ASSIGNMENT

V.S.B. Engineering College,Karur
Department Of Electronics And Communication Engineering

Title: SmartFarmer - IoT Enabled Smart Farming Application

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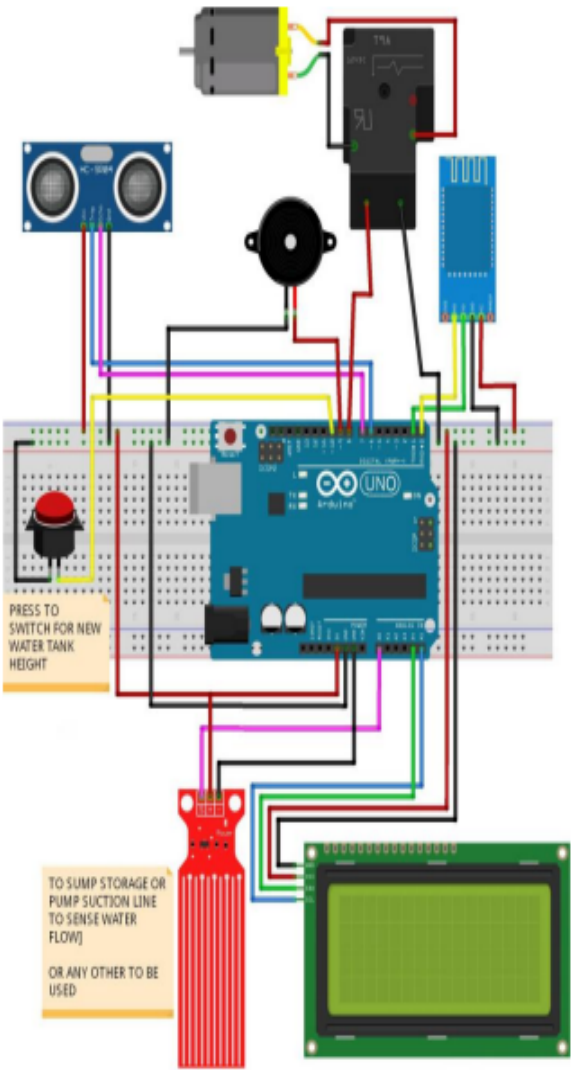
Problem:

Make s smart Home in Tinkercad using 2+ sensors, LED, Buzzers in single code and circuit

Circuit:



Code:

```
#include<SoftwareSerial.h> int bulb1 = 8;
int bulb2 = 9; int bulb3 = 10; int bulb4 = 11;

SoftwareSerial bt(0,1); /* (Rx,Tx) */ String str;
void setup() { bt.begin(9600); Serial.begin(9600);

pinMode(bulb1,OUTPUT); pinMode(bulb2,OUTPUT);pinMode(bulb3,OUTPUT);
pinMode(bulb4,OUTPUT);

}
```

```
void loop() {

if (bt.available())
{
str = bt.read(); Serial.println(str);
//bulb1
if(str==”bulb1 on”)
{
digitalWrite(bulb1,HIGH); Serial.println(“BUlB 1 is ON”);
}
else if(str==”bulb1 off”)
{
digitalWrite(bulb1,LOW); Serial.println(“BUlB 1 is OFF”);
}
else
{
digitalWrite(bulb1,LOW);
}
//bulb2
if(str==”bulb2 on”)
{
digitalWrite(bulb2,HIGH); Serial.println(“BUlB 2 is ON”);
}
else if(str==”bulb2 off”)
{
digitalWrite(bulb2,LOW); Serial.println(“BUlB 2 is OFF”);
}
else
{
digitalWrite(bulb2,LOW);
}
////bulb3
if(str==”bulb3 on”)
{
digitalWrite(bulb3,HIGH); Serial.println(“BUlB 3 is ON”);
}
else if(str==”bulb3 off”)
{
digitalWrite(bulb3,LOW); Serial.println(“BUlB 3 is OFF”);
}
else
{
digitalWrite(bulb3,LOW);
}
//bulb4
if(str==”bulb4 on”)
{
digitalWrite(bulb4,HIGH); Serial.println(“BUlB 4 is ON”);
}
else if(str==”bulb4 off”)
```

```
{
digitalWrite(bulb4,LOW); Serial.println(“BUlB 4 is OFF”);
}
else
{
digitalWrite(bulb4,LOW);
}

}
}
```