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
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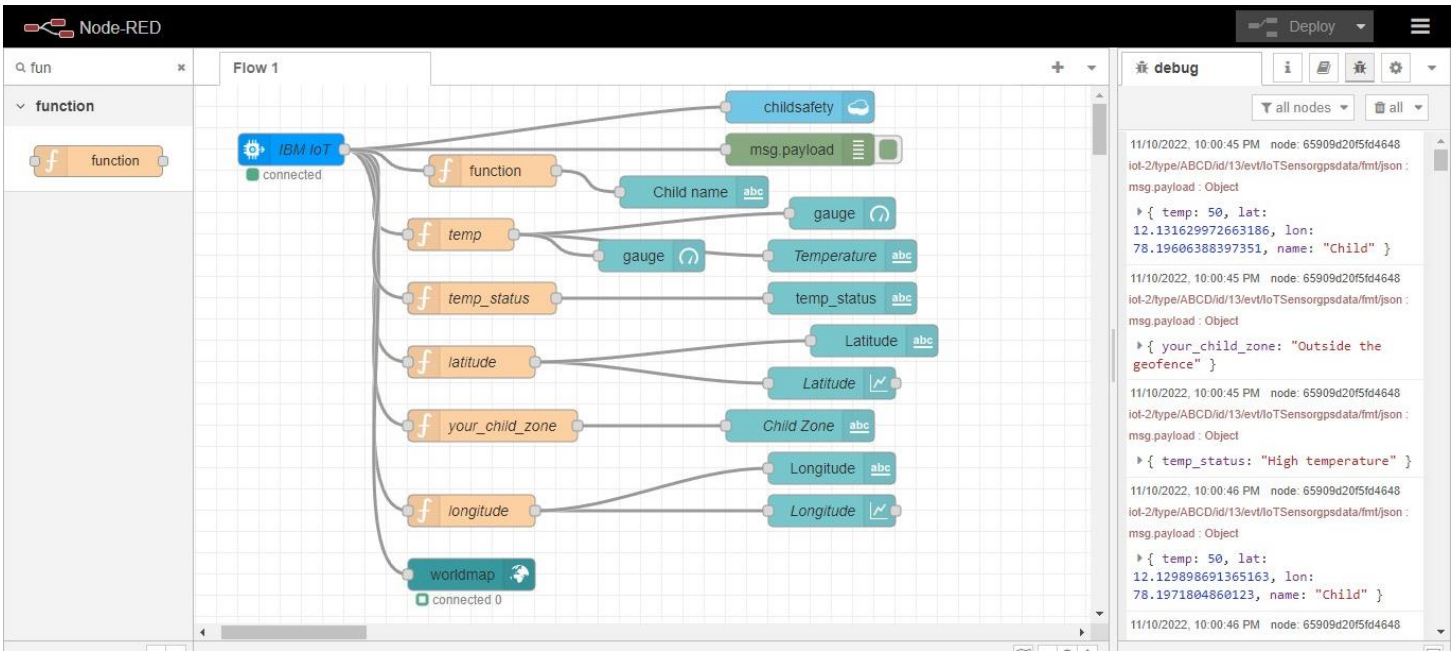
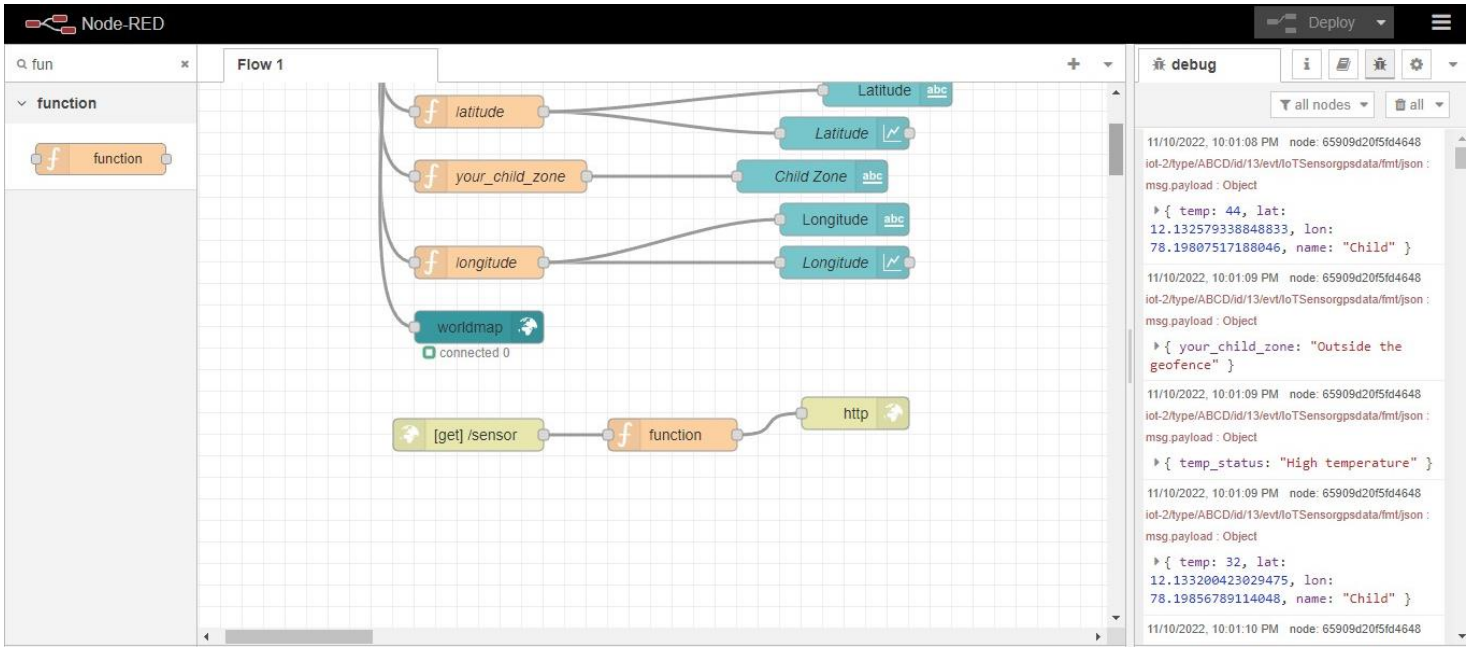
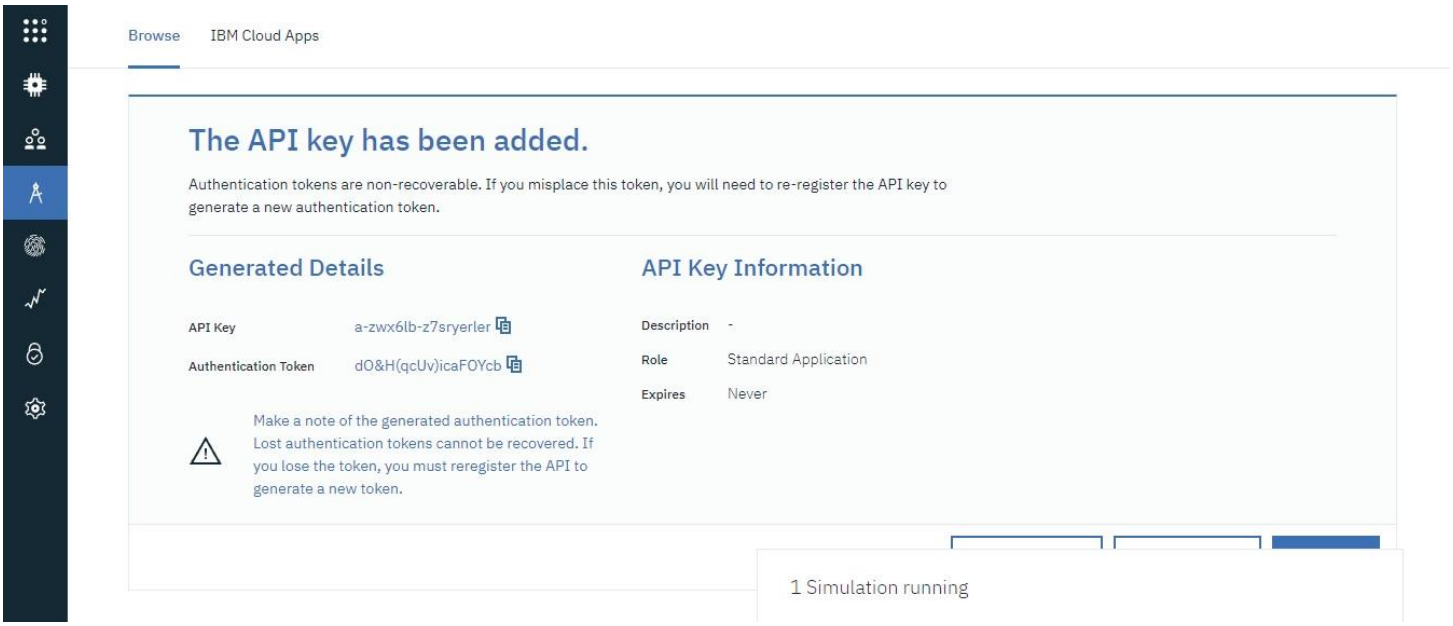
Creating Node-Red service:

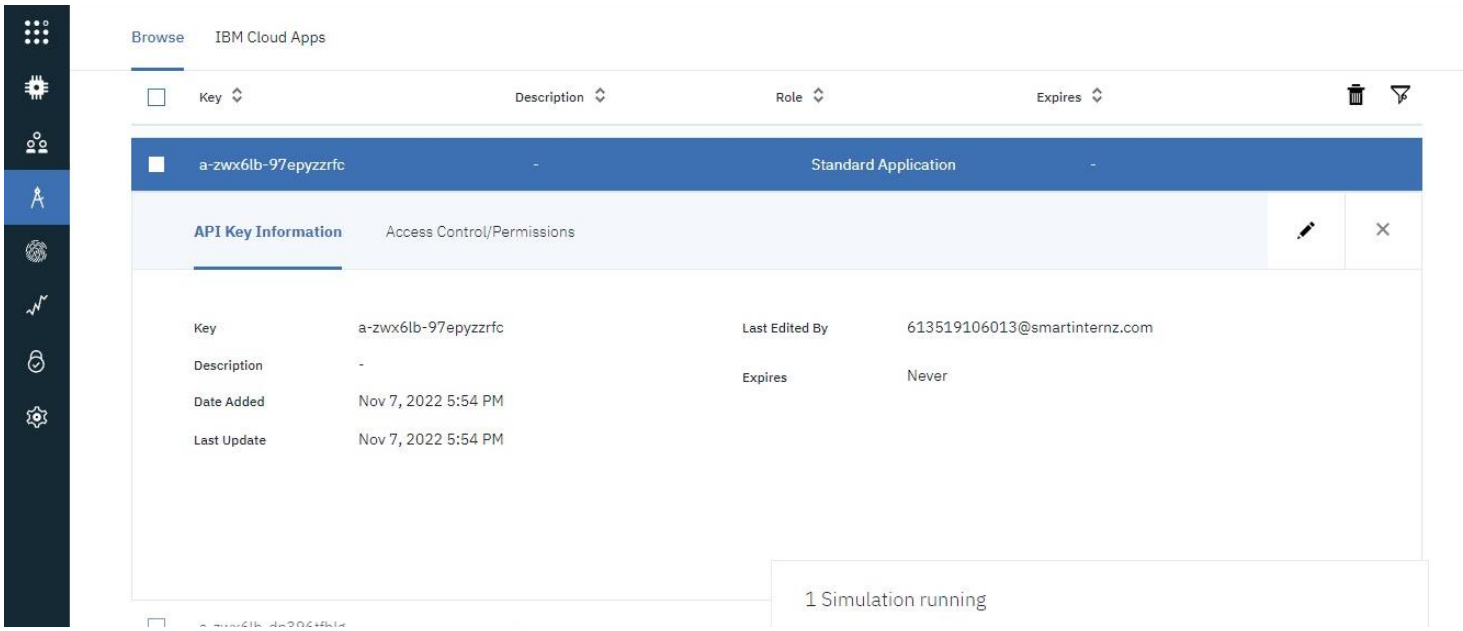




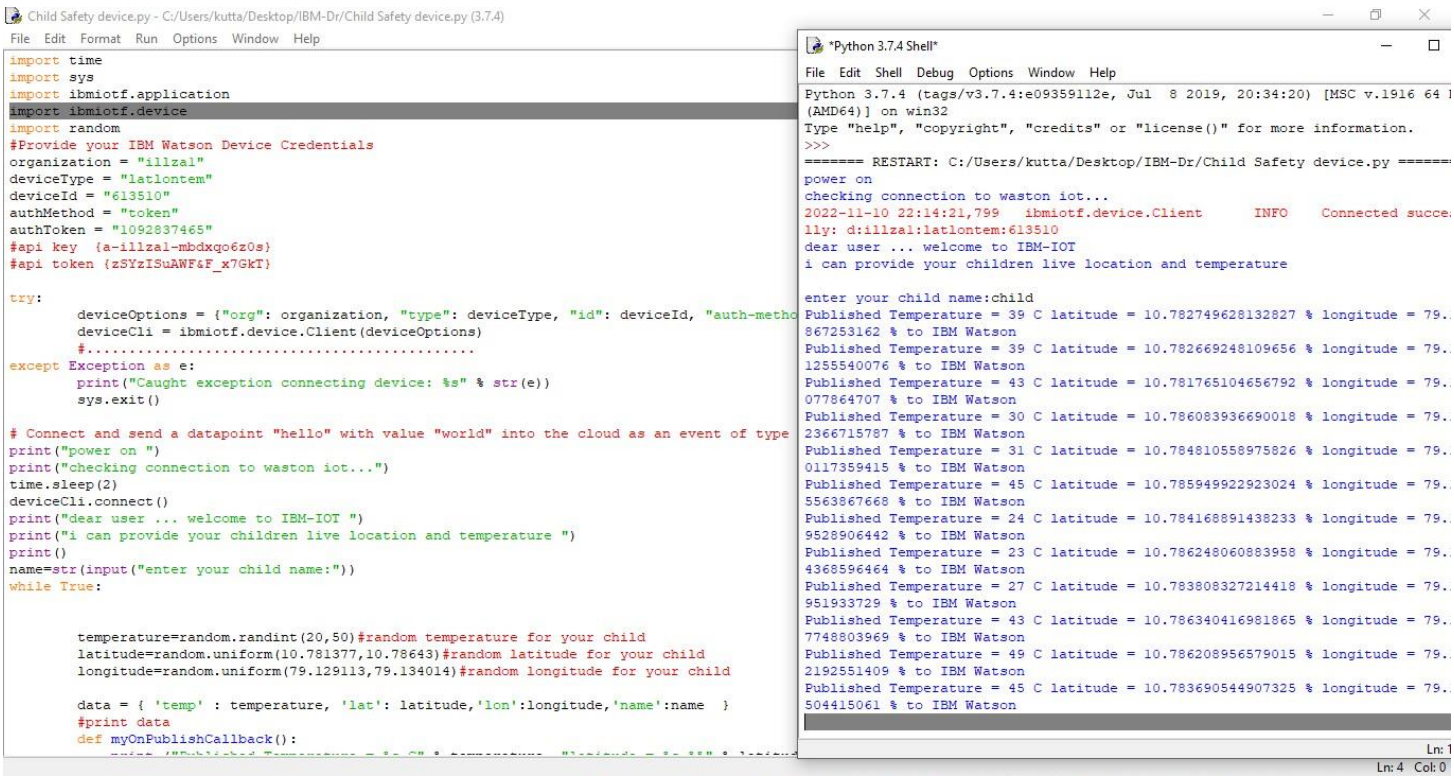
Connecting with IBM Cloud:

Using IBM IOT node through API key





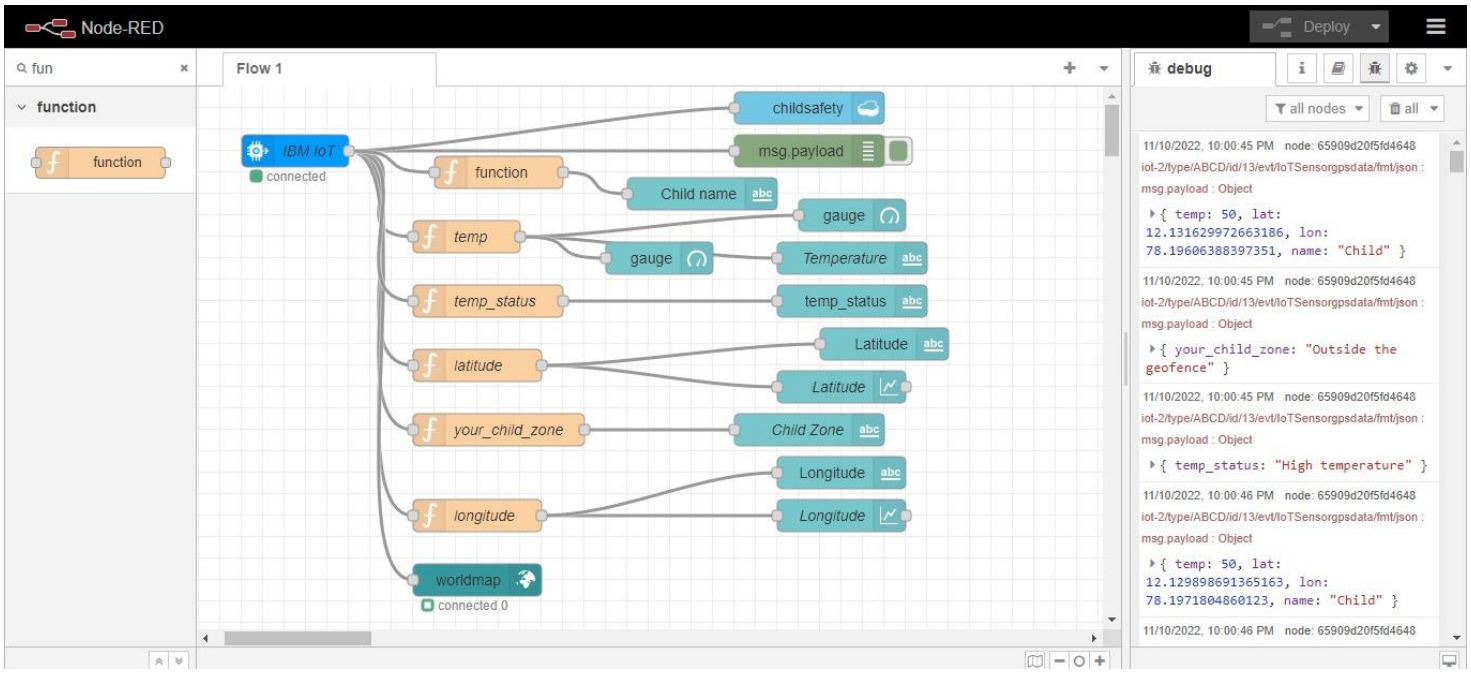
Transferring values from Python Code:



```
Child Safety device.py - C:/Users/kutta/Desktop/IBM-Dr/Child Safety device.py (3.7.4)
File  Edit  Format  Run  Options  Window  Help
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 I
(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
                                                                        Ln: 1
                                                                        Ln: 4  Col: 0
```

Node-Red:



Node-Red Dashboard: