ASSIGNMENT 1

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QUESTION : Home automation by using IOT in TINKER CAD

Code:

// C++ code

//

#include <Servo.h>

int dist = 0;

int read\_digital\_pin = 0;

int read\_digital\_pin\_2 = 0;

int my\_2 = 0;

int pin = 0;

int read = 0;

int digital\_pin = 0;

long readUltrasonicDistance(int triggerPin, int echoPin)

{

pinMode(triggerPin, OUTPUT); // Clear the trigger

digitalWrite(triggerPin, LOW);

delayMicroseconds(2);

// Sets the trigger pin to HIGH state for 10 microseconds

digitalWrite(triggerPin, HIGH);

delayMicroseconds(10);

digitalWrite(triggerPin, LOW);

pinMode(echoPin, INPUT);

// Reads the echo pin, and returns the sound wave travel time in microseconds

return pulseIn(echoPin, HIGH);

}

Servo servo\_8;

void setup()

{

servo\_8.attach(8, 500, 2500);

pinMode(2, INPUT);

pinMode(12, OUTPUT);

pinMode(A0, INPUT);

pinMode(9, OUTPUT);

}

void loop()

{

dist = 0.01723 \* readUltrasonicDistance(7, 7);

if (dist <= 100) {

servo\_8.write(90);

delay(1000); // Wait for 1000 millisecond(s)

} else {

servo\_8.write(0);

delay(1000); // Wait for 1000 millisecond(s)

}

if (digitalRead(2) == 1) {

digitalWrite(12, HIGH);

delay(1000); // Wait for 1000 millisecond(s)

} else {

digitalWrite(12, LOW);

delay(1000); // Wait for 1000 millisecond(s)

}

if (analogRead(A0) > 300) {

digitalWrite(9, HIGH);

delay(1000); // Wait for 1000 millisecond(s)

} else {

digitalWrite(9, LOW);

delay(1000); // Wait for 1000 millisecond(s)

}

}

TINKER CAD:

