## Basics to Electronics - Circuit Prep

In this assignment, you will be assembling a predefined circuit, the Flashlight. It uses only a few components and cables to show the capabilities of sensor feedback. Final Deliverables

One Functioning Circuit

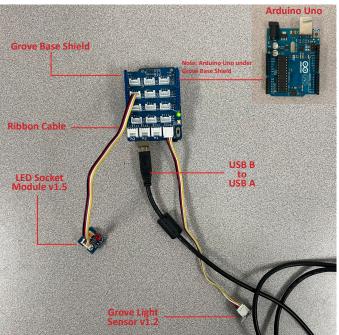
2a-Flashlight(Sensor)

What you'll need

The Flashlight Sketch(Code)-

Follow the Instructions and Parts list found at the top of the code provided. It will walk you through connections, switches, compiling, and uploading your code. Then once finished test out your circuit by placing your hand over the light sensor and watching the LED glow.

Components Required Arduino Uno- Arduinos Grove Base Shield- Arduinos USB B to USB A Cable- Misc Cables LED Socket Module v1.5- Dials/Switches/LEDS Grove Light Sensor v1.2- Sensors If sensors need cables grab any ribbon cable from the clear bin



(Code Download Link)

Instructions

- Attach Grove Shield to the Arduino Uno by lining up the pins on the side and the 6 pins with the blue block on the underside of the grove shield

- Ensure LED Socket Module is plugged into D2

- Ensure Light Sensor is plugged into A0

In Arduino IDE go to Tools<Board<Arduino Uno

In Arduino IDE go to Tools<Port<Look for the COM port that says (Arduino Uno) next to it.

If no COM port shows with (Arduino Uno) next to it, go to the windows button<search device manager<Ports (COM & LPT)< Look for COM port labeled Arduino Uno

Ensure Arduino Switch is set to 5V it is located on the grove shield next to the green LED Finally, click the right-facing arrow at the top left of the Arduino IDE to flash the code onto the Arduino (Proceed to M5A2 c or d)

2a