Date

Team ID

Project Name

Maximum Marks

**SPRINT** - **2**

**19.11.2022**

PNT2022TMID32392

**Project - IoT Based Safety Gadget for Child Safety Monitoring & Notification**

**8 Marks**

**USN- 4:** Integrating the IBM Watson IoT Platform and Cloudant DB withthe

node red.

Launching IBM IOT Watson

IBM Watson IoT Platform

Browse Action Device Types Interfaces

--

Browse Devices

All Devices

Diagnose

Å

This table shows a summary of all devices that have been added. It can be filtered, organized, and searched on using different

criteria. To get started, you can add devices by using the Add Device button, or by using API.

Q Search by Device ID

Items per page

Device ID

**Status**

28

50 •

1-1 of 1 item

Device **Type**

Class ID

**Date** Added

Disconnected

Tracker

asvithavs.cse19@veltechmultitech.org

ID: fjde2i

**Add** Device

101 Y

Device Simulator

Device

Nov 6**,** 2022 11:54 AM

1 of 1 page

< 1 ▼

^

•

! !!!

目

Implementing the node-red in IBM cloud.

IBM **Cloud**

Search resources and products...

vm

•

**Name**

Filter by name or IP address...

**Catalog**

Manage

Asvitha V S's Account

↑ Group

**Location**

Filter by group **or org...**

Filter...

**Product**

Filter**...**

**Status**

Filter...

Databases (2)

node-red**-rvwbe-**2022--cloudant**-...**

Default

London

**Cloudant**

Active

**node-red-rvwbe-**2022--**cloudant-...**

asvithavscse19veltechmultitech/1 **Sydney**

Cloudant

Provisioned

Developer tools (3)

**Continuous Delivery**

Default

**Sydney**

Continuous **Delivery**

**Active**

Node RED RVWBE 2022-11-05

Default

Global

Cloud **Application**

NodeREDRVWBE2022-11-05

Default

Sydney

Toolchain

**Logging and monitoring** (0**)**

**Migration** (0)

Integration (0)

Internet of **Things** (1)

**Internet** of **Things** Platform-ASVÍ

**Default**

Frankfurt

Internet of **Things** Platform

Active

>

>

Designing the node-red work flow for our project.

Node-RED

**Q** filter nodes

✓ common

Flow **1**

debug

inject

IBM IOT

connected

function

msg.payload

complete

function

[get]/childtracker

catch

4

geofence

worldmap

Oconnected 0

http

msg.payload

status

link in

function

rbe

http request

link call O

switch

f function

show dialog

link out

function

*Cloud*

comment

function

msg.payload

✓ function

•

function

**Tags**

Filter**...**

Deploy

**debug**

i

券

Yall nodes

all-

A ¥

-01

Launch the cloudant DB and create a database to store the location data.

品

B

•

**<**

Databases

Monitoring

Databases

Replication

Your **Databases**

Name

Size

# of Docs

Database **name**

Create Database

{}JSON

Partitioned

**Actions**

child\_location

Active Tasks

0 bytes

0

Yes

noderedrvwbe20221105

30.4 KB

4

No

Account

0 bytes

0

Yes

sample

Support

Documentation

目 IBM **Cloudant**

Log Out **IBMid-**66700085RV

4.

1-0

4-0

**410**

Showing 1-3 of 3 databases. Databases per page 20

V

«

1

>>>

For our project we are creating a database called child\_loaction.

Databases

Monitoring

Your Databases

Databases

Name

Replication

Size

# of **Docs**

child\_location

0 bytes

0

Active Tooke

Database name

Create Database {**}**JSON

Partitioned

Actions

Yes

4-0

800

**USN - 5**: Developing the Python code for connecting with IBM Watson IoT

platform.

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4

8

123 5 176σOHN 3

TL

12

import time

import wiotp.sdk.application print("Hello"**)**

EmyConfig = {

"identity**"** : {

"orgId**"**: "fjde21",

**"**typeId": "Tracker"**,**

**"**deviceId**"**:"28"**,**

**"**auth**"**: {

9

}**,**

10

11

"token": "123456789"

13

14

15

16

HHHHHN 2 2 2 2 2 2 2 2 2 3 3 3 3 3

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

17 **while** True**:**

name = "**Child**"

#in area location

latitude = 17.4219272

18

19

20

21

*22*

longitude

=

78.5488783

23

24

25

26

27

28

29

30

**31**

32

33

34

35

client.disconnect(**)**

36

#out area location

#latitude = 17.4219272

#longitude = 78.5488783

myData = {'name':name, 'lat'**:** latitude, 'lon': longitude)

client.publishEvent (eventId = **"**status**"**, msg Format = "json**",** data = myData**,** gos = 0, onPublish =None**) print (**"Data published to IBM IoT Platform**:** ", myData**)**

time.sleep**(**5**)**

Connected successfully with IBM IOT Watson.

Run: child x

H

↑ C:\Users\dell\AppData\Local\**Programs**\Python\Python311**\python.exe C**:/Users/dell/AppData/Local/Programs/Python/child.py

Data published to IBM IoT Platform**:** {'name': 'Child', 'lat**:** 17.4219272, '**Lon**': **78.5488783)**

2022-11-08 20:**56:53,786** wiotp.sdk.device.client.DeviceClient INFO Connected successfully: d:fjde2i: Tracker:28 Data published to IBM IoT Platform: {'name': 'Child', 'lat': 17.4219272, **'**Lon': 78.5488783} Data published to IBM IoT Platform: {'name': 'Child', 'lat': 17.4219272, 'lon': 78.5488783} Data **published** to IBM IoT Platform**: {**'name': 'Child', 'lat: 17.4219272, '**Lon**': 78.5488783**)** Data published to IBM IoT Platform: {'name': 'Child', 'lat**:** 17.4219272, 'Lon': **78.5488783}**

IBM IOT Watson platform receiving the details of the child's location.

IBM Watson IoT **Platform**

M

Browse

Action Device Types

Interfaces

28

Disconnected

Tracker

Device

Nov 6, 2022 11:54 AM

Identity

Device Information

Recent Events

State

**Logs**

The recent events listed show the live stream of data that is coming and going from this device.

Event

Value

status

status

status

status

status

Format

**Last Received**

a few seconds **ago**

{**"name**":"Child","lat":17.4219272,"lon":78.5488... json

{"name":"Child","lat":17.4219272,"lon":78.5488... json

{"name":"Child**",**"lat":17.4219272,"lon":78.5488... json

{"name":"Child","lat":17.4219272,"lon":78.5488... json

{"name":"Child","lat":17.4219272,"lon":78.5488... json

a few seconds ago

a few seconds ago

a few seconds ago

a few seconds ago

**asvithavs.cse19@veltechmultitech.org**

ID: fidezi

**Add Device**