Assignment 4

CSCI/CINF 4320.01 – Web Application Development, Fall 2022

Due Date: 12-02-22, 11:55pm

Description of Assignment

Design and develop a one-page ASP.NET web application that implements the popular Tic-Tac-Toe game using JavaScript:

Here are the specific requirements:

- Use a textbox (with its property **ReadOnly** = **true**) to represent each space on the grid. So, you will use total 9 textboxes to represent 3x3 grid.
- Implement **onclick()** event handler in Javascript to detect whenever the user clicks on one of the textboxes.
- You must show on top of the page whether it is **O**'s turn or **X**'s turn.
- When the user clicks on a space:
  - If it is an empty space, then mark **O** or **X** in that space depending on whose turn it is.
  - If that space already has **O** or **X** marked in it, then show a message at the bottom of the page saying that it is an invalid move.
- If all the spaces are filled, then reset the board (i.e., make them all empty again).

Note: All the above functionality must be implemented using **only Javascript functions and event handlers**

Bonus:

You will get a 20% bonus credit on this assignment if you implement the following functionality:

- Automatically detect when a player succeeds in placing three of their marks in a diagonal, horizontal, or vertical row, and declare it (**O** or **X**) as a winner at the bottom of the page.