Title:

Button

Sensor/Indicator/Actuator:

Sensor

Features:

Detects presses

Connection:

Analog Digital

Summary:

Buttons are a type of switch. They appear on calculators, phones, remotes, and just about every electronic device. What's more universal than the button? Though it may seem simple (it's either pressed or it's not), buttons can get pretty complex. Single, double, or triple presses could all do different things. Add in how long you hold the button down for and a single button can do a lot.

Example Code

```
/*
  Button

  Turns on and off a light emitting diode(LED) connected to digital socket 6 (D6),
  when pressing a pushbutton attached to digital socket 5 (D5).

  The circuit:
  - LED attached from D6 to ground (LED grove module attached to socket D6
        handles the ground connection for us)
  - pushbutton attached to D5 from +5V (Pushbutton grove module attached to D5)
  - 10K resistor attached to D5 from ground (Included within the grove module)

  - Note: on most Arduinos there is already an LED on the board
    attached to pin 13, so you could optionally use that instead.

  created 2005
  by DojoDave <http://www.0j0.org>
```

```
  modified 30 Aug 2011
  by Tom Igoe
  modified 1 Feb 2018
  by David Brenner

  This example code is in the public domain.

  http://www.arduino.cc/en/Tutorial/Button
*/

// Change here if you're using a different socket
#define LED_SOCKET    5 // <= digital socket number
#define BUTTON_SOCKET 6 // <= digital socket number

// variables will change:
int buttonState = 0;         // variable for reading the pushbutton status

void setup() {
  // initialize the LED pin as an output:
  pinMode(LED_SOCKET, OUTPUT);
  // initialize the pushbutton pin as an input:
  pinMode(BUTTON_SOCKET, INPUT);
}

void loop() {
  // read the state of the pushbutton value:
  buttonState = digitalRead(BUTTON_SOCKET);

  // check if the pushbutton is pressed. If it is, the buttonState is HIGH:
  if (buttonState == HIGH) {
    // turn LED on:
    digitalWrite(LED_SOCKET, HIGH);
  } else {
    // turn LED off:
    digitalWrite(LED_SOCKET, LOW);
  }
}
```