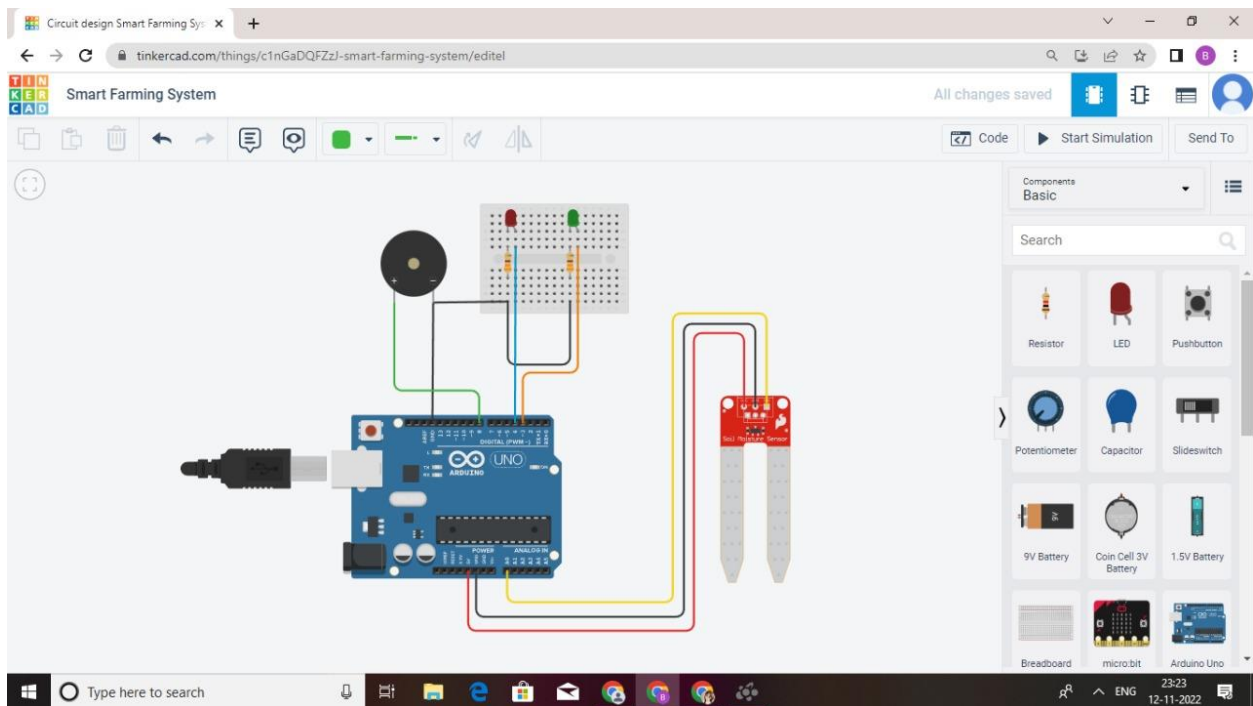


SPRINT 1

Date	29 October 2022
Team ID	PNT2022TMID30750
Project Name	Project - SmartFarmer - IoT Enabled Smart Farming Application

- Created Simulation by connecting the Sensors by using the Arduino.



Circuit design Smart Farming: x

tinkercad.com/things/c1nGaDQFZzJ-smart-farming-system/editel

Smart Farming System

Connection lost! Changes will be saved on reconnect.

Simulator time: 00:00:07.766

Code Stop Simulation Send To

1 (Arduino Uno R3)

Output Control Input Math Notation Variables

set built-in LED to HIGH

set pin 0 to HIGH

set pin 3 to 0

rotate servo on pin 0 to 0 degree

Serial Monitor

0
0
0
0
0
0
0

Send Clear

Circuit design Smart Farming Sys: x

tinkercad.com/things/c1nGaDQFZzJ-smart-farming-system/editel

Smart Farming System

Connection lost! Changes will be saved on reconnect.

Simulator time: 00:00:27

Code Stop Simulation Send To

1 (Arduino Uno R3)

Soil Moisture Sensor

Name 1

Output Control Input Math Notation Variables

set built-in LED to HIGH

set pin 0 to HIGH

set pin 3 to 0

rotate servo on pin 0 to 0 degree

Serial Monitor

876
876
876
876
876
876
8

Send Clear

Code:

```
#include <LiquidCrystal.h>
LiquidCrystal lcd = LiquidCrystal(10,9,8,7,6,5); // Create an LCD object.
Parameters: (RS, E, D4, D5, D6, D7):
const int trigPin = 12;
const int echoPin = 11;
float time, distance;
void setup()
{
    lcd.begin(16, 2); // Specify the LCD's number of columns and rows.
    Change to (20, 4) for a 20x4 LCD
    pinMode(trigPin, OUTPUT);
    pinMode(echoPin, INPUT);
    Serial.begin(9600);
}

void loop()
{
    digitalWrite(trigPin, LOW);
    delayMicroseconds(2);
    digitalWrite(trigPin, HIGH);
    delayMicroseconds(10);
    digitalWrite(trigPin, LOW);

    time = pulseIn(echoPin, HIGH);

    distance = (time*.0343)/2;

    // For Serial Monitor
    Serial.print("Distance:CM ");
    Serial.println(distance);

    // For LCD Display
    lcd.setCursor(0,0);
    lcd.print("Distance in CM");
    lcd.setCursor(0,1);
    lcd.print(distance);
}
```