

SPRINT DELIVERY-2

Team ID	PNT2022TMID41335
Project Name	IoT based Safety Gadget for Child Safety, monitoring and notification

PYTHON CODE:

```
import time
import sys
import ibmiotf.application
import ibmiotf.device
import random
#Provide your IBM Watson Device Credentials
organization = "hw3zh6"
deviceType = "NodeMCU"
deviceId = "12345"
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}
```

```
#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
=myOnPublishCallback)
    print(x)
    print("\n")
else:
```

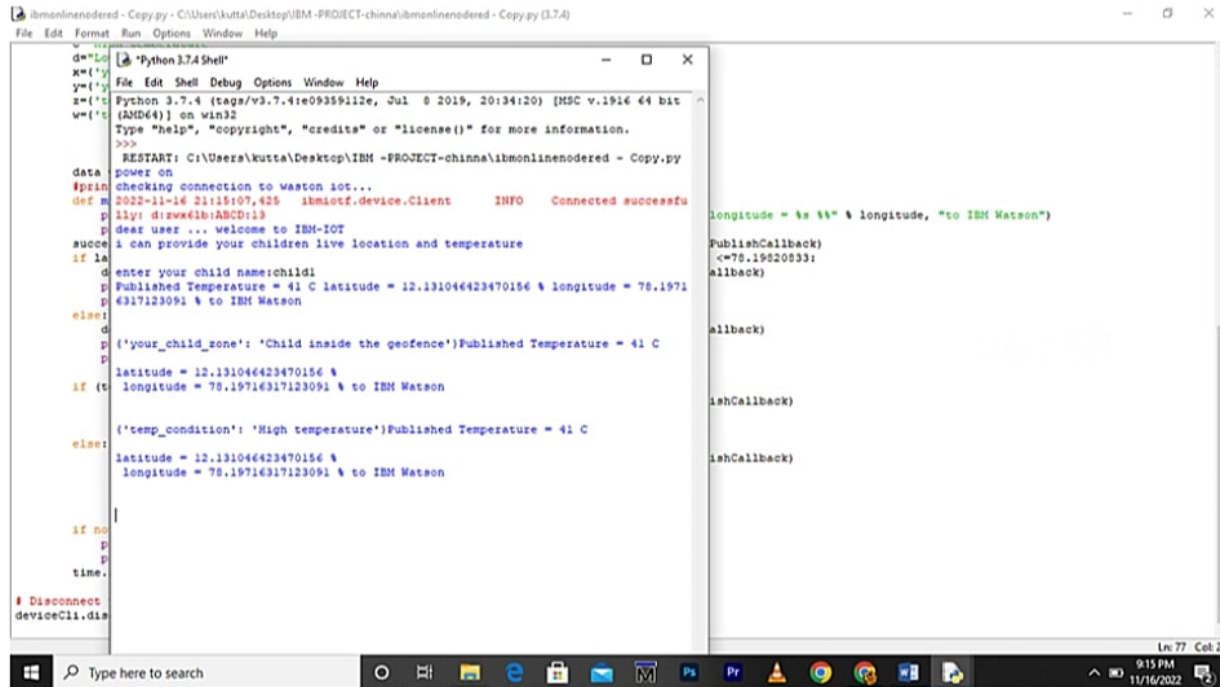
```
deviceCli.publishEvent("IoTSensorgpsdata","json",data=y,qos=0,on_publish
=myOnPublishCallback)
    print(y)
    print("\n")
if (temperature>35):
```

```
deviceCli.publishEvent("IoTSensorgpsdata","json",data=z,qos=0,on_publish
=myOnPublishCallback)
    print(c)
    print("\n")
else:
```

```
deviceCli.publishEvent("IoTSensorgpsdata","json",data=w,qos=0,on_public
h=myOnPublishCallback)
    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()

OUTPUT:



```
d="Log
x="Y
y="Y
z="Y
w="Y

def main():
    #START: C:\Users\kutta\Desktop\IBM -PROJECT-chinna\ibmonlinenodered - Copy.py
    power on
    #print
    checking connection to waeton iot...
    def m
    2022-11-16 21:15:07,425 ibmiotf.device.Client INFO Connected successfu
    p lly: d1xw61b:ABCD:13
    p dear user ... welcome to IBM-IOT
    succe
    i can provide your children live location and temperature
    if la
    d
    enter your child name:child1
    p Published Temperature = 41 C latitude = 12.131046423470156 & longitude = 78.1971
    6317123091 & to IBM Watson
    else:
    d
    p ('your_child_zone': 'Child inside the geofence')Published Temperature = 41 C
    p
    latitude = 12.131046423470156 &
    longitude = 78.19716317123091 & to IBM Watson
    if (t
    ('temp_condition': 'High temperature')Published Temperature = 41 C
    else:
    latitude = 12.131046423470156 &
    longitude = 78.19716317123091 & to IBM Watson
    |
    if no
    p
    p
    time.
    # Disconnect
    deviceCli.dis
```