Sprint Delivery - 1

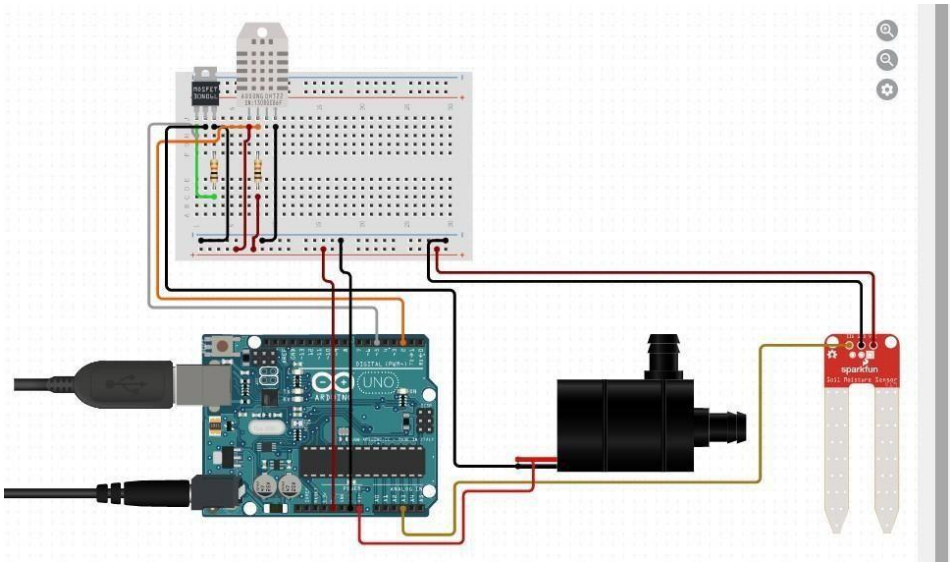
Team ID: PNT2022TMID29912

Connecting Sensors with 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<40)//pump
   { while(m<40)
   {       digitalWrite(pin_out,HIGH);       //open pump
sensor_analog = analogRead(sensor_pin);
   moisture_percentage = ( 100 - ( (sensor_analog/1023.00) * 100 )
   ); m=moisture_percentage; delay(1000);
   }
   digitalWrite(pin_out,LOW);                    //closepump
   } if(c>=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);
      }

  }
```

Circuit Diagram


UNO
sparkfun