Project Development Phase

SPRINT-1

Team ID	PNT2022TMID19466
Project Title	Smart Farmer – IoT enabled Smart Farming Application
Date	11-11-2022

CODE:

```
#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);
}
}
```

CIRCUIT CONNECTION DIAGRAM: