

If this lab is an Individual assignment, you must do all coded programs on your own. You may ask others for help on **the** language syntax, but you must organize and present your own logical solution to the problem. No lab is complete until the student submits the signed pledge form associated with that lab. I realize that no coded programs will be graded until I turn in the sign & pledge form associated with that program; any late penalties will continue to compound until the pledge form is submitted.

If this lab is a team assignment, both team members may share logic as they program side by side on their own computers. Each person must type all of his/her own code as part of the learning process. Team assignments are never to be "You do this portion and I'll do that portion" or "You do this lab and I'll do the next lab".

Some of the lab assignments will have short answer questions. These short answer questions will be spot checked and graded for completion, but not checked for accuracy. Once these labs are graded and returned, I encourage you to form a study team comprised of members of this class who have also successfully completed this lab for credit; once the labs have been graded and returned, you may compare your answers with this team if and only if they have successfully completed the lab.

I/We realize that the penalty for turning in work that is not my own, or assisting others in doing so, can range from an "F" in the class to dismissal from Trinity University. I realize that it is a violation of academic integrity to share any portion of this lab with any students (outside my prof & my 3342 study team)!

Print Name _____ Time Required = _____ Hrs.

Signature _____ (pledged)

Print Name _____ Time Required = _____ Hrs.

Signature _____ (pledged)

Tic-Tac-Toe-II

Individual/Team (1-2 Persons)
30 Points

- 1] Create a visual studio 2012 C# projects in folders called **Tic-Tac-Toe-II-TomH**
- 2] Put a copy of your folders from Tic-Tac-Toe-I lab: **TomH-Tic-Tac-Toe-I-Server & TomH-Tic-Tac-Toe-I-Client**; Name these folders **TomH-Tic-Tac-Toe-II-Server & TomH-Tic-Tac-Toe-II-Client**.

- 3] Add the connection code, from the pdfs, to the server. Study the code as you code it. Put in the trace messaging for now!
- 4] In the screen capture below, you can see where the "Client Says Hello". Both server and client shall be configured asynchronously. Either shall be able to send or receive at any time between connection and termination.

The screenshot shows the 'Tic-Tac-Toe Server - Written By Dr. Tom Hicks' application window. The interface is divided into two main sections: a game board on the left and a console output area on the right.

Game Board: A 3x3 grid is displayed. Below the grid, there are two player indicators: 'You Are' with a red 'X' icon and 'Whose Turn' with a red 'X' icon. A 'Start New Game' button is located below these indicators. Further down, there are input fields for 'I. P. Address' (containing '127.0.0.1') and 'Port #' (containing '6666'). Below these fields are two buttons: 'Start The Server Listening' (green) and 'Exit' (black). At the bottom, there is a 'Message' label and a 'Send Message' button. A status bar at the very bottom displays 'Server Says "IAM KING"'.

Console Output: The right side of the window shows a text area with the following content:

```

*****
***** Server Is Sending This To Client *****
*****
***** Top Of Function ResetReceiveData(iar)
***** Welcome to Dr. Hicks Async TCP Server
--> 12 *****
--> 13 ***** Top Of Function SendMessageToClient(Message)
*****
--> 14

***** Bottom Of Function AcceptConn(iar)
***** Bottom Of Function ResetReceiveData
(iar)*****

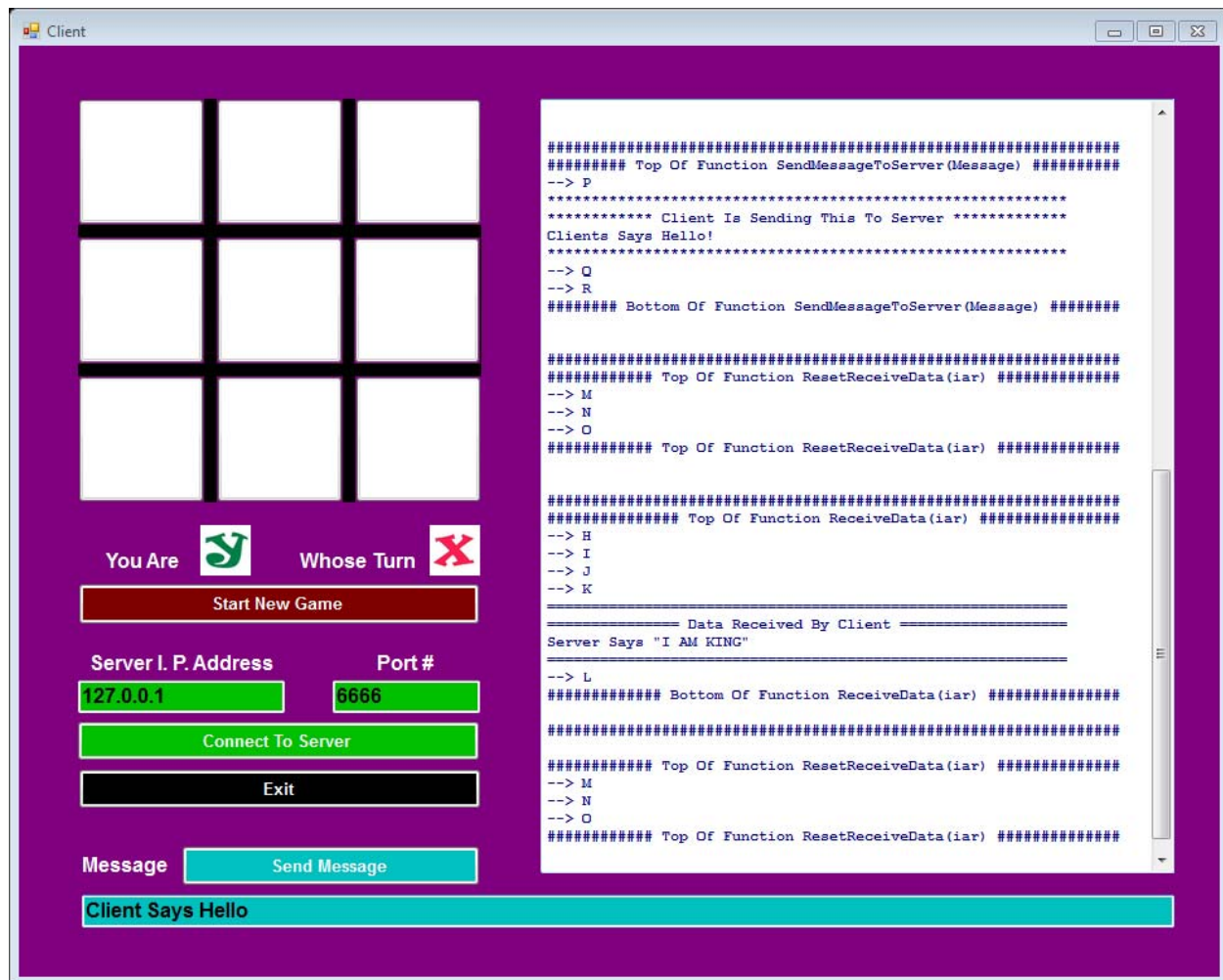
*****
***** Top Of Function ReceiveData(iar)*****
--> 15
--> 16
--> 17

===== Data Received By Server =====
Clients Says Hello!
=====
--> 18
--> 19
***** Bottom Of Function ReceiveData(iar)*****

*****
***** Top Of Function ResetReceiveData(iar)*****
--> 12
--> 13
--> 14
***** Bottom Of Function ResetReceiveData(iar)*****

```

- 5] Add the connection code, from the pdfs, to the client. Study the code as you code it. Put in the trace messaging for now!
- 6] In the screen capture below, you can see where the “Server Says ‘I AM KING’”. Both server and client shall be configured asynchronously. Either shall be able to send or receive at any time between connection and termination.



- 7] Add the Server IP Address to the Server application! (use your Show IP program!)

What To Turn In

----- No Lab Is Complete Until Both Are Complete -----

- 1] You sign & submit the Pledge form.
- Review the Pledge statement
 - Sign & Pledge
 - Record the amount of time you think you spent on this lab
 - Staple all pages of this lab. Fold in half length-wise (like a hot-dog). Put your name on the outside. Place it on the professor desk before the beginning of lecture on the day it is due. The penalty for late homework will not exceed 25% off per day.
- 2] Place all programming code associated with this program, if any, in the Professor's Code Drop Box
- I do not accept programs by mail; do not submit labs via email!

----- **Comments** -----

- A] Programs that do not compile are worth little, if anything.
- B] If a print statement format is off, the penalties will often be less than the 25% per day late penalty; turn in the lab. You would not be happy if you went to Best Buy and purchased a large screen TV that did everything except show the picture; you would consider it pretty worthless. Most users consider software that does not work properly pretty useless as well. If the lab is not working correctly, credit will be small (if any); you might be better to accept a 25% (1 day) late penalty and turn in the lab working correctly!
- C] Start all programs early so that you can get in contact with the professor if you have problems.
- D] If you are turning in this lab late, you may
 - hand it to me if I am in the office
 - put it in the mail box outside my office door
 - slide it under the outer door to our suite {if locked}
 - slide it under my office door. The sooner I get late labs, the sooner the late penalty meter quits clicking.
- E] Backup your programs in at least three places. Put a copy on your Y drive. Put a copy on your flash drive. Put a copy on your personal computer. Send yourself a copy in your e-mail.