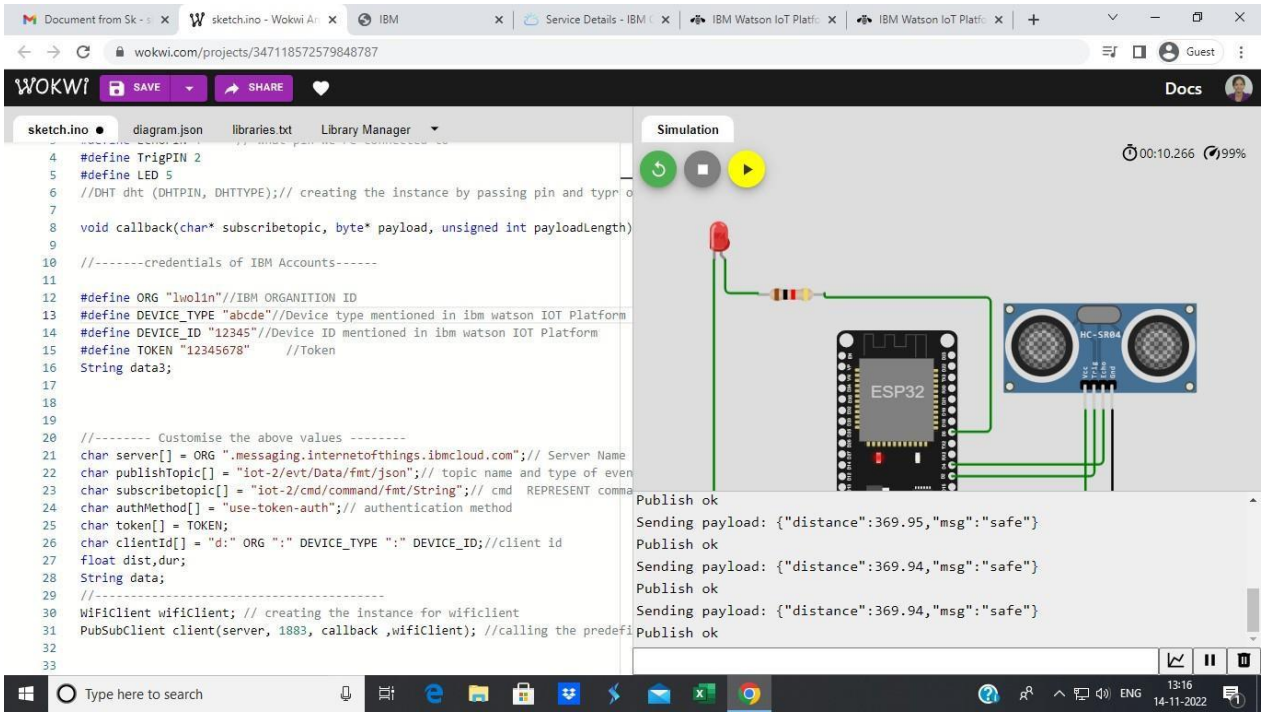
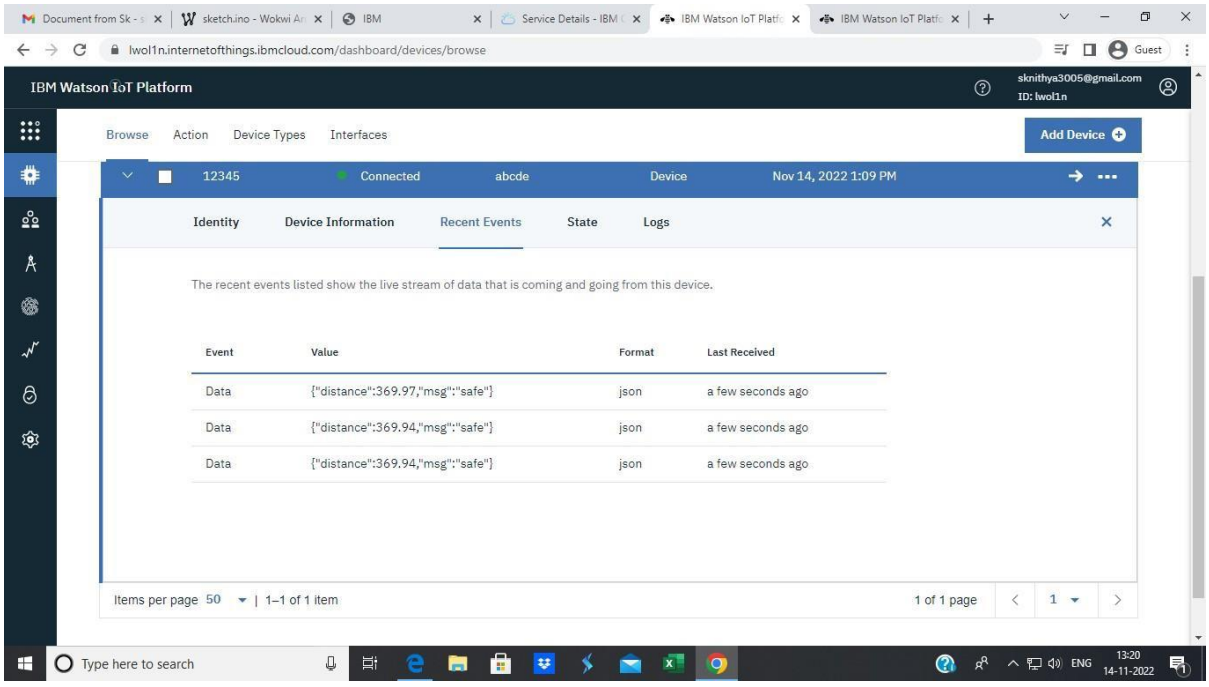
ASSIGNMENT 4

IOT BASED SMART CROP PROTECTION SYSTEM FOR AGRICULTURE

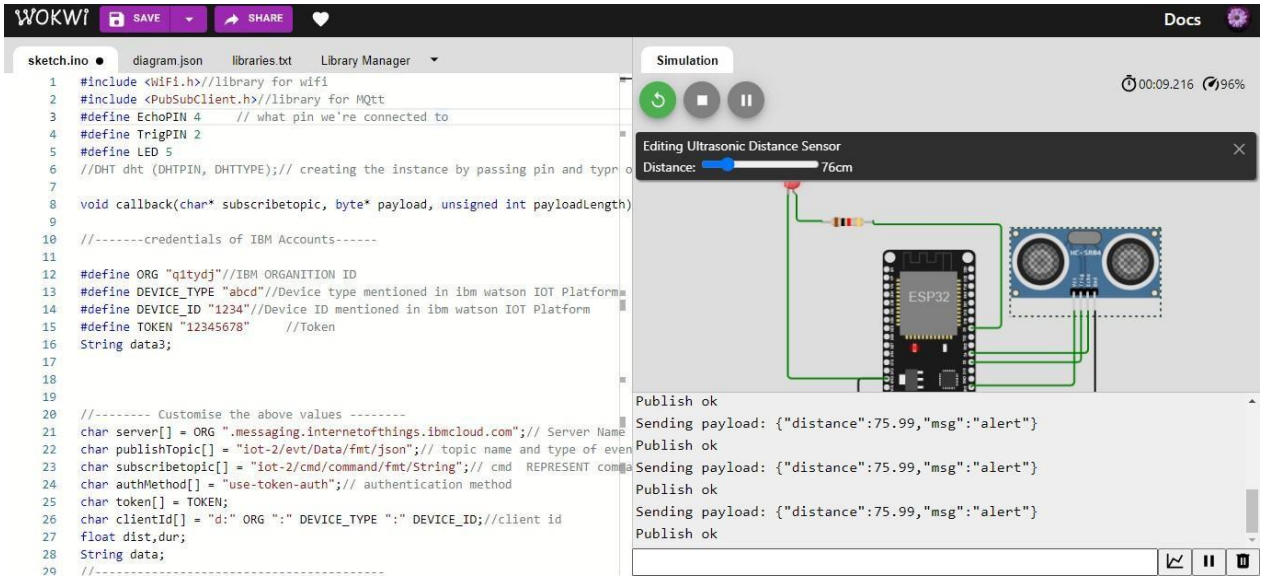
WowkiLink:https://wokwi.com/projects/348470251436900946

Distance when greater than 100cm-no alert sent to IBM CLOUD





Distance when less than 100cm-no alert sent to IBM CLOUD




```
#include <WiFi.h>//library for wifi
#include <PubSubClient.h>//library for MQtt
#define EchoPIN 4      // what pin we're connected to
#define TrigPIN 2
#define LED 5
//DHT dht (DHTPIN, DHTTYPE);// creating the instance by passing pin and typr o

void callback(char* subscribetopic, byte* payload, unsigned int payloadLength)

//-------credentials of IBM Accounts------

#define ORG "q1tydj"//IBM ORGANITION ID
#define DEVICE_TYPE "abcd"//Device type mentioned in ibm watson IOT Platform
#define DEVICE_ID "1234"//Device ID mentioned in ibm watson IOT Platform
#define TOKEN "12345678"      //Token
String data3;



//-------- Customise the above values --------
char server[] = ORG ".messaging.internetofthings.ibmcloud.com";// Server Name
char publishTopic[] = "iot-2/evt/Data/fmt/json";// topic name and type of even
char subscribetopic[] = "iot-2/cmd/command/fmt/String";// cmd  REPRESENT com
char authMethod[] = "use-token-auth";// authentication method
char token[] = TOKEN;
char clientId[] = "d:" ORG ":" DEVICE_TYPE ":" DEVICE_ID;//client id
float dist,dur;
String data;
//----------------------------------------
```