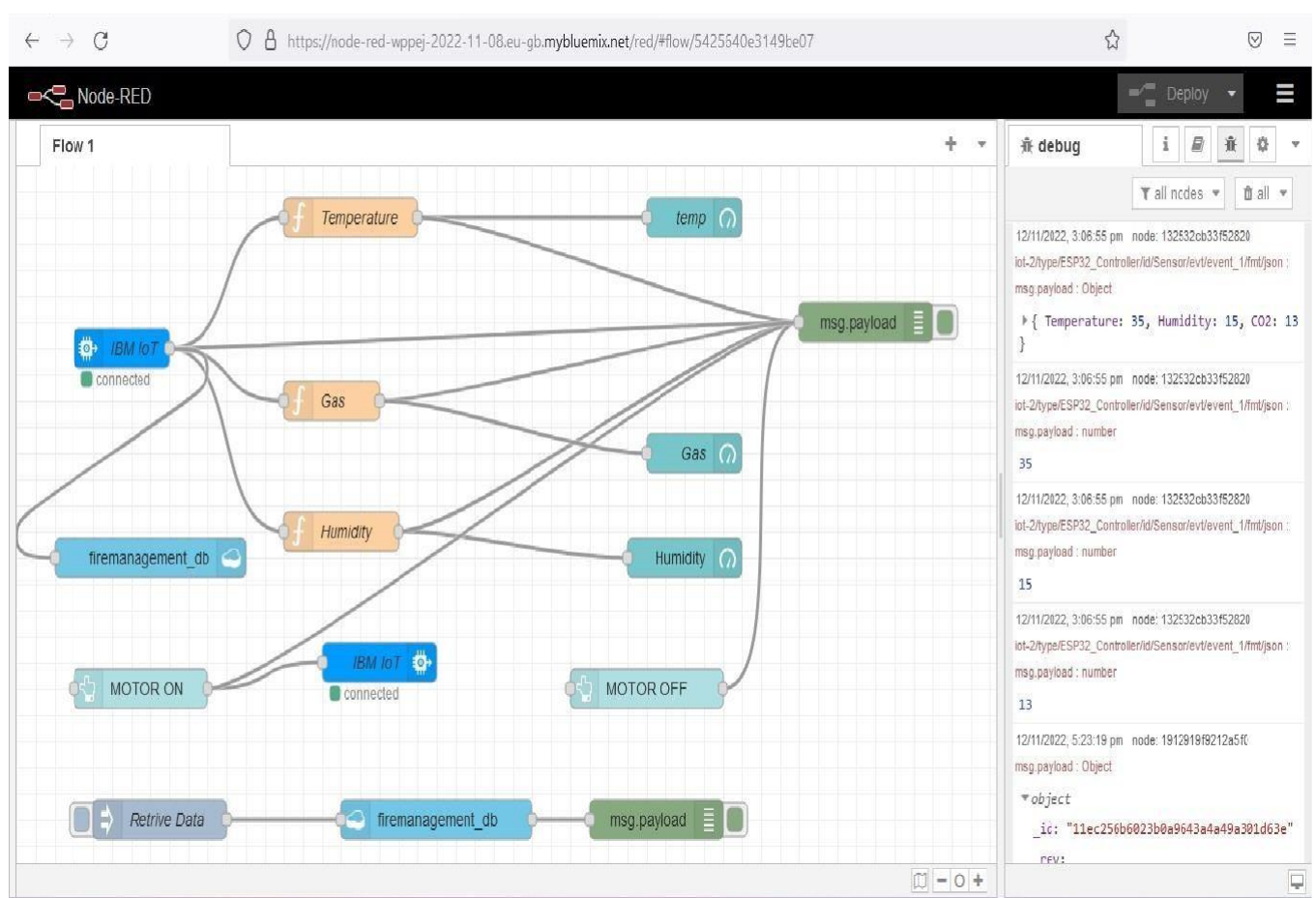


Develop The Web Application Using Node-RED

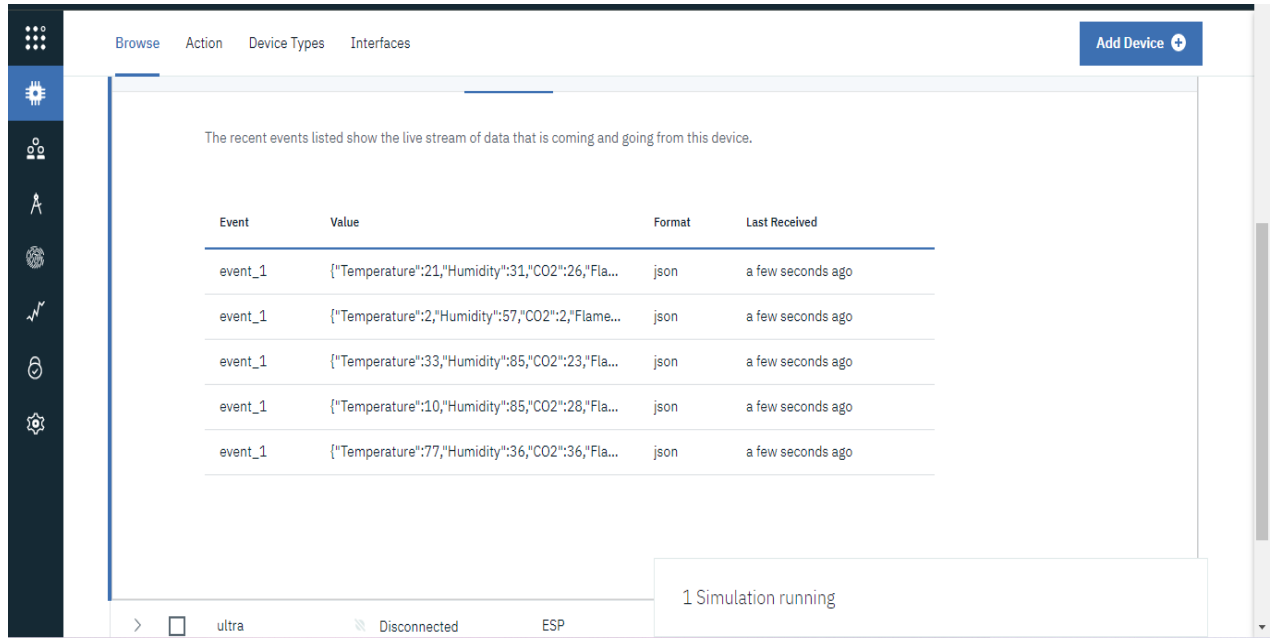
Date	12-11-2022
Team ID	PNT2022TMID11818
Project Name	Industry – specific intelligent fire management system

Configure the Node-RED flow to receive data from the IBM IoT platform :



IoT Watson Cloud Output :

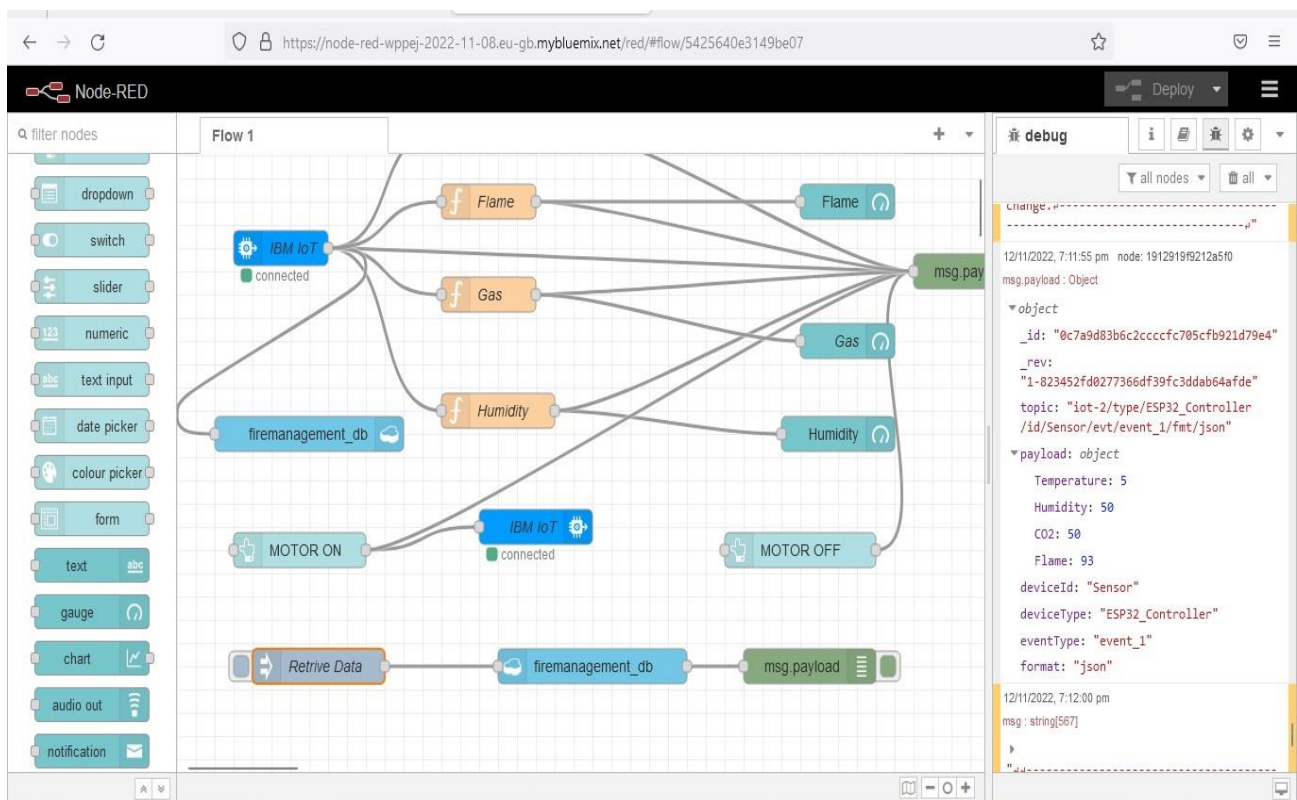
Use Cloudant DB nodes to store the received sensor data in the cloudant DB:



The screenshot shows the IBM Watson IoT Cloud interface. The top navigation bar includes 'Browse', 'Action', 'Device Types', and 'Interfaces'. A sidebar on the left contains various icons. The main content area displays a table of recent events. Below the table, a status bar indicates '1 Simulation running'.

Event	Value	Format	Last Received
event_1	{"Temperature":21,"Humidity":31,"CO2":26,"Fla...	json	a few seconds ago
event_1	{"Temperature":2,"Humidity":57,"CO2":2,"Flame...	json	a few seconds ago
event_1	{"Temperature":33,"Humidity":85,"CO2":23,"Fla...	json	a few seconds ago
event_1	{"Temperature":10,"Humidity":85,"CO2":28,"Fla...	json	a few seconds ago
event_1	{"Temperature":77,"Humidity":36,"CO2":36,"Fla...	json	a few seconds ago

1 Simulation running



The screenshot shows the Node-RED interface. The left sidebar contains a list of nodes: dropdown, switch, slider, numeric, text input, date picker, colour picker, form, text, gauge, chart, audio out, and notification. The main workspace displays a flow named 'Flow 1'. The flow starts with an 'IBM IoT' node connected to a 'firemanagement_db' node. The data is then processed by 'Flame', 'Gas', and 'Humidity' nodes. The output is sent to a 'msg.payload' node. The right sidebar shows the debug console with a log entry for the message payload.

```
12/11/2022, 7:11:55 pm node: 1912919f9212a5f0
msg.payload: Object
object
  _id: "0c7a9d83b6c2ccccfc705cfb921d79e4"
  _rev: "1-823452fd0277366df39fc3ddab64afde"
  topic: "iot-2/type/ESP32_Controller/id/Sensor/evt/event_1/fmt/json"
  payload: object
    Temperature: 5
    Humidity: 50
    CO2: 50
    Flame: 93
  deviceId: "Sensor"
  deviceType: "ESP32_Controller"
  eventType: "event_1"
  format: "json"
12/11/2022, 7:12:00 pm
msg: string[567]
```

Storing Data in Cloudant DB :

← → ↻ 988ed731-90dd-4efd-8885-5354ddc244e9-bluemix.cloudant.com/dashboard.html#database/firemanagement_db/_all_docs

firemanagement_db Document ID Options {} JSON

All Documents +

Query

Permissions

Changes

Design Documents +

Log Out

Table Metadata {} JSON Create Document

	id	key	value
<input type="checkbox"/>	0c7a9d83b6c2ccccfc705cfb921d79e4	0c7a9d83b6c2ccccfc705cfb921d79e4	{"rev": "1-823452fd0277366df39fc..."}
<input type="checkbox"/>	0c7a9d83b6c2ccccfc705cfb921fed3e	0c7a9d83b6c2ccccfc705cfb921fed3e	{"rev": "1-f66d54506f51c9c8a2571..."}
<input type="checkbox"/>	0c7a9d83b6c2ccccfc705cfb9220c6f0	0c7a9d83b6c2ccccfc705cfb9220c6f0	{"rev": "1-b1964621234efdf5b37fe..."}
<input type="checkbox"/>	0c7a9d83b6c2ccccfc705cfb92227d81	0c7a9d83b6c2ccccfc705cfb92227d81	{"rev": "1-2796390cb5ded6c72072..."}
<input type="checkbox"/>	0c7a9d83b6c2ccccfc705cfb92296d06	0c7a9d83b6c2ccccfc705cfb92296d06	{"rev": "1-35c25093322e143ef0f22..."}
<input type="checkbox"/>	0c7a9d83b6c2ccccfc705cfb922ea0f9	0c7a9d83b6c2ccccfc705cfb922ea0f9	{"rev": "1-bf119ea41c91dc75ace98..."}
<input type="checkbox"/>	1904e7f6289ceabbe74bba25d46a4f...	1904e7f6289ceabbe74bba25d46a4f...	{"rev": "1-21ea0132ec21b00dd7f46..."}
<input type="checkbox"/>	227aa9a201bc2d02790a57e7ab25...	227aa9a201bc2d02790a57e7ab25...	{"rev": "1-0492498ea34f19a0ed36f..."}
<input type="checkbox"/>	2503fe8aebab0fa98b9cc5c76aea93f1	2503fe8aebab0fa98b9cc5c76aea93f1	{"rev": "1-874687a42b1a135d3b0cf..."}
<input type="checkbox"/>	3536e866b44c219242eaf2fb368e7...	3536e866b44c219242eaf2fb368e7...	{"rev": "1-7eb00af2e5bf22f1f2f7f1d..."}

Showing document 1 · 20. Documents per page: 20