

## **Mission #4 Assignment**

IS 413 - Hilton

For this assignment, you will work in your teams to write a game of Tic-Tac-Toe in C#.

The program will be written in two classes:

- 1) The “Driver” class (the Program.cs class with the main method where the program begins) will:
  - Welcome the user to the game
  - Create a game board array to store the players’ choices
  - Ask each player in turn for their choice and update the game board array
  - Print the board by calling the method in the supporting class
  - Check for a winner by calling the method in the supporting class, and notify the players when a win has occurred and which player won the game
- 2) The supporting class (with whichever name you choose) will:
  - Receive the “board” array from the driver class
  - Contain a method that prints the board based on the information passed to it
  - Contain a method that receives the game board array as input and returns if there is a winner and who it was

Each team will divide itself into half, and one half of the team will work on the driver class, while the other half of the team will work on the supporting class. Each half of the team will use the Paired Programming approach, where programmers work together on the class to solve the problem. The Driver (the individual at the keyboard) will type, while the Navigator (the other team member) will help provide overall direction and watch for any potential errors. You can switch those roles at any time, but both individuals should be working on their part of the program together.

For the purposes of this assignment in trying to help you solidify your understanding of object-oriented programming better, **each half of the team should NOT look at the code of the other half until after the project has been assembled and is functioning**. You can communicate as much as you want as a team to understand what the other half is doing, but do not view or modify any of the code from the other half while you are building the program.

As always, write good, clean code with descriptive variable names, proper indentation, and clear commenting as appropriate to describe what the code is doing.

**Submit the link to your GitHub repository via Learning Suite. (One submission per team)**