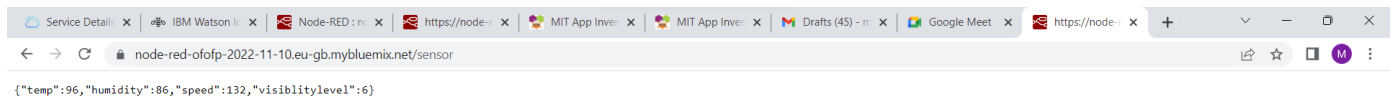


SPRINT 3 (PART –2)

TEAMID	PNT2022TMID01063
PROJECT NAME	SIGNS WITH SMART CONNECTIVITY FOR BETTER ROAD SAFETY

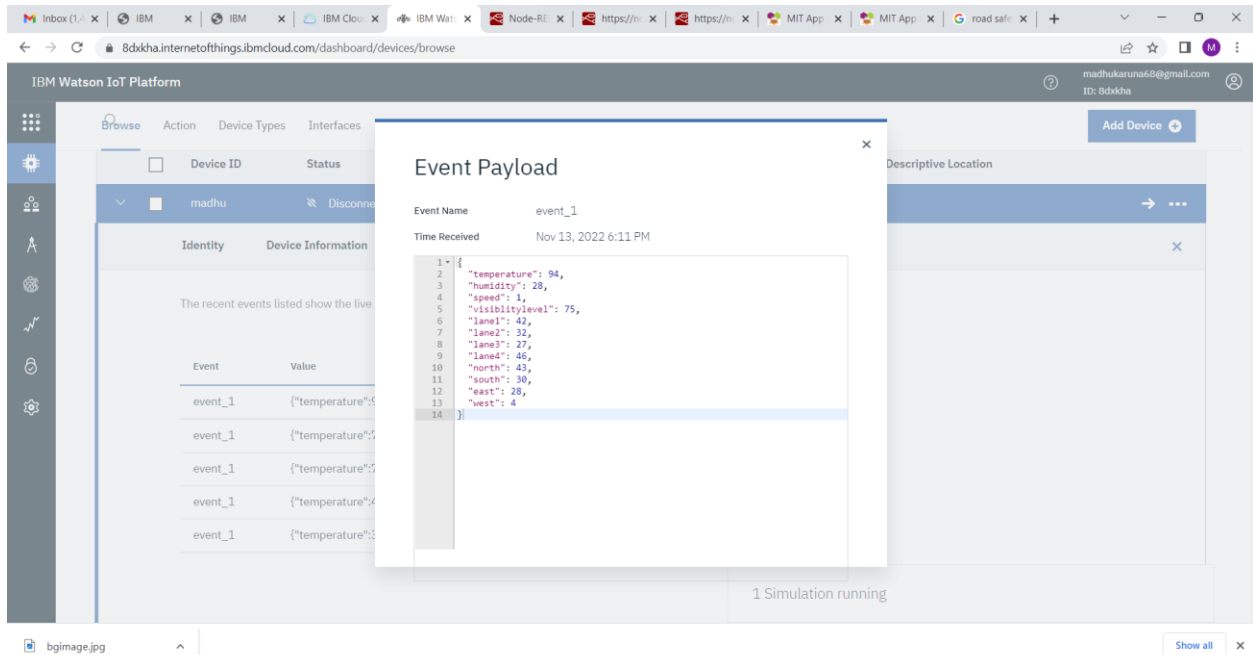
Further updates in sprint 3 are considered and the workflow is illustrated below



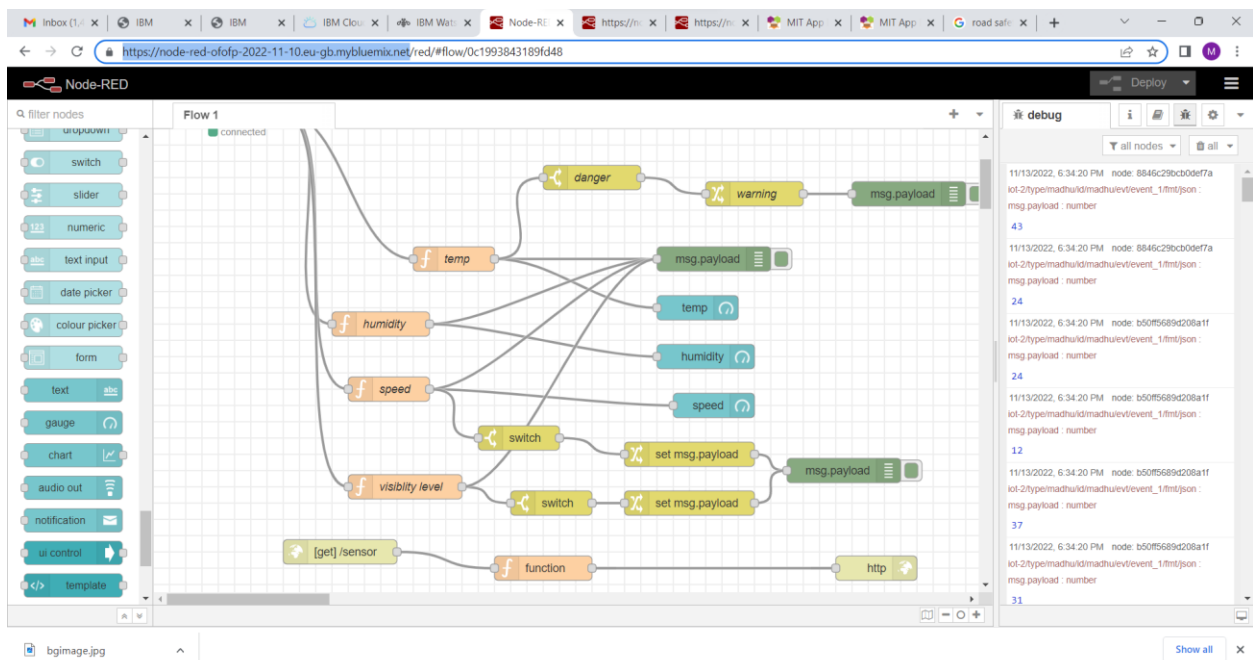
The speed and visibility level are considered and given as output and the link is mentioned below:

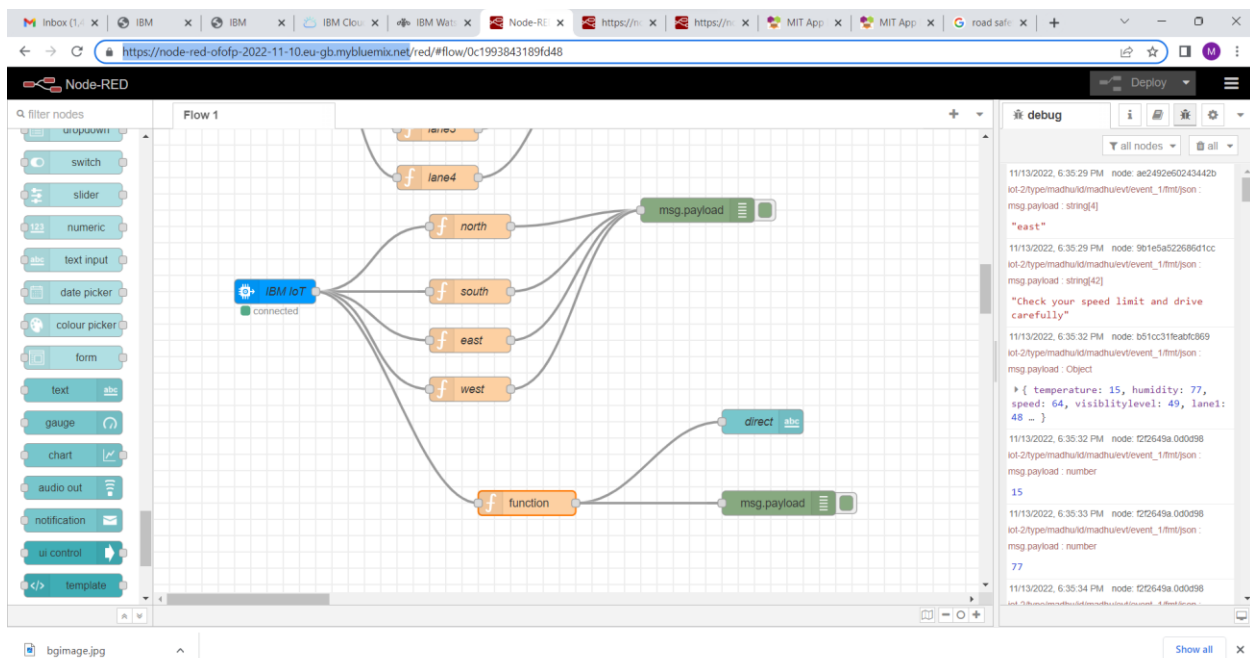
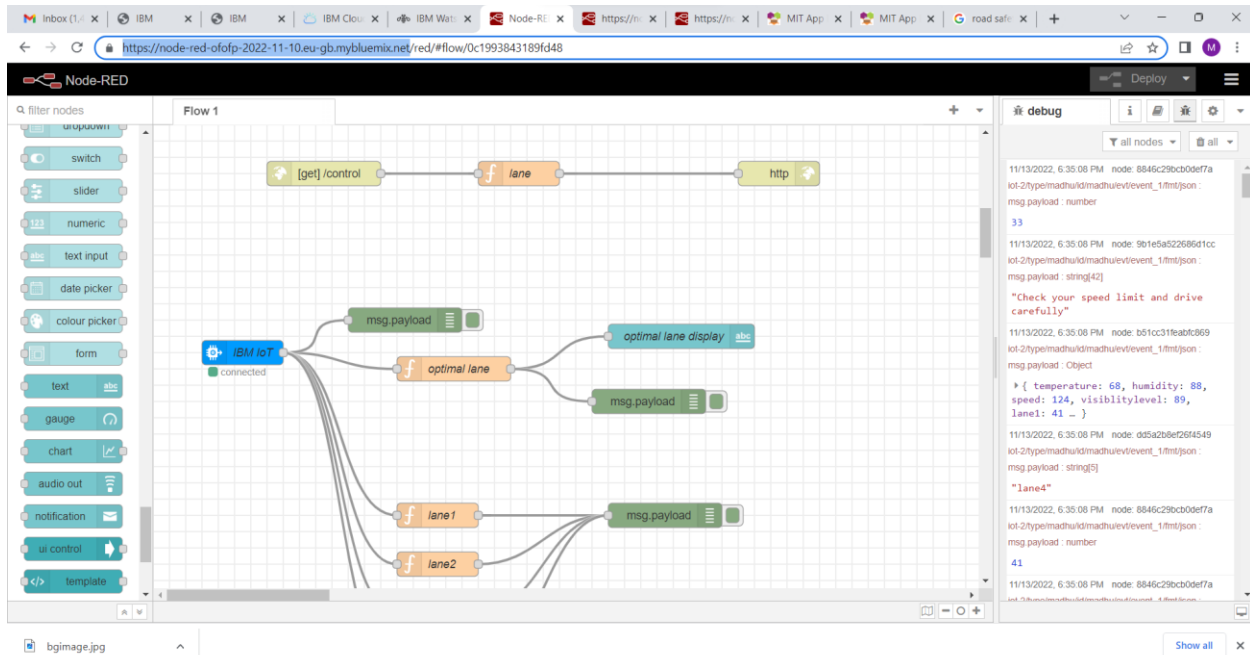
<https://node-red-ofofp-2022-11-10.eu-gb.mybluemix.net/sensor>

Inputs of lane and direction are considered



Node red flow is indicated as below:

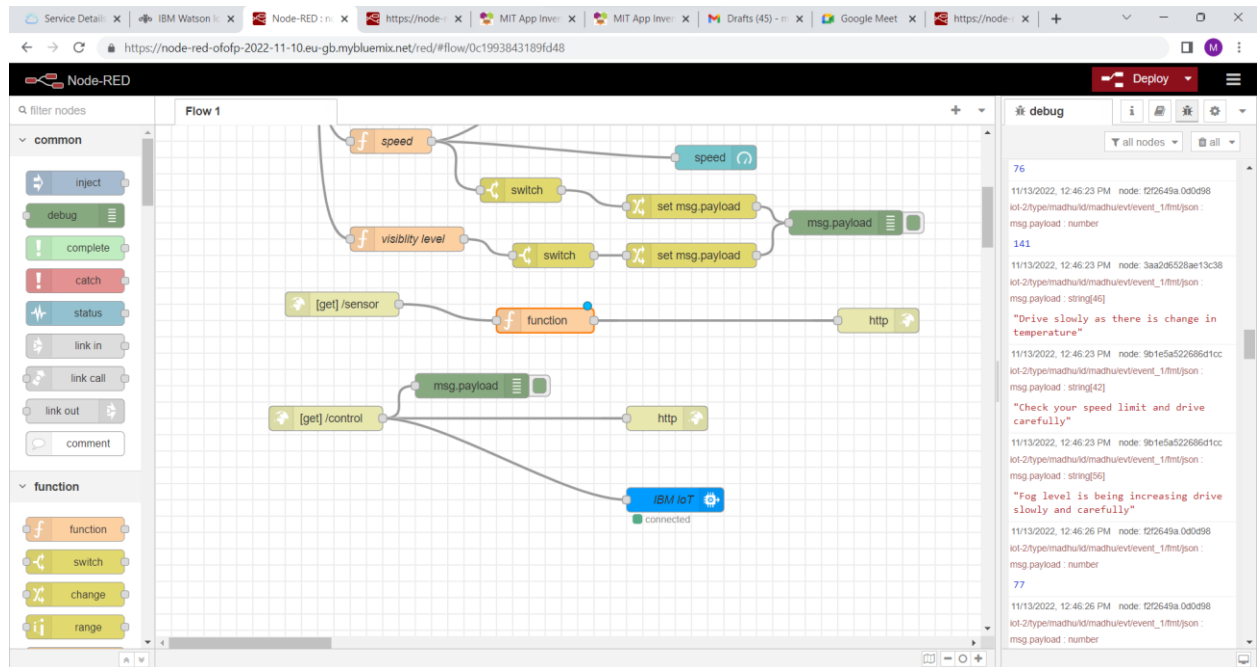




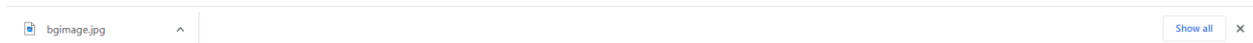
This connection simulation gives 3 alert messages

- Incase of low temperature----Drive slowly as there is change in temperature
- Incase of high speed --- Check your speed limit and drive carefully
- Incase of low visibility level--- Fog level is being increasing drive slowly and carefully

The snapshots are also included for the above cases.



In addition to speed and visibility level, determination of optimum lane and direction are done and the screenshots are shared below



The link is shared below:

<https://node-red-ofofp-2022-11-10.eu-gb.mybluemix.net/control>

Coding is done in backend for two criterions

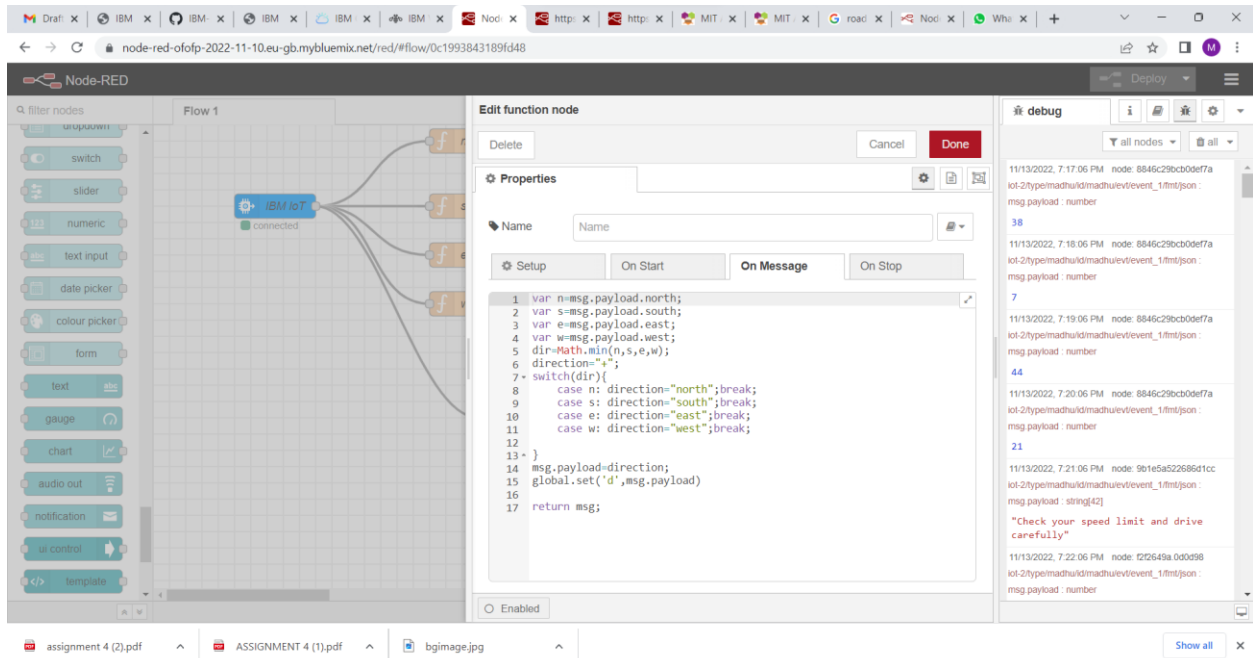
- For selecting the optimum lane i.e(lane which has the smallest distance out of 4) is also displayed.
- for selecting the direction out of 4

The screenshot displays the Node-RED web interface. On the left, a palette of nodes is visible. In the center workspace, a flow named 'Flow 1' contains an 'IBM IoT' node connected to a 'msg.payload' node, which is then connected to a function node named 'optimal lane'. The function node is configured with the following JavaScript code:

```
1 var l1=msg.payload.lane1;
2 var l2=msg.payload.lane2;
3 var l3=msg.payload.lane3;
4 var l4=msg.payload.lane4;
5 mini=Math.min(l1,l2,l3,l4);
6 route="";
7 switch(mini){
8   case l1: route="lane1";break;
9   case l2: route="lane2";break;
10  case l3: route="lane3";break;
11  case l4: route="lane4";break;
12 }
13
14 msg.payload=route;
15
16
17 return msg;
```

The right-hand side of the interface shows the 'debug' console with several log entries. The most recent entry shows the output of the function: 'lane1'.

assignment 4 (2).pdf | ASSIGNMENT 4 (1).pdf | bgimage.jpg | Show all



The rest of the work is developed in MIT app developer which is delivered or released in sprint 4