Project Deveopment Phase
Sprint 1

Date	31 October 2022
Team ID	PNT2022TMID30240
Project Name	Hazardous Area Monitoring for Industrial Plant powered by IoT

In this sprint, we are getting temperature and heart beat as input from the python program which is consider to get the input from the workers through beacon scanners.

Solution:

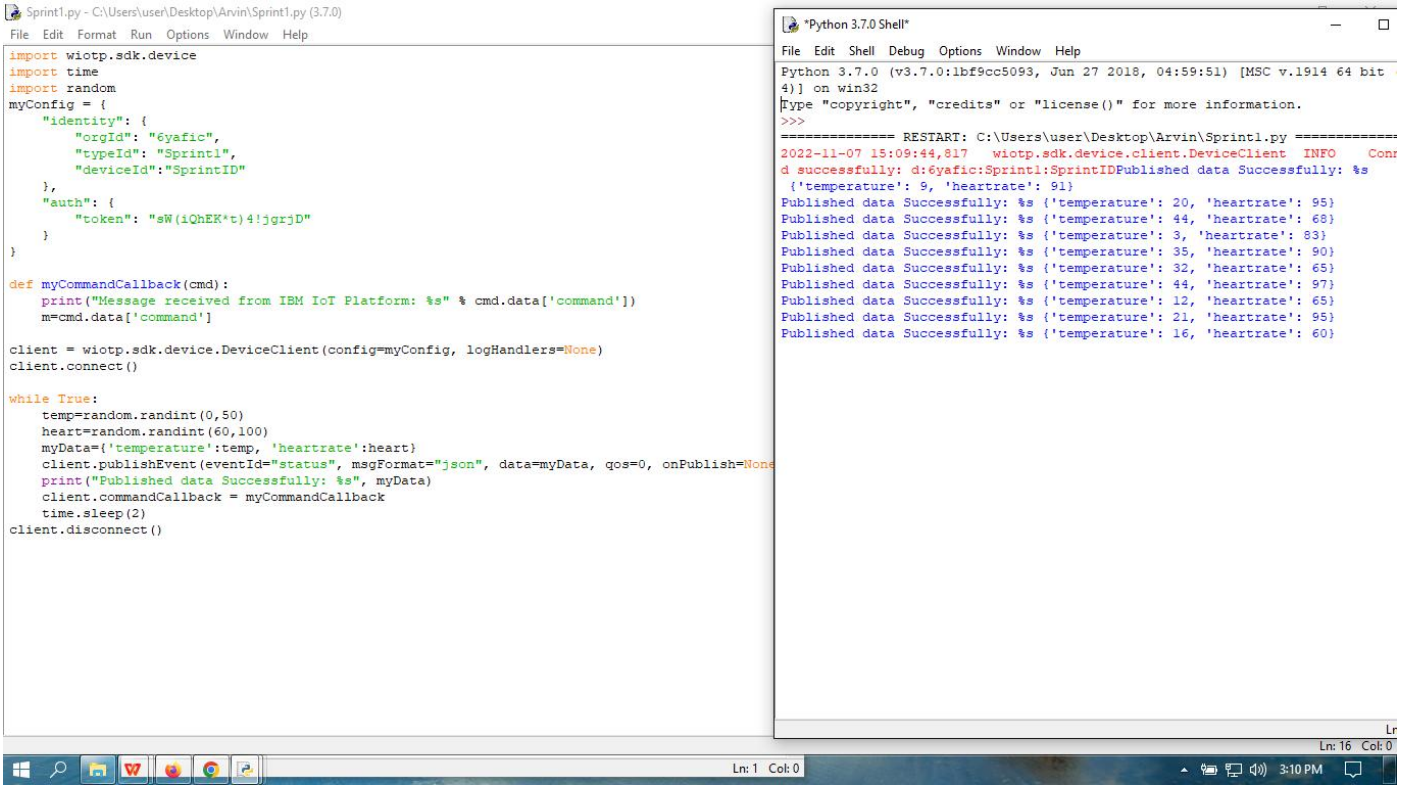
```
import wiotp.sdk.device
import time
import random
myConfig = {
   "identity": {
      "orgId": "6yafic",
      "typeId": "Sprint1",
      "deviceId":"SprintID"
   },
   "auth": {
      "token": "sW(iQhEK*t)4!jgrjD"
   }
}

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(0,50)
   heart=random.randint(60,100)
   myData={'temperature':temp, 'heartrate':heart}
   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()
```

Data gathering from beacon scanner (using python)



Sprint1.py - C:\Users\user\Desktop\Arvin\Sprint1.py (3.7.0)

File Edit Format Run Options Window Help

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import time
import random
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```

Python 3.7.0 Shell

File Edit Shell Debug Options Window Help

```
Python 3.7.0 (v3.7.0:1bf9cc5093, Jun 27 2018, 04:59:51) [MSC v.1914 64 bit
4)] on win32
Type "copyright", "credits" or "license()" for more information.
>>>
========== RESTART: C:\Users\user\Desktop\Arvin\Sprint1.py ==========
2022-11-07 15:09:44,817   wiotp.sdk.device.client.DeviceClient  INFO    Conn
d successfully: d:6yafic:Sprint1:SprintIDPublished data Successfully: %s
 {'temperature': 9, 'heartrate': 91}
Published data Successfully: %s {'temperature': 20, 'heartrate': 95}
Published data Successfully: %s {'temperature': 44, 'heartrate': 68}
Published data Successfully: %s {'temperature': 3, 'heartrate': 83}
Published data Successfully: %s {'temperature': 35, 'heartrate': 90}
Published data Successfully: %s {'temperature': 32, 'heartrate': 65}
Published data Successfully: %s {'temperature': 44, 'heartrate': 97}
Published data Successfully: %s {'temperature': 12, 'heartrate': 65}
Published data Successfully: %s {'temperature': 21, 'heartrate': 95}
Published data Successfully: %s {'temperature': 16, 'heartrate': 60}
```

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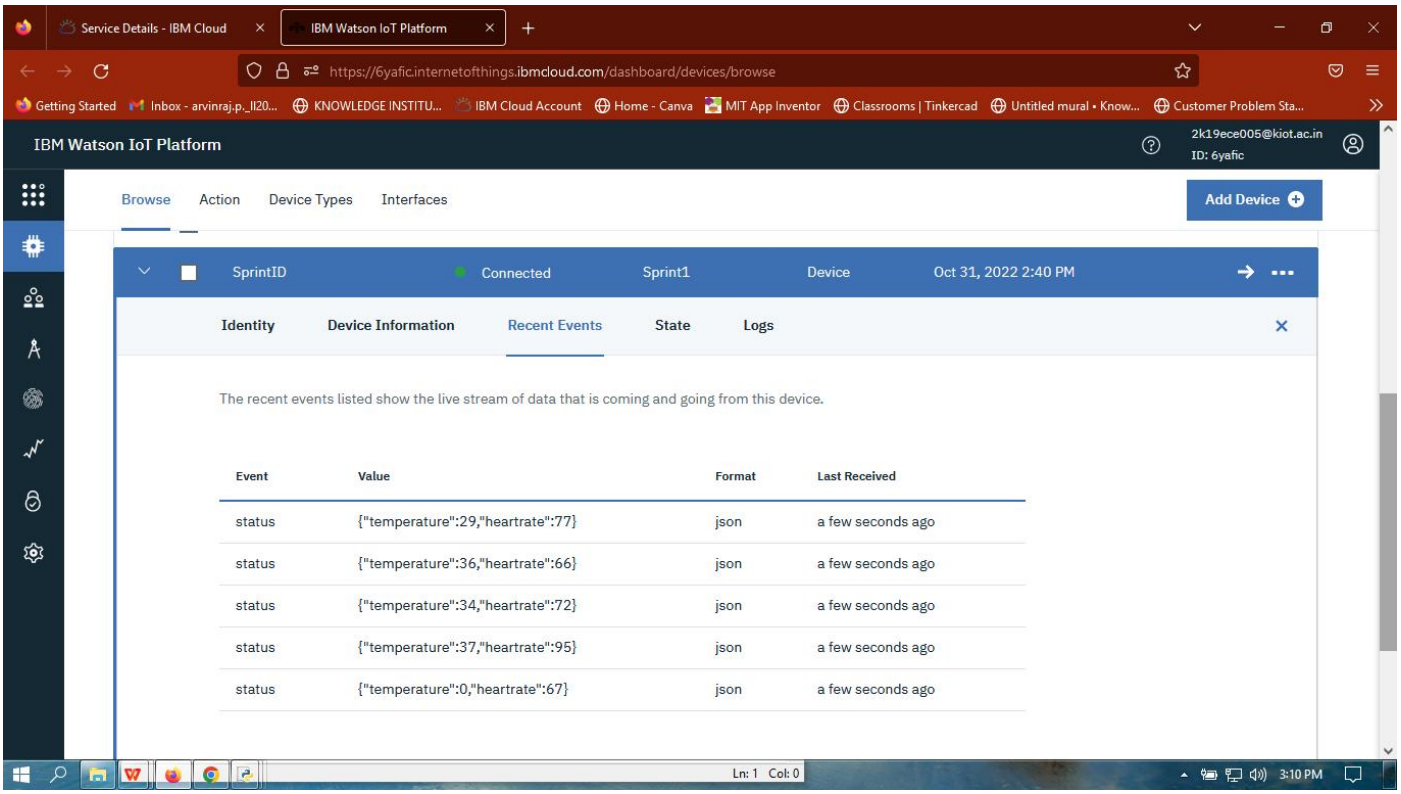
Uploaded data in Cloud from from beacon scanner



Service Details - IBM Cloud | IBM Watson IoT Platform

https://6yafic.internetofthings.ibmcloud.com/dashboard/devices/browse

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IBM Watson IoT Platform

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Browse Action Device Types Interfaces

Add Device

SprintID Connected Sprint1 Device Oct 31, 2022 2:40 PM

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
status	{"temperature":29,"heartrate":77}	json	a few seconds ago
status	{"temperature":36,"heartrate":66}	json	a few seconds ago
status	{"temperature":34,"heartrate":72}	json	a few seconds ago
status	{"temperature":37,"heartrate":95}	json	a few seconds ago
status	{"temperature":0,"heartrate":67}	json	a few seconds ago

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