

# Night Light Programming

We've done a lot of fairly well structured activities so far in this course, now it's time for a much more open ended one. In this section you will take what you've learned and constructed in the previous two sections to solve a programming challenge. The objective is to design a device that will turn the LED on when the lights turn out.

Lets start the prototyping process by collecting a few design requirements. We need to measure the output of the light sensor while the lights in the room are on.

- Open and upload the LightSensor sketch
- Write down the average output of the sensor while the room lights are on.
- Wait until the room lights have been turned off
- Write down the average output of the light sensor while the room lights are off.

Your open ended problem will be to write code that turns the LED on when the room lights turn off. You may choose to begin from the included outline code NightLight.ino or you may decide to just start from scratch. Why are you still reading? Get to it!