# PROJECT DEVELOPMENT DELIVERY OF SPRINT-4
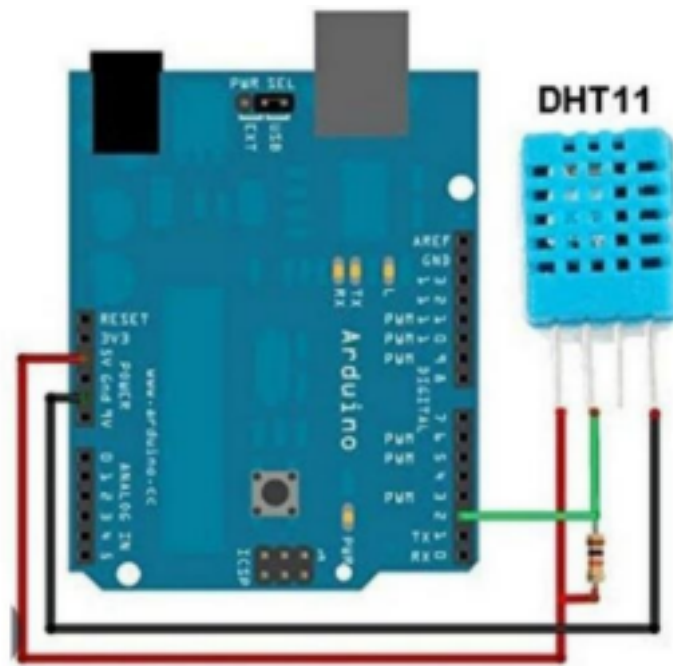
| TEAM ID: | PNT2022TMID52180 |
|---|---|
| PROJECT NAME: | IOT BASED SMART CROP PROTECTION SYSTEM FOR  AGRICULTURE |

## An introduction to IOT based smart crop protection system for Agriculture:
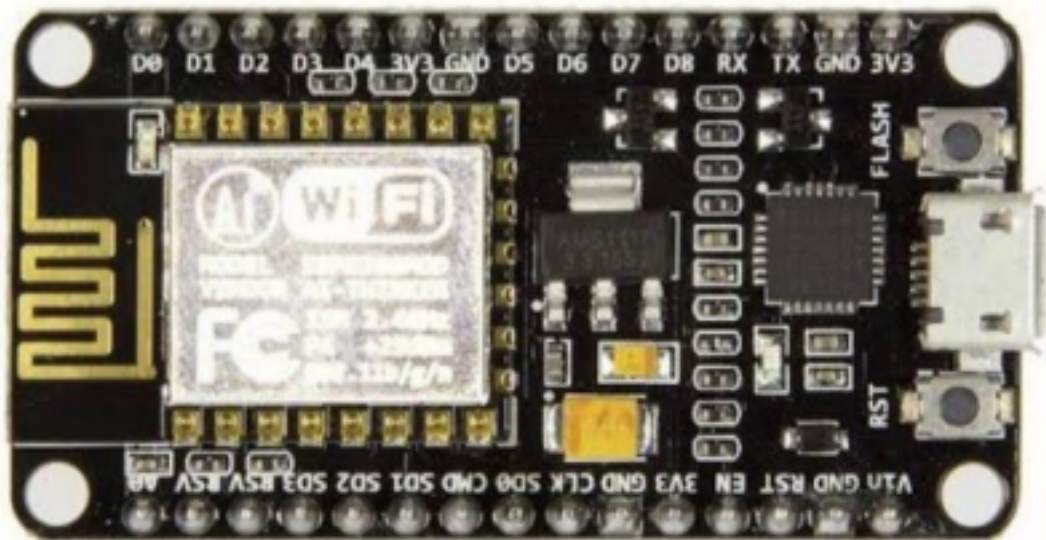
 In every country agriculture is done from ages which are considered to  be science and also art of cultivating plants. In day to day life, technology is updating and it is also necessary to trend up agriculture too. Internet of Things (IOT) sensors are used to provide necessary information about agriculture fields. The main advantage of IOT is to monitor agriculture by using the wireless sensor networks and collect the data from different sensors which  are deployed at various nodes and sent by wireless protocols.

## HOW DOES THE SYSTEM WORKS:

In this project the temperature and humidity of the soil is monitored by the DHT11 Sensor. The components required are Arduino UNO, DHT11 Sensor, Node MCU, power supply, Jumper wire, 16*2 LCD Display, 9V DC battery. The system used in the project is Arduino. In this project we built a small circuit to interface Arduino with DHT11 Sensor. One of the main applications of connecting DHT11 Sensor with Arduino is weather monitoring. The DHT11 sensor uses a capacitive humidity sensor and thermistor to measure the surrounding air and split out the digital signal on the data pin. The DHT11 Sensor which is interfaced with Arduino which is a microcontroller. The data that are sensed from the field using the DHT11 Sensor are stored in the IBM Cloud and then it will alert the user.

Arduino UNO



Node MCU