- B. **0.2%** When ttt.html is run, some sort of tic tac toe GUI is displayed
- C. **Total = 0.2%**
  - C.A. **0.1%** The GUI has a drop down list
  - C.B. **0.1%** The GUI has a submit button
- D. **0.2%** The drop down list is initially populated with {A1, B1, C1, A2, B2, C2, A3, B3, C3} (order does not matter)
- E. **Total = 1.3%**, start with a new game (i.e. run ttt.html if you haven't already), have Player 'X' (should be the initial player), choose 'A1'.
  - E.A. **0.25%** The player label should now show 'Player O' instead.
  - E.B. **0.1%** The message about the board should now say 'X placed at A1'
  - E.C. **0.25%** The board now shows an 'X' placed at A1
  - E.D. **0.25%**, Now have Player O guess 'C3'. The player label should now show 'Player X' instead
  - E.E. **0.1%** The message on the board should now say 'O placed at C3'
  - E.F. **0.25%** The board now shows an 'O' placed at C3
  - E.G. **0.1%** E.D, E.E, and E.F happened without the page refreshing (i.e. AJAX call)
- F. **Total = 0.3%**
  - F.A.**0.2%** If C3 is still displayed as an option on the dropdown list, choose C3 and hit the submit button. There should now be an error message displayed saying 'ERROR: X cannot be placed at C3'. If C3 is not displayed, this warrants full credit as well
  - F.B. **0.1%** F.A happened without the page refreshing (i.e. AJAX call)
- G. **Total = 0.3%**
  - G.A.**0.2%** Have Player X (should be the current player) choose 'B1' and hit the submit button. Have Player O choose any square as long as it is not 'C1'. Have Player X choose 'C1'. There should now be a message such as the following: 'GAME OVER: X won!'
  - G.B.**0.1%** G.A happened without the page refreshing (i.e. AJAX call)
- H. **Total = 0.3%**
  - H.A.**0.2%** Now that the game is over, the submit button and drop down menu should no longer be displayed.
  - H.B. **0.1%** H.A happened without the page refreshing (i.e. AJAX call)
- I. **0.2%** Close the window and rerun ttt.html. Have Player X guess 'A1'. Have Player O guess anything other than 'A2' or 'A3'. Have Player X guess 'A2'. Have Player O guess anything other than 'A3'. Have Player X guess 'A3'. There should now be a message such as the following: "GAME OVER: X wins!"
- J. **0.2%** Close the window and rerun ttt.html. Have Player X guess 'A1'. Have Player O guess anything other than 'B2' or 'C3'. Have Player X guess 'B2'. Have Player O guess anything other than 'C3'. Have Player X guess 'C3'. There should now be a message such as the following: "GAME OVER: X wins!"
- K. **Total = 0.3%**

K.A.0.2% Close the window and rerun ttt.html. Play the game such that there is no winner; once all the squares of the board have been guessed, there should be a message such as the following: "GAME OVER: Cat's game."

K.B. 0.1% K.A happens without the page refreshing(i.e. AJAX call)

L. **Total = 0.3%**, Refresh the browser

L.A. 0.1% The tic tac toe board no longer shows 'X's or 'O's in any other squares

L.B. 0.1% The dropdown menu shows the original list of possible moves, and the player label says 'Player X'.

L.C. 0.1% Have Player X make any guess. The message should display above the board, the 'X' character should be in the appropriate square on the board and the form should switch to Player O.

## **Part 2 - 8.0%**

M. 0.5% The html file for Part 2 is named 'ttt2.html'

N. **Total = 0.5%**, Run the ttt2.html file.

N.A. 0.2% The form for making a move should not be visible

N.B. 0.3% Player X has the following message displayed: "Waiting for a second player to join the game."

O. **Total = 0.5%** Run another instance of ttt2.html. Go back to the window for Player X (the first player).

O.A. 0.2% The form to make a move is now visible to Player X

O.B. 0.3% Player X has the following message displayed: "Player O joined. You are Player X"

P. **Total = 0.5%**, Go back to Player O's browser

P.A. 0.2% The form to make a move should not be visible

P.B. 0.3% Play O has the following message displayed: "Both players joined. You are Player O"

Q. **Total = 0.7%** Have Player X guess 'A1'

Q.A. 0.25% Player X's window displays the following message: "X placed at A1"

Q.B. 0.25% Player O's window displays the following message: "X placed at A1"

Q.C. 0.2% Q.A and Q.B happened without either window refreshing (i.e. AJAX call)

R. **Total = 0.7%** (building off of test Q)

R.A. 0.25% Player X's tic tac toe board shows an 'X' in the A1 square

R.B. 0.25% Player O's tic tac toe board shows an 'X' in the A1 square

R.C. 0.2% R.A and R.B happened without either window refreshing (i.e. AJAX call)

S. **Total = 0.5%** (building off of tests R and Q)

S.A. 0.25% Player X's window no longer displays the form to make a move

S.B. 0.25% Player O's window now displays the form to make a move

T. **Total = 0.5%** Have Player O guess 'A1'. There should either be an error message displayed on Player O's window and NOT on Player X's window, or Player O is unable to guess 'A1' because it is no longer an option on the drop down menu

U. **Total = 0.7%**

U.A.0.5% Have Player O (should be the current player) choose anything other than 'B1' and 'C1'. Have Player X choose 'B1'. Have Player O choose anything other than 'C1'. Have

Player X choose 'C1'. There should now be a message on BOTH windows such as the following: 'GAME OVER: X won!'

U.B.0.2% U.A happened without the page refreshing (i.e. AJAX call)

V. Total = 0.7%

V.A.0.5% Now that the game is over, the submit button and drop down menu should no longer be displayed on BOTH windows

V.B. 0.2% H.A happened without the page refreshing (i.e. AJAX call) on BOTH windows

W. 0.5% Close the window and rerun tt2.html. Have Player X guess 'A1'. Have Player O guess anything other than 'A2' or 'A3'. Have Player X guess 'A2'. Have Player O guess anything other than 'A3'. Have Player X guess 'A3'. There should now be a message on BOTH windows such as the following: "GAME OVER: X wins!"

X. 0.5% Close the window and rerun tt2.html. Have Player X guess 'A1'. Have Player O guess anything other than 'B2' or 'C3'. Have Player X guess 'B2'. Have Player O guess anything other than 'C3'. Have Player X guess 'C3'. There should now be a message on BOTH windows such as the following: "GAME OVER: X wins!"

Y. Total = 0.7%

Y.A.0.5% Close the window and rerun tt2.html. Play the game such that there is no winner; once all the squares of the board have been guessed, there should be a message on BOTH windows such as the following: "GAME OVER: Cat's game."

Y.B. 0.2% K.A happens without the page refreshing(i.e. AJAX call) on BOTH windows

Z. Total = 0.5%, Refresh the page. It should start a new game or force a player to wait until another player joins if there is not another player yet