

Date		17-11-2022
Team ID		PNT2022TMID27330
Project name		Signs with smart connectivity for better road safety
Maximum marks		20 marks
1.	Sprint-2	Configure the connection security and create API keys that are used in the Node-RED service for accessing the IBM IOT Platform.
2.	Sprint-2	Create a Node-RED service.

Python code

```
import requests as reqs
```

```
def get(myLocation,APIKEY):
```

```
    apiURL = f"https://api.openweathermap.org/data/2.5/weather?q={myLocation}&appid={APIKEY}"
```

```
    responseJSON = (reqs.get(apiURL)).json()
```

```
    returnObject = { "temperature" : responseJSON['main']['temp'] - 34,
```

```
                    "weather" : [responseJSON['weather'][_]['main'].lower() for _ in range(len(responseJSON['weather']))],
```

```
                    "visibility" : responseJSON['visibility']/100, # visibility in percentage where 10km is 100% and 0km is 0%
```

```
    }
```

```
    if("rain" in responseJSON):
```

```
        returnObject["rain"] = [responseJSON["rain"][key] for key in responseJSON["rain"]]
```

```
    return(returnObject)
```

US-I Configure the connection security and create API keys that are used in the Node-red service for accessing the IBM IOT platform

← → ↺ gkg1c.internetofthings.ibmcloud.com/dashboard/apps/browse/add

IBM Watson IoT Platform


anupama.hemu@gmail.com
ID: gkg1c

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 Information	
API Key	a-gkg1c-t8k5ryqa64	Description	-
Authentication Token	QZLvW3Sv3rCgmuyz+m	Role	Standard Application
		Expires	Never



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.

View API Key

Add Another

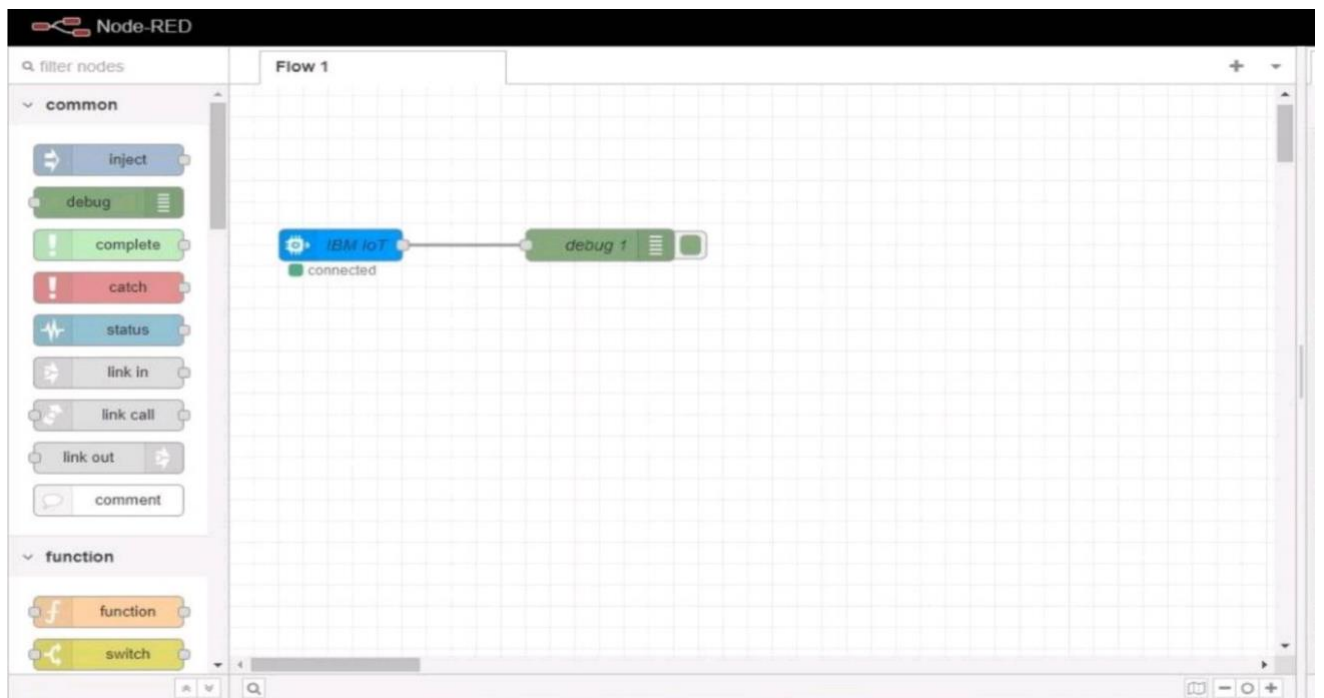
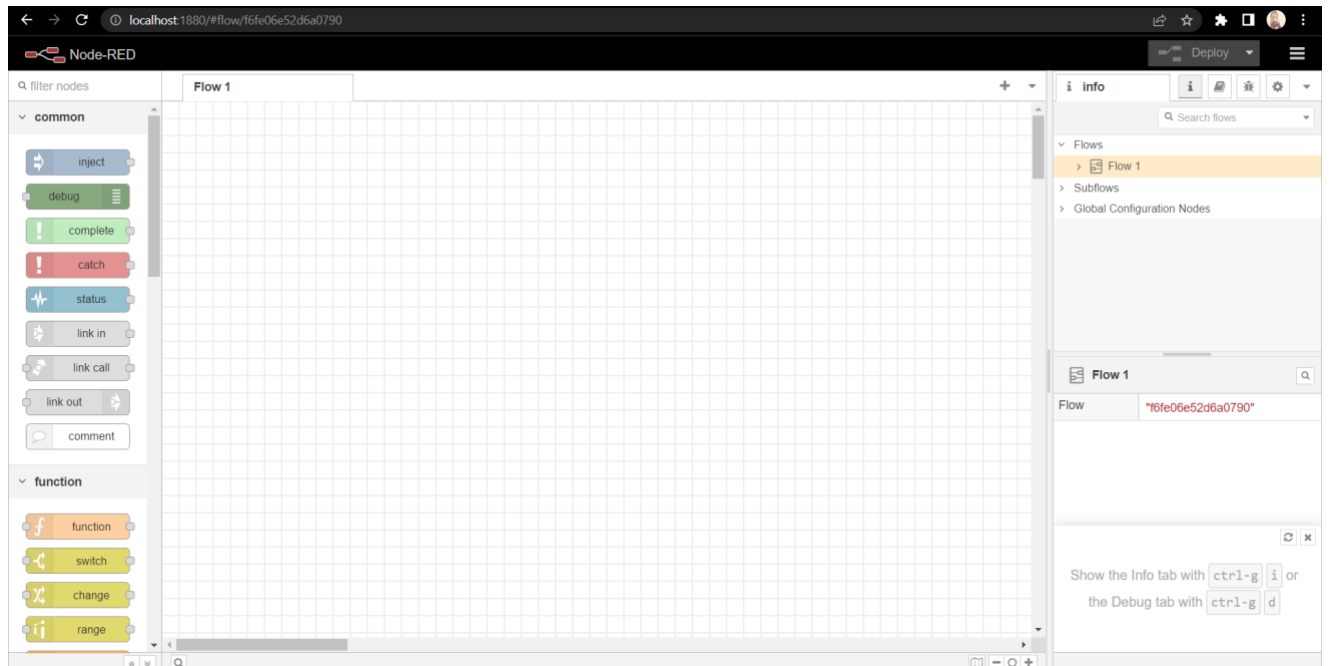
Close

Browse API Keys

This table shows a summary of the API keys that have been added for the organization. It can be filtered, organized, and search on using different criteria. To get started, you can add API keys by clicking Generate API Key,

Type the app description to search for

US-2 Create a Node-red service



Node-RED

Flow 1

filter nodes

link call

link out

comment

function

function

switch

change

range

template

delay

trigger

exec

filter

IBM IoT

connected

debug 1

temperature

humidity

rain

temperature

humidity

rain

Edit gauge node

Delete

Cancel

Done

Properties

Group [weather] road safety

Size auto

Type Gauge

Label humidity

Value format {{value}}

Units units

Range min 0 max 100

Colour gradient

Sectors 0 optional optional 100

Class Optional CSS class name(s) for widget

Enabled

Node-RED

Flow 1

filter nodes

link call

link out

comment

function

function

switch

change

range

template

delay

trigger

exec

filter

IBM IoT

connected

debug 1

temperature

humidity

rain

temperature

humidity

rain

Edit gauge node

Delete

Cancel

Done

Properties

Group [weather] road safety

Size auto

Type Gauge

Label rain

Value format {{value}}

Units units

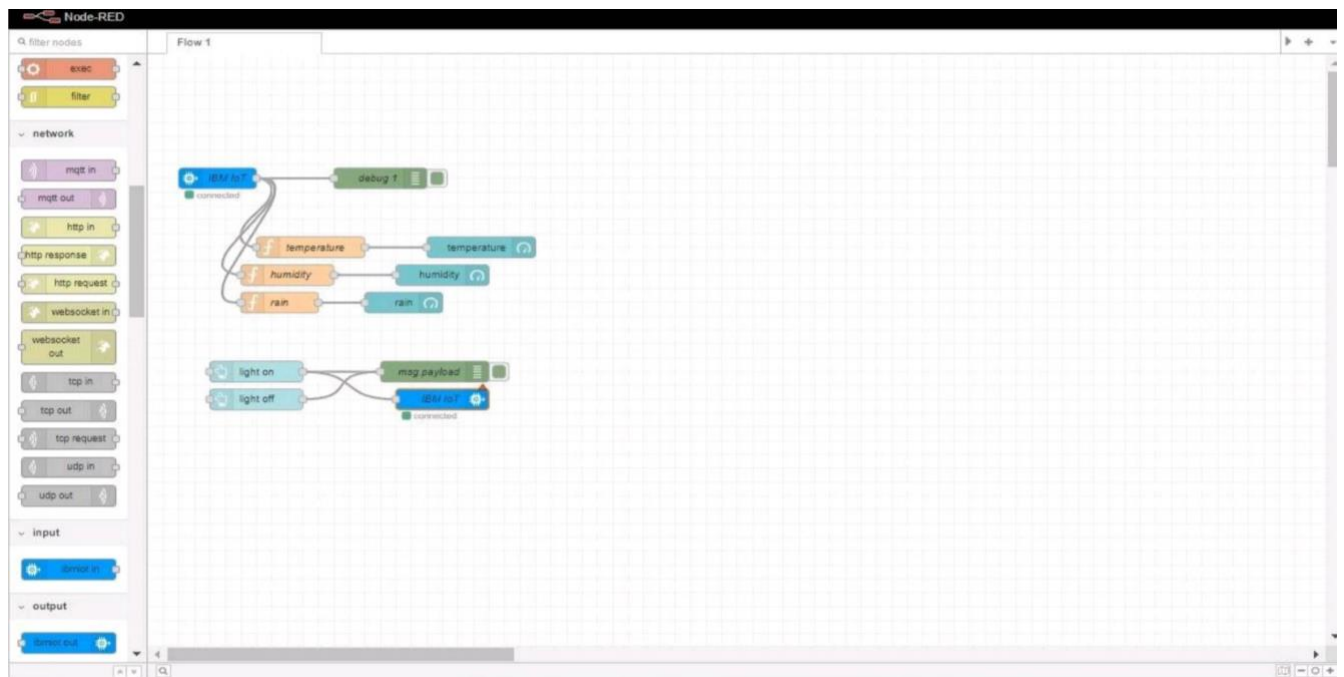
Range min 0 max 100

Colour gradient

Sectors 0 optional optional 100

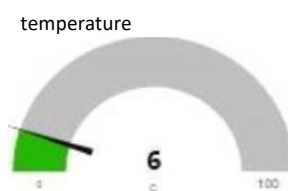
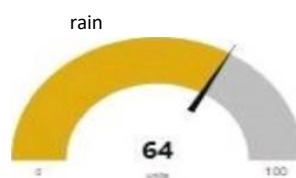
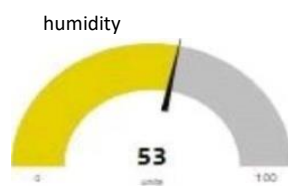
Class Optional CSS class name(s) for widget

Enabled



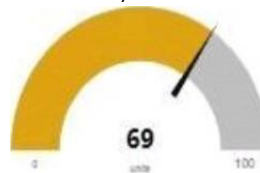
output from recent events

road safety

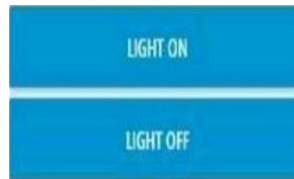


road safety

humidity



rain



temperature



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Computer program

MIT App Inventor is a web application integrated development environment originally provided by Google, and now maintained by the Massachusetts Institute of Technology. [Wikipedia](#)

Initial release date: 15 December 2010

Operating system: [Android](#)

Available in: 19 languages

Stable release: nb180a / November 26, 2019; 2 years ago

