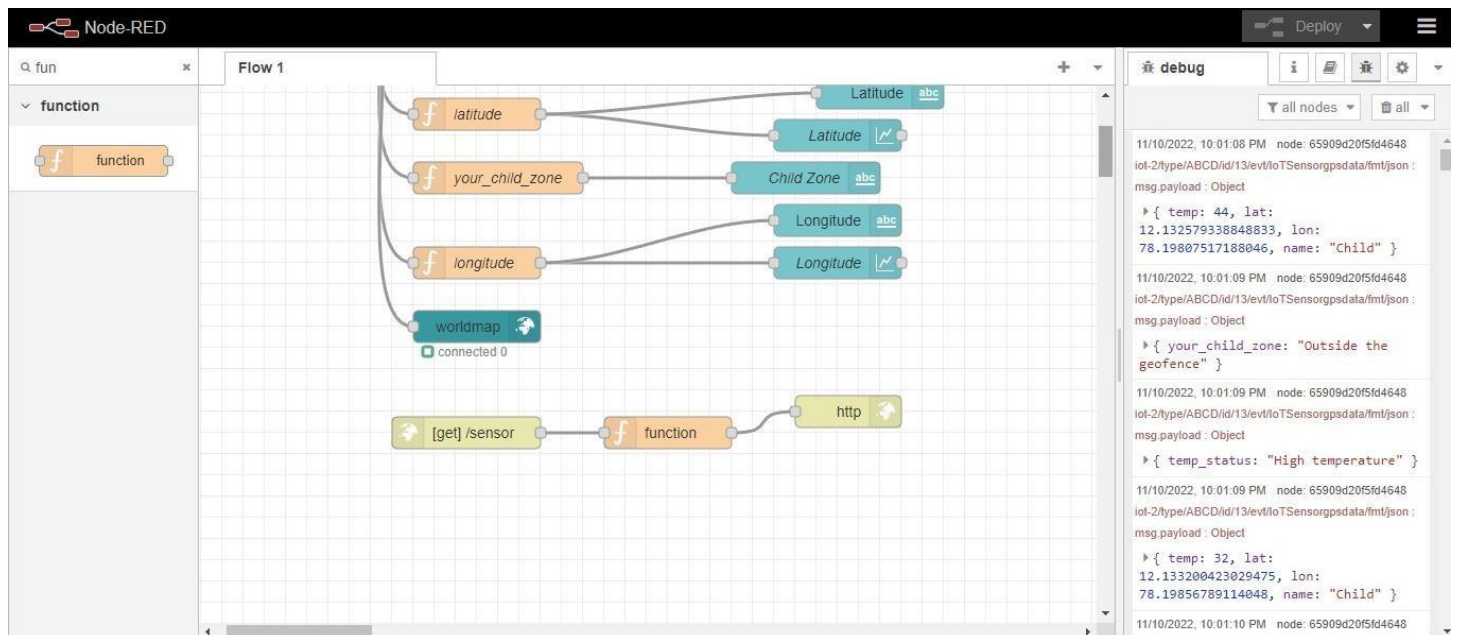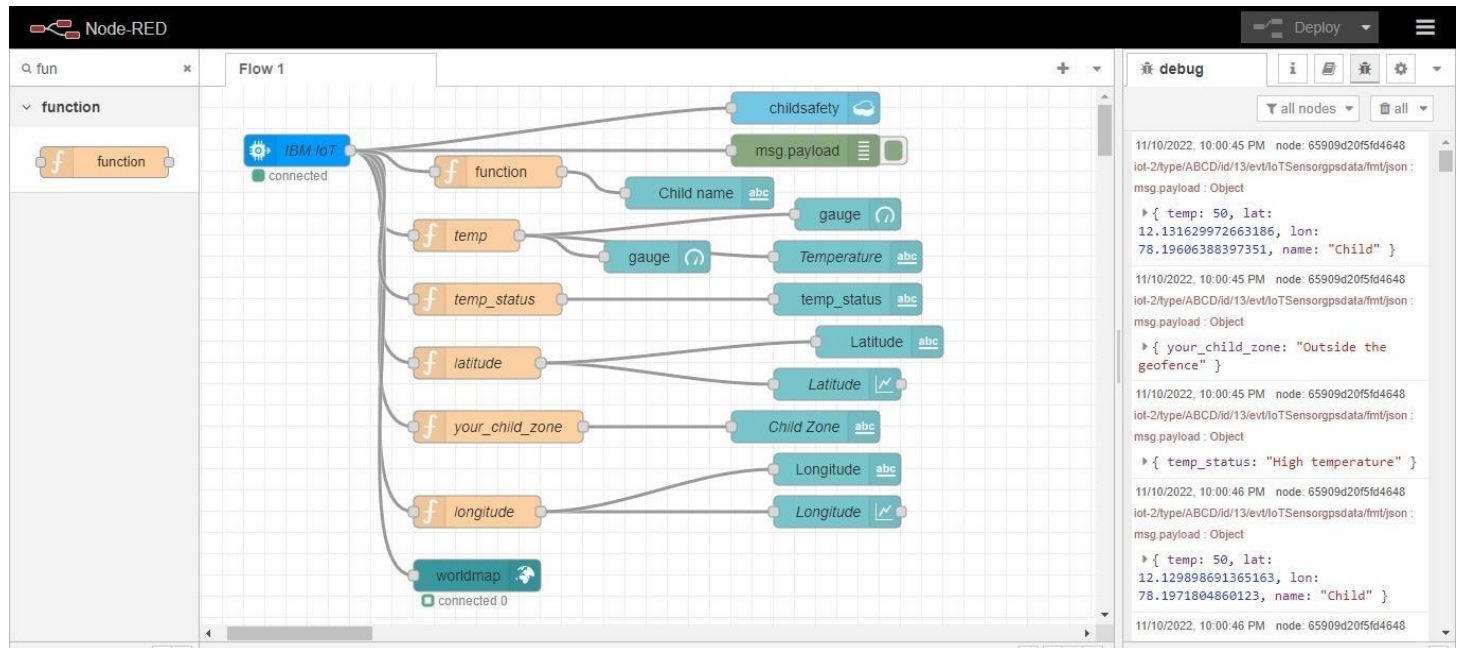# IOT Based Safety Gadget for Child Safety Monitoring and Notification

Project Development –Delivery of Sprint 1

Creating Node –Red service and connect with IBM cloud and Web UI

TITLE	IOT based child safety gadget for child safety monitoring and notification
DOMAIN NAME	INTERNET OF THINGS
TEAM ID	**PNT2022TMID40851**
TEAM LEADERNAME	SATHISHKUMAR .M
TEAM MEMBER NAME	MOHAMEDBADHUSHA.A PRAVEENKUMAR.S SARANRAJ.S
MENTOR NAME	Mr.T.Thirunavukkarasu

Creating Node-Red service:

Connecting with IBM Cloud:

Using IBM IOT node through API key

Browse   IBM Cloud Apps

The API key has been added.

Authentication tokens are non-recoverable. If you misplace this token, you will need to re-register the API key to generate a new authentication token.

Generated Details

API Key	a-zwx6lb-z7sryerler
Authentication Token	dO&H(qcUv)icaFOYcb

⚠ Make a note of the generated authentication token. Lost authentication tokens cannot be recovered. If you lose the token, you must reregister the API to generate a new token.

API Key Information

Description	-
Role	Standard Application
Expires	Never

1 Simulation running

Browse   IBM Cloud Apps

☐	Key ◇	Description ◇	Role ◇	Expires ◇	🗑 ▽
☐	a-zwx6lb-97epyzzrfc	-	Standard Application	-	

| **API Key Information** | Access Control/Permissions | | ✏ | ✕ |

Key	a-zwx6lb-97epyzzrfc		Last Edited By	613519106013@smartinternz.com
Description	-		Expires	Never
Date Added	Nov 7, 2022 5:54 PM			
Last Update	Nov 7, 2022 5:54 PM			

1 Simulation running

☐ a-zwx6lb-dp396tfblc

Transferring values from Python Code:

Child Safety device.py - C:/Users/kutta/Desktop/IBM-Dr/Child Safety device.py (3.7.4)

File Edit Format Run Options Window Help

```python
import time
import sys
import ibmiotf.application
import ibmiotf.device
import random
#Provide your IBM Watson Device Credentials
organization = "illzal"
deviceType = "latlontem"
deviceId = "613510"
authMethod = "token"
authToken = "1092837465"
#api key  {a-illzal-mbdxqo6z0s}
#api token {zSYzISuAWF&F_x7GkT}

try:
        deviceOptions = {"org": organization, "type": deviceType, "id": deviceId, "auth-metho
        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
print("power on ")
print("checking connection to waston iot...")
time.sleep(2)
deviceCli.connect()
print("dear user ... welcome to IBM-IOT ")
print("i can provide your children live location and temperature ")
print()
name=str(input("enter your child name:"))
while True:

        temperature=random.randint(20,50)#random temperature for your child
        latitude=random.uniform(10.781377,10.78643)#random latitude for your child
        longitude=random.uniform(79.129113,79.134014)#random longitude for your child

        data = { 'temp' : temperature, 'lat': latitude,'lon':longitude,'name':name  }
        #print data
        def myOnPublishCallback():
```

Python 3.7.4 Shell

File Edit Shell Debug Options Window Help

```
Python 3.7.4 (tags/v3.7.4:e09359112e, Jul  8 2019, 20:34:20) [MSC v.1916 64 
(AMD64)] on win32
Type "help", "copyright", "credits" or "license()" for more information.
>>>
======= RESTART: C:/Users/kutta/Desktop/IBM-Dr/Child Safety device.py ======
power on
checking connection to waston iot...
2022-11-10 22:14:21,799   ibmiotf.device.Client      INFO    Connected succe
lly: d:illzal:latlontem:613510
dear user ... welcome to IBM-IOT
i can provide your children live location and temperature

enter your child name:child
Published Temperature = 39 C latitude = 10.782749628132827 % longitude = 79.
867253162 % to IBM Watson
Published Temperature = 39 C latitude = 10.782669248109656 % longitude = 79.
1255540076 % to IBM Watson
Published Temperature = 43 C latitude = 10.781765104656792 % longitude = 79.
077864707 % to IBM Watson
Published Temperature = 30 C latitude = 10.786083936690018 % longitude = 79.
2366715787 % to IBM Watson
Published Temperature = 31 C latitude = 10.784810558975826 % longitude = 79.
0117359415 % to IBM Watson
Published Temperature = 45 C latitude = 10.785949922923024 % longitude = 79.
5563867668 % to IBM Watson
Published Temperature = 24 C latitude = 10.784168891438233 % longitude = 79.
9528906442 % to IBM Watson
Published Temperature = 23 C latitude = 10.786248060883958 % longitude = 79.
4368596464 % to IBM Watson
Published Temperature = 27 C latitude = 10.783808327214418 % longitude = 79.
951933729 % to IBM Watson
Published Temperature = 43 C latitude = 10.786340416981865 % longitude = 79.
7748803969 % to IBM Watson
Published Temperature = 49 C latitude = 10.786208956579015 % longitude = 79.
2192551409 % to IBM Watson
Published Temperature = 45 C latitude = 10.783690544907325 % longitude = 79.
504415061 % to IBM Watson
```
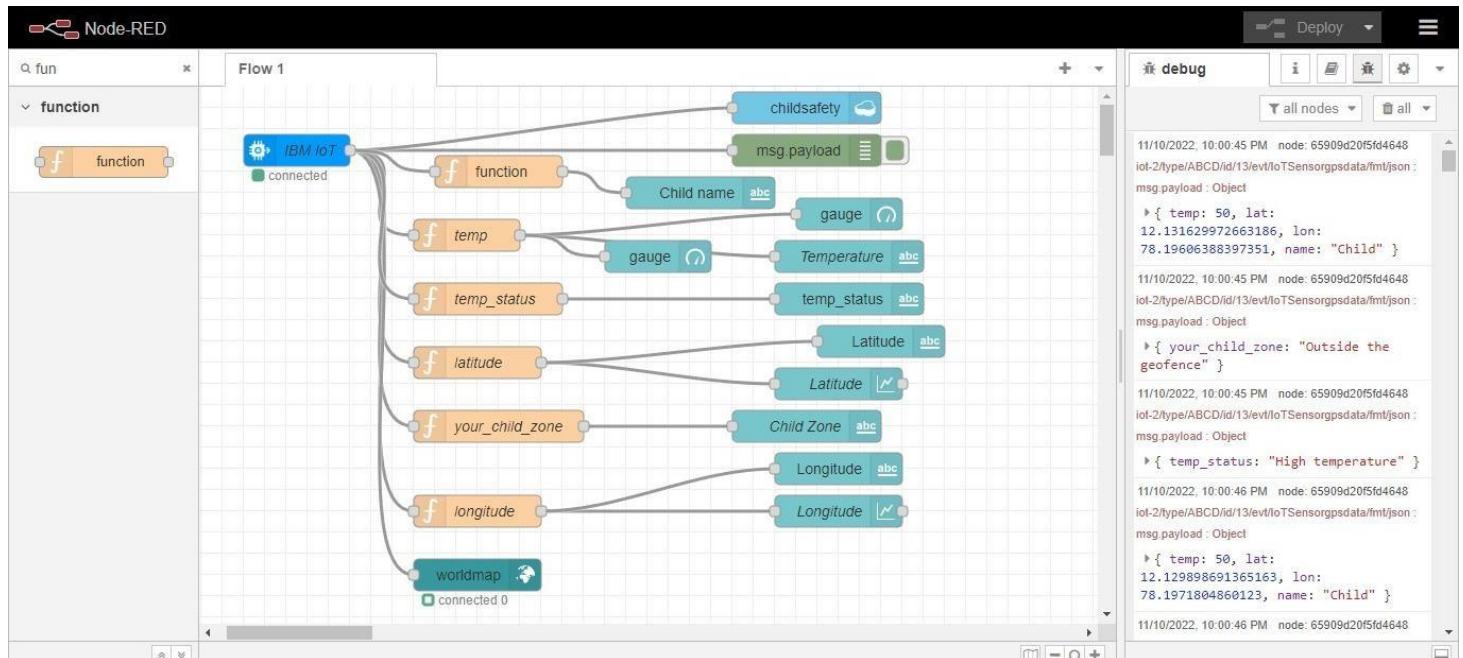
Node-Red:

Node-Red Dashboard:

☰ Home

home

Child name   **Child**

Temperature   **106**

temp_status   **Low temperature**

gauge

106

0   units   100

☰ map

map