

## **Programming Assignment 1**

### **Due Feb 7**

Create a board component that can be used to play checkers. The board will have 64 squares in an 8x8 array. The squares will be alternately red and black. The top row will have a black square on the left. The width and height of each square will be given by the property `SquareWidth`. There will be one event called `SquareClick` with two parameters. The event will be fired when a mouse-down event occurs on the board. The two parameters will indicate the square that has been clicked. The square will be identified by a pair of numbers from 0-7. The top left square will be 0,0, while the top right square will be 0,7. The parameters will be called `Row` and `Column`, in that order. The component will have two functions, `SetSquare` and `GetSquare`. `SetSquare` will not return a value, and will have three parameters, `Row`, `Column`, and `State`. `Row` and `Column` are the same as those parameters for `SquareClick`. `State` will have three values 0, 1, and 2. 1 will cause the square to be redrawn with a white circle inside it, 2 will cause it to be redrawn with a grey circle inside it, and 0 will cause it to be redrawn empty. `GetSquare` have two parameters `Row` and `Column` and will return 1, 2, or 0 depending on whether the addressed square has a white circle, a grey circle or is empty.

This does not provide the capability of creating kings. If you wish, think up some way of doing that and implement it.