

# PROJECT DEVELOPMENT PHASE

## SPRINT 3

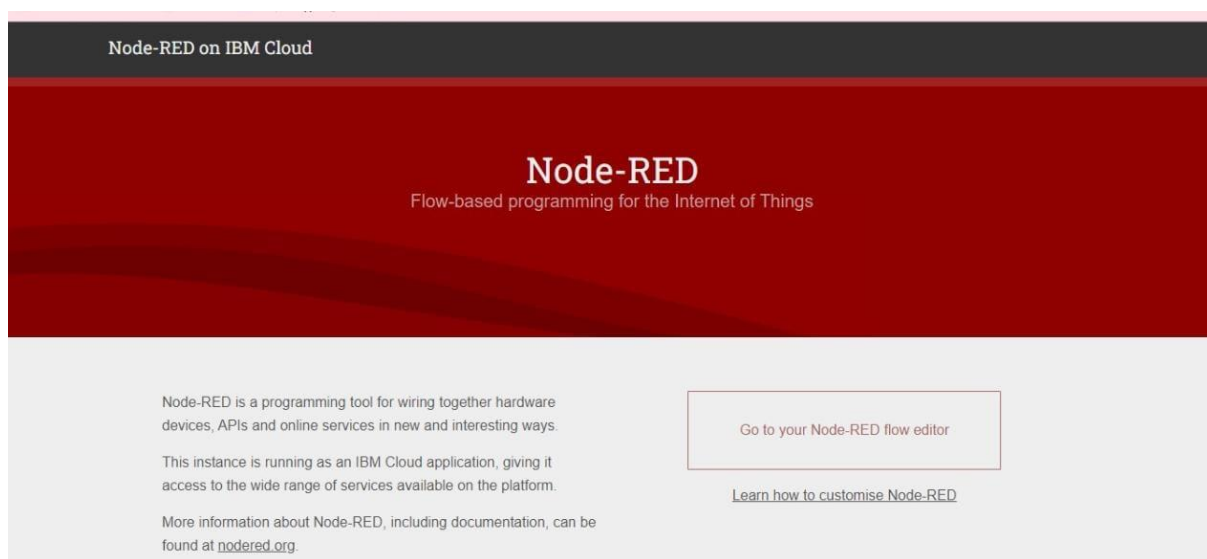
Date	16 November 2022
Team ID	PNT2022TMID13542
Project name	Hazardous area monitoring for industrial power plants by IoT
Maximum marks	2 marks

### ANALYZE THE PREREQUISITES

Needed prerequisites for real time river water quality monitoring and control system using Internet Of Things (IoT) were

- ❖ IBM Watson IoT Platform
- ❖ Node-RED Service
- ❖ Cloudant DB

### NODE-RED



### Procedure for the creation of NODE -RED

Node-RED interface showing a flow named "Flow 1". The flow consists of an "IBM IoT" node (connected), a "temperature" node, and a "msg payload" node. The "debug" console on the right displays the following data:

```
msg.payload: Object
  { temperature: 96 }
11/14/2022, 8:24:09 PM node: 12622ba8d79f54e0
iot-2type/NodemcuId/123/ev/ventflow/fmt/json :
msg.payload: Object
  { temperature: 99 }
11/14/2022, 8:24:37 PM node: 12622ba8d79f54e0
iot-2type/NodemcuId/123/ev/ventflow/fmt/json :
msg.payload: Object
  { temperature: 92 }
11/14/2022, 8:33:50 PM node: 12622ba8d79f54e0
iot-2type/NodemcuId/123/ev/ventflow/fmt/json :
msg.payload: Object
  { temperature: 95 }
11/14/2022, 8:33:50 PM node: 12622ba8d79f54e0
iot-2type/NodemcuId/123/ev/ventflow/fmt/json :
msg.payload: number
95
```

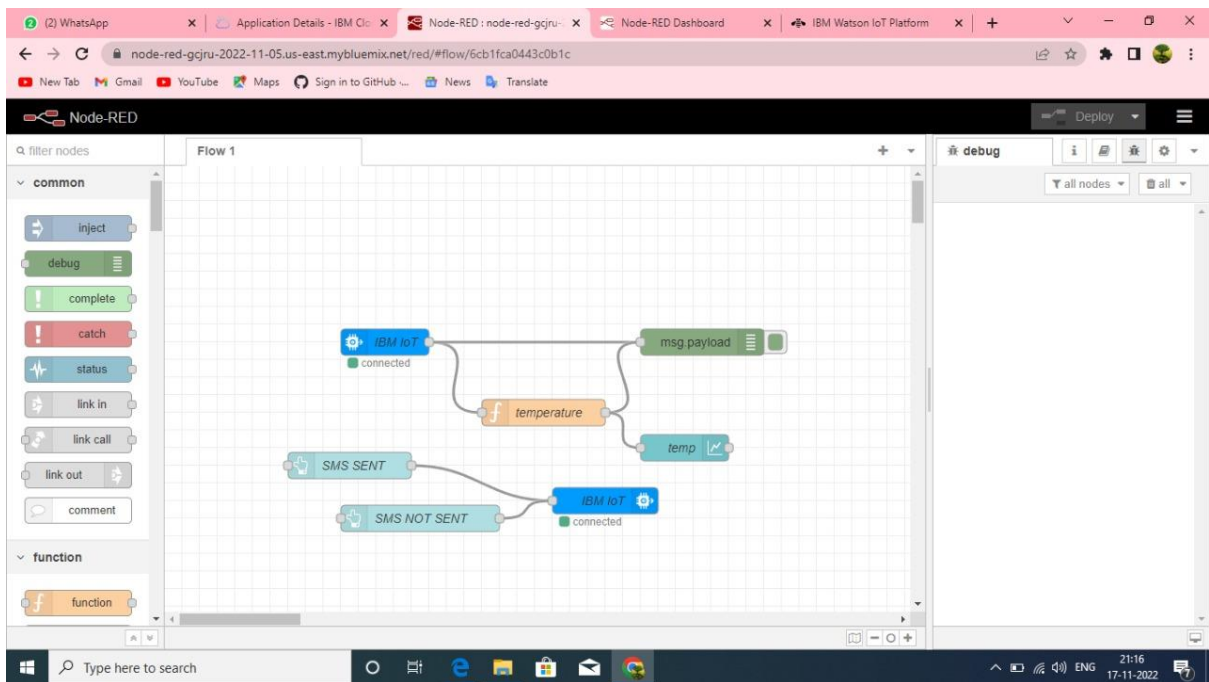
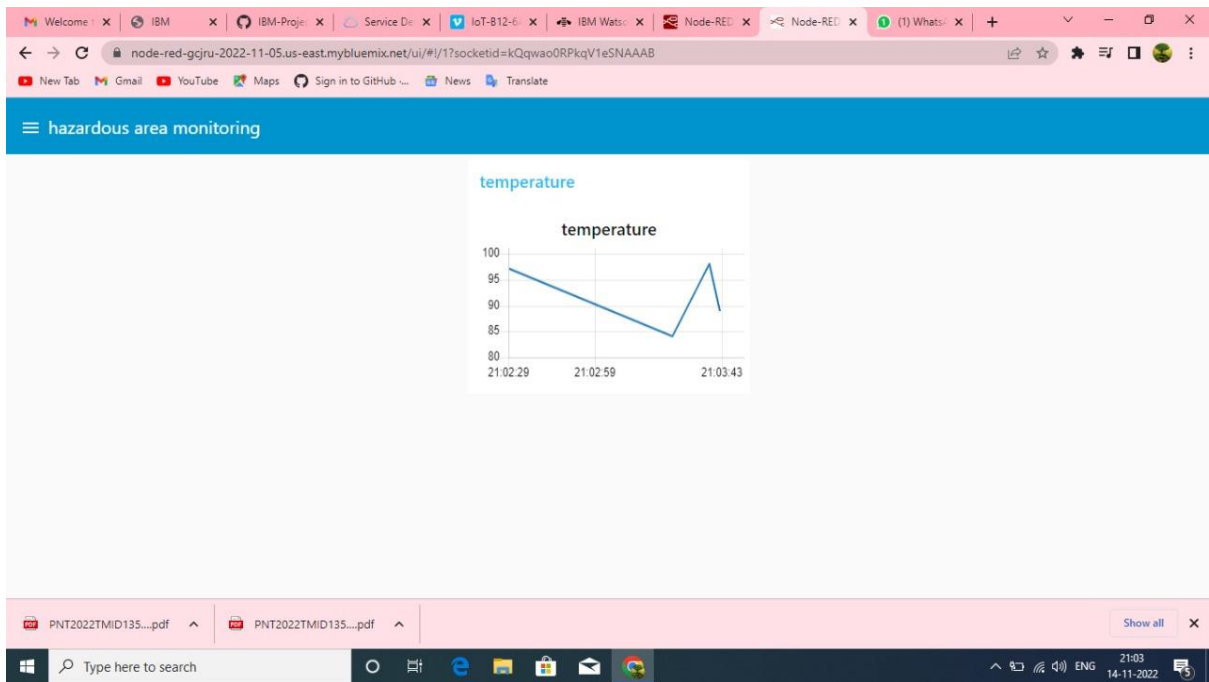
The browser address bar shows the URL: `node-red-gcjr-2022-11-05-us-east.mybluemix.net/red/#flow/5cb1fca0443c0b1c`. The taskbar at the bottom shows the Windows search bar and various application icons.

hazardous area monitoring

temperature

The graph displays temperature data over time. The y-axis is labeled "temperature" and ranges from 80 to 100. The x-axis shows time from 21:02:00 to 21:08:00. The graph shows a sharp drop from approximately 98 to 85 at 21:03:00, followed by a sharp rise back to approximately 98 at 21:04:00.

The browser address bar shows the URL: `node-red-gcjr-2022-11-05-us-east.mybluemix.net/ui/#/17socketid=RRVSHn3AfoQWij7vAAAD`. The taskbar at the bottom shows the Windows search bar and various application icons.



The screenshot displays a web browser window with multiple tabs. The active tab is 'Node-RED : node-red-gcjr-...' showing a Node-RED dashboard. The browser's address bar contains the URL: `node-red-gcjr-2022-11-05-us-east.mybluemix.net/ui/#/1?socketid=nFXU2Bsg-tMuO0-8AAAJ`. The dashboard has a blue header with the text 'hazardous area monitoring'. Below the header, there is a 'temperature' section with a line graph. The graph's y-axis is labeled 'temperature' and ranges from 74 to 76. The x-axis shows three time points: '00:00:00', '00:00:00', and '00:00:00'. To the right of the graph, there are two blue buttons: 'SMS SENT' and 'SMS NOT SENT'.