**SPRINT - 1**

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| --- | --- |
| Date | 14 November 2022 |
| Team ID | PNT2022TMID04642 |
| Project Name | Smart Farmer-IoT Enabled Smart Farming Application |

**Connecting sensors using Arduino**

#include "Arduino.h"

#include "dht.h”

#include "SoilMoisture.h"

#define dht\_apin A0

const int sensor\_pin = A1; \

//soil moisture

int pin\_out = 9;

dht DHT;

int c=0;

void setup()

{

pinMode(2, INPUT); //Pin 2 as INPUT

pinMode(3, OUTPUT); //PIN 3 as OUTPUT

pinMode(9, OUTPUT); //output for pump

}

void loop()

{

if (digitalRead(2) == HIGH)

{

digitalWrite(3, HIGH); // turn the LED/Buzz ON

delay(10000); // wait for 100 msecond

digitalWrite(3, LOW); // turn the LED/Buzz OFF

delay(100);

}

Serial.begin(9600);

delay(1000);

DHT.read11(dht\_apin); //temprature

float h=DHT.humidity;

float t=DHT.temperature;

delay(5000);

Serial.begin(9600);

float moisture\_percentage;

int sensor\_analog;

sensor\_analog = analogRead(sensor\_pin);

moisture\_percentage = ( 100 - ( (sensor\_analog/1023.00) \* 100 ) );

float m=moisture\_percentage;

delay(1000);

if(m=0) { mySerial.begin(9600);

delay(15000);

Serial.begin(9600);

delay(1000);

Serial.print("\r");

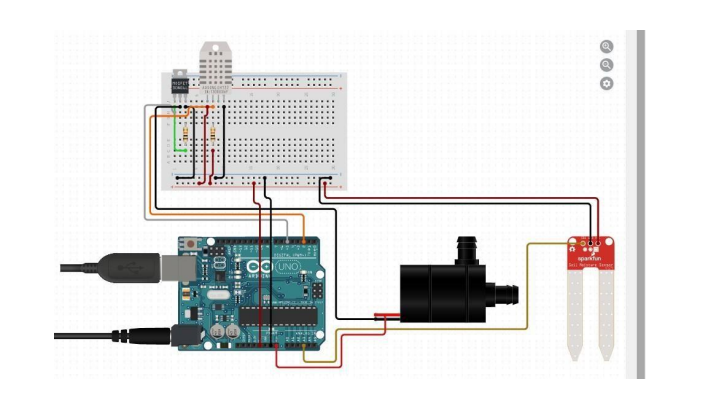
delay(1000);

Serial.print((String)"update --> "+(String)" Temprature = "+t+(String)"Humidity = "+h+(String) "Moisture = "+m);

delay(1000);

}

}

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