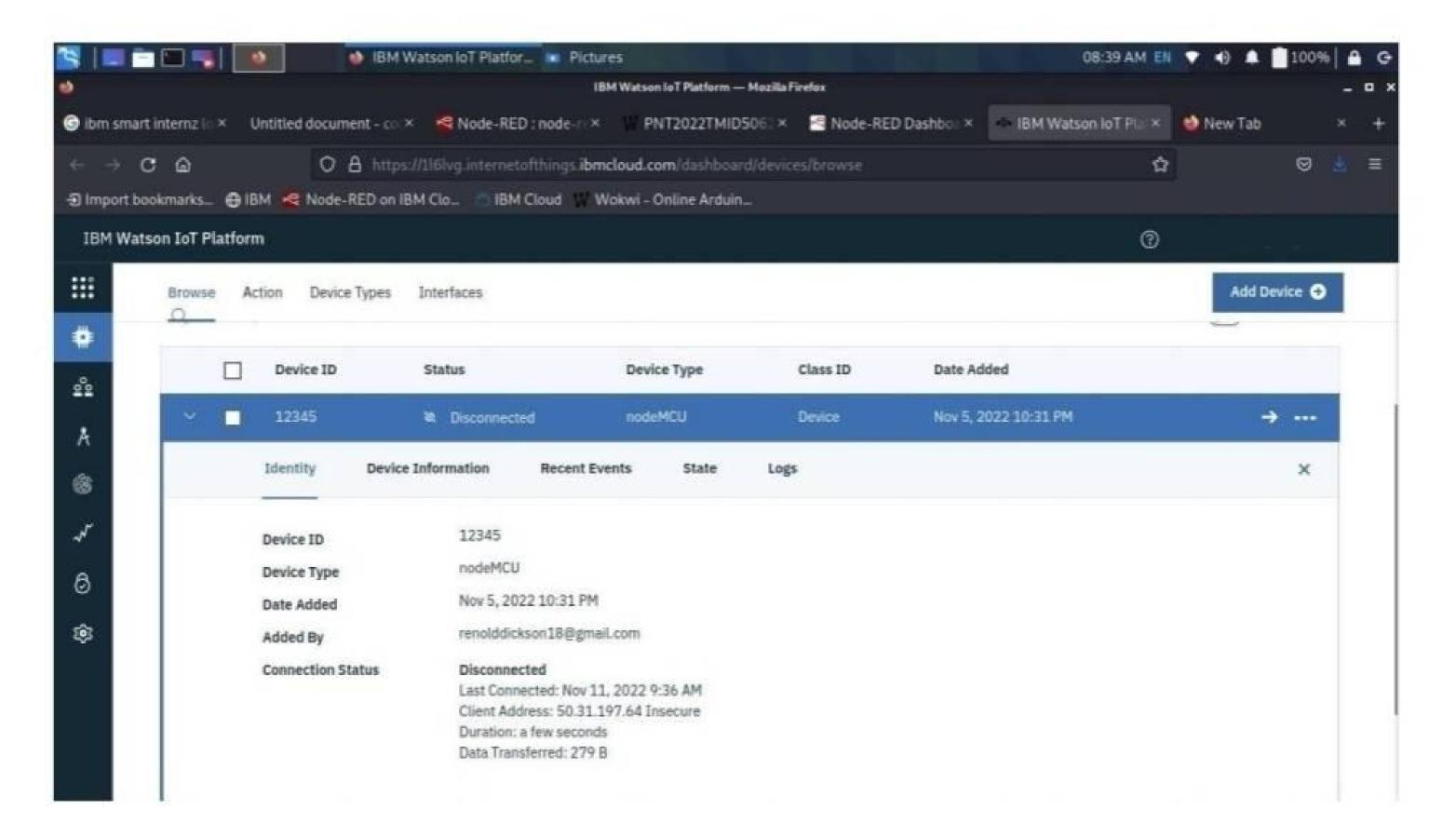
# SPRINT - 1

Team ID	PNT2022TMID50941
Project Name	Personal Assistance for Seniors Who are self-reliant
Date	15November2022

#### Created IOT device config in IBM IOT watson



### Connected IBM IOT watson cloud with wokwi(nodemcu)

Wokwi url: https://wokwi.com/projects/347406552336958036

## Code:

#include<WiFi.h>//library for wifi module #include<PubSubClient.h>//library for
MQTT void callback(char\* subscribetopic, byte\* payload,unsigned int
payloadlength);

//----credentials of IBM Account-----

#define ORG "twoqgm"// IBM ORGANIZATION ID

#define DEVICE\_TYPE "nodemcu"//DEVICE TYPE MENTIONED IN IOT WATSON PLATFORM #define DEVICE\_ID "11111"//DEVICE ID MENTIONED IN IOT WATSON PLATEFORM

```
#define TOKEN "XsgsvH8+*w4p2Y_XQO"//Token
String data3;
float dist:
//----customize the above value----char server[]=ORG
".messaging.internetofthings.ibmcloud.com";//server name char
publishtopic[]="ultrasonic/evt/Data/fmt/json";/*topic name and type of event perform and format
in which data to be send*/
char subscribetopic[]="ultrasonic/cmd/test/fmt/String";/*cmd REPRESENT Command tupe and
COMMAND IS TEST OF FORMAT STRING*/char authMethod[]="use-token-
auth";//authentication method char token[]=TOKEN; char clientid[]="d:" ORG ":"
DEVICE_TYPE":" DEVICE_ID;//CLIENT ID
//-----
WiFiClient wifiClient;// creating an instance for wificlient
PubSubClient client(server, 1883, wifiClient); void setup()
Serial.begin(115200);
wificonnect(); mqttconnect();
void loop()//recursive function
if (!client.loop()){
mqttconnect();
/*.....retriving to cloud.....*/ void
mqttconnect(){ if(!client.connected()){
Serial.print("Reconnecting client to ");
Serial.println(server);
while(!!!client.connect(clientid,authMethod,
token)){ Serial.print("."); delay(500); }
initManagedDevice();
Serial.println();
} else{
Serial.println("Connected:)");
} } void wificonnect()//function defenition for wificonnects
Serial.println();
Serial.print("Connecting to ");
WiFi.begin("Wokwi-GUEST", "",6);//PASSING THE WIFI CREDIDENTIALS TO ESTABLISH
CONNECTION
while (WiFi.status() !=WL_CONNECTED){delay(500);
Serial.print(".");
Serial.println("");
Serial.println("WiFi connected");
```

```
Serial.println("IP address");
Serial.println(WiFi.localIP()); }
void initManagedDevice(){
if(client.subscribe(subscribetopic)){
Serial.println((subscribetopic));
Serial.println("subscribe to cmd OK");
}else{
Serial.println("subscribe to cmd failed");
   Personal Assistant For Sx Personal Assistant For Sx Service Details - IBM Clo x
                                                                               IBM Watson IoT Platfor X
                                                                                                        sketch.ino - Wokwi Ard
              wokwi.com/projects/347406552336958036
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          #include<WiFi.h>//library for wifi module
          #include<PubSubClient.h>//library for MQTT
          void callback(char* subscribetopic, byte* payload,unsigned int payload)
          //----credentials of IBM Account-----
          #define ORG "twoqgm"// IBM ORGANIZATION ID
          #define DEVICE TYPE "nodemou"//DEVICE TYPE MENTIONED IN IOT WATSON PLE
           #define DEVICE ID "11111"//DEVICE ID MENTIONED IN IOT WATSON PLATEFORM
          #define TOKEN "XsgsvH8+"w4p2Y XQO"//Token
          String data3;
      10 float dist;
      11 //----customize the above value-----
      12 char server[]=ORG ".messaging.internetofthings.ibmcloud.com";//server r
      13 char publishtopic[]="ultrasonic/evt/Data/fmt/json";/"topic name and typ
      14 and format in which data to be send*/
      15 char subscribetopic[]="ultrasonic/cmd/test/fmt/String";/*cmd REPRESENT
      16 COMMAND IS TEST OF FORMAT STRING*/
      17 char authMethod[]="use-token-auth";//authentication method
                                                                          Connecting to ....
      18 char token[]=TOKEN;
      19 char clientid[]="d:" ORG ":" DEVICE TYPE":" DEVICE ID;//CLIENT ID
                                                                          WiFi connected
      20 //------
                                                                          IP address
      21 WiFiClient wifiClient;// creating an instance for wificlient
                                                                          10.10.0.2
          PubSubClient client(server, 1883 , wifiClient);
                                                                           Reconnecting client to
      23
      24
                                                                           twoqgm.messaging.internetofthings.ibmcloud.com
          void setup()
      25
                                                                           ultrasonic/cmd/test/fmt/String
      26 {
                                                                           subscribe to cmd OK
            Serial.begin(115200);
      27
            wificonnect();
                                                                                                                                        ₩ ▶
      79 mattconnect():
```

#### Jira process:

Url: https://pnt2022tmid50622.atlassian.net/jira/software/projects/PAFSCII/boards/1

