

# SPRINT-IV

## PROJECT DEVELOPMENT PHASE

DATE	14 NOVEMBER 2022
TEAM ID	PNT2022TMID49507
PROJECT NAME	PROJECT-IOT BASED SAFETY GADGETS FOR CHILD SAFETY MONITORING AND NOTIFICATION

### CODING:

```
import serial as io
```

```
gsm = io.Serial("/dev/ttyUSB0",9600, timeout=0.5)
```

```
gsm.flush()
```

```
def sendSms(msg):
```

```
    print("Sending SMS\n")
```

```
    gsm.write(b'AT+CMGF=1\r\n')
```

```
    sleep(0.5)
```

```
    gsm.write(b'AT+CMGS=\')
```

```
    serialcmd = args["mobile"]
```

```
    gsm.write(serialcmd.encode())
```

```
    gsm.write(b'\r\n')
```

```
    sleep(0.5)
```

```
    data = msg
```

```
    gsm.write(data.encode())
```

```
gsm.write(b'\x1A')
```

```
sleep(3)
```

```
sendSms("Alert child is missing.....")
```

```
CODING NOTIFICATION SENDING:
```

```
import time
```

```
import sys
```

```
import ibmiotf.application
```

```
import ibmiotf.device
```

```
import random
```

```
#Provide your IBM Watson Device Credentials
```

```
organization = "8bchp4"
```

```
deviceType = "pdharani"
```

```
deviceId = "12345678"
```

```
authMethod = "token"
```

```
authToken = "12345678"
```

**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**

```
deviceCli.connect()
```

**while True:**

```
    #Get Sensor Data from DHT11
```

```
    name="pooja"
```

```
    #latitude=8.9179987
```

```
    #longitude=98.0527826
```

```
    latitude=10.7905
```

```
    longitude=80.2707
```

```
data = { 'name' : name, 'lat': latitude, 'lon':longitude }

#print data

def myOnPublishCallback():

    print ("Published name = %s " % name, "lat = %s " % latitude, "lon = %s " % longitude, "to IBM
Watson")

    success = deviceCli.publishEvent("IoTSensor", "json", data, qos=0,
on_publish=myOnPublishCallback)

    if not success:

        print("Not connected to IoT")

    time.sleep(5)

deviceCli.commandCallback = 'myCommandCallback'

client.disconnect()
```