

We've prepared a sensor array as well, with these sensors:

- PIR motion sensor
- Ultrasonic distance sensor
- Soil moisture sensor

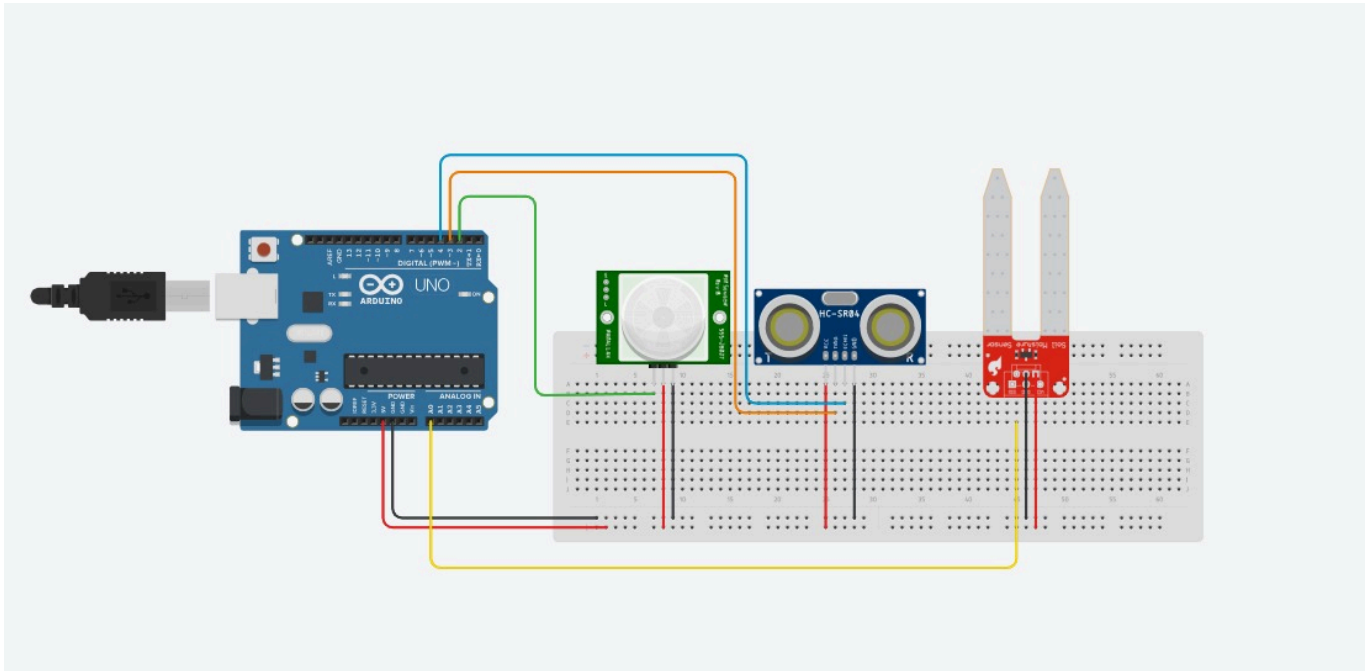
Hardware

- PIR Motion Sensor
- Ultrasonic Distance Sensor HC-SR04
- Soil Moisture Sensor
- Arduino
- Jumper Wires
- Breadboard

Circuit

Connect the sensors to the Arduino as shown in the diagram. Here is a table of the connections for your reference:

Sensor	Arduino
PIR Motion Sensor OUT	Digital Pin 2
Ultrasonic Distance Sensor (Echo)	Digital Pin 3
Ultrasonic Distance Sensor (Trig)	Digital Pin 4
Soil Moisture Sensor OUT	Analog Pin A0
VCC (of all sensors)	5V
GND (of all sensors)	GND



You're free to use any digital pin for the all the sensors, from 2 to 12, and any analog pin for the soil moisture sensor. Just make sure to update the pin numbers in the code, as shown below in the `void setup()` function.

```
void setup() {  
    initializePIRSensor(2); // Initialize the PIR sensor on digital pin 2  
    initializeUltrasonicSensor(3, 4); // Initialize the ultrasonic sensor  
    on digital pins 3 and 4  
    initializeSoilMoistureSensor(A0); // Initialize the soil moisture  
    sensor on analog pin A0  
}
```