

# PROJECT DEVELOPMENT PHASE

## SPRINT-2 CONNECTION (Interface Sensor)

Date	05 November 2022
Team ID	PNT2022TMID41585
Project Name	IoT Based Safety Gadget Child Monitoring and Notification
Maximum Marks	8 Marks

### Device Details:

The screenshot displays the IBM Watson IoT Platform interface. The top navigation bar includes tabs for 'Browse', 'Action', 'Device Types', and 'Interfaces'. A sidebar on the left contains icons for various IoT functions. The main content area shows a table of devices with columns for Device ID, Status, Device Type, Class ID, and Date Added. Two devices are listed: 'demo1' and 'raspberrypi\_1', both with a 'Connected' status. A search bar and a 'Device Simulator' toggle are also visible. The bottom of the screen shows a Windows taskbar with several open applications and the system clock indicating 16:13 on 05-11-2022.

Device ID	Status	Device Type	Class ID	Date Added
demo1	Connected	raspberrypi	Device	Nov 5, 2022 1:15 PM
raspberrypi_1	Connected	raspberrypi	Device	Nov 5, 2022 4:15 PM

## Recent Events:

The screenshot shows the IBM Watson IoT Platform dashboard. The main view displays a table of recent events for a device. The table has two columns: 'Event' and 'Value'. The events are all labeled 'event\_1' and contain JSON payloads with a 'randomNumber' field.

Event	Value
event_1	{"randomNumber":59}
event_1	{"randomNumber":1}
event_1	{"randomNumber":92}
event_1	{"randomNumber":99}
event_1	{"randomNumber":52}

Below the table, it indicates 'Items per page 50' and '1-1 of 1 item'.

A modal window is open on the right, titled 'Device Type: raspberrypi'. It shows the configuration for an event type named 'event\_1'. The 'Schedule' is set to 'Every Minute'. The 'Payload' is defined as a JSON object with 'latitude' and 'longitude' fields, both using random number generators.

```
0 {  
1   "latitude": random(-90,90),  
2   "longitude": random(-180,180)  
3 }  
4
```

The modal also includes a 'Send' button, a 'New event type' button, and an 'Upload a CSV file' button.

## Node-Red Connection and Dashboard Design:

The screenshot shows the Node-RED interface. The main workspace displays a flow named 'Flow 1'. The flow starts with an 'IBM IoT' node, which connects to a 'function' node. This function node then connects to a 'worldmap' node. The 'worldmap' node connects to a 'geofence' node, which then connects to another 'function' node. This second function node connects to a 'switch' node. The 'switch' node has three outputs, each leading to a 'function' node. These three function nodes then connect to 'msg payload' nodes, 'http request' nodes, and 'show notification' nodes. The 'show notification' node connects to a 'child' node, which then connects to another 'msg payload' node.

The left sidebar shows the 'common' and 'function' node palettes. The right sidebar shows the 'info' tab, which displays the flow details and a message: 'You can confirm your changes in the node edit tray with **ctrl-enter** or cancel them with **ctrl-escape**'.