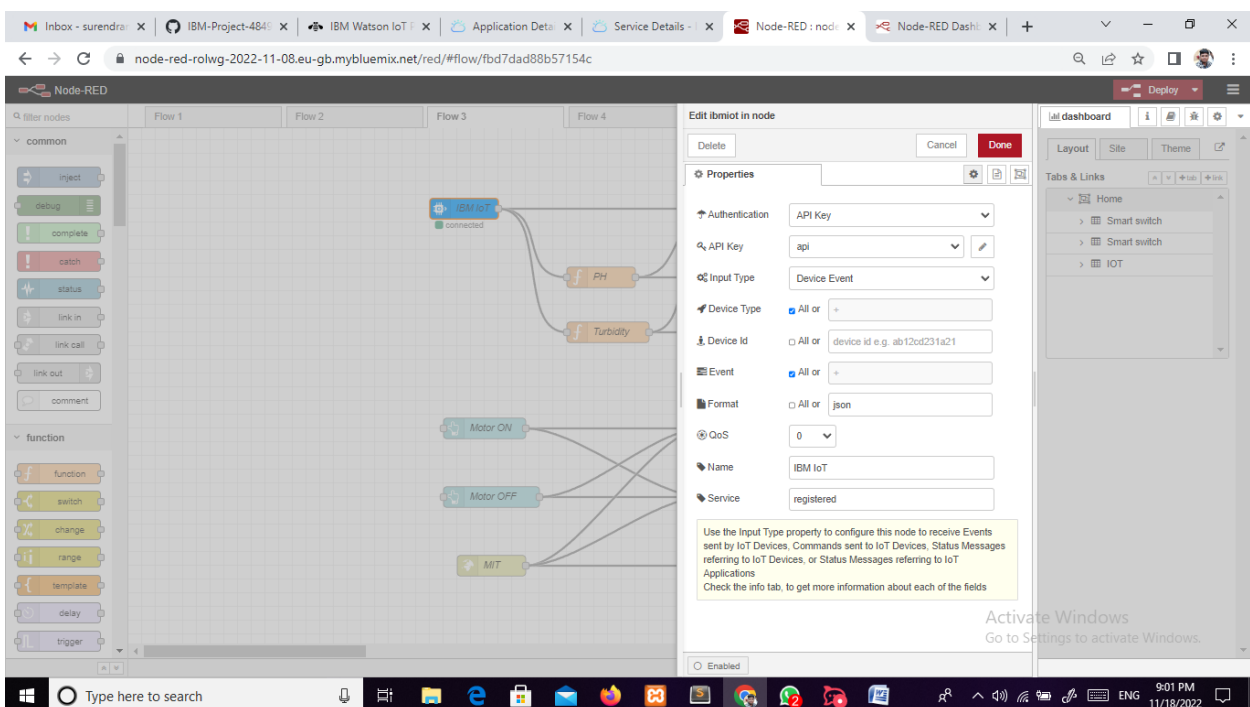
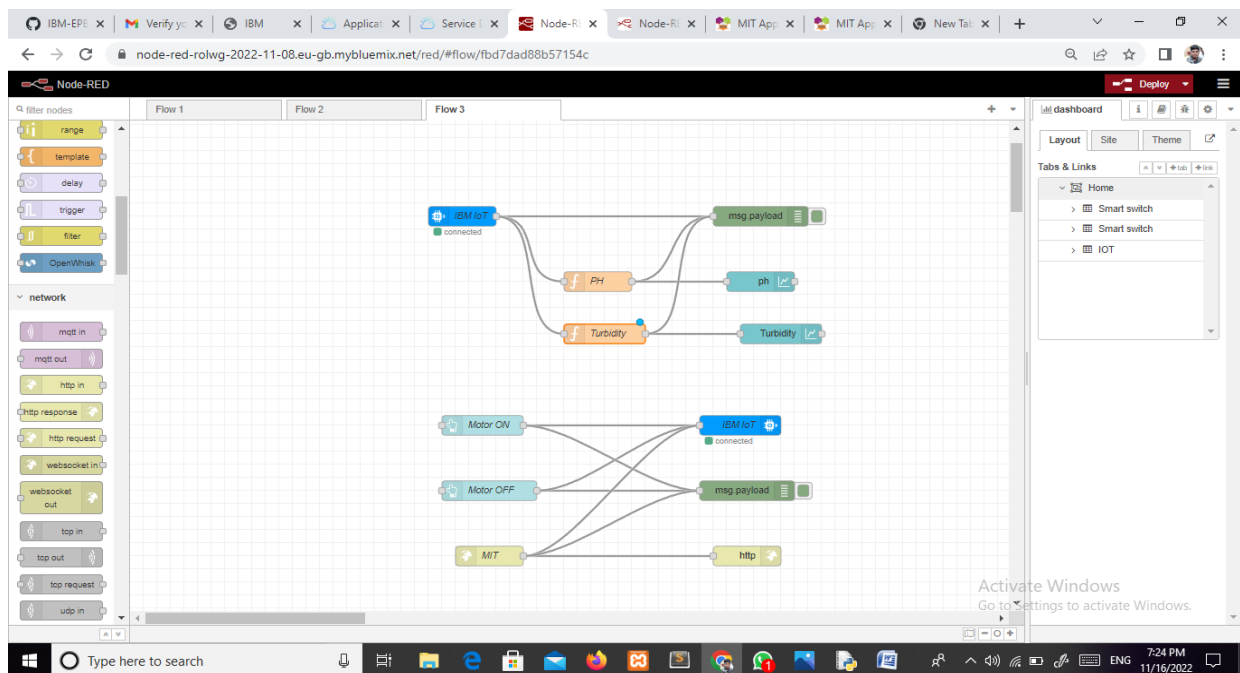


Project Development Phase

Sprint 4

Team ID	PNT2022TMID44989
Project Name	Real-Time River Water Quality Monitoring and Control System



node-red-rolwg-2022-11-08.eu-gb.mybluemix.net/red/#flow/fbd7dad88b57154c

Node-RED

Flow 1 Flow 2 Flow 3

common

- inject
- debug
- complete
- catch
- status
- link in
- link call
- link out
- comment

function

- function
- switch
- change
- range
- template
- delay
- trigger

IBM IoT

Motor ON

Motor OFF

MIT

Edit function node

Name: PH

Setup On Start On Message On Stop

```
1 msg.payload=msg.payload.PH
2 return msg;
```

dashboard

Layout Site Theme

Home

- Smart switch
- Smart switch
- IOT

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9:01 PM 11/18/2022

node-red-rolwg-2022-11-08.eu-gb.mybluemix.net/red/#flow/fbd7dad88b57154c

Node-RED

Flow 1 Flow 2 Flow 3

common

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function

- function
- switch
- change
- range
- template
- delay
- trigger

IBM IoT

Motor ON

Motor OFF

MIT

Edit function node

Name: Turbidity

Setup On Start On Message On Stop

```
1 msg.payload=msg.payload.Turbidity
2 return msg;
3
```

dashboard

Layout Site Theme

Home

- Smart switch
- Smart switch
- IOT

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node-red-rolwg-2022-11-08.eu-gb.mybluemix.net/red/#flow/fbd7dad88b57154c

Node-RED

Flow 1 Flow 2 Flow 3 Flow 4

common

- inject
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- complete
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- status
- link in
- link call
- link out
- comment

function

- function
- switch
- change
- range
- template
- delay
- trigger

IBM IoT

PH

Turbidity

Motor ON

Motor OFF

MIT

Edit button node

Properties

- Group: [Home] Smart switch
- Size: auto
- Icon: optional icon
- Label: Motor ON
- Tooltip: optional tooltip
- Color: optional text/icon color
- Background: optional background color

When clicked, send:

Payload: [] ("Command": "tighten")

Topic: msg topic

If msg arrives on input, emulate a button click: ☐

Class: Optional CSS class name(s) for widget

Name: Motor ON

Deploy

Layout Site Theme

Home

- Smart switch
- Smart switch
- IOT

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Node-RED

Flow 1 Flow 2 Flow 3 Flow 4

common

- inject
- debug
- complete
- catch
- status
- link in
- link call
- link out
- comment

function

- function
- switch
- change
- range
- template
- delay
- trigger

IBM IoT

PH

Turbidity

msg payload

ph

Turbidity

Motor ON

Motor OFF

MIT

msg payload

http

debug

11/18/2022, 9:05:54 PM node: a093baafae333897
iot-2thype/LaptopId0410evltuTSensorFn1jpcn : msg.payload : undefined
undefined

11/18/2022, 9:05:54 PM node: c2e27151337163e7
iot-2thype/LaptopId0410evltuTSensorFn1jpcn : msg.payload : number
187

11/18/2022, 9:05:54 PM node: c2e27151337163e7
iot-2thype/LaptopId0410evltuTSensorFn1jpcn : msg.payload : number
68

11/18/2022, 9:05:55 PM node: a093baafae333897
iot-2thype/LaptopId0410evltuTSensorFn1jpcn : msg.payload : Object
{ PH: 189, Turbidity: 82 }

11/18/2022, 9:05:55 PM node: a093baafae333897
iot-2thype/LaptopId0410evltuTSensorFn1jpcn : msg.payload : undefined
undefined

11/18/2022, 9:05:55 PM node: a093baafae333897
iot-2thype/LaptopId0410evltuTSensorFn1jpcn : msg.payload : undefined
undefined

11/18/2022, 9:05:55 PM node: c2e27151337163e7
iot-2thype/LaptopId0410evltuTSensorFn1jpcn : msg.payload : Object
{ PH: 189, Turbidity: 82 }

11/18/2022, 9:05:55 PM node: c2e27151337163e7
iot-2thype/LaptopId0410evltuTSensorFn1jpcn : msg.payload : number
189

11/18/2022, 9:05:55 PM node: c2e27151337163e7
iot-2thype/LaptopId0410evltuTSensorFn1jpcn : msg.payload : number
82

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node-red-rolwg-2022-11-08.eu-gb.mybluemix.net/red/#flow/fbd7dad88b57154c

Node-RED

Flow 1 Flow 2 Flow 3 Flow 4

common

- inject
- debug
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- link out
- comment

function

- function
- switch
- change
- range
- template
- delay
- trigger

Flow 1

```

graph LR
    IBMIoT[IBM IoT] --> PH[PH]
    IBMIoT --> Turbidity[Turbidity]
    PH --> msgPayload1[msg payload]
    Turbidity --> msgPayload1
    PH --> ph[ph]
    Turbidity --> Turbidity[Turbidity]
    MotorON[Motor ON] --> IBMIoT
    MotorOFF[Motor OFF] --> IBMIoT
    MIT[MIT] --> msgPayload2[msg payload]
    MIT --> http[http]
  
```

Flow 2

Flow 3

Flow 4

debug

```

11/18/2022, 9:05:51 PM node: a083baafae333897
is: 2thypeLaptopId0410levltuTSensorfntjpon : msg payload : undefined
undefined
11/18/2022, 9:05:51 PM node: a083baafae333897
is: 2thypeLaptopId0410levltuTSensorfntjpon : msg payload : undefined
undefined
11/18/2022, 9:05:51 PM node: a083baafae333897
is: 2thypeLaptopId0410levltuTSensorfntjpon : msg payload : undefined
undefined
11/18/2022, 9:05:51 PM node: c2e27151337163e7
is: 2thypeLaptopId0410levltuTSensorfntjpon : msg payload : Object
{ PH: 98, Turbidity: 93 }
11/18/2022, 9:05:51 PM node: c2e27151337163e7
is: 2thypeLaptopId0410levltuTSensorfntjpon : msg payload : number
98
11/18/2022, 9:05:51 PM node: c2e27151337163e7
is: 2thypeLaptopId0410levltuTSensorfntjpon : msg payload : number
93
11/18/2022, 9:05:52 PM node: a083baafae333897
is: 2thypeLaptopId0410levltuTSensorfntjpon : msg payload : Object
{ PH: 94, Turbidity: 66 }
11/18/2022, 9:05:52 PM node: c2e27151337163e7
is: 2thypeLaptopId0410levltuTSensorfntjpon : msg payload : Object
{ PH: 94, Turbidity: 66 }
11/18/2022, 9:05:52 PM node: a083baafae333897
is: 2thypeLaptopId0410levltuTSensorfntjpon : msg payload : undefined
undefined
11/18/2022, 9:05:52 PM node: a083baafae333897
is: 2thypeLaptopId0410levltuTSensorfntjpon : msg payload : undefined
undefined
  
```

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9:06 PM
11/18/2022

node-red-rolwg-2022-11-08.eu-gb.mybluemix.net/ui/#/0/socketid=37LsRggXqmx_IsJRAAd

Home

Smart switch

Smart switch

MOTOR ON

MOTOR OFF

IOT

ph

Turbidity

Activate Windows
Go to Settings to activate Windows.

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7:03 PM
11/16/2022