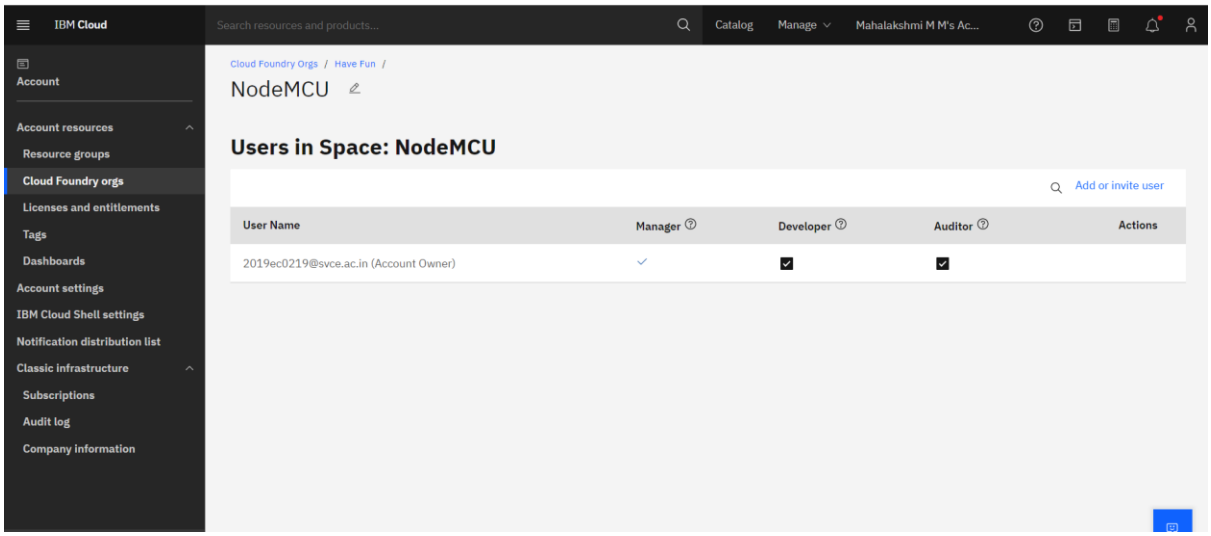
SPRINT 1

Date	29 October 2022
Team ID	PNT2022TMID53631
Project Name	Smart Farmer – IOT Enabled Smart Farming Application
Maximum Marks	8 Marks

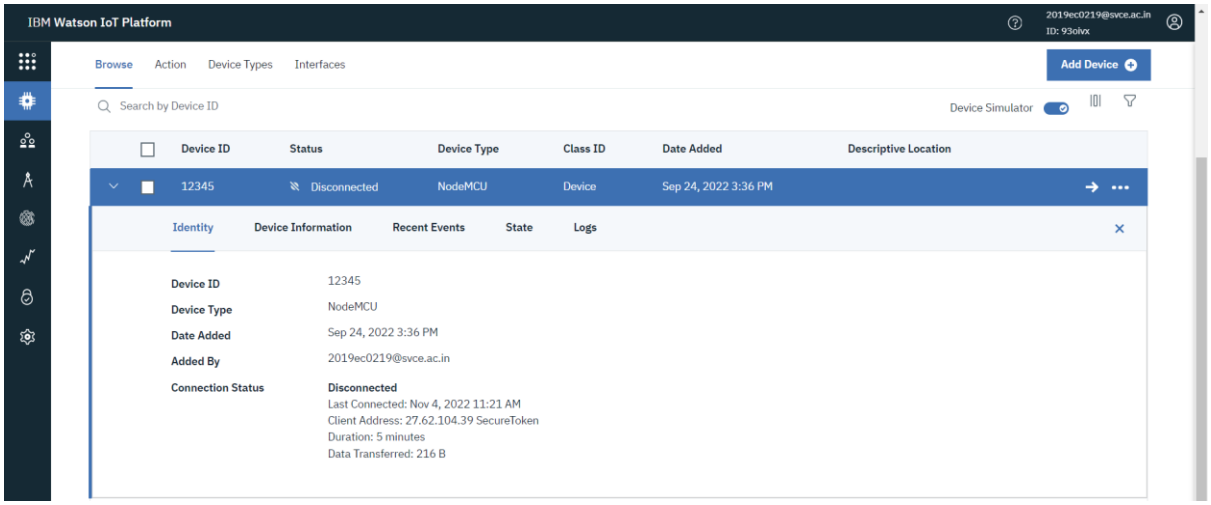
Configuration:

An account has been created on the required platforms (IBM Cloud, IBM Watson, Node-Red, MIT App Inventor)

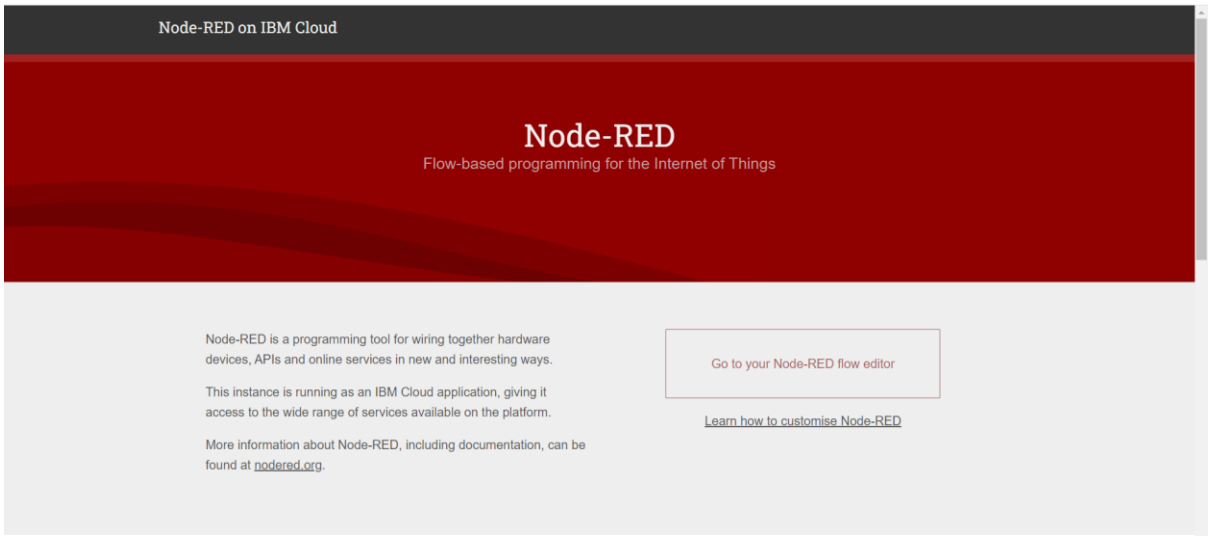
IBM Cloud:



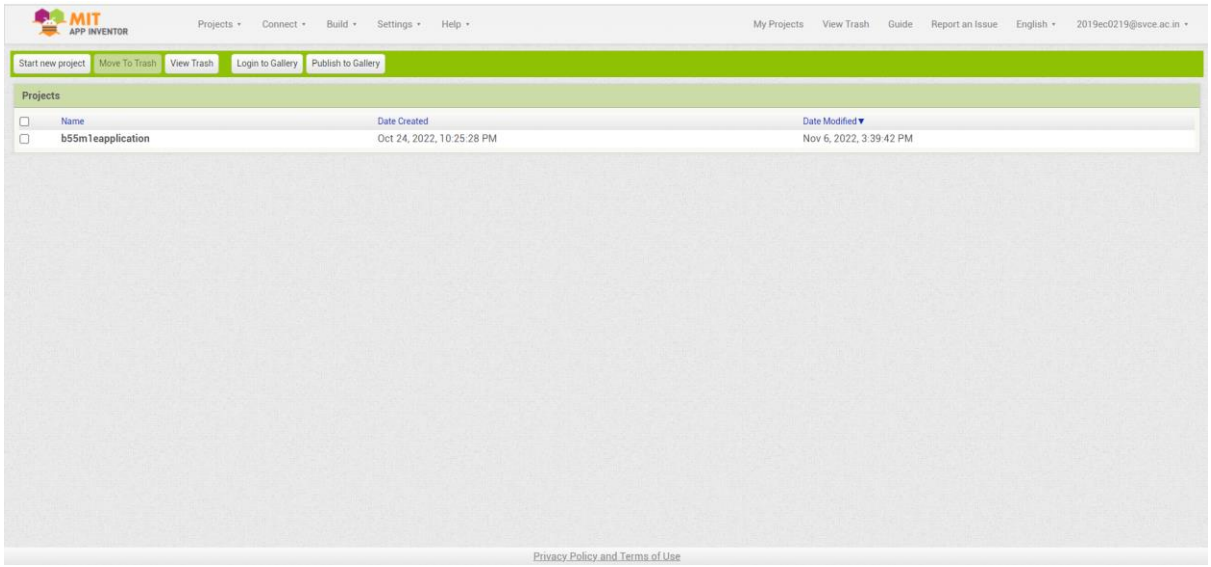
IBM Watson:



Node-Red:



MIT App Inventor:



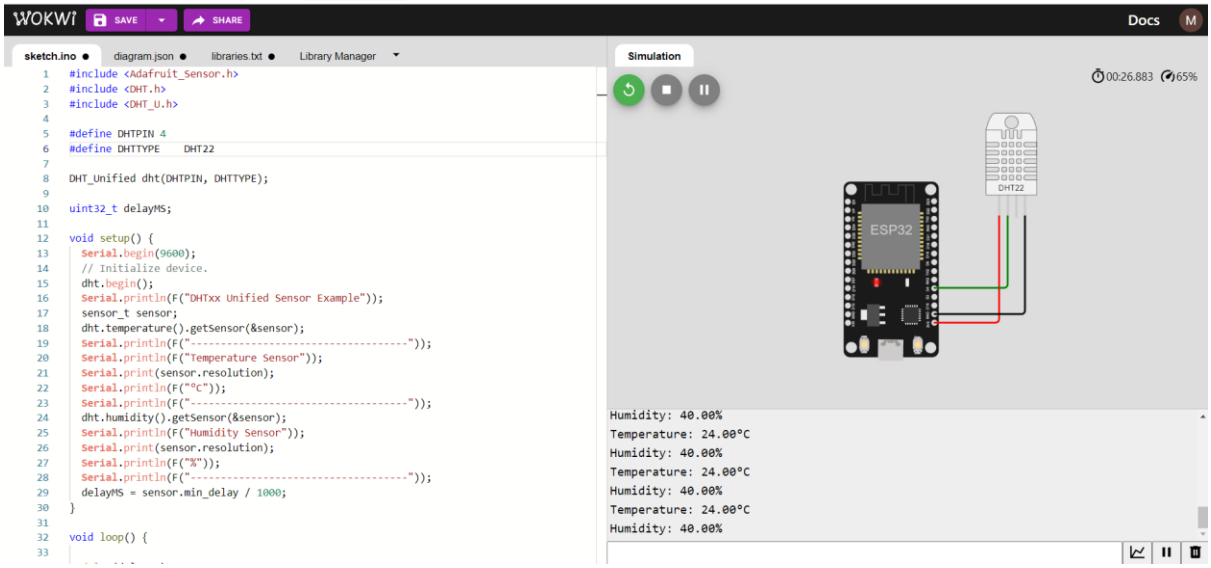
Simulation:

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("%"));
  }
}
```

OUTPUT:

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