Assignment 2 – Light Cycles

For this assignment, you will be creating a light cycle game similar to that featured in TRON using HTML5, CSS3, and JavaScript.

# Due Date

This homework assignment is due **Wednesday, September 24 by 2:30pm** (Just before class).

# Requirements

You will need to:

1. Move the game logic for light cycle state changes from the input handler into the light cycle object itself (20 points).
2. Implement collisions:
   1. Between the two cycles. In this case, the game ends and both players loose (20 points).
   2. Between a cycle and the boundary of the playing area. In this case the colliding player loses (20 points).
   3. Between a cycle and a light trail (Hint: You’ll want to consider the canvas’ nature as a raster graphic. Look at <https://developer.mozilla.org/en-US/docs/Web/Guide/HTML/Canvas_tutorial/Pixel_manipulation_with_canvas>) (30 points).
3. Add a GUI that:
   1. Displays the time the game has been going on (20 points).
   2. Identifies who has won or lost when the game ends (10 points).

**Extra Credit**

1. Convert your solution from a variable-timestep to a fixed-timestep game loop (20 points).

# Turning Your Work In

To turn your work in, you must:

1. Post your working solution on your personal CIS web space (or your own website). Supply the direct url to KSOL. *Make sure that your site is publicly visible!*
2. Zip your project files and attach them to your KSOL submission.

Failing to do one or the other will result in a 50% reduction in your grade