

Goals & Success Factors

Lesson Goal

- To understand how momentary buttons/switches work

Lesson Success Factor(s)

- Build and code a circuit activated with a momentary button

Runsheet (Guideline)

00:00 Introduction
00:05 Goals & Success Factors
00:10 Recap of last week
00:15 Introduction to switches
00:20 The momentary switch
00:30 Build an LED circuit with a switch
00:40 Code/Test/Run the circuit
01:00 Finish

Extension(s)

Add 1 more LED and another switch to your circuit.
Code your circuit so that the second LED turns on.

Students Pre-work

Watch the following video:

Arduino Button Tutorial: bit.ly/ytp01-button-circuit

Teachers Pre-work

Read the following tutorial about buttons:

<https://programmingelectronics.com/tutorial-17-using-a-button-old-version/>

Watch the following video:

Arduino Button Tutorial: bit.ly/ytp01-button-circuit

Student Homework

Handouts (optional)

Crossword

Please download from:

<https://github.com/nexgencodecamp/ytp/tree/master/modules/arduino/05-buttons/handouts>

Materials Needed

Arduino IDE

Arduino UNOs

Breadboards

Momentary switches

Jumper wires

LEDs

220 Ohm resistors

10000 Ohm resistors