

PROJECT DEVELOPMENT PHASE

SPRINT-2

Date	05 November 2022
Team ID	PNT2022TMID41908
Project Name	Hazardous Area Monitoring for Industrial Plant powered by IoT

Monitoring temperature and humidity:

```
new.py - F:/ibm/new.py (3.6.5)
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#IBM Watson IOT Platform
#pip install wiotp-sdk
import wiotp.sdk.device
import time
import random
myConfig = {
    "identity": {
        "orgId": "Oz9ma9",
        "typeId": "NodeMCU",
        "deviceId": "8680"
    },
    "auth": {
        "token": "8680933262"
    }
}

def myCommandCallback(cmd):
    print("Message received from IBM IoT Platform: %s" % cmd.data['command'])
    m=cmd.data['command']

client = wiotp.sdk.device.DeviceClient(config=myConfig, logHandlers=None)
client.connect()

while True:
    temp=random.randint(-20,125)
    hum=random.randint(0,100)
    myData={'temperature':temp, 'humidity':hum}
    client.publishEvent(eventId="status", msgFormat="json", data=myData, qos=0, onPublish=None)
    print("Published data Successfully: %s", myData)
    client.commandCallback = myCommandCallback
    time.sleep(2)
client.disconnect()
```

```
*Python 3.6.5 Shell*
File Edit Shell Debug Options Window Help
Published data Successfully: %s {'temperature': 108, 'humidity': 53}
Published data Successfully: %s {'temperature': 100, 'humidity': 87}
Published data Successfully: %s {'temperature': 22, 'humidity': 87}
Published data Successfully: %s {'temperature': 20, 'humidity': 10}
Published data Successfully: %s {'temperature': 0, 'humidity': 8}
Published data Successfully: %s {'temperature': 0, 'humidity': 54}
Published data Successfully: %s {'temperature': 10, 'humidity': 15}
Published data Successfully: %s {'temperature': 90, 'humidity': 31}
Published data Successfully: %s {'temperature': 83, 'humidity': 75}
Published data Successfully: %s {'temperature': 56, 'humidity': 49}
Published data Successfully: %s {'temperature': 93, 'humidity': 96}
Published data Successfully: %s {'temperature': 95, 'humidity': 48}
Published data Successfully: %s {'temperature': 19, 'humidity': 81}
Published data Successfully: %s {'temperature': 46, 'humidity': 100}
Published data Successfully: %s {'temperature': 81, 'humidity': 34}
Published data Successfully: %s {'temperature': 117, 'humidity': 13}
Published data Successfully: %s {'temperature': 26, 'humidity': 17}
Published data Successfully: %s {'temperature': 30, 'humidity': 7}
Published data Successfully: %s {'temperature': 14, 'humidity': 77}
Published data Successfully: %s {'temperature': -19, 'humidity': 30}
Published data Successfully: %s {'temperature': 12, 'humidity': 34}
Published data Successfully: %s {'temperature': 123, 'humidity': 10}
Published data Successfully: %s {'temperature': 94, 'humidity': 40}
Published data Successfully: %s {'temperature': 37, 'humidity': 41}
Published data Successfully: %s {'temperature': 29, 'humidity': 63}
Published data Successfully: %s {'temperature': 110, 'humidity': 89}
Published data Successfully: %s {'temperature': 101, 'humidity': 29}
Published data Successfully: %s {'temperature': 121, 'humidity': 99}
Published data Successfully: %s {'temperature': 52, 'humidity': 45}
Published data Successfully: %s {'temperature': 47, 'humidity': 28}
Published data Successfully: %s {'temperature': 96, 'humidity': 92}
Published data Successfully: %s {'temperature': 78, 'humidity': 55}
Published data Successfully: %s {'temperature': -4, 'humidity': 42}
Published data Successfully: %s {'temperature': 58, 'humidity': 99}
Published data Successfully: %s {'temperature': 109, 'humidity': 5}
Published data Successfully: %s {'temperature': 100, 'humidity': 99}
Published data Successfully: %s {'temperature': 84, 'humidity': 54}
Published data Successfully: %s {'temperature': -19, 'humidity': 94}
Published data Successfully: %s {'temperature': 19, 'humidity': 9}
```

lot dashboard interfacing and web ui:



