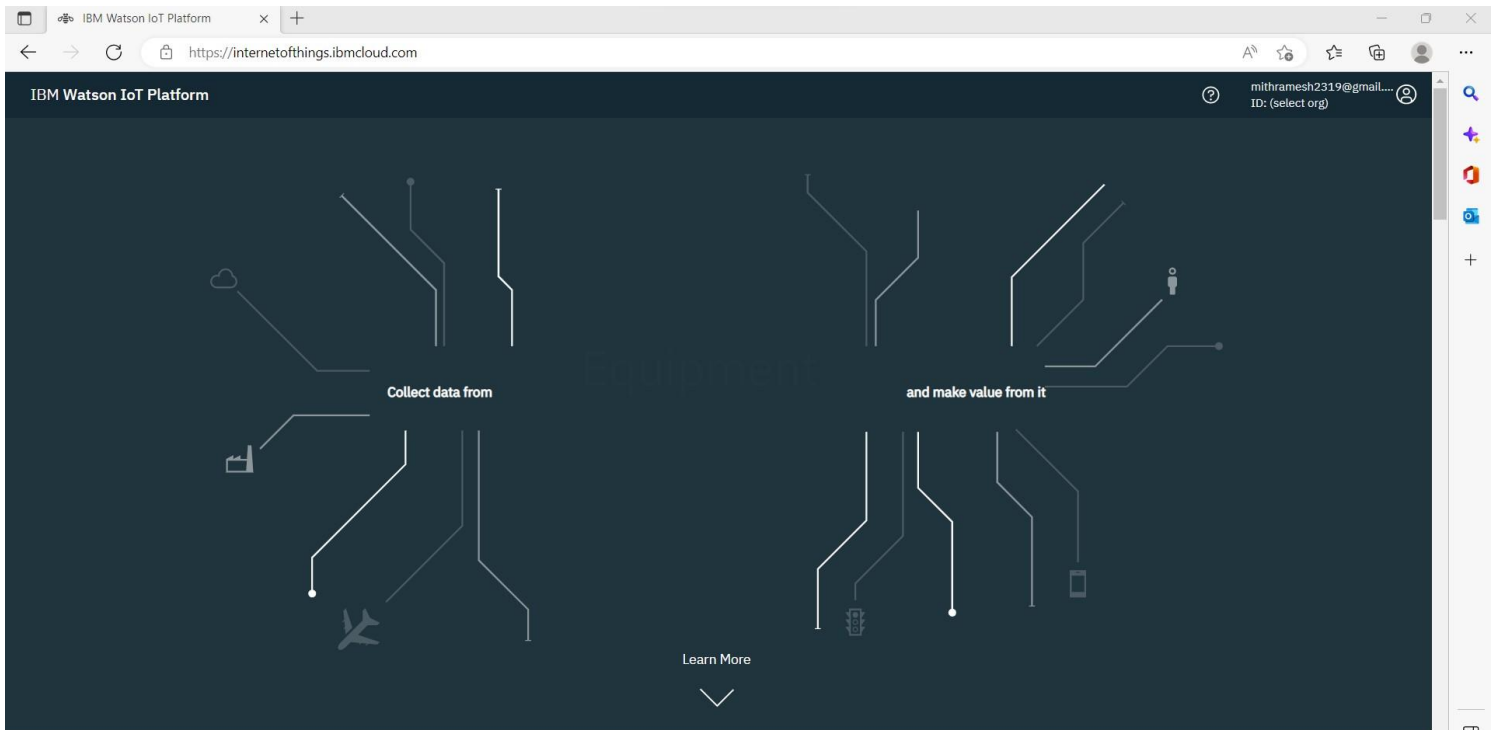


## SPRINT -1

### Creating IBM Cloud Service and creating the device:



Cookie Preferences

https://8h4w3h.internetofthings.ibmcloud.com/dashboard/devices/browse

IBM Watson IoT Platform

mithramesh2319@gmail.com  
ID: 8h4w3h

Browse Action Device Types Interfaces

Add Device +

Device ID	Status	Device Type	Class ID	Date Added	Descriptive Location
BME280_Sensor	Disconnected	ESP32_Controller	Device	12 Nov 2022 22:36	
ESP32_Controller_1	Connected	ESP32_Controller	Device	17 Nov 2022 21:36	

Identity Device Information Recent Events State Logs

Device ID: ESP32\_Controller\_1  
Device Type: ESP32\_Controller  
Date Added: 17 Nov 2022 21:36  
Added By: mithramesh2319@gmail.com  
Connection Status: **Connected**  
Connection Time: 17 Nov 2022 21:37  
Client Address: 157.51.181.212 SecureToken

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1 of 1 page

2 Simulations running

## Creating Python Code:

```
import time

import sys

import ibmiotf.application

import ibmiotf.device

import random

#Provide your IBM Watson Device Credentials

organization = "zwx6lb"

deviceType = "ABCD"

deviceId = "13"

authMethod = "token"

authToken = "12345678"

#api key {a-illza1-mbdxqo6z0s}

#api token {zSYzISuAWF&F_x7GkT}


try:

    deviceOptions = {"org": organization, "type": deviceType, "id": deviceId, "auth-method":
authMethod, "auth-token": authToken}

    deviceCli = ibmiotf.device.Client(deviceOptions)

    #.....

except Exception as e:

    print("Caught exception connecting device: %s" % str(e))

    sys.exit()


# Connect and send a datapoint "hello" with value "world" into the cloud as an event of type
"greeting" 10 times

print("power on ")

print("checking connection to waston iot  ")
```

```

time.sleep(2)
deviceCli.connect()
print("dear user ... welcome to IBM-IOT ")
print("i can provide your children live location and temperature ")
print()
name=str(input("enter your child name:"))
while True:

    temperature=random.randint(20,50)#random temperature for your child
    latitude=random.uniform(10.781377,10.78643)#random latitude for your child
    longitude=random.uniform(79.129113,79.134014)#random longitude for your child
    a="Child inside the geofence"
    b=" Child outside the geofence"
    c="High temperature"
    d="Low temperature"
    x={'your_child_Zone':a}
    y={'your_child_Zone':b}
    z={'temp_condition':c}
    w={'temp_condition':d}

    data = { 'temp' : temperature, 'lat': latitude,'lon':longitude,'name':name }
    #print data
    def myOnPublishCallback()

```

```

        print ("Published Temperature = %s C" % temperature, "latitude = %s %" % latitude,
"longitude = %s %" % longitude, "to IBM Watson")

        print("\n")

        success = deviceCli.publishEvent("IoTSensorgpsdata", "json", data, qos=0,
on_publish=myOnPublishCallback)

        if latitude>=10.78200 and latitude<=10.786000 and longitude >=79.130000 and longitude
<=79.133000:

deviceCli.publishEvent("IoTSensorgpsdata","json",data=x,qos=0,on_publish=myOnPublishCall
back)

        print(x)

        print("\n")

    else:

deviceCli.publishEvent("IoTSensorgpsdata","json",data=y,qos=0,on_publish=myOnPublishCallb
ack)

        print(y)

        print("\n")


    if (temperature>35):

deviceCli.publishEvent("IoTSensorgpsdata","json",data=z,qos=0,on_publish=myOnPublishCallb
ack)

        print(c)

        print("\n")

    else:

deviceCli.publishEvent("IoTSensorgpsdata","json",data=w,qos=0,on_publish=myOnPublishCall
back)

        print(d)

```

```
print("\n")
```

if not success:

```
print("Not connected to IoT")
```

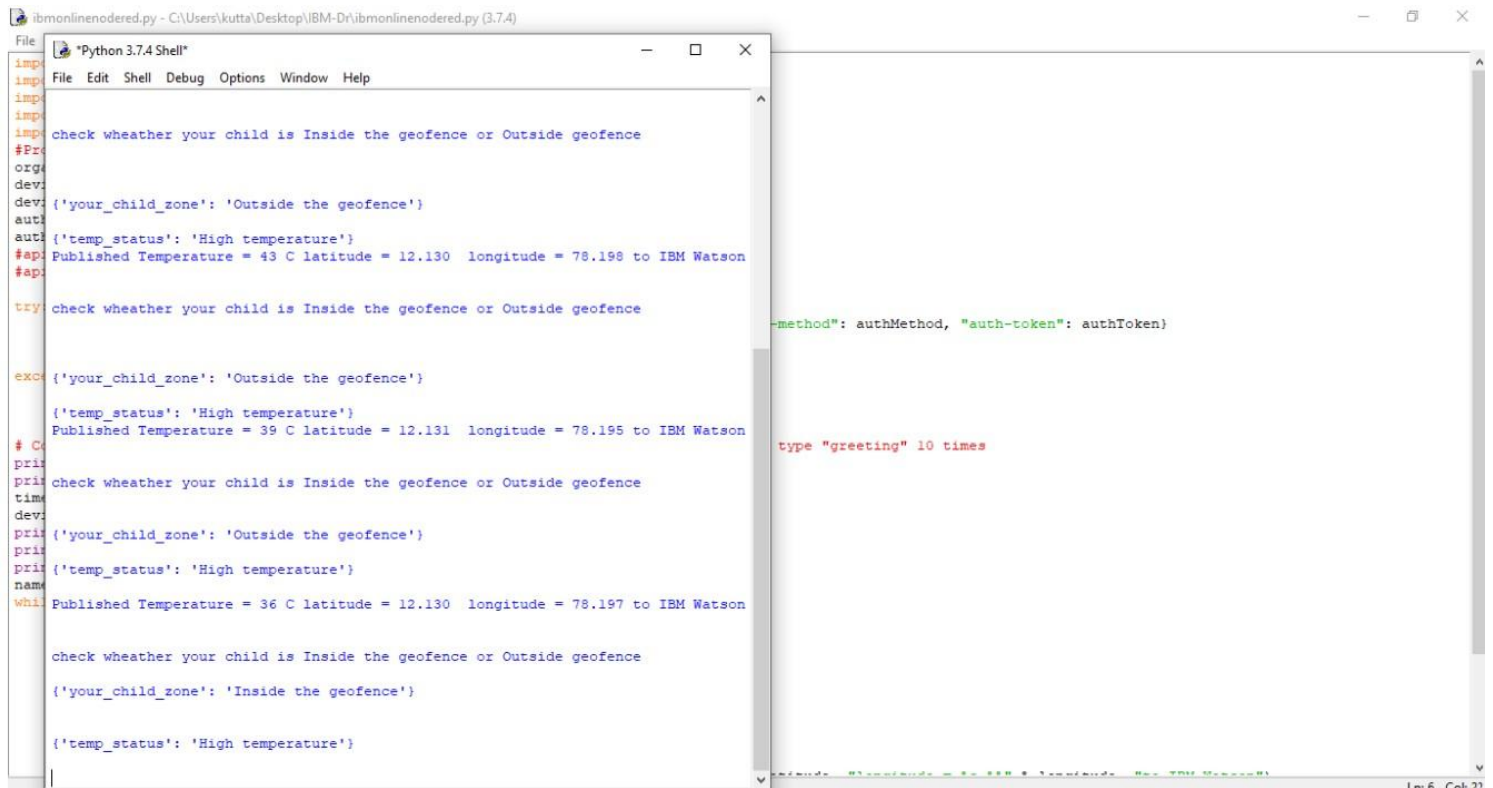
```
print("\n")
```

```
time.sleep(3)
```

## # Disconnect the device and application from the cloud

```
deviceCli.disconnect()
```

## Connecting IBM Watson and python Code:



Browse

Action

Device Types

Interfaces

Add Device +

13

Connected

ABCD

Device

Nov 2, 2022 10:55 PM

→ ...

Identity

Device Information

Recent Events

State

Logs

X

The recent events listed show the live stream of data that is coming and going from this device.

Event	Value	Format	Last Received
IoTSensorgp...	{"temp_status":"High temperature"}	json	a few seconds ago
IoTSensorgp...	{"your_child_zone":"Outside the geofence"}	json	a few seconds ago
IoTSensorgp...	{"temp":50,"lat":12.132819998043411,"lon":78...	json	a few seconds ago
IoTSensorgp...	{"temp_status":"Low temperature"}	1 Simulation running	
IoTSensorgp...	{"your_child_zone":"Outside the geofence"}		