



Arduino Workshop Challenges

After taking the **Arduino Workshop** and learning the basics, you need to complete these challenges below.

You'll work **ALONE** and do these challenges by yourself. If you need any information please check again the **slides** of the workshop or search in **YouTube** for some tutorials.

	Sensors Session
Level 1	PIR Sensor With LEDs
Level 2	Gas Sensor With Buzzer & LEDs
Level 3	Automatic Lighting With PIR & LDR

	Actuators Session
Level 1	Automatic Door With Ultrasonic Sensor
Level 2	Automatic Fan With Temperature Sensor
Level 3	Controlling 2 Stepper Motors With 2 Potentiometers or 1 Joystick

	Communication Session
Level 1	Controlling 2 LEDs With Bluetooth
Level 2	Send DHT Sensor Data To The Phone Each 30s With Bluetooth
Level 3	Communication Between 2 Arduinos Using Bluetooth And Push Buttons

	Display Session
Level 1	Displaying the Gas Level In LCD With I2C
Level 2	Displaying the Gas Sensor Level And DHT Data In LCD With I2C
Level 3	Displaying The Received Number From The Bluetooth In A Seven Segment