**Required Equipment for Embedded Systems**

1. DHT22 Temperature and Humidity Sensor

<https://www.robotshop.com/ca/en/dht22-temperature-humidity-sensor.html?gclid=EAIaIQobChMIpKq_9_v_6wIVLD2tBh1c6QwaEAQYBSABEgKwPPD_BwE&utm_campaign=surfaces_across_google_caen&utm_medium=surfaces&utm_source=google>

1. ESP32, WIFI AND BLUETOOTH MODULE, /W MICRO USB POWER

<https://leeselectronic.com/en/product/16551-esp32-wifi-and-bluetooth-module-w-micro-usb-power.html>

1. ARDUINO UNO

<https://leeselectronic.com/en/product/10997-10997arduinounor3.html>

1. PIR MOTION Sensor

<https://leeselectronic.com/en/product/10847.html>

1. ESP32, WIFI AND BLUETOOTH MODULE, /W MICRO USB POWER

<https://leeselectronic.com/en/product/16551.html>

1. LCD DISPLAY 2X16 BLUE WITH I2C INTERFACE
2. ESP 8266
3. MQ Gas Sensor

<https://www.robotshop.com/ca/en/mq-2-gas-sensor.html>

1. IR Infrared Obstacle Avoidance Sensor

<https://www.amazon.ca/Infrared-Obstacle-Avoidance-Detecting-Adjutable/dp/B07D3PHQT8/ref=asc_df_B07D3PHQT8/?tag=googleshopc0c-20&linkCode=df0&hvadid=335359065098&hvpos=&hvnetw=g&hvrand=17680183739813697269&hvpone=&hvptwo=&hvqmt=&hvdev=c&hvdvcmdl=&hvlocint=&hvlocphy=9001533&hvtargid=pla-828204391344&psc=1>

1. 1-RELAY DIGITAL MODULE 5V

<https://www.amazon.ca/RoboJax-Relay-Module-Arduino-Triggered/dp/B07BL2JYKV/ref=asc_df_B07BL2JYKV/?tag=googleshopc0c-20&linkCode=df0&hvadid=292937955291&hvpos=&hvnetw=g&hvrand=14266249717234782068&hvpone=&hvptwo=&hvqmt=&hvdev=c&hvdvcmdl=&hvlocint=&hvlocphy=9001533&hvtargid=pla-646789861375&psc=1>

1. µSD Card (Recommended 128 GB)
2. Raspberry pie
3. Jumper wire (male, female)
4. LED
5. Resistor
6. Buzzer

<https://www.amazon.ca/Gikfun-Terminals-Passive-Electronic-Arduino/dp/B01J9SEVLM/ref=sr_1_1_sspa?dchild=1&keywords=buzzer+for+arduino&qid=1600892342&s=electronics&sr=1-1-spons&psc=1&spLa=ZW5jcnlwdGVkUXVhbGlmaWVyPUEyMzNFQVk3SzlJNVVRJmVuY3J5cHRlZElkPUEwNjgwODMyM0FZSTZGSFZYNzY3NyZlbmNyeXB0ZWRBZElkPUEwNDQzMjUxVUNZVEI0UkIxUTkxJndpZGdldE5hbWU9c3BfYXRmJmFjdGlvbj1jbGlja1JlZGlyZWN0JmRvTm90TG9nQ2xpY2s9dHJ1ZQ>==

1. Ethernet cable to connect PC with Raspberry.
2. Equipment for your Project.