**ELECTRONICS NOTES**

Components;

1. PIR – Passive Infra Red Sensor

* Resting phase - 0
* Active phase – 1 results to change in voltage (increase or decrease)

2. Servo SG90 - Motor – it is used for movement

They are used in;

* Robotics

**Components;**

* Brown wire – ground
* Red wire – 5v / vcc
* Orange - signal.

3. HCSR04 – Utrasonic

Speed of sound in air - 343m/s

**Components;**

* Vcc
* Trigger
* Echo
* Ground

The trigger is used to release the sound while the echo is used to listen to the sound.

**Exercise**

**1,000,000 microseconds – 1second.**

**Distance = 0.0343 \* time /2**

**Speed = distance / time.**

**06/05/2019**

# include <servo.h> it symbolizes a header file.

VSS - GRD

VDD – 5V

VO – PINPOT – POTENTIOMETER MIDDLE

RS - PIN 7

RW – GND

E – 8

D0 – D7 – DATA PINS

A – 5V

K - GND

**FLOW CHARTS**

1. Start
2. Process - reading data, writing data, passing data.
3. Decision - e.g if else.
4. End

**PIN WIRING**

SDA Digital 10

SCK Digital 13

MOSI Digital 11

MISO Digital 12

IRQ Unconnected

GND GND

RST Digital 9

3.3V 3.3V

You must power this device to 3.3V.