User Interface Testing Document

for Tic-Tac-Toe forever

by

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Table of Contents

User interface testing: 3
Events in the code being covered: 3
Test 1: Welcome Window interface Test 3
Test 2: Instructions Window Test 5
Test 3: Game Window Test 6
Test 4: Game Window (User makes a move) Test 7
Test 5: Game Window (CPU makes a counter move) Test 8
Test 6: Game Window (Board Resizes) Test 9
Test 7: Game Window (CPU wins) Test 14
Test 8: Game Window (Player wins) Test 15
Test 9: Game Window (Error message when user right clicks on the board) Test. 16
Test 10: Game Window (Goodbye Window) Test 18
Test 11: Game Window (Goodbye Window) (When user clicks the restart button)Test 20
Test 12: Game Window (Goodbye Window) (When user clicks the exit button)Test 22

User interface testing:

Events in the code being covered:

```
1. protected override void OnPaint(PaintEventArgs e)
2. protected override void OnMouseClick(MouseEventArgs e)
3. private void Start_Click(object sender, EventArgs e)
4. private void Instructions_Click(object sender, EventArgs e)
5. private void GameManager_Load(object sender, EventArgs e)
6. private void GameRestart_Click(object sender, EventArgs e)
7. private void Exit_Click(object sender, EventArgs e)
8. private void GameManager_Resize(object sender, EventArgs e)
9. public void DrawBoard(Graphics g)
10. void DrawCell(Graphics g, Point position)
11. void PaintSymbolO(Graphics g, Point position)
12. void PaintSymbolX(Graphics g, Point position)
13. private void GameManager_Resize(object sender, EventArgs e)
```

Test 1: Welcome Window interface Test

Expected output:

A window with a Grey background.

2 Labels(

Label 1 Text:"Tic-Tac-Toe-Forever" **, background color**: White,TextColor: Black,

Label 2 Text : "Welcome to the Game !!" , , **TextColor**: White),

'Start' button: **Button Text**: START

'Instructions' button: **Button Text**: INSTRUCTIONS,

Close button on the upper right corner ,

Title of the window- Tic-Tac-Toe-Forever,

Tooltip for Start Button(**Tooltip Text :**Press to start the game),

Tooltip for Instructions Button(**Tooltip Text :**Press the button to get instructions),

Actual Output:

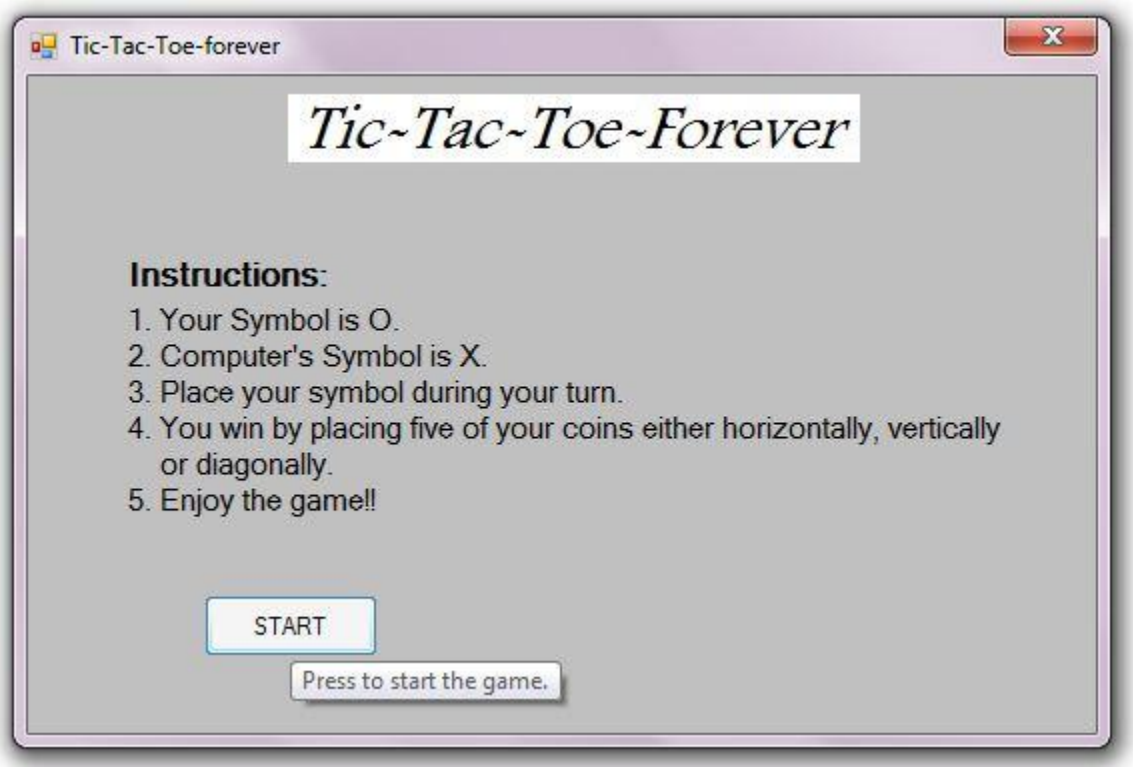
By looking at the above window shots we can see that the actual output matches the expected output.

Test 2: Instructions Window Test

Expected output:

2 Labels (**Label 1 Text:**"Tic-Tac-Toe-Forever**", Label2 Text:** "Instructions", **Label 3 Text:** "1. Your Symbol is O, 2. Computer's Symbol is X, 3. Place your symbol during your turn, 4. You win by placing five of your coins either horizontally, vertically or diagonally, 5. Enjoy the game!!"),'Start' button, 'Close' button on the upper right corner of , Tooltip for Start button(**Tooltip Text** :Press to start the game), Title of the window

Actual Output:



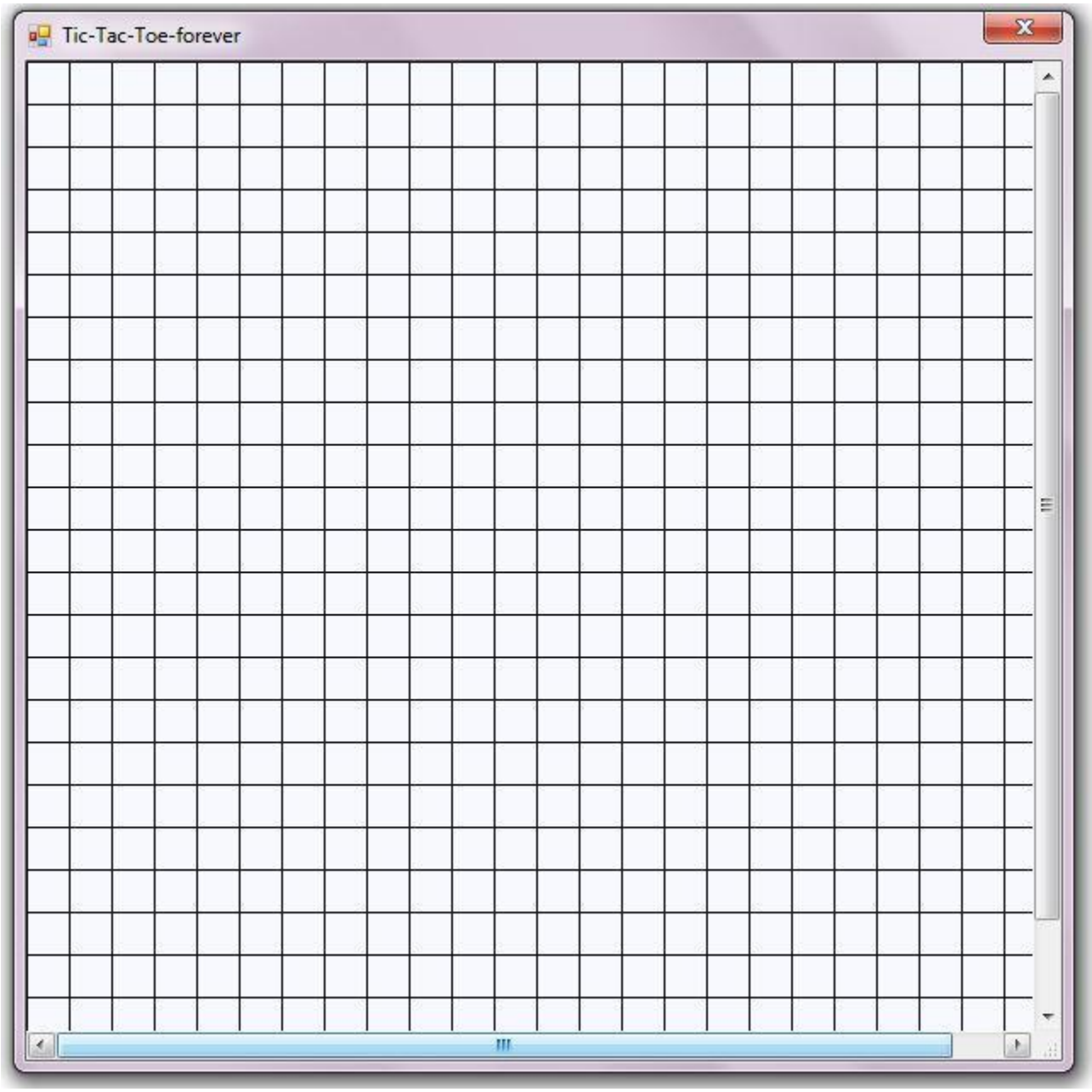
By looking at the above window shot we can see that the actual output matches the expected output.

Test 3: Game Window Test

Expected output:

25x25 pixels Empty Grid with a Ghost white background, Cell size of 25 pixels draw with black border, Horizontal Scrollbar, Vertical Scrollbar, Close button on the upper right corner, Title of the window.

Actual Output:



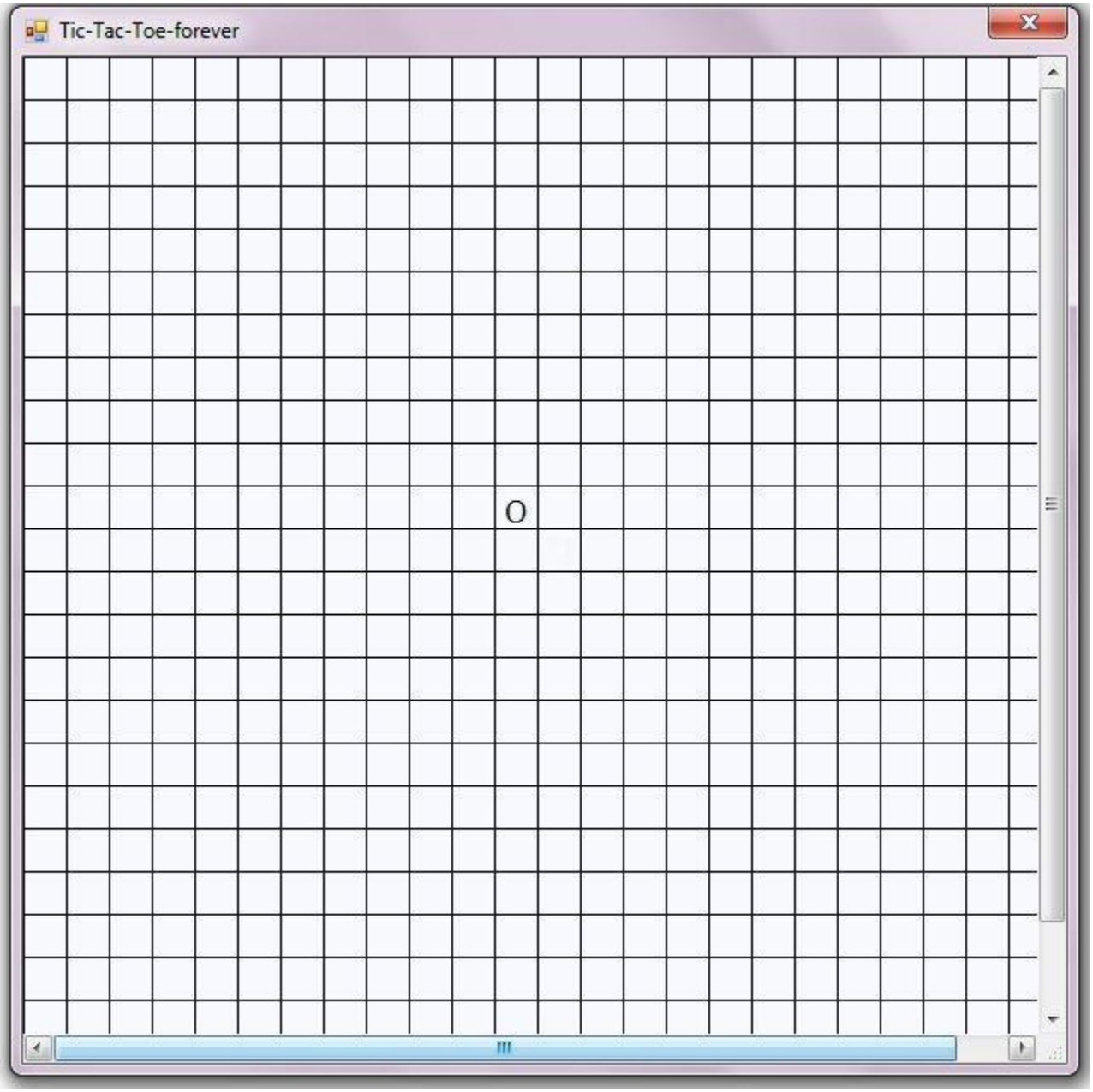
By looking at the above window shot we can see that the actual output matches the expected output.

Test 4: Game Window (User makes a move) Test

Expected output:

25x25 Grid, Cell size of 25 pixels , 'O' symbol displayed at the position (12,11), Horizontal Scrollbar, Vertical Scrollbar, Close button on the upper right corner of , Title of the window

Actual Output:



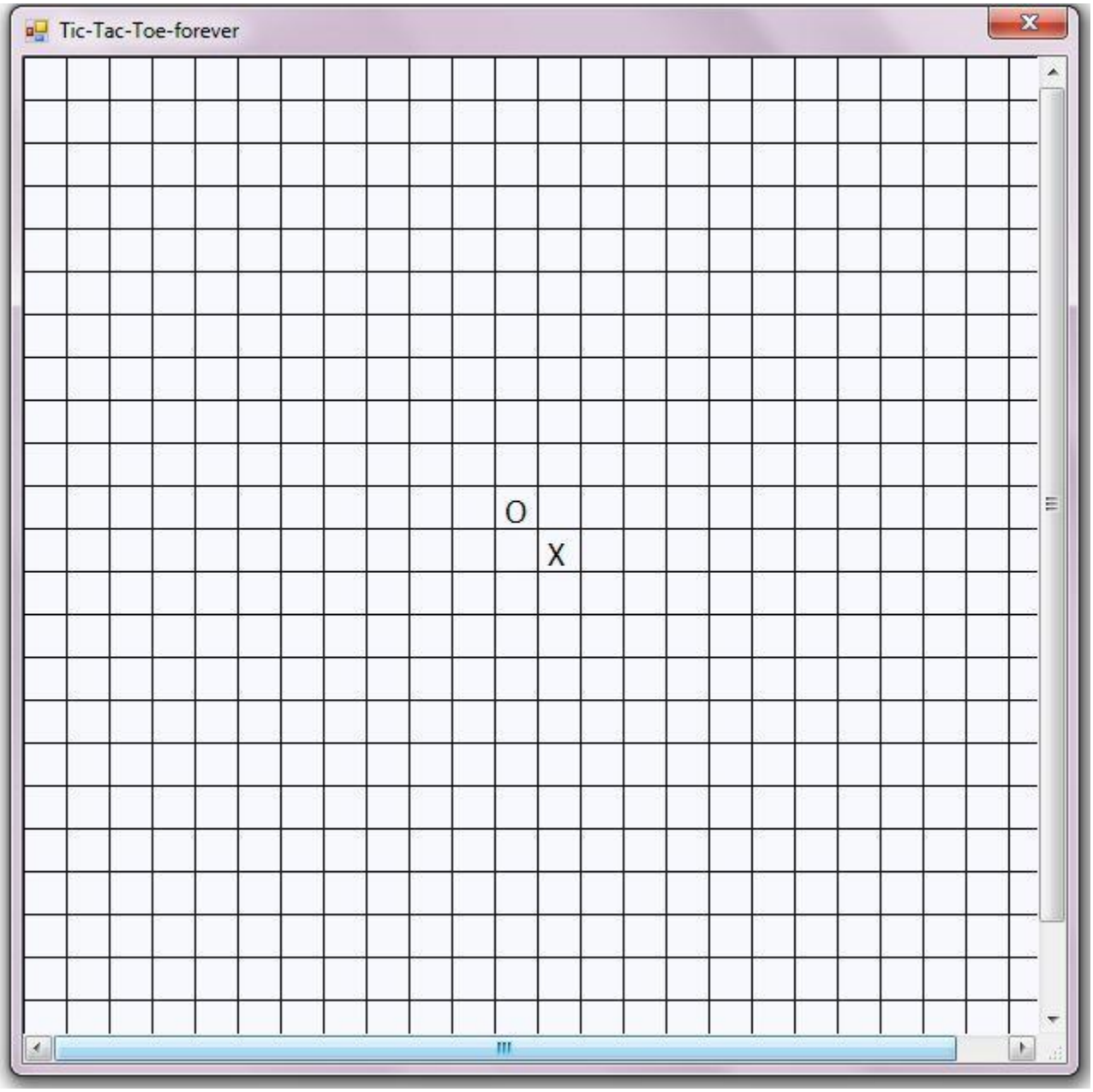
By looking at the above window shot we can see that the actual output matches the expected output.

Test 5: Game Window (CPU makes a counter move) Test

Expected output:

25x25 Grid, Cell size of 25 pixels, 'X' symbol displayed in response to users move according to game logic, Horizontal Scrollbar, Vertical Scrollbar, Close button on the upper right corner of , Title of the window

Actual Output:



By looking at the above window shot we can see that the actual output matches the expected output.

Test 6: Game Window (Board Resizes) Test

Expected output:

25x25 Grid, Cell size of 25 pixels , ‘O’ symbol, ’X’ symbol ,, Horizontal Scrollbar, Vertical Scrollbar, Close button on the upper right corner of , Title of the window, an expanded grid by a factor of 10 depending upon the position the user clicks.

Extreme left – 10 added columns to board size to left.

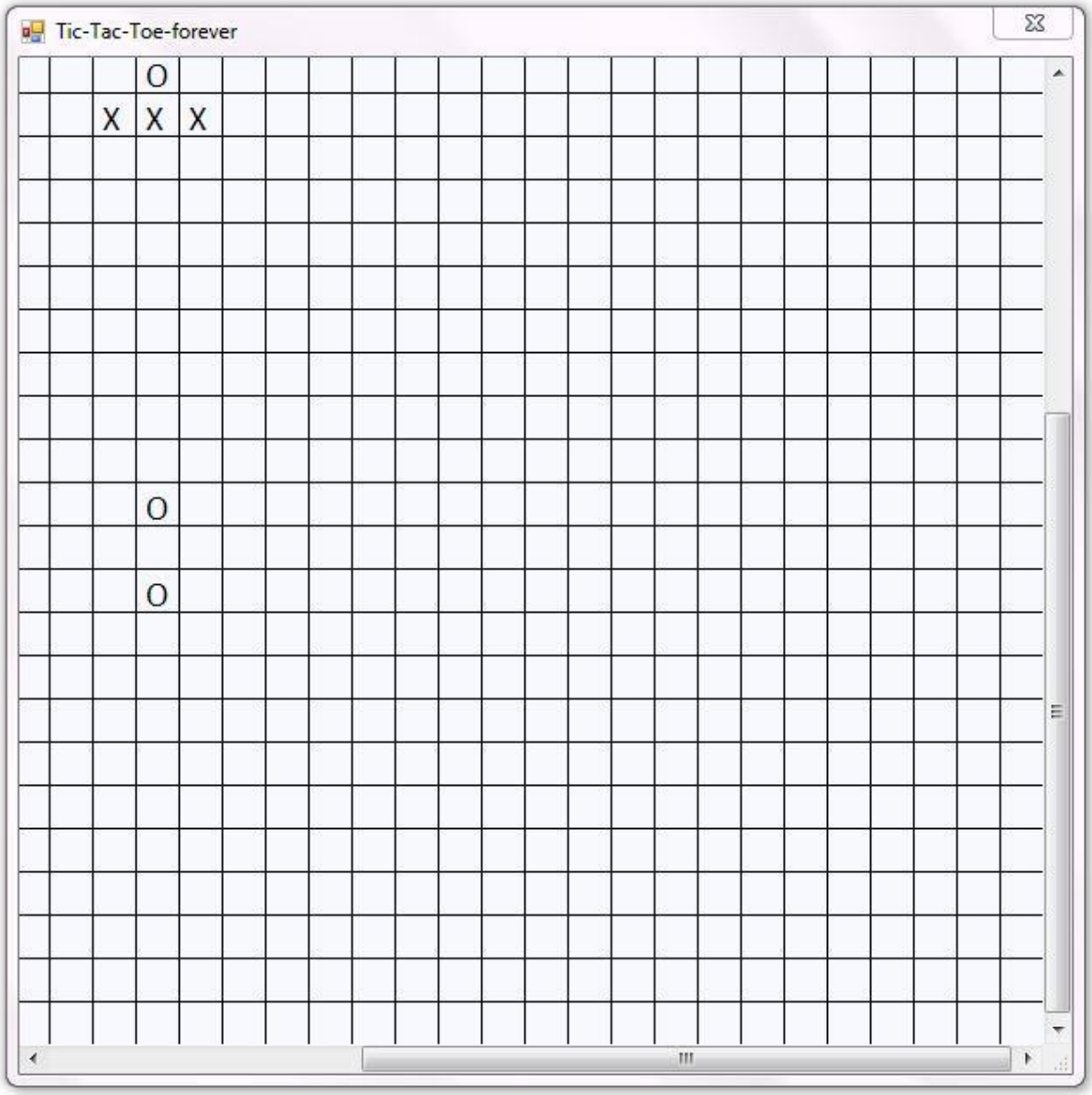
Extreme Right- 10 added columns to current board size to right.

Extreme Top – 10 added rows to current board size on Top.

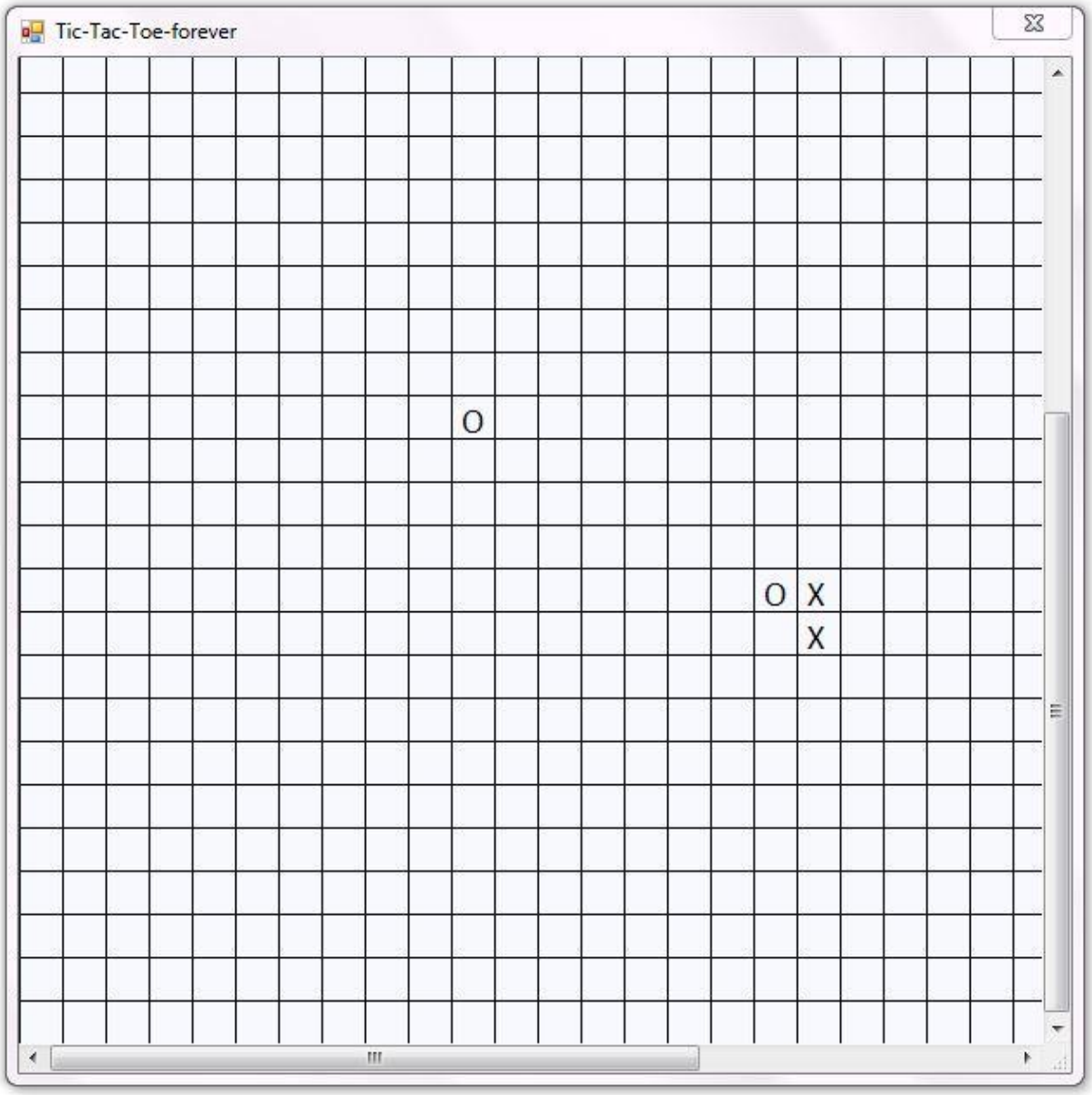
Extreme Bottom – 10 added rows to current board size on Bottom.

Actual Output:

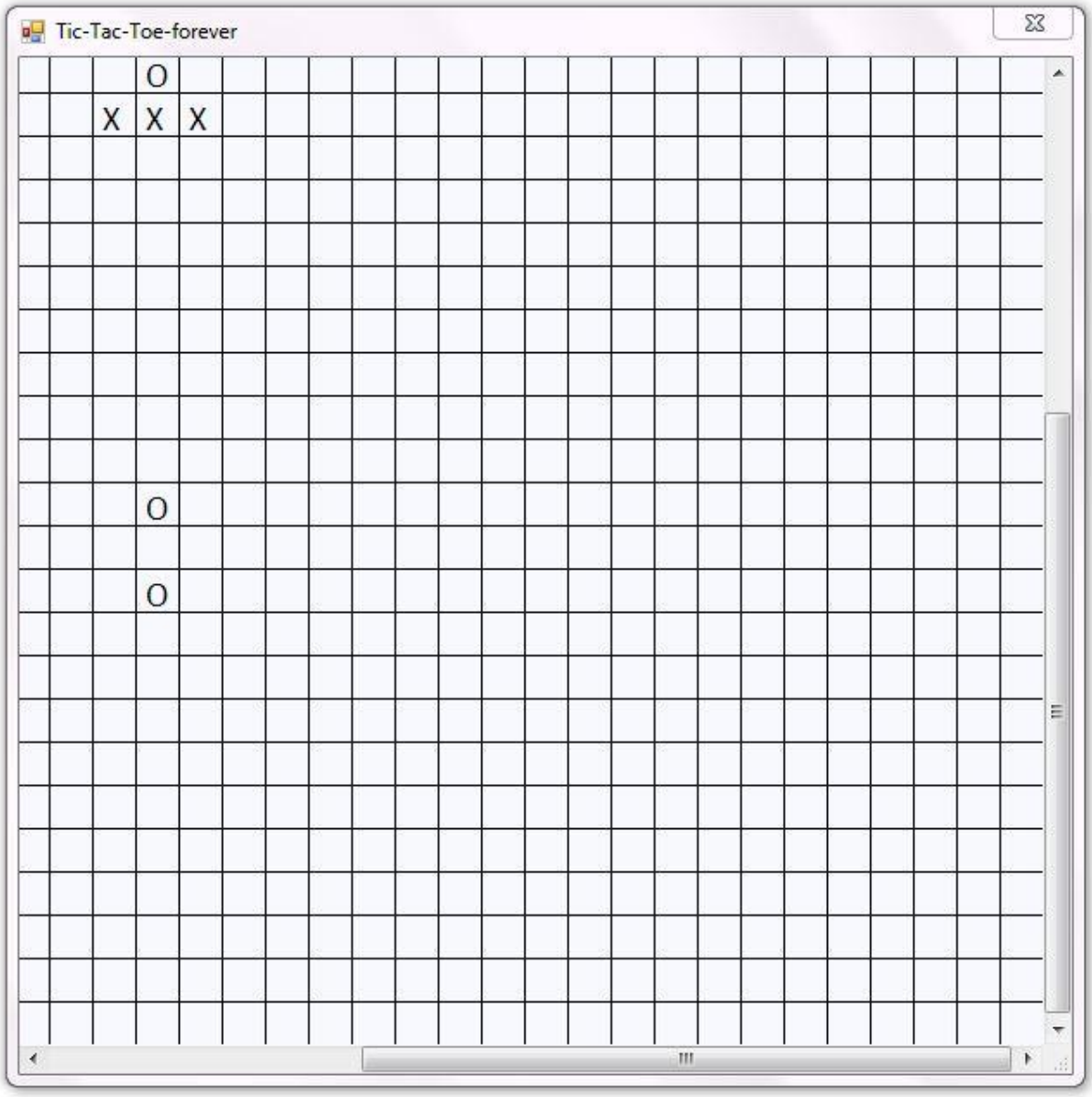
1. **User clicks on any of the Extreme right cell of the grid.**


Tic-Tac-Toe-forever
O
X X X
O
O

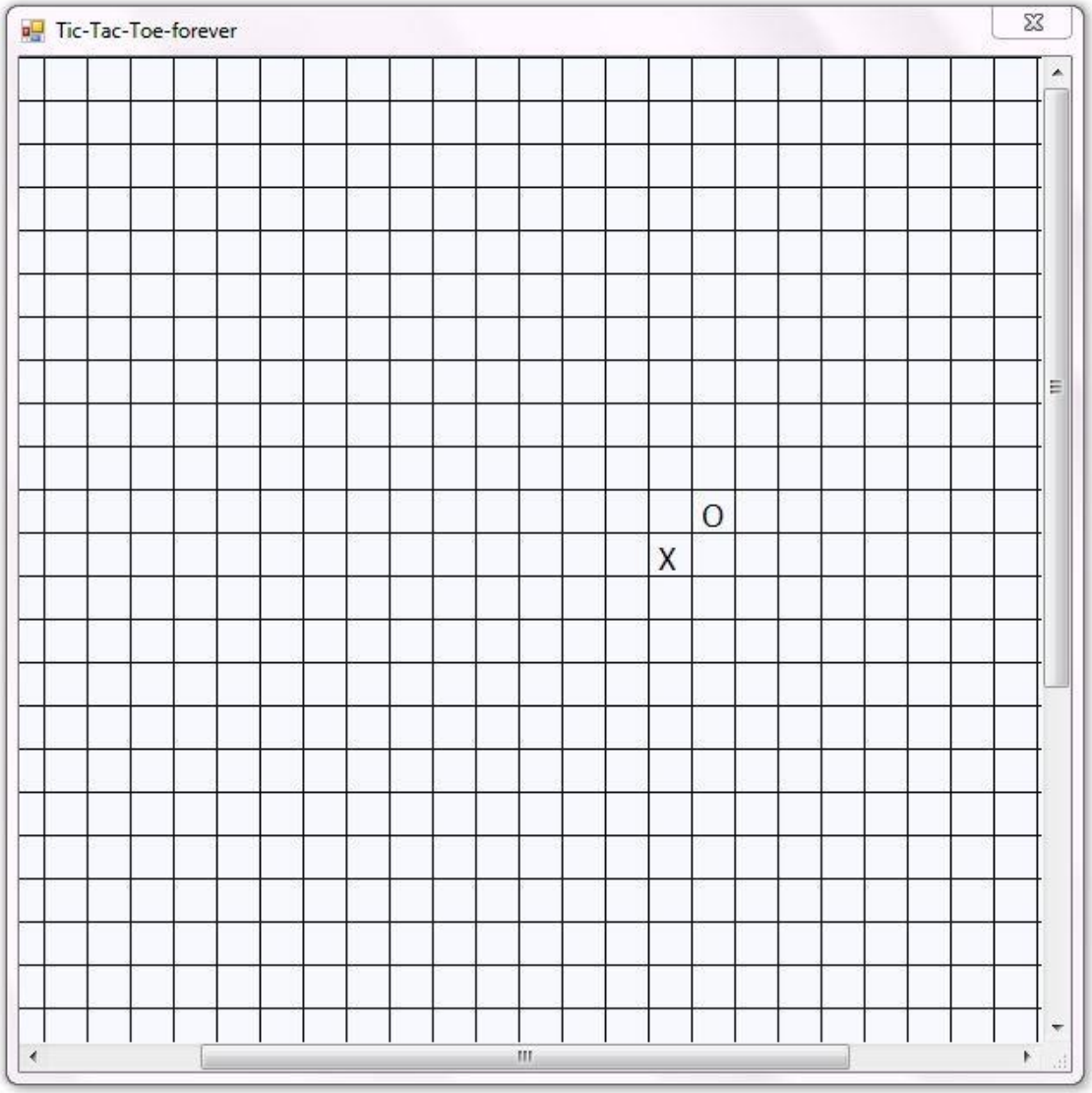
2. User clicks on any of the left cell of the grid.



3. **User clicks on the bottom cell of the grid.**



4. **User clicks on any of the top cell of the grid.**



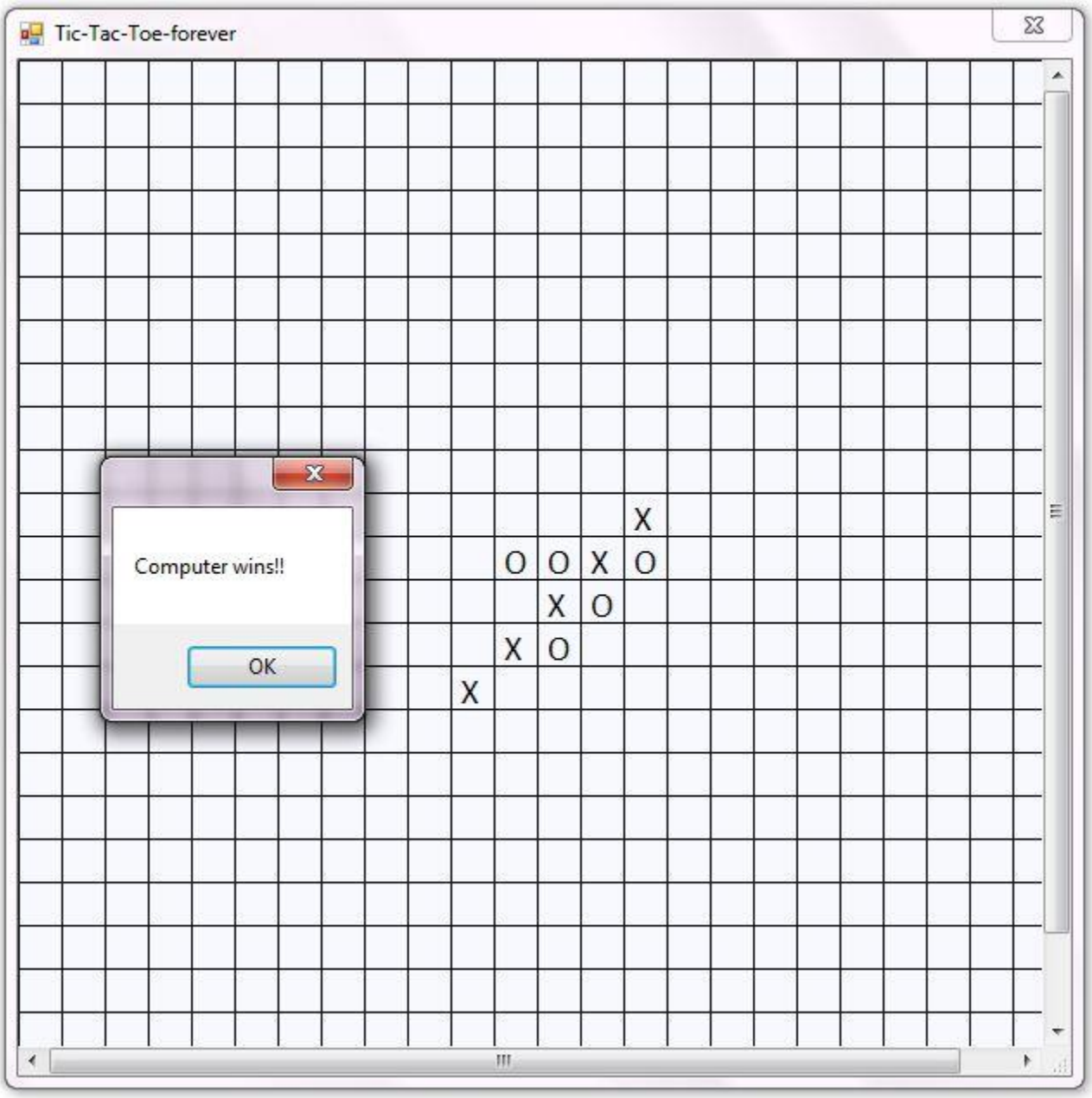
By looking at the above window shots we can see that the actual output matches the expected output.

Test 7: Game Window (CPU wins) Test

Expected output:

25x25 Grid(case when Grid is not expanded), Cell size of 25 pixels, ‘O’ symbol, ’X’ symbol ,Message box stating ‘Computer Wins’, ‘Ok’ button in the Message box, Horizontal Scrollbar, Vertical Scrollbar, Close button on the upper right corner of , Title of the window.

Actual Output:



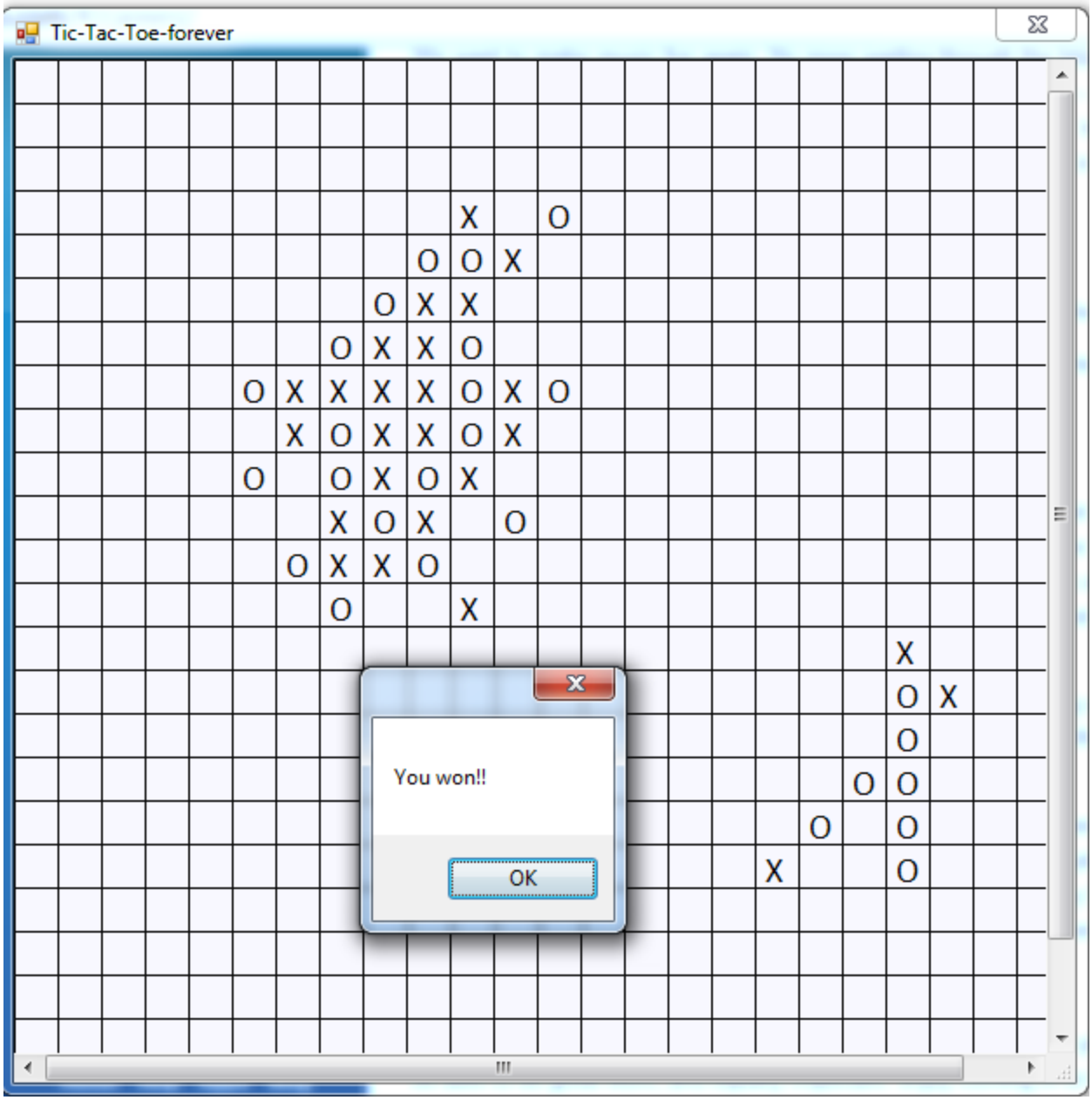
By looking at the above window shot we can see that the actual output matches the expected output.

Test 8: Game Window (Player wins) Test

Expected output:

25x25 Empty Grid(case when Grid is not expanded), Cell size of 25 pixels, 'O' symbol, 'X' symbol, Message box stating 'Player Wins', 'Ok' button in the Message box, Horizontal Scrollbar, Vertical Scrollbar, Close button on the upper right corner of , Title of the window.

Actual Output:

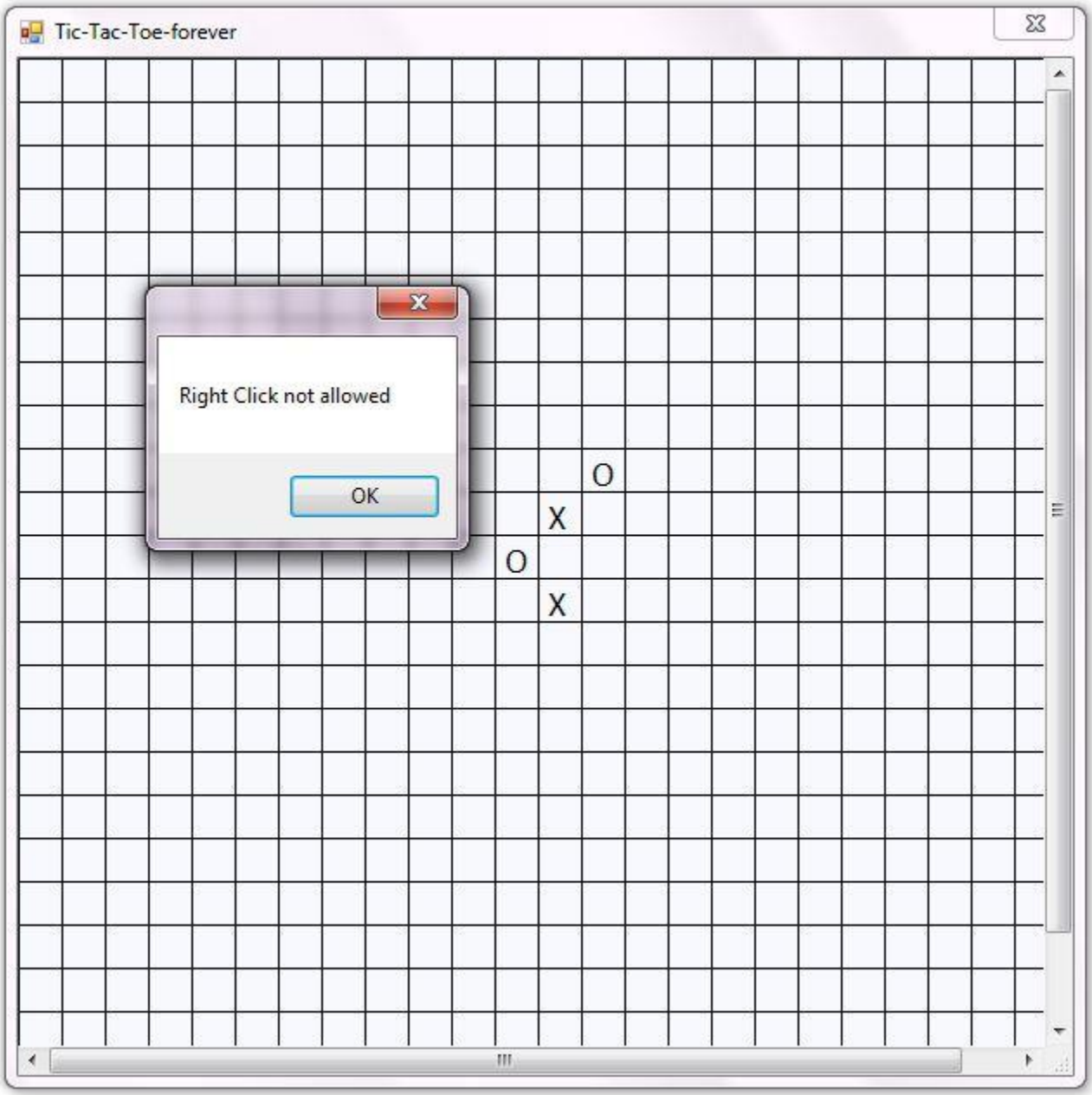

Tic-Tac-Toe-forever
You won!!
OK

Test 9: Game Window (Error message when user right clicks on the board) Test.

Expected output:

25x25 Empty Grid, Cell size of 25 pixels, 'O' symbol, 'X' symbol, Message box stating 'Right Click not allowed', 'Ok' button in the Message box, Horizontal Scrollbar, Vertical Scrollbar, Close button on the upper right corner of , Title of the window.

Actual Output:



By looking at the above window shot we can see that the actual output matches the expected output.

Test 10: Game Window (Goodbye Window) Test

Expected output:

2 Labels **(Label 1 Text:**"Tic-Tac-Toe-Forever", **Label 2 Text:** "Thanks for playing!! Good Bye!!"), 'Restart' button, 'Exit' Button, Close button on the upper right corner of , Tooltip for Restart button(**Tooltip Text:** Press the button to Restart the game) , Tooltip for Exit button(**Tooltip Text:** Press the button to Exit the game), Title of the window

Actual Output:

Tic-Tac-Toe-forever
Tic~Tac~Toe~Forever
Thanks for playing !! Good Bye !!
RESTART
EXIT
Press the button to Restart the game..

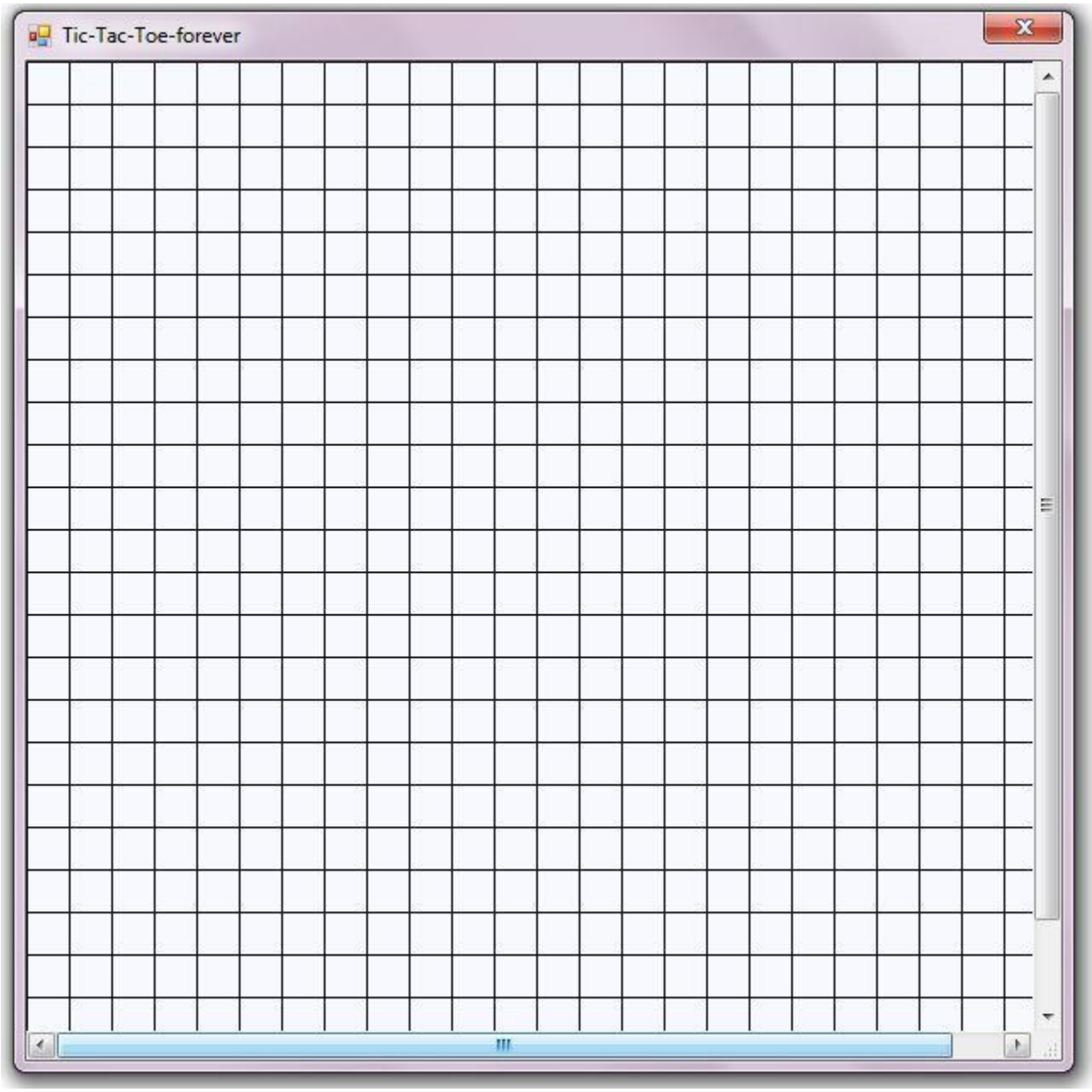
By looking at the above window shots we can see that the actual output matches the expected output.

Test 11: Game Window (Goodbye Window) (When user clicks the restart button)Test

Expected output:

25x25 Empty Grid, Cell size of 25 pixels, Horizontal Scrollbar, Vertical Scrollbar, Close button on the upper right corner, Title of the window.

Actual Output:



By looking at the above window shot we can see that the actual output matches the expected output.

Test 12: Game Window (Goodbye Window) (When user clicks the exit button)Test

Expected Result : The game should exit.

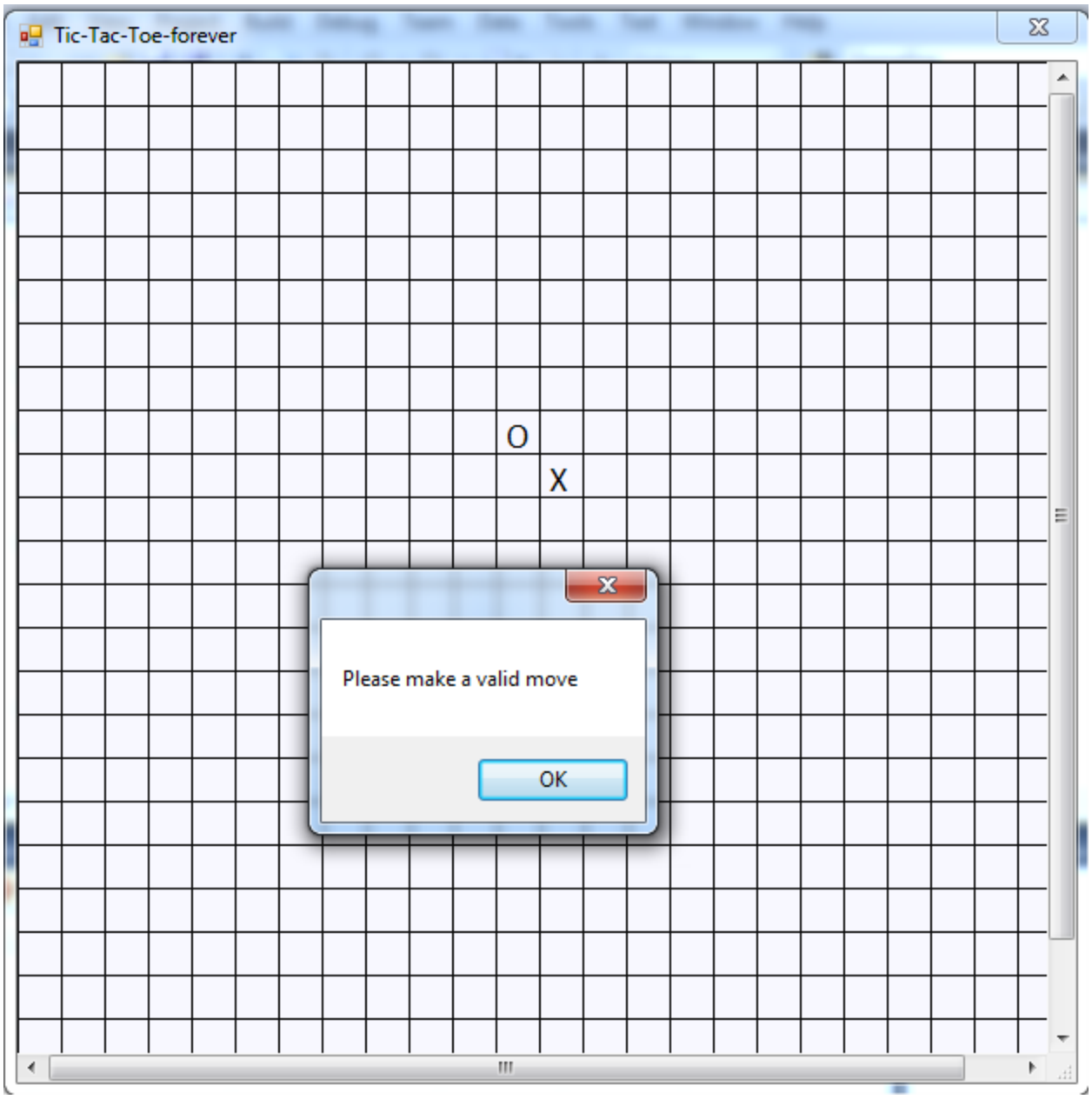
Actual Result : The game exited.

Expected Result and Actual Result match.

Test13: Game Window(When user makes a invalid move) Test:

Expected Result: A message box indicating the user to make a valid move.

Actual Result:



Expected Result and Actual Result match.