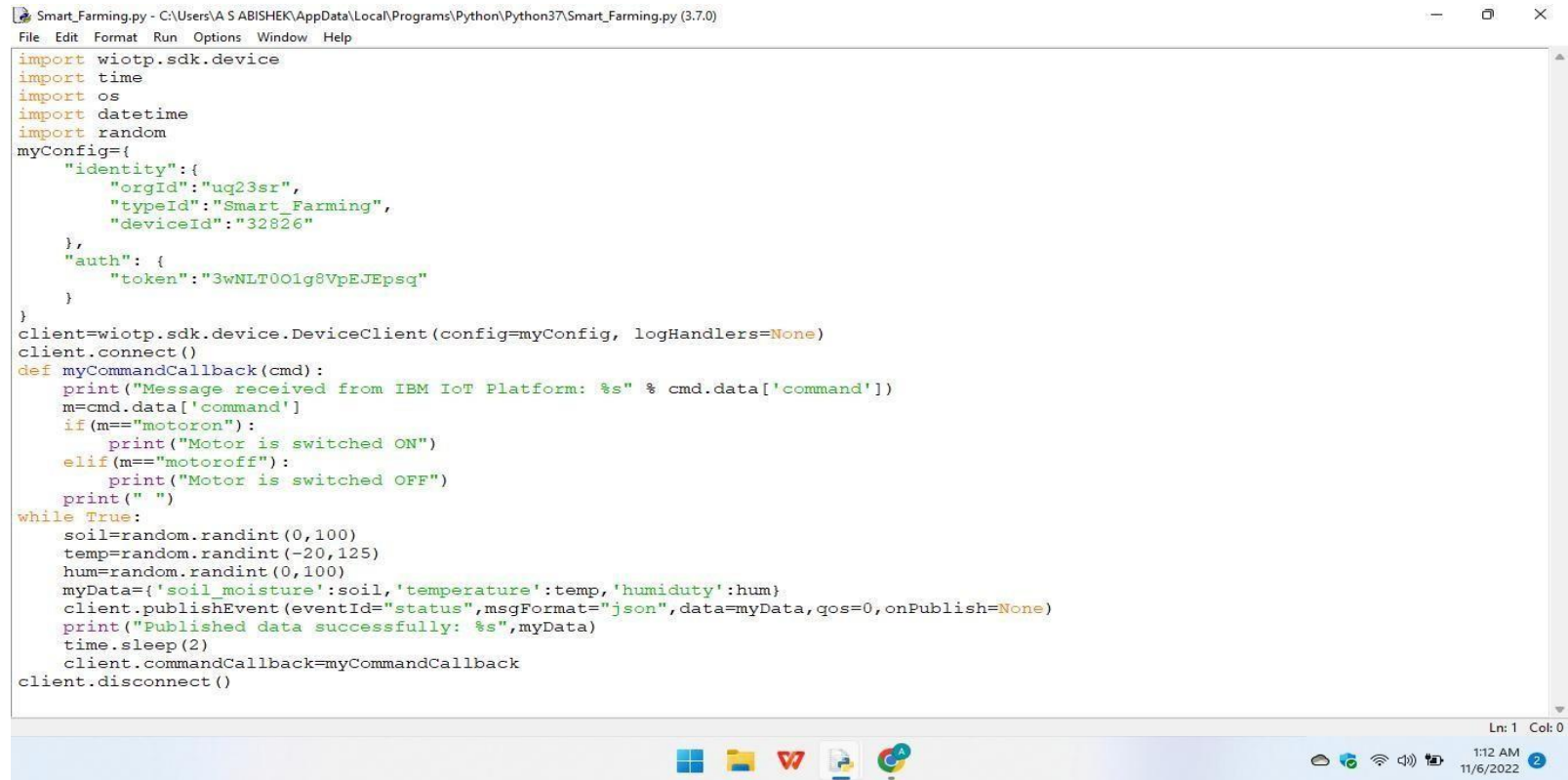


## Project Development Phase

### Sprint - 2

Date	5 November 2022
Team ID	PNT2022TMID03577
Project Name	Smart farmer - IoT Enabled Smart Farming Application



The screenshot shows a Python IDE window titled "Smart\_Farming.py - C:\Users\A S ABISHEK\AppData\Local\Programs\Python\Python37\Smart\_Farming.py (3.7.0)". The code is as follows:

```
import wiotp.sdk.device
import time
import os
import datetime
import random
myConfig={
    "identity":{
        "orgId":"uq23sr",
        "typeId":"Smart_Farming",
        "deviceId":"32826"
    },
    "auth": {
        "token":"3wNLT001g8VpEJEpsq"
    }
}
client=wiotp.sdk.device.DeviceClient(config=myConfig, logHandlers=None)
client.connect()
def myCommandCallback(cmd):
    print("Message received from IBM IoT Platform: %s" % cmd.data['command'])
    m=cmd.data['command']
    if(m=="motoron"):
        print("Motor is switched ON")
    elif(m=="motoroff"):
        print("Motor is switched OFF")
    print(" ")
while True:
    soil=random.randint(0,100)
    temp=random.randint(-20,125)
    hum=random.randint(0,100)
    myData={'soil_moisture':soil,'temperature':temp,'humidity':hum}
    client.publishEvent(eventId="status",msgFormat="json",data=myData,qos=0,onPublish=None)
    print("Published data successfully: %s",myData)
    time.sleep(2)
    client.commandCallback=myCommandCallback
client.disconnect()
```

The IDE interface includes a menu bar (File, Edit, Format, Run, Options, Window, Help), a status bar at the bottom showing "Ln: 1 Col: 0", and a Windows taskbar at the very bottom with icons for the Start menu, File Explorer, Word, and other applications, along with the system clock showing 1:12 AM on 11/6/2022.

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 (AMD64)] on win32  
Type "copyright", "credits" or "license()" for more information.

>>>

RESTART: C:\Users\A S ABISHEK\AppData\Local\Programs\Python\Python37\Smart\_Farming.py

2022-11-06 01:11:23,500 wiotp.sdk.device.client.DeviceClient INFO Connected successfully: d:uq23sr:Smart\_Farming:32826  
Published data successfully: %s

```
{'soil_moisture': 83, 'temperature': 29, 'humidity': 36}
Published data successfully: %s {'soil_moisture': 47, 'temperature': 96, 'humidity': 25}
Published data successfully: %s {'soil_moisture': 45, 'temperature': 5, 'humidity': 49}
Published data successfully: %s {'soil_moisture': 82, 'temperature': 29, 'humidity': 80}
Published data successfully: %s {'soil_moisture': 92, 'temperature': 49, 'humidity': 86}
Published data successfully: %s {'soil_moisture': 60, 'temperature': 11, 'humidity': 98}
Published data successfully: %s {'soil_moisture': 40, 'temperature': -18, 'humidity': 100}
Published data successfully: %s {'soil_moisture': 17, 'temperature': 80, 'humidity': 33}
Published data successfully: %s {'soil_moisture': 60, 'temperature': 93, 'humidity': 95}
Published data successfully: %s {'soil_moisture': 22, 'temperature': 15, 'humidity': 70}
Published data successfully: %s {'soil_moisture': 78, 'temperature': 72, 'humidity': 15}
Published data successfully: %s {'soil_moisture': 42, 'temperature': 41, 'humidity': 63}
Published data successfully: %s {'soil_moisture': 21, 'temperature': 61, 'humidity': 50}
Published data successfully: %s {'soil_moisture': 36, 'temperature': 95, 'humidity': 56}
Published data successfully: %s {'soil_moisture': 14, 'temperature': 102, 'humidity': 74}
Published data successfully: %s {'soil_moisture': 34, 'temperature': 31, 'humidity': 44}
Published data successfully: %s {'soil_moisture': 95, 'temperature': 1, 'humidity': 37}
Published data successfully: %s {'soil_moisture': 58, 'temperature': 61, 'humidity': 97}
Published data successfully: %s {'soil_moisture': 94, 'temperature': 86, 'humidity': 14}
Published data successfully: %s {'soil_moisture': 56, 'temperature': 89, 'humidity': 82}
Published data successfully: %s {'soil_moisture': 100, 'temperature': -12, 'humidity': 61}
Published data successfully: %s {'soil_moisture': 82, 'temperature': 63, 'humidity': 41}
Published data successfully: %s {'soil_moisture': 30, 'temperature': 53, 'humidity': 84}
Published data successfully: %s {'soil_moisture': 42, 'temperature': 83, 'humidity': 71}
Published data successfully: %s {'soil_moisture': 80, 'temperature': 107, 'humidity': 38}
Published data successfully: %s {'soil_moisture': 64, 'temperature': 14, 'humidity': 73}
Published data successfully: %s {'soil_moisture': 95, 'temperature': 0, 'humidity': 100}
Published data successfully: %s {'soil_moisture': 67, 'temperature': 124, 'humidity': 21}
Published data successfully: %s {'soil_moisture': 51, 'temperature': 109, 'humidity': 5}
Published data successfully: %s {'soil_moisture': 25, 'temperature': 35, 'humidity': 58}
```

Ln: 57 Col: 4



1:13 AM  
11/6/2022

← → ↺

uq23sr.internetofthings.ibmcloud.com/dashboard/devices/browse

813819205004@smartinternz.com  
ID: uq23sr

IBM Watson IoT Platform

⋮

Browse

Action

Device Types

Interfaces

Add Device +

32826

Connected

Smart\_Farming

Device

Oct 28, 2022 11:29 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	{"soil_moisture":89,"temperature":80,"humiduty...	json	a few seconds ago
status	{"soil_moisture":44,"temperature":93,"humiduty...	json	a few seconds ago
status	{"soil_moisture":34,"temperature":59,"humiduty...	json	a few seconds ago
status	{"soil_moisture":18,"temperature":76,"humiduty...	json	a few seconds ago
status	{"soil_moisture":71,"temperature":123,"humidut...	json	a few seconds ago

0 Simulations running