IOT Based Safety Gadget for Child Safety Monitoring and Notification

Project Development –Delivery of Sprint 1

Creating and Connecting IBM cloud for Project and Python Code

TITLE	IOT based child safety gadget for child safety monitoring and notification
DOMAIN NAME	INTERNET OF THINGS
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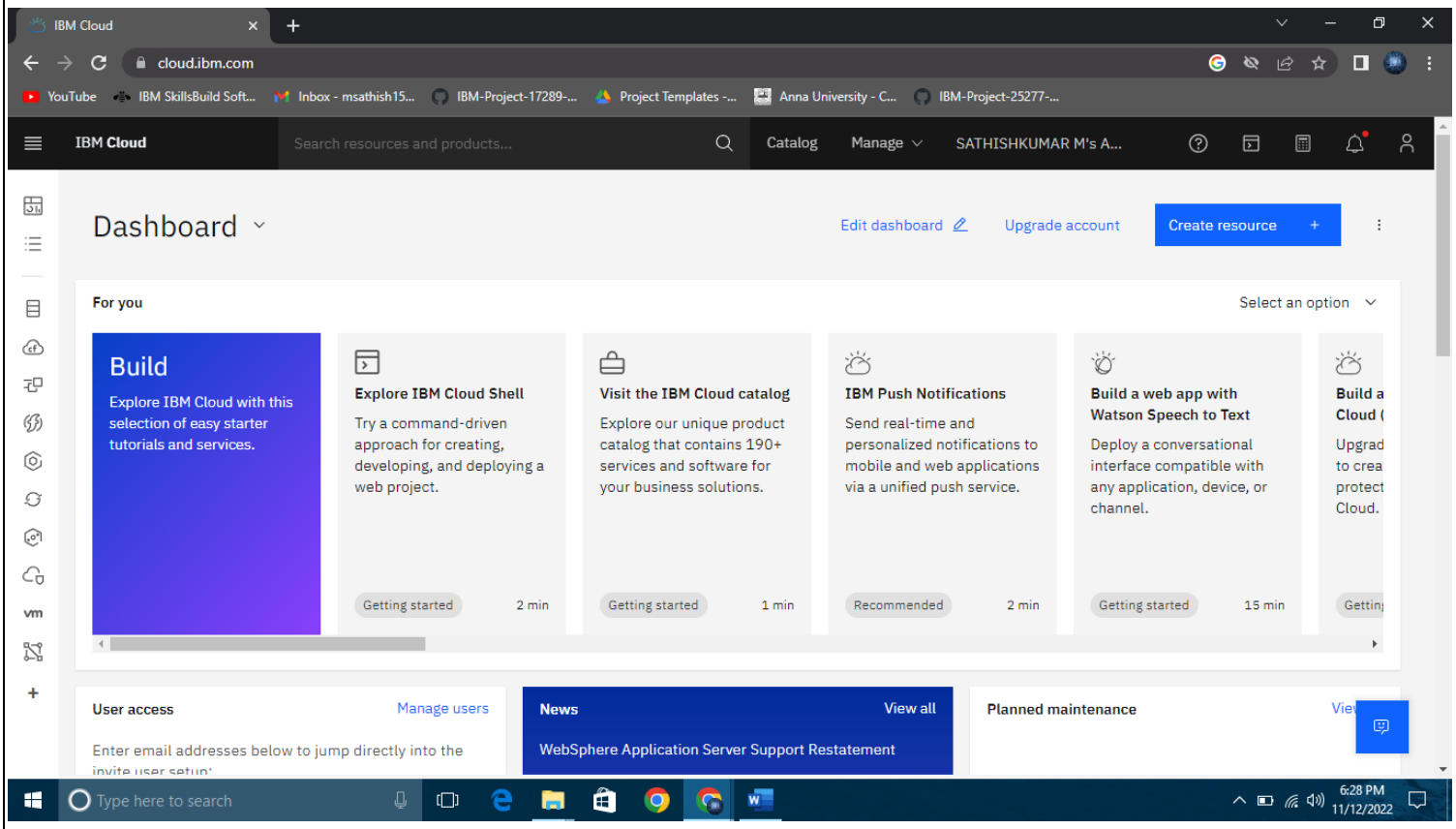
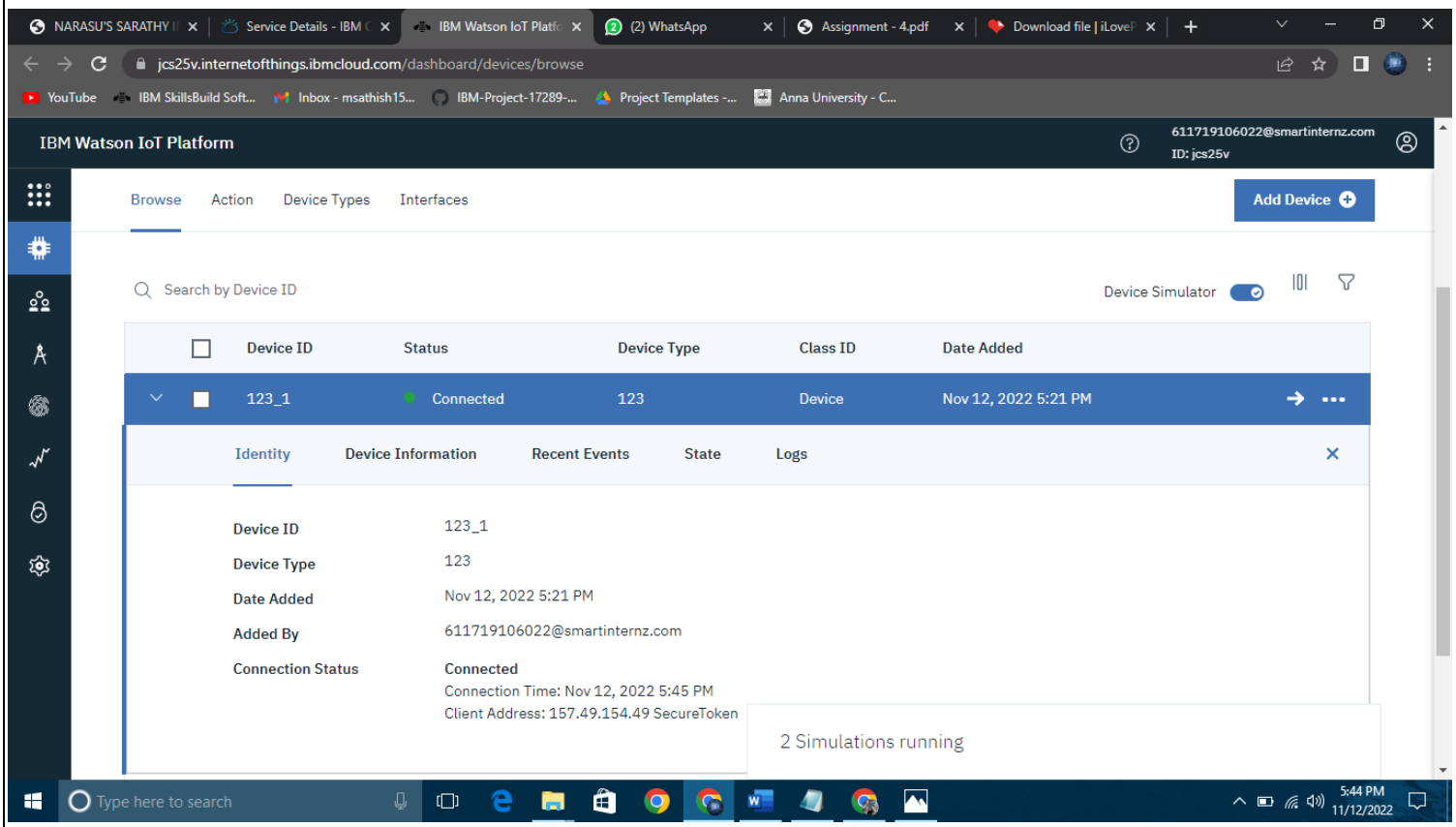
Creating IBM Cloud Service and creating the device:





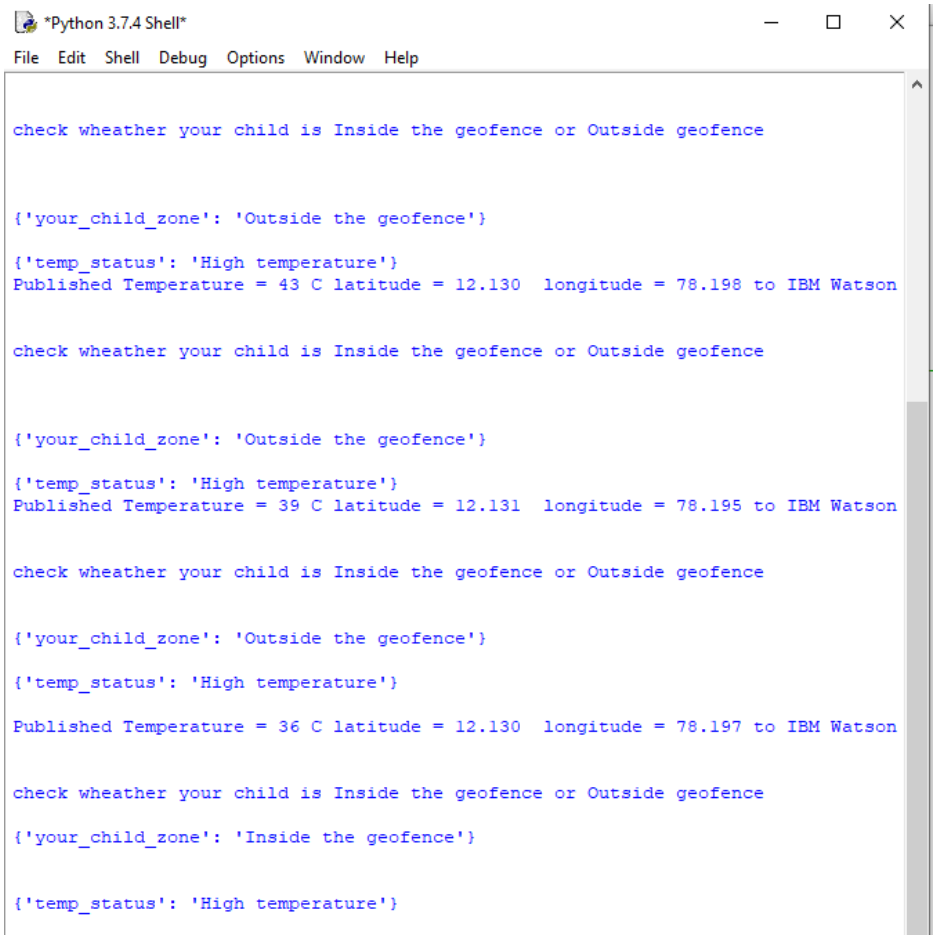
Creating Python Code:

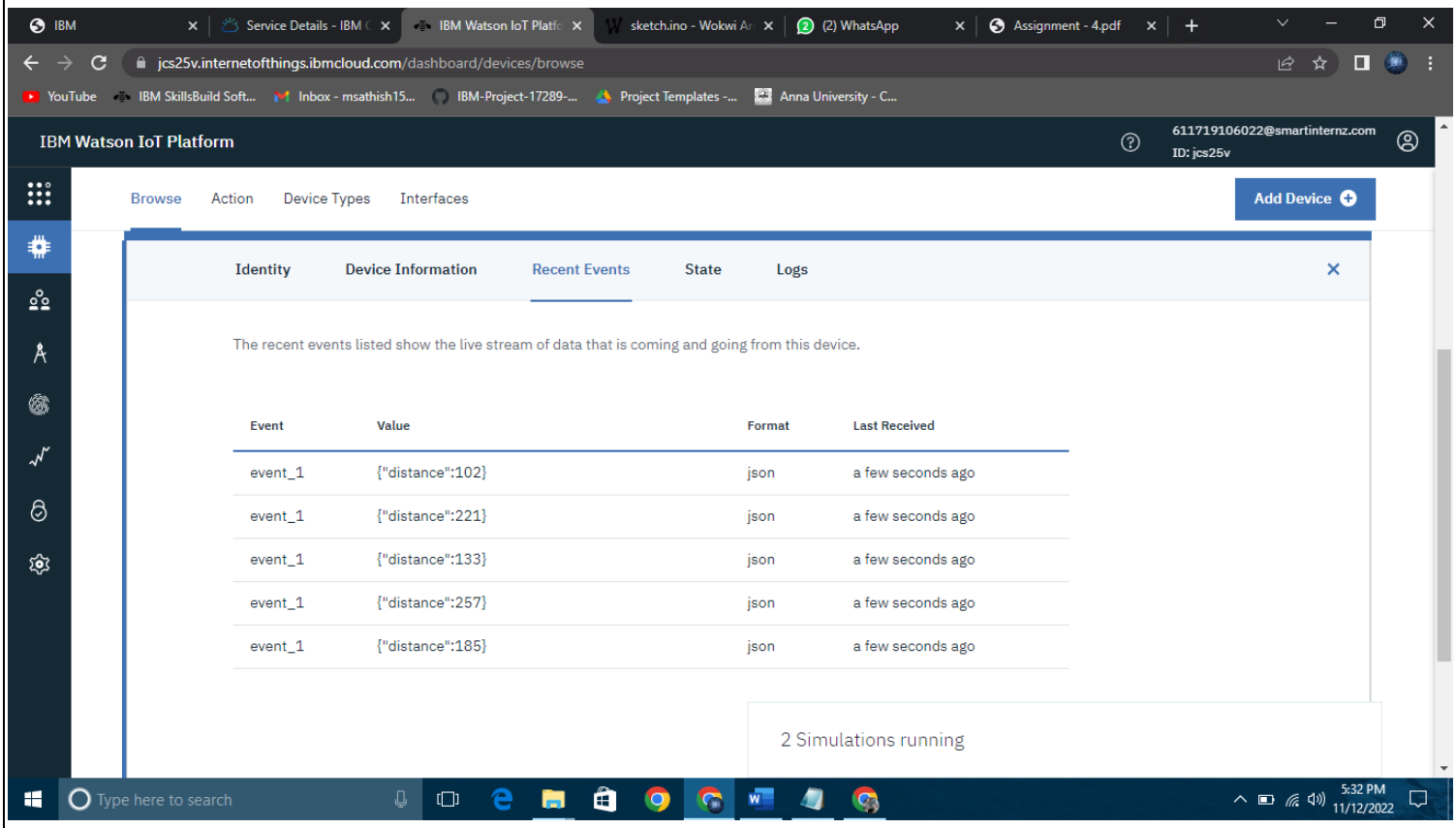
```
import time
import sys
import ibmiotf.application
import ibmiotf.device
import random
#Provide your IBM Watson Device Credentials
organization = "zwx6lb"
deviceType = "ABCD"
deviceId = "13"
authMethod = "token"
authToken = "12345678"
#api key {a-illza1-mbdxqo6z0s}
#api token {zSYzISuAWF&F_x7GkT}


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=myOnPublishCallb
ack)

        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 IoTF")

        print("\n")

    time.sleep(3)

# Disconnect the device and application from the cloud

deviceCli.disconnect()
```

Connecting IBM Watson and python Code:




IBM
Service Details - IBM
IBM Watson IoT Platfo
sketch.ino - Wokwi Ar
(2) WhatsApp
Assignment - 4.pdf
jcs25v.internetofthings.ibmcloud.com/dashboard/devices/browse
YouTube
IBM SkillsBuild Soft...
Inbox - msathish15...
IBM-Project-17289-...
Project Templates -...
Anna University - C...
IBM Watson IoT Platform
611719106022@smartinternz.com
ID: jcs25v
Browse
Action
Device Types
Interfaces
Add Device
Identity
Device Information
Recent Events
State
Logs
The recent events listed show the live stream of data that is coming and going from this device.
Event
Value
Format
Last Received
event_1
{"distance":102}
json
a few seconds ago
event_1
{"distance":221}
json
a few seconds ago
event_1
{"distance":133}
json
a few seconds ago
event_1
{"distance":257}
json
a few seconds ago
event_1
{"distance":185}
json
a few seconds ago
2 Simulations running
Type here to search
5:32 PM
11/12/2022