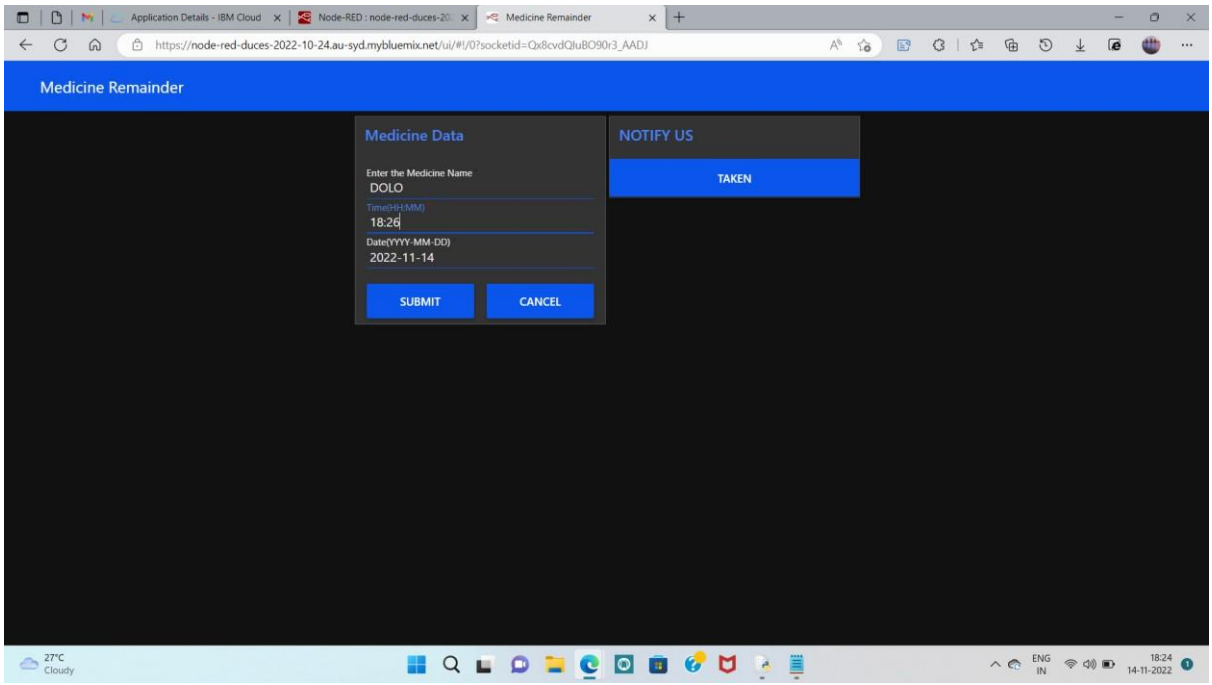
SPRINT-4

Date	09 November 2022
Team ID	PNT2022TMID420623
Project Name	Personal Assistance for Seniors who are Self-Reliant

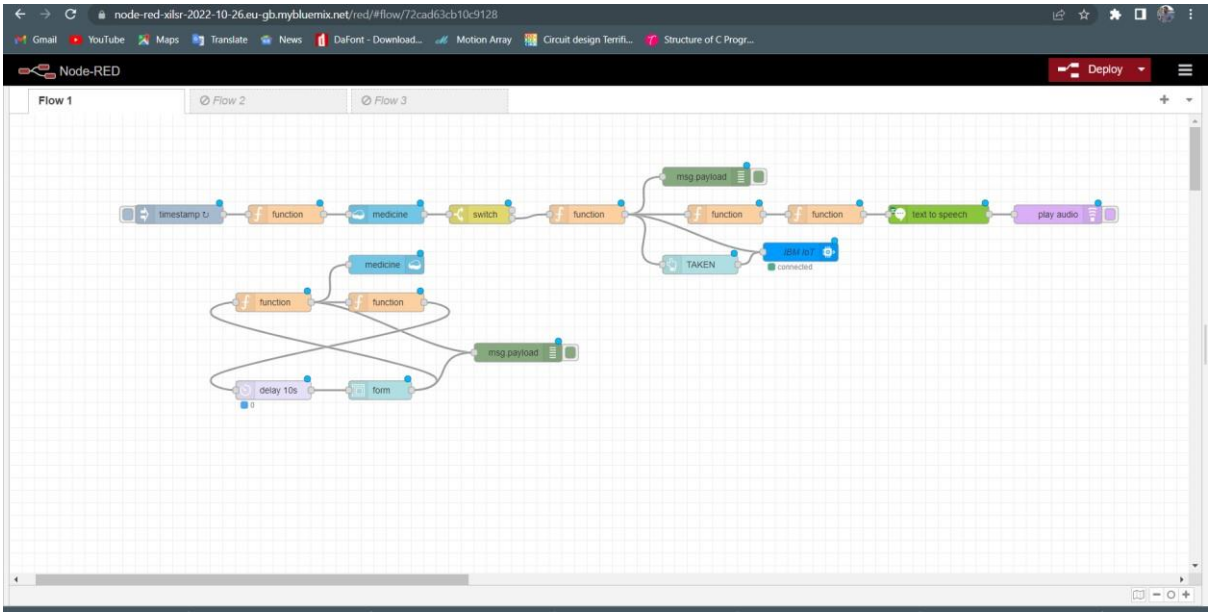
CASE:

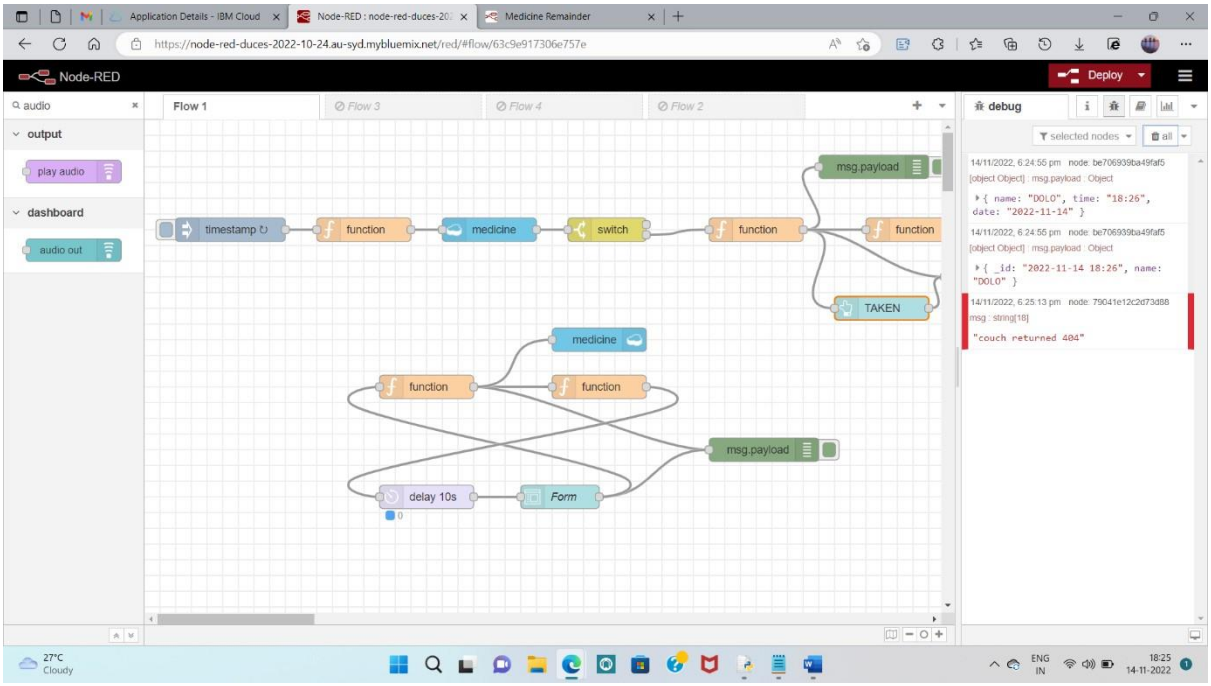
To develop a python script to receive data from node-red by using IBM Watson IoT platform

INPUT:

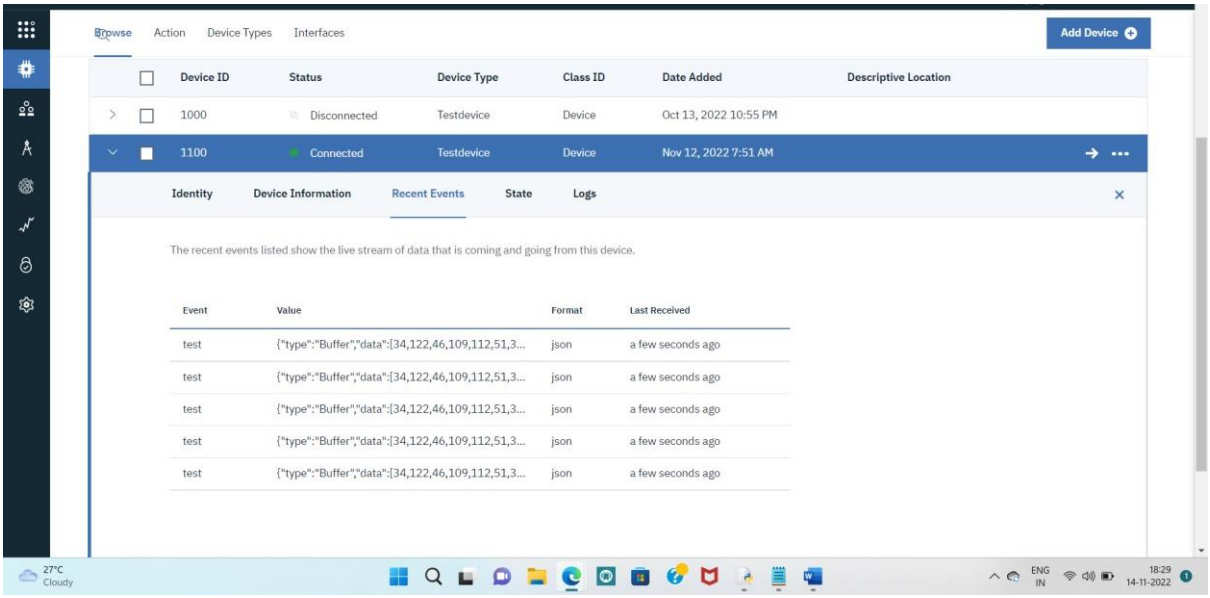


NODE RED FLOW AND OUTPUT:


node-red-xilsr-2022-10-26.eu-gb.mybluemix.net/red/#flow/72cad63cb10c9128
Node-RED
Deploy
Flow 1
Flow 2
Flow 3
timestamp
function
medicine
switch
function
msg.payload
function
function
text to speech
play audio
TAKEN
connected
medicine
function
function
msg.payload
delay 10s
form


Application Details - IBM Cloud
Node-RED : node-red-duces-20
Medicine Remainder
https://node-red-duces-2022-10-24.au-syd.mybluemix.net/red/#flow/63c9e917306e757e
Node-RED
Deploy
audio
output
play audio
dashboard
audio out
Flow 1
Flow 3
Flow 4
Flow 2
debug
timestamp
function
medicine
switch
function
function
msg.payload
TAKEN
medicine
function
function
msg.payload
delay 10s
Form
"couch returned 404"

IoT OUTPUT:



PYTHON SCRIPT: import wiotp.sdk.device import time import

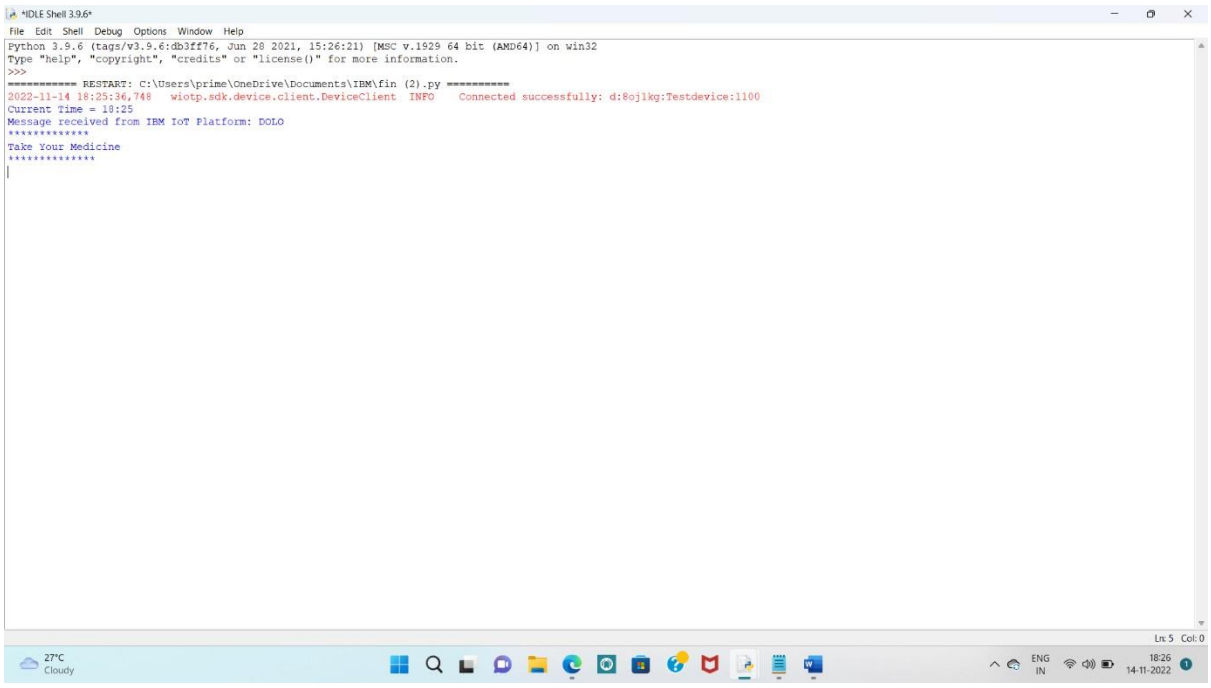
random import playsound from datetime import datetime from

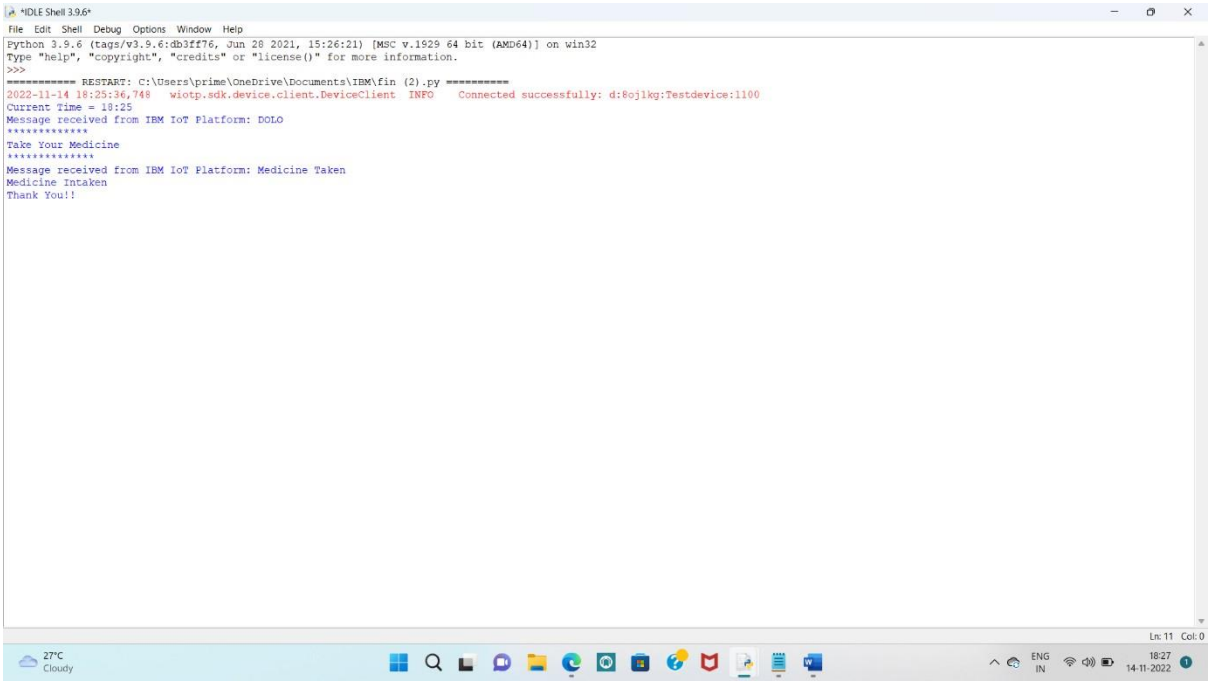
ibm_watson import TextToSpeechV1 from

```
ibm_cloud_sdk_core.authenticators import IAMAuthenticator
myConfig = {
   "identity": {
      "orgId": "pje2x1",
      "typeId": "Test1",
      "deviceId":"555"
   },
   "auth": {
      "token": "Thiyagu@21"
   }
}

def myCommandCallback(cmd):     print("Message received from IBM IoT
Platform: %s" % cmd.data['command'])     m=cmd.data['command']
if(m=="Medicine Taken"):       print("Medicine Intaken")
   else:
      print("**************")
print("Take Your Medicine")
print("***************")

client = wiotp.sdk.device.DeviceClient(config=myConfig, logHandlers=None)
client.connect()

authenticator = IAMAuthenticator('07htoTDmlEv0F75vmA5YDyCz7mIINscQ0zbrT2p-vrNm')
text_to_speech = TextToSpeechV1(     authenticator=authenticator
)

text_to_speech.set_service_url('https://api.eu-gb.text-to-
speech.watson.cloud.ibm.com/instances/3346a3b2-4ad2-4fc1-a1f4-c78784c1e0b8')
```

```
now = datetime.now() current_time =
now.strftime("%H:%M") print("Current
Time =", current_time)

while True:   with open('z.mp3','wb')
as audio_file:
   audio_file.write(
text_to_speech.synthesize(
'take your respected medicine',
voice='en-US_AllisonV3Voice',
accept='audio/wav'
      ).get_result().content)
 client.publishEvent(eventId="test", msgFormat="json", data="z.mp3", qos=0, onPublish=None)
client.commandCallback = myCommandCallback
client.disconnect()
```

OUTPUTS:




IDLE Shell 3.9.6
File Edit Shell Debug Options Window Help
Python 3.9.6 (tags/v3.9.6:db3ff76, Jun 28 2021, 15:26:21) [MSC v.1929 64 bit (AMD64)] on win32
Type "help", "copyright", "credits" or "license()" for more information.
>>>
========== RESTART: C:\Users\prime\OneDrive\Documents\IBM\fin (2).py ==========
2022-11-14 18:25:36,748 wiotp.sdk.device.client.DeviceClient INFO Connected successfully: d:8ojlkg:Testdevice:1100
Current Time = 18:25
Message received from IBM IoT Platform: DOLO
****
Take Your Medicine
****
Message received from IBM IoT Platform: Medicine Taken
Medicine Intaken
Thank You!!
Ln: 11 Col: 0
27°C
Cloudy
ENG
IN
18:27
14-11-2022