Lab 2: Adding lights to 2D Art

Lab professors: Adam Norton and Holly Yanco

Start in lab: Tuesday 9/18 or Thursday 9/20

Due: At start of lab on Tuesday 9/25 or Thursday 9/27 (due Tuesday for Tuesday lab students; Thursday for Thursday lab students)

In this lab, you will add 3 lights to your 2-D art that you constructed for Lab 1. By using a light sensor or touch sensor (or both), you will make your project interactive.

Materials: Super Cricket, light bulbs, light sockets, light sensor, touch sensor, LED display, your 2D art.

Process:
1. Solder a wire to the tab on one side of the light socket and another wire to the other tab. Then put the other ends of the wire into the two prong Cricket connector. (All of these materials are in the light bag in your kit.) The wires should snap into the connector. If you can pull it out easily, turn the connector on the wire around 180 degrees and insert it again.
2. Determine the location for your light socket in your artwork. Cut the necessary hole and install the socket. Then screw in a light bulb (either a clear bulb or one of the three colored bulbs).
3. Repeat until you have three wired light sockets inserted in your artwork.
4. Write a Cricket Logo program to have the lights react to either the amount of light seen by the light sensor or whether or not the touch sensor has been pressed. You can also use both in your program. Try to create interesting light patterns.
5. Show your work to at least three people in the lab. Ask them to give you their feedback.
6. Document your process (Lab write-up)

Lab write-up:

Write a one-page description including:
1. Your name
2. Concept -- What were you trying to do in your program? How did you want someone to interact with your piece?
3. Design strategy -- Where did you incorporate the lights into your 2D art?
4. Reflection on the audience response -- Did you have unexpected feedback? If so, describe how it was different from your intention.
5. You should also include a print out of your program with your lab write up. Additionally, please e-mail your code to Adam (anorton@cs.uml.edu).