

## MicroBoard Web Link

The purpose of this project is to create a means of using a MicroPac development board from a remote location. A user will be able to log onto a computer that is serving as a host to the board and if the computer is not in use take control of that computer. Once a user is in control of that computer and board he/she will be able to upload code and run it as if they were at that computer/board. The outputs from all the pins on the board will be viewable through a logic analyzer. A camera will also be in place for the user to see what is displayed on the LCD. On the screen of the users computer will be a keypad mimicking the one on the board and a button that will hardware reset the board. Any other functionality of the boards will be looked at later.

### The systems top level IO

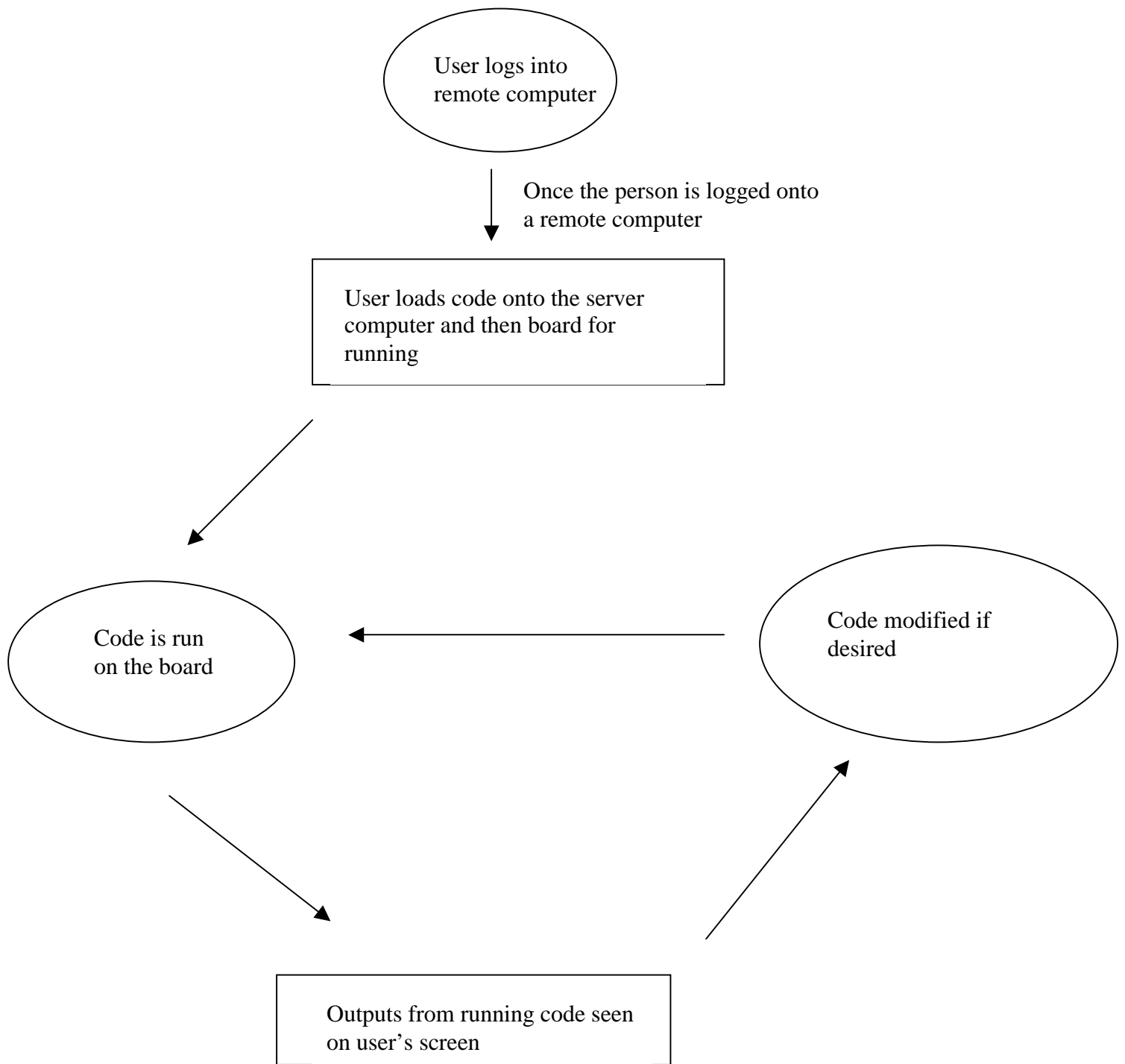
#### Input

Mouse on user's computer  
Keyboard on user's computer  
Code that the user has on his/her computer

#### Output

The user's monitor

The system internally will consist of a channel for data to pass bi-directional between the computers and contain the means of encoding and decoding the signals to and from the Emac-board. The computers will communicate through a TCP network and the board and remote computer will communicate through a serial link and then any other link that has to be made to allow communication that is not currently present. A diagram on how a user would use the system is shown on the next page.



Once the user wishes to exit the system, which can be done at any time, if the user modified the code he/she will be prompted if those changes are to be saved. The person then will exit the application that serves to communicate with the remote computer and is logged off from the computer. A timeout function may be implemented but due to the nature of coding there are times that a timeout log off might not be desired