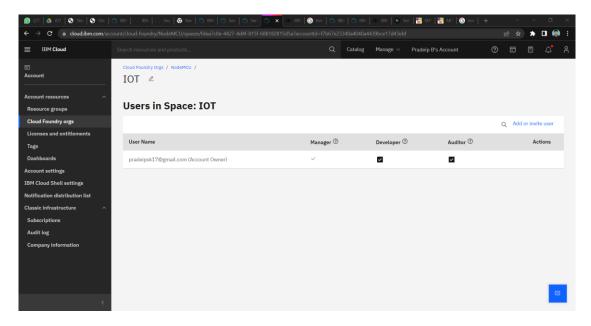
## **SPRINT 1**

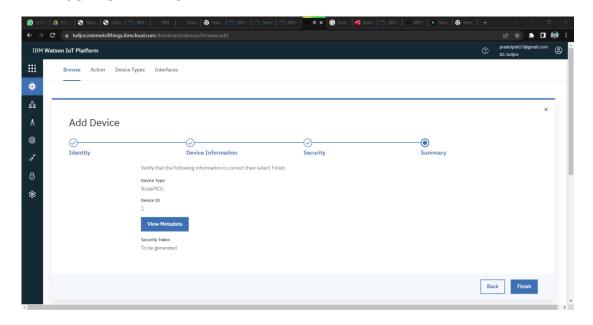
Date	29 October 2022
Team ID	PNT2022TMID12920
Project Name	Smart Farmer – IoT Enabled Farming Application
Maximum Marks	8 Marks

An account has been created on the respective platforms like IBM Cloud, IBM Watson, Node-Red, MIT App Inventor.

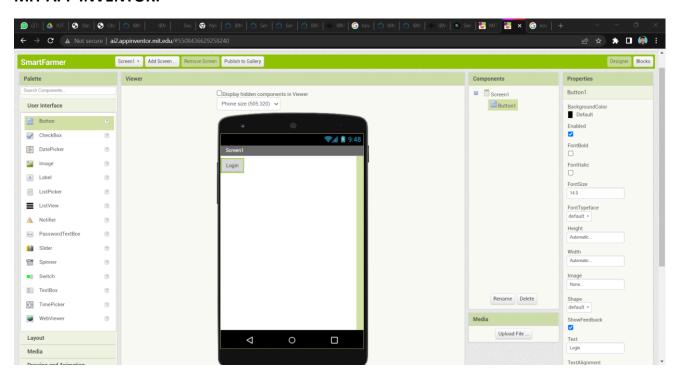
## **IBM CLOUD DASHBOARD:**



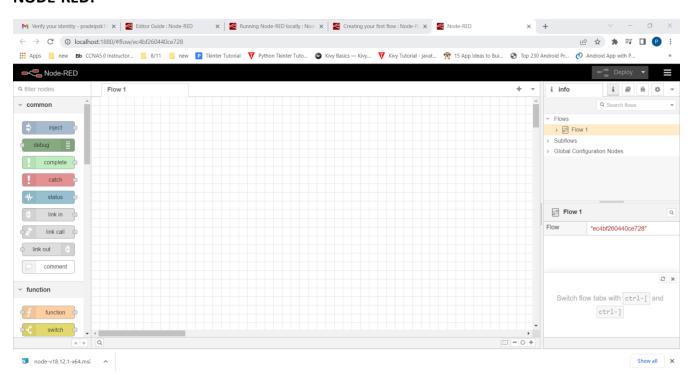
# **IBM WATSON IOT PLATFORM:**



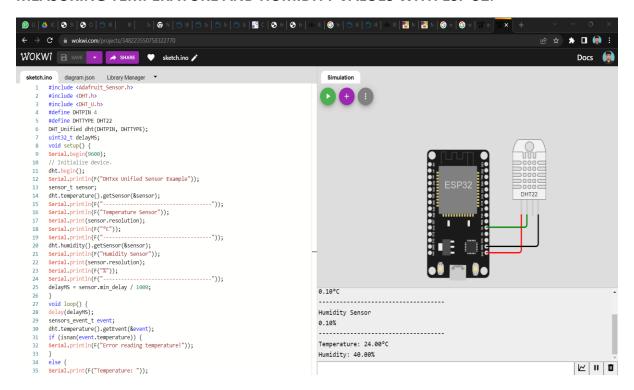
#### **MIT APP INVENTOR:**



#### **NODE-RED:**



#### **MEASURING TEMPERATURE AND HUMIDITY VALUES WITH ESP 32:**



### **Program:**

```
#include <Adafruit_Sensor.h>
#include <DHT.h>
#include <DHT U.h>
#define DHTPIN 4
#define DHTTYPE DHT22
DHT Unified dht(DHTPIN, DHTTYPE);
uint32_t delayMS;
void setup() {
Serial.begin(9600);
// Initialize device.
dht.begin();
Serial.println(F("DHTxx Unified Sensor Example"));
sensor_t sensor;
dht.temperature().getSensor(&sensor);
Serial.println(F("-----"));
Serial.println(F("Temperature Sensor"));
Serial.print(sensor.resolution);
Serial.println(F("°C"));
Serial.println(F("-----
                             -----"));
dht.humidity().getSensor(&sensor);
Serial.println(F("Humidity Sensor"));
Serial.print(sensor.resolution);
Serial.println(F("%"));
Serial.println(F("-----"));
delayMS = sensor.min_delay / 1000;
```

```
}
void loop() {
delay(delayMS);
sensors_event_t event;
dht.temperature().getEvent(&event);
if (isnan(event.temperature)) {
Serial.println(F("Error reading temperature!"));
}
else {
Serial.print(F("Temperature: "));
Serial.print(event.temperature);
Serial.println(F("°C"));
}
dht.humidity().getEvent(&event);
if (isnan(event.relative_humidity)) {
Serial.println(F("Error reading humidity!"));
}
else {
Serial.print(F("Humidity: "));
Serial.print(event.relative_humidity);
Serial.println(F("%"));
}
}
```

Wokwi editor window link: <a href="https://wokwi.com/projects/348223550758322770">https://wokwi.com/projects/348223550758322770</a>