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ECE 511 Project Proposal

For our project, we are planning on using an RGB LED in combination with an accelerometer and an xbee wireless module to create a lamp that will change colors based on what the accelerometer reads that can be controlled across a room.

Our current plan is to build a glove or similar wearable device with an accelerometer and an xbee transmitter and a separate unit using our MSP430, an xbee receiver, and an RGB LED. The xbee will relay the X, Y, and Z values from the accelerometer, which will each be assigned to a color on the RGB LED. For example, if the accelerometer is moved down the middle of the X and Y axis, and X = Red and Y = Blue, the resulting color from our RGB LED should be purple.

Graded hardware we are planning to use:

RGB LED: 2 points Accelerometer: 3 points

Xbee wireless communication: 3 points

Total: 8 points