

## **PROJECT DEVELOPMENT PHASE**

### **SPRINT-2**

Date	12 November 2022
Team ID	PNT2022TMID14066
Project Name	Signs with Smart Connectivity for Better Road Safety

### **SPRINT-2:**

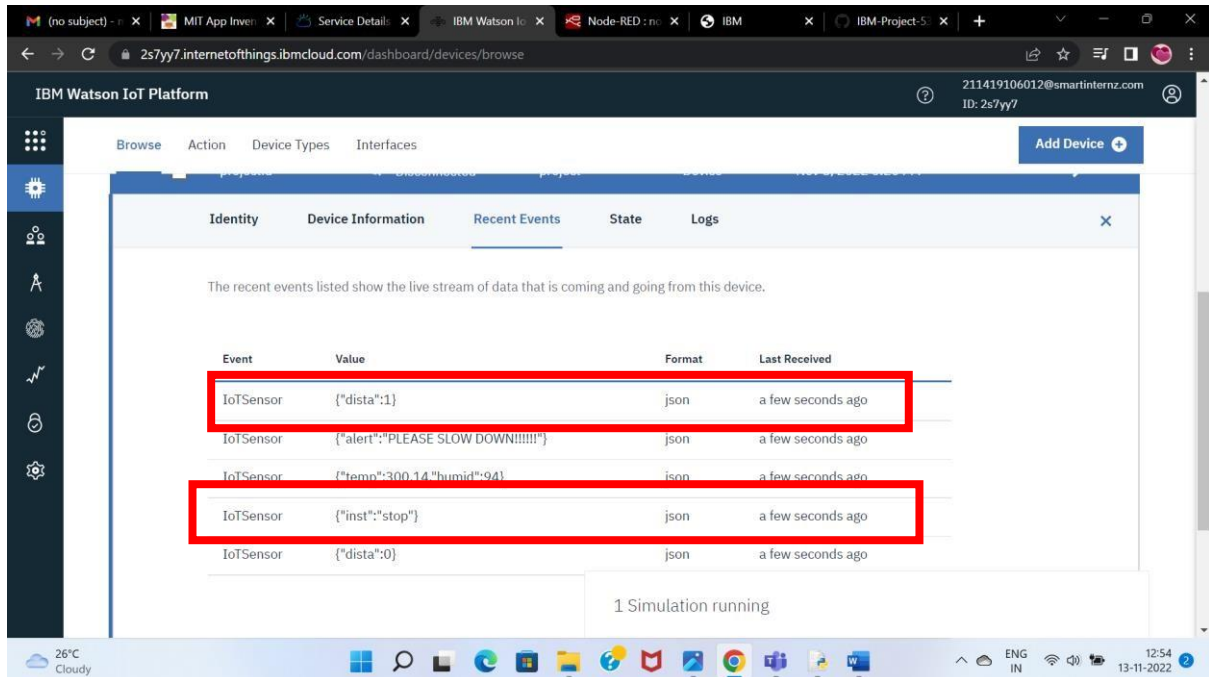
- In sprint-2, we have developed a python code using random function to generate random values for distance between user and the vehicle ahead.
- We have also implemented a condition such that, if distance is less than 20, then it displays a warning like “STOP”. The user can either try with different direction or can take diversion
- This helps in reducing accidents ,to avoid clashes and to promote safe driving experience.

### **PYTHON CODE:**

```
dist=random.randint(0,50)
dis={'dista':dist}
```

```
if(dist<20):
    insta={'inst':'stop'}
```

## IBM IoT WATSON PLATFORM:

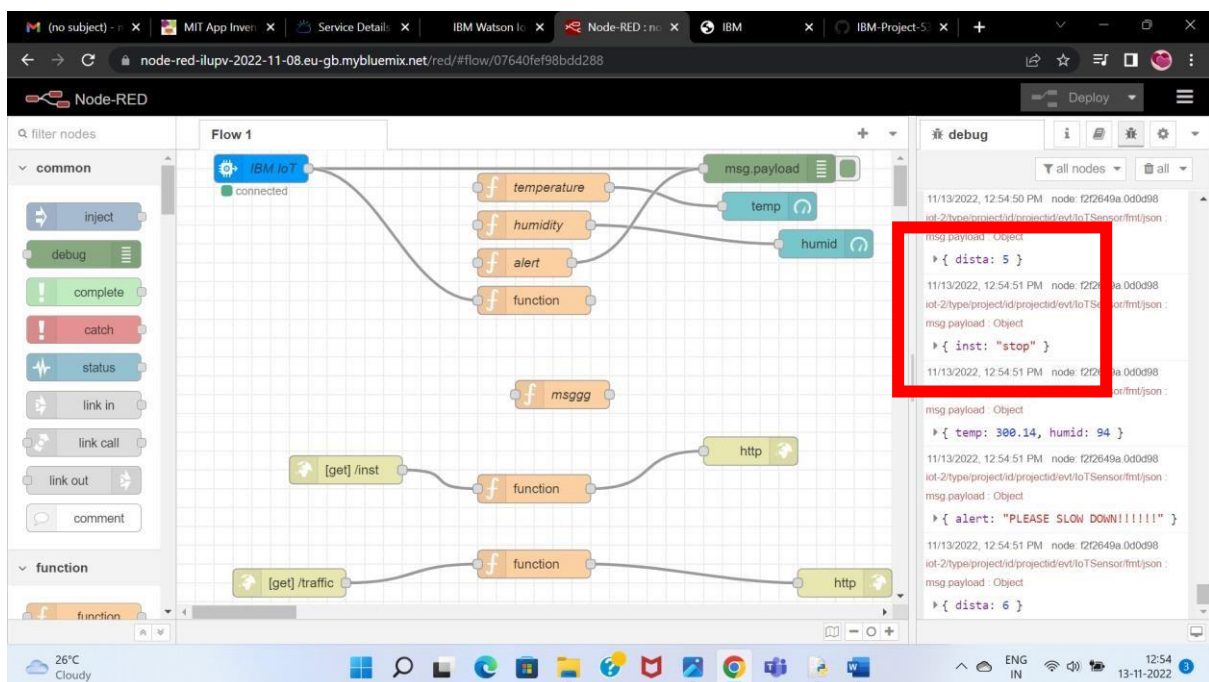


The screenshot shows the IBM Watson IoT Platform dashboard. The 'Recent Events' tab is selected, displaying a table of events. Two rows are highlighted with red boxes:

Event	Value	Format	Last Received
IoTSensor	{"dista":1}	json	a few seconds ago
IoTSensor	{"alert":"PLEASE SLOW DOWN!!!!!!!"}	json	a few seconds ago
IoTSensor	{"temp":300.14,"humid":94}	json	a few seconds ago
IoTSensor	{"inst":"stop"}	json	a few seconds ago
IoTSensor	{"dista":0}	json	a few seconds ago

Below the table, it indicates '1 Simulation running'.

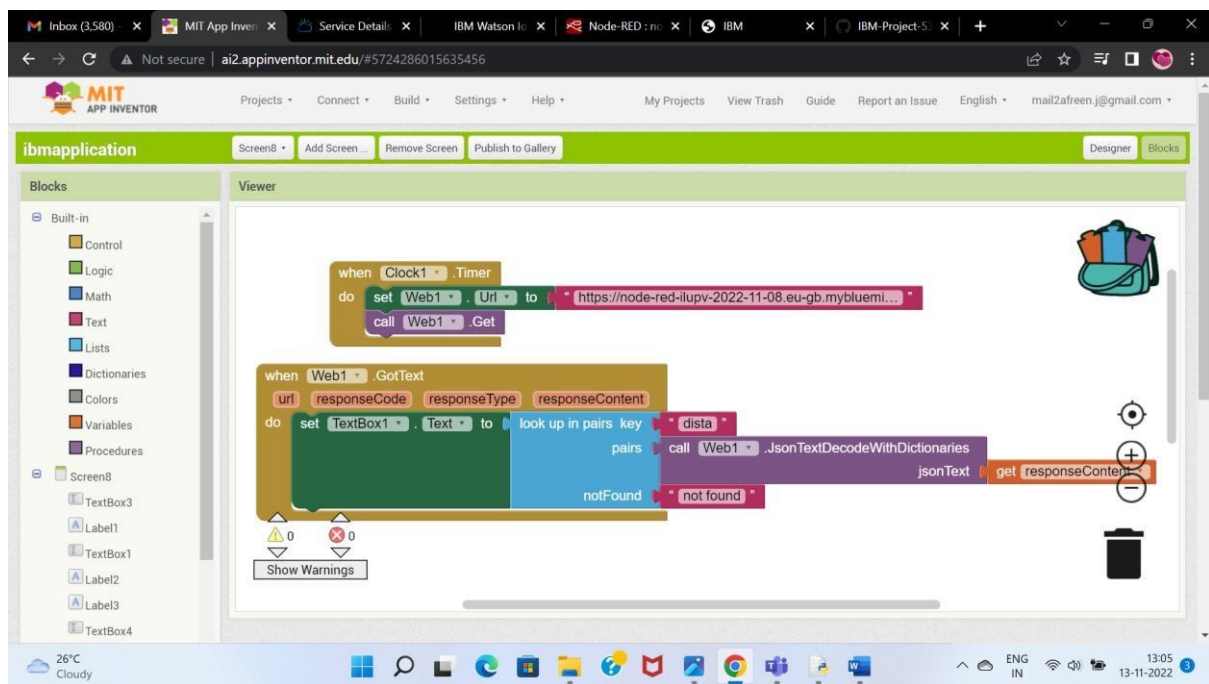
## NODE-RED:



The screenshot shows the Node-RED interface. A flow named 'Flow 1' is visible, starting with an 'IBM IoT' node connected to a 'function' node. The flow continues through 'temperature', 'humidity', and 'alert' nodes, which are connected to 'temp' and 'humid' nodes. The 'debug' console on the right shows the following messages:


```
11/13/2022, 12:54:50 PM node: f2f2649a.0d0d98  
iot-2/type/project/id/projectid/evt/IoTSensor/rmt/json :  
msg payload : Object  
  > { dista: 5 }  
11/13/2022, 12:54:51 PM node: f2f2649a.0d0d98  
iot-2/type/project/id/projectid/evt/IoTSensor/rmt/json :  
msg payload : Object  
  > { inst: "stop" }  
11/13/2022, 12:54:51 PM node: f2f2649a.0d0d98  
msg payload : Object  
  > { temp: 300.14, humid: 94 }  
11/13/2022, 12:54:51 PM node: f2f2649a.0d0d98  
iot-2/type/project/id/projectid/evt/IoTSensor/rmt/json :  
msg payload : Object  
  > { alert: "PLEASE SLOW DOWN!!!!!!!" }  
11/13/2022, 12:54:51 PM node: f2f2649a.0d0d98  
iot-2/type/project/id/projectid/evt/IoTSensor/rmt/json :  
msg payload : Object  
  > { dista: 6 }
```


## MIT APP INVENTOR:



**USER APP SCREENSHOT:**

12:11





Screen8

TRAFFIC UPDATES

YOU ARE BEHIND ANOTHER VEHICLE BY

18

IF DISTANCE IS BELOW 20

STOP

TRY MOVING IN DIFFERENT DIRECTION

OR TAKE DIVERSION

BACK