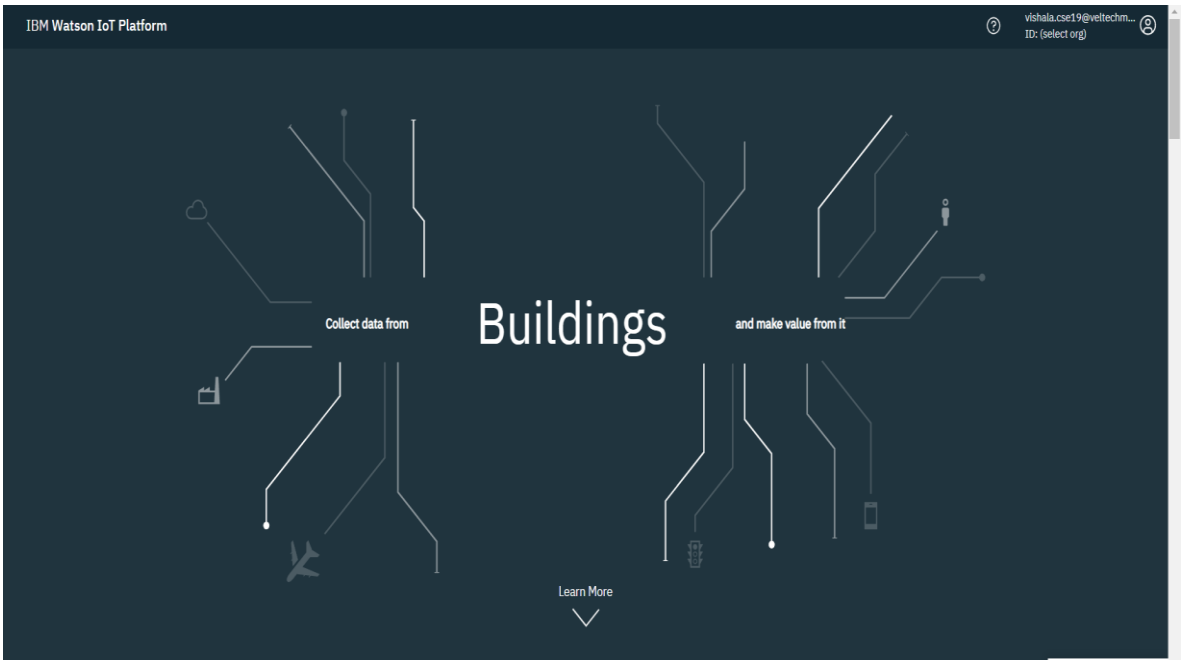
Project Development –Delivery plan sprint-2

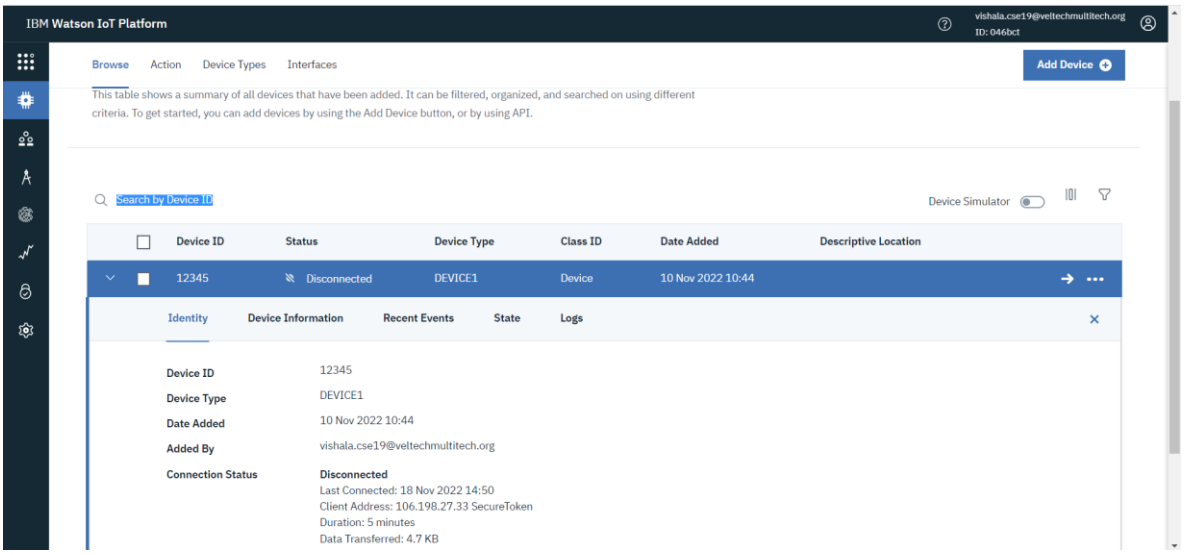
IoT Based Safety Gadget for Child Safety Monitoring & Notification

TEAM ID:PNT2022TMID22325

Creating and Connecting IBM cloud for Project and Python Code

Creating IBM Cloud Service and creating the device:





Creating Python Code:

```
import time
import wiotp.sdk.application
from twilio.rest import Client
import twilio_keys

myConfig = {
    "identity": {
        "orgId": "046bct",
        "typeId": "DEVICE1",
        "deviceId": "12345",
    },
    "auth": {
        "token": "123456789"
    }}
client = wiotp.sdk.device.DeviceClient(config=myConfig, logHandlers=None)
client.connect()
while True:
    name = "vishal"
    # in area location
    # latitude = 17.4219272
    # longitude = 78.5488783
    # out area location
    latitude = 50.4219272
    longitude = 110.5488783
myData = {"name": name, "lat": latitude, "lon": longitude}
client.publishEvent(eventId="status", msgFormat="json", data=myData,
qos=0, onPublish=None)
    print("Data published to IBM IoT Platform: ", myData)
    time.sleep(5)
```

```
    if (latitude != 17.4219272) and (longitude != 78.5488783):
        client1 = Client(twilio_keys.account_sid, twilio_keys.auth_token)
        message = client1.messages.create(
            body="Dear Parent/Guardian,"
                 "\nVishal is not within the geofence!!!",
            from_=twilio_keys.twilio_number,
            to=twilio_keys.target_number
        )
client.disconnect()
```

Connecting IBM Watson and python Code:

In-Area Location:

```
import time
import wiotp.sdk.application

myConfig = {
    "identity": {
        "orgId": "046bct",
        "typeId": "DEVICE1",
        "deviceId": "12345",
    },
    "auth": {
        "token": "123456789"
    }
}
client = wiotp.sdk.device.DeviceClient(config=myConfig, logHandlers=None)
client.connect()

while True:
    name = "Vishal"
    # in location
    latitude = 13.189020
    longitude = 80.106220
    # out location
    #latitude = 50.4219272
    #longitude = 110.5488783
    myData = {"name": name, "lat": latitude, "lon": longitude}
    client.publishEvent(eventId="status", msgFormat="json", data=myData, qos=0, onPublish=None)
    print("Data published to IBM IoT Platform: ", myData)
    time.sleep(5)

client.disconnect()
```

```
C:\Users\91994\PycharmProjects\pythonintro\venv\Scripts\python.exe C:/Users/91994/PycharmProjects/pythonintro/swap.py
2022-11-18 19:13:53,641   wiotp.sdk.device.client.DeviceClient  INFO    Connected successfully: d:046bct:DEVICE1:12345
Data published to IBM IoT Platform:  {'name': 'Vishal', 'lat': 13.18902, 'lon': 80.10622}
Data published to IBM IoT Platform:  {'name': 'Vishal', 'lat': 13.18902, 'lon': 80.10622}
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Data published to IBM IoT Platform:  {'name': 'Vishal', 'lat': 13.18902, 'lon': 80.10622}
```

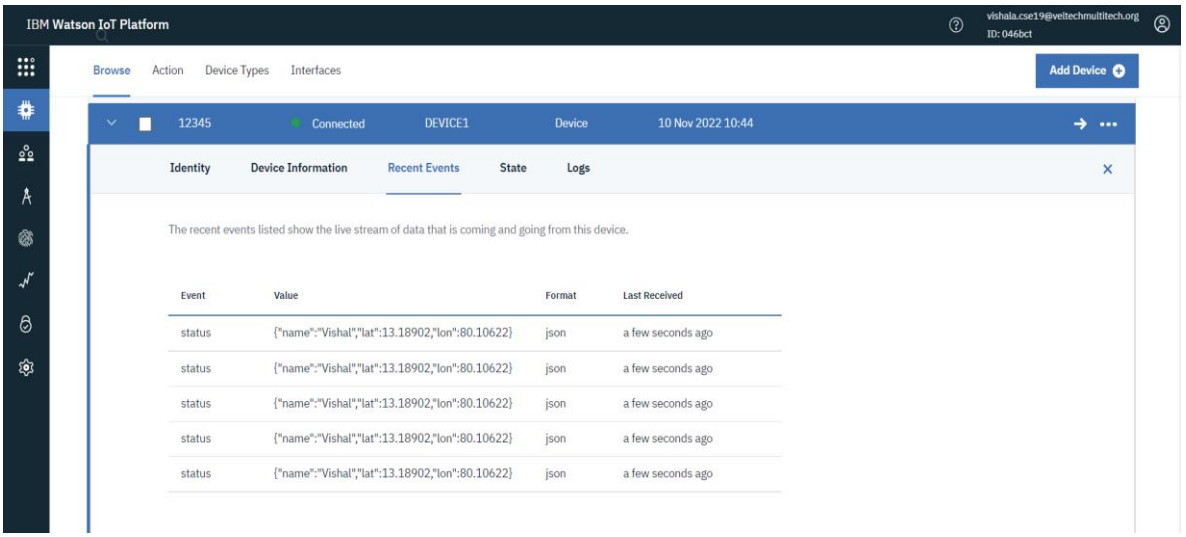

Out-Area Location:

```python
import time
import wiotp.sdk.application

myConfig = {
    "identity": {
        "orgId": "046bct",
        "typeId": "DEVICE1",
        "deviceId": "12345",
    },
    "auth": {
        "token": "123456789"
    }
}
client = wiotp.sdk.device.DeviceClient(config=myConfig, logHandlers=None)
client.connect()

while True:
    name = "Vishal"
    # in location
    #latitude = 13.189020
    #longitude = 80.106220
    # out location
    latitude = 50.4219272
    longitude = 110.5488783
    myData = {"name": name, "lat": latitude, "lon": longitude}
    client.publishEvent(eventId="status", msgFormat="json", data=myData, qos=0, onPublish=None)
    print("Data published to IBM IoT Platform: ", myData)
    time.sleep(5)

client.disconnect()
```

```
C:\Users\91994\PycharmProjects\pythonintro\venv\Scripts\python.exe C:/Users/91994/PycharmProjects/pythonintro/swap.py
2022-11-18 19:03:01,223   wiotp.sdk.device.client.DeviceClient  INFO    Connected successfully: d:046bct:DEVICE1:12345
Data published to IBM IoT Platform:  {'name': 'Vishal', 'lat': 50.4219272, 'lon': 110.5488783}
Data published to IBM IoT Platform:  {'name': 'Vishal', 'lat': 50.4219272, 'lon': 110.5488783}
Data published to IBM IoT Platform:  {'name': 'Vishal', 'lat': 50.4219272, 'lon': 110.5488783}
Data published to IBM IoT Platform:  {'name': 'Vishal', 'lat': 50.4219272, 'lon': 110.5488783}
Data published to IBM IoT Platform:  {'name': 'Vishal', 'lat': 50.4219272, 'lon': 110.5488783}
Data published to IBM IoT Platform:  {'name': 'Vishal', 'lat': 50.4219272, 'lon': 110.5488783}
Data published to IBM IoT Platform:  {'name': 'Vishal', 'lat': 50.4219272, 'lon': 110.5488783}
```