

# DEVELOPE A WEB APPLICATION USING NODE-RED

Project name-Gas leakage monitoring and Detection System

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Step1:

- a) Open IBM Watson and create device.
- b) Enable the device simulator.

The screenshot displays the IBM Watson IoT Platform interface. The top navigation bar includes 'Browse', 'Action', 'Device Types', and 'Interfaces'. The main heading is 'Browse Devices'. Below this, there are tabs for 'All Devices' and 'Diagnose'. A descriptive text states: 'This table shows a summary of all devices that have been added. It can be filtered, organized, and searched on using different criteria. To get started, you can add devices by using the Add Device button, or by using API.' A search bar labeled 'Search by Device ID' is present. To the right of the table, there is a 'Device Simulator' toggle switch, which is currently turned on. The table itself has the following data:

Device ID	Status	Device Type	Class ID	Date Added	Descriptive Location
123	Disconnected	ultrasensor	Device	Oct 25, 2022 7:45 PM	
dist	Disconnected	distance	Device	Nov 7, 2022 10:28 PM	
temphum	Disconnected	abcd	Device	Nov 2, 2022 6:59 PM	

At the bottom of the table, it indicates 'Items per page 50' and '1-3 of 3 items'. The bottom of the screenshot shows a Windows taskbar with various application icons and a system tray displaying '24°C Cloudy' and the date '13-11-2022'.

Step2:Open the device simulation and on the respective device simulation.

The screenshot shows the IBM Watson IoT Platform interface. The main page is titled 'Browse Devices' and displays a table of devices. A 'Simulations' modal is open on the right side of the screen.

**Simulations Modal:**

- 1/50 Simulations Running
- + New Simulation
- Device Type: distance (Configure Event, 1 Event)
- Device Type: ultrasensor (1 Event)
- Device Type: abcd (1 Event)
- 1 Device: temphum
- 1 x Create Simulated Device Use Registered Device
- 1 event sent 28 bytes sent

**Browse Devices Table:**

Device ID	Status	Device Type	Class ID	Date
123	Disconnected	ultrasensor	Device	Oct
dist	Disconnected	distance	Device	Nov
temphum	Disconnected	abcd	Device	Nov

Step3:Alter the code,save and give send.

The screenshot shows the IBM Watson IoT Platform interface. The main page is titled 'Device Type: abcd' and displays a table of recent events. A 'Send' modal is open on the right side of the screen.

**Device Type: abcd Modal:**

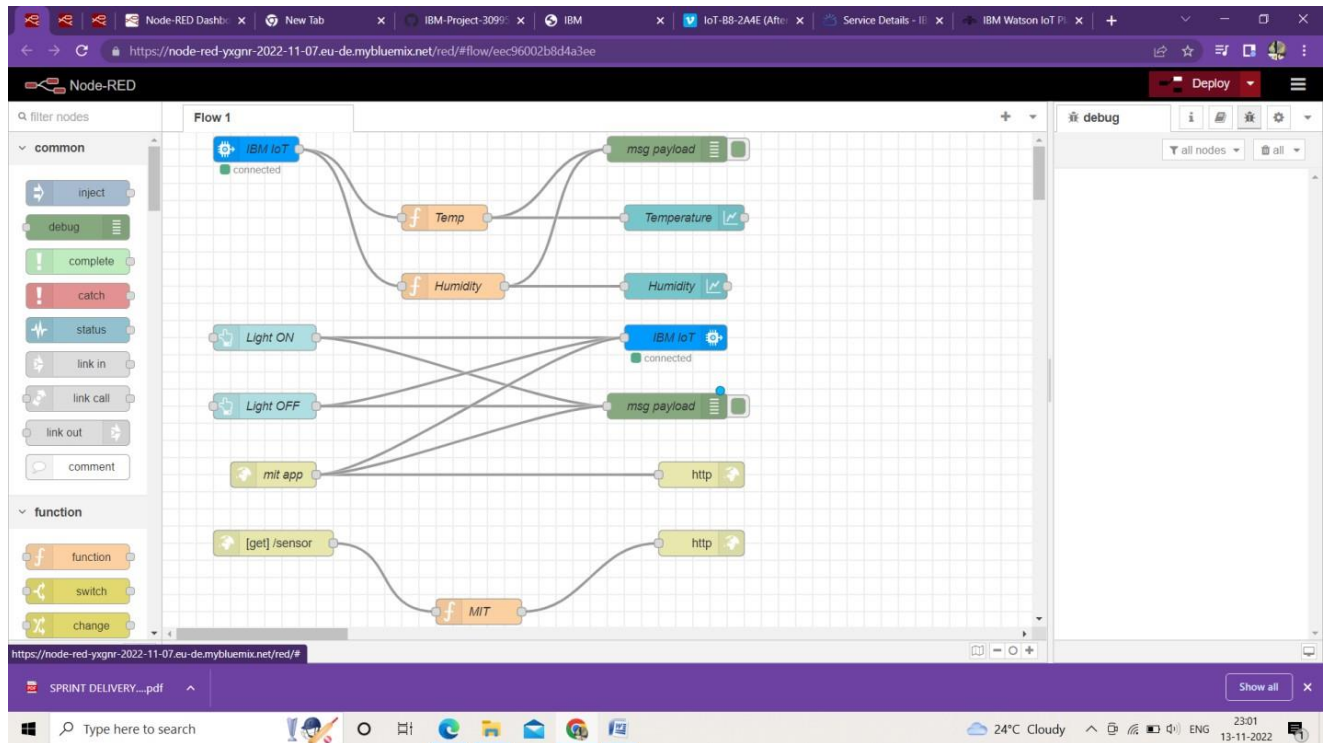
- Events 1
- New event type
- Event type name: event\_1
- Schedule: 1 Every Minute
- Payload: 

```
{ "temp": random(10,80), "Humid": random(60,100) }
```
- Upload a CSV file
- Cancel Save

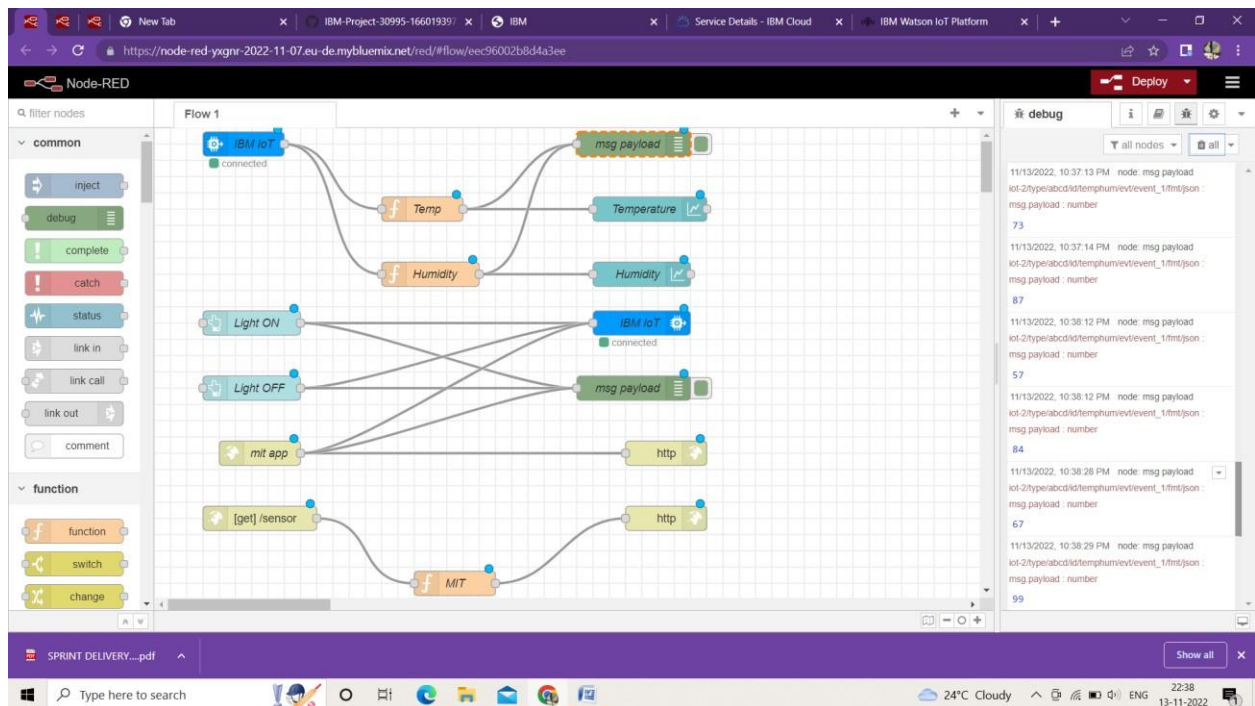
**Recent Events Table:**

Event	Value	Format	Last Received
event_1	{"temp":67,"Humid":99}	json	a few seconds ago

Step4:Open the Node-Red.



Step5:When we give send the output is displayed on the node red screen.



Step6:Temperature and Humidity value will be displayed in the Web page.

