

## SPRINT 2

<b>TEAM ID</b>	PNT2022TMID11049
<b>PROJECT NAME</b>	Smart Waste Management System For Metropolitan Cities

### AIM:

To create device in the IOT Watson Platform and Configure Node Red Services.

### REQUIREMENT:

IBM cloud, IBM IOT WATSON PLATFORM,NODE RED SERVICES.

### WORKFLOW:

#### STEP 1:

Log on to IBM cloud and create IBM Watson IOT Platform from IBM cloud Dashboard.

#### STEP 2:

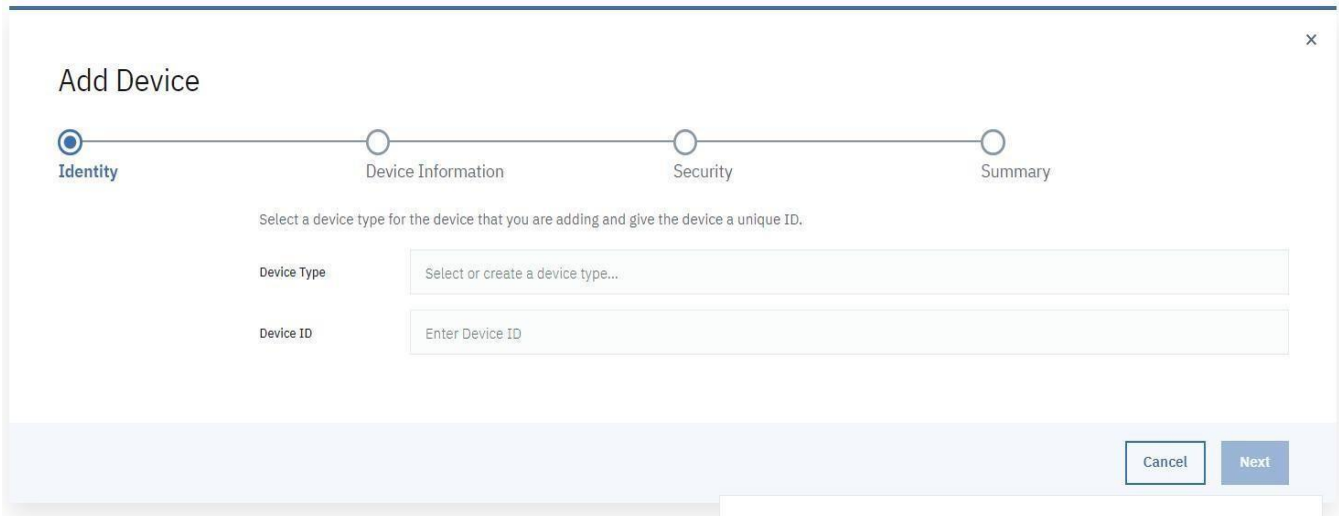
After Creating IBM Watson IOT Platform,create an Organization

The screenshot displays the IBM Watson IoT Platform interface. At the top, the header shows the user's email (811519106100@smartinternz.com) and ID (ytb5k8). The main navigation bar includes tabs for 'Browse', 'Action', 'Device Types', and 'Interfaces', along with an 'Add Device' button. Below the navigation bar, there are two tabs: 'All Devices' (selected) 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.' Below this text is a search bar labeled 'Search by Device ID'. To the right of the search bar is a 'Device Simulator' toggle switch and two icons. The main content area features a table with the following columns: 'Device ID', 'Status', 'Device Type', 'Class ID', and 'Date Added'. The table contains one row with the following data: Device ID: 1234567890s, Status: Disconnected, Device Type: Pooja, Class ID: Device, Date Added: Nov 18, 2022 11:47 AM. At the bottom of the table, there is a pagination bar showing 'Items per page 50' and '1-1 of 1 item'. The right side of the pagination bar shows '1 of 1 page' and navigation arrows.

Device ID	Status	Device Type	Class ID	Date Added
1234567890s	Disconnected	Pooja	Device	Nov 18, 2022 11:47 AM

### STEP 3:

Create an device IBM IOT PALTFORM.



The 'Add Device' dialog box shows a four-step process: Identity, Device Information, Security, and Summary. The 'Identity' step is active. It prompts the user to 'Select a device type for the device that you are adding and give the device a unique ID.' There are two input fields: 'Device Type' with a dropdown menu showing 'Select or create a device type...' and 'Device ID' with a text input field showing 'Enter Device ID'. At the bottom right are 'Cancel' and 'Next' buttons.

TYPE THE REQUIRED FIELDS (TYPE: Pooja , ID: 1234567890s)GIVE AUTH-TOKEN.

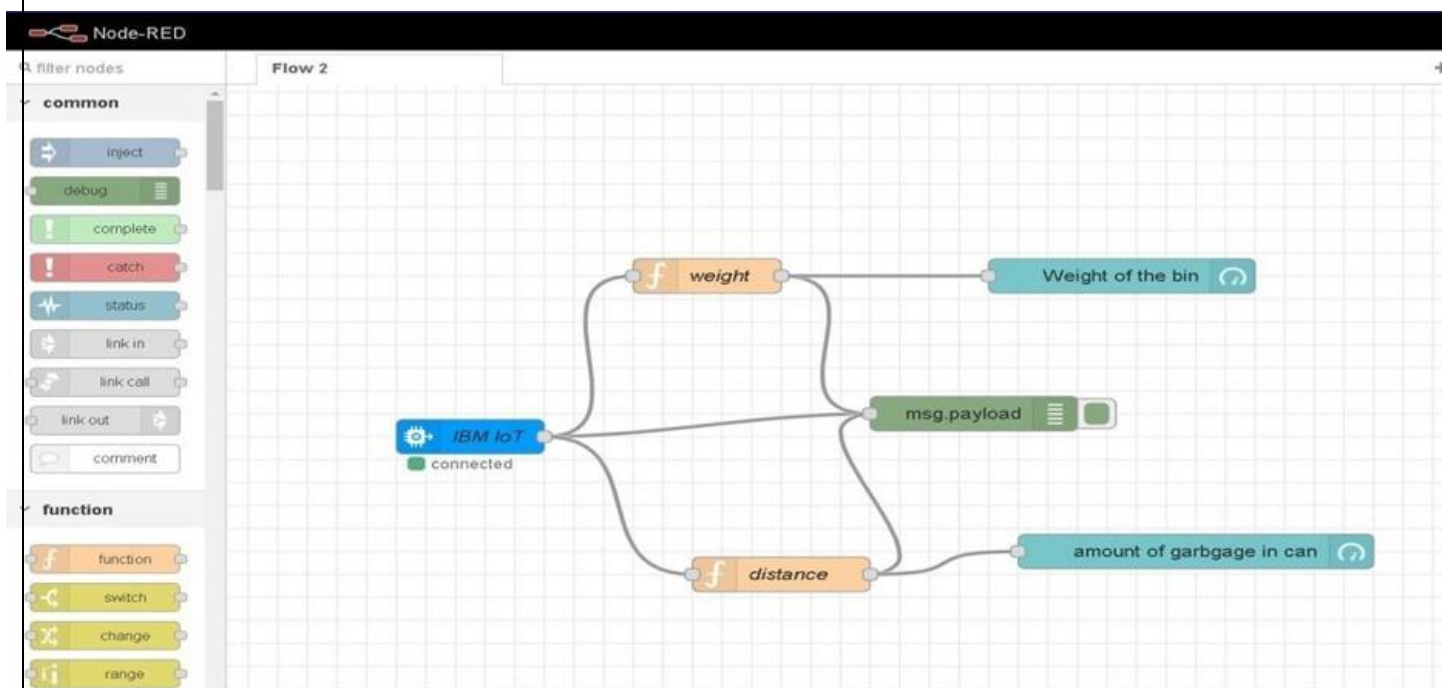
### STEP 4:

NODE RED SERVICE

- INSTALL IBM IOT IN MANGE PALETTE.
- INSTALL NODE RED DASHBOARD.

### STEP 5:

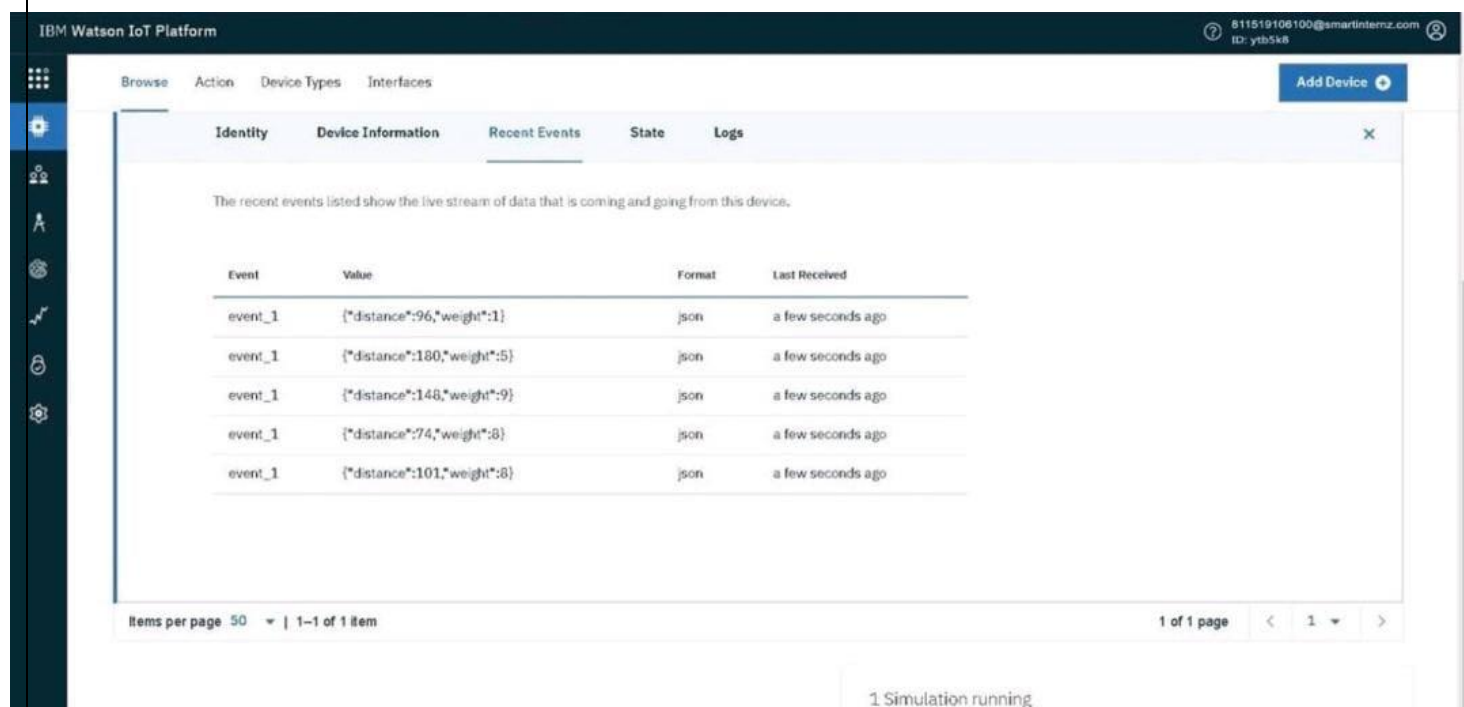
Configuring the corresponding nodes



### STEP 6:

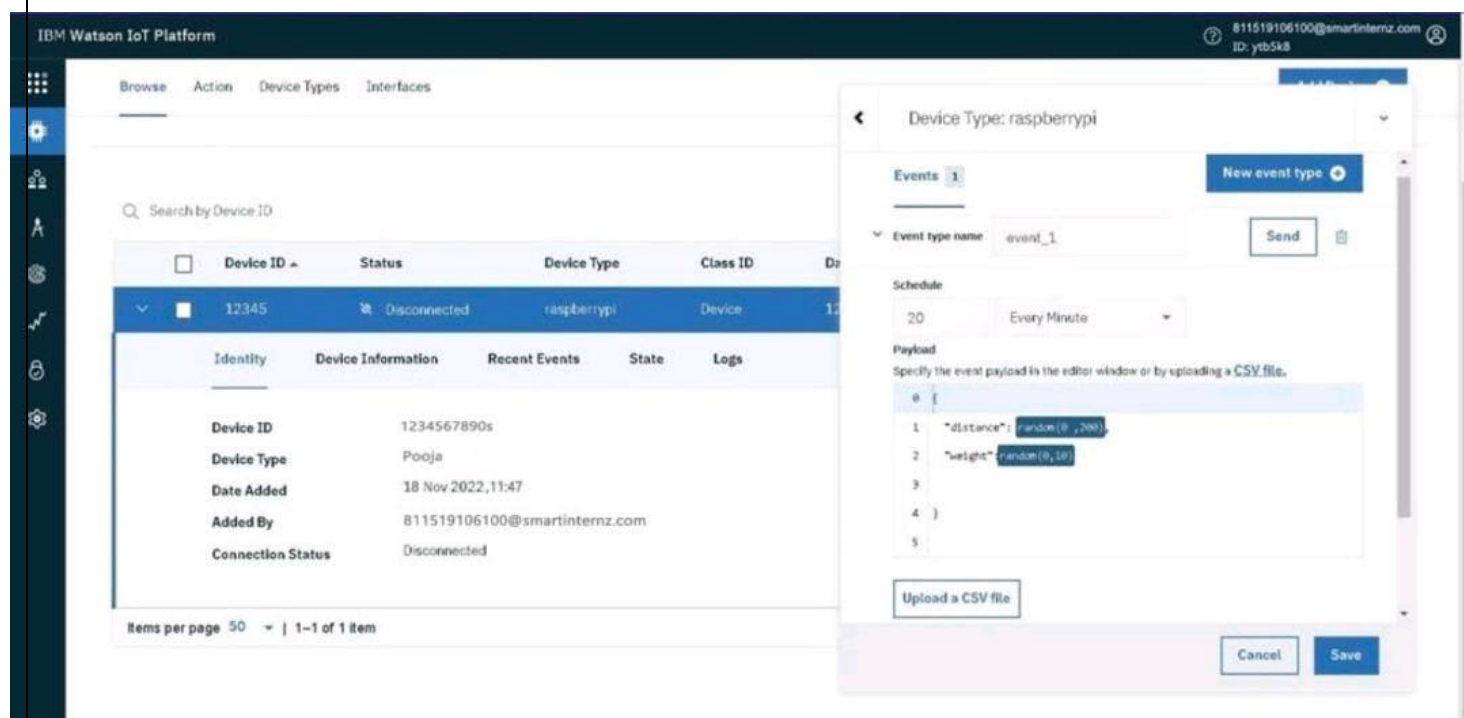
Deploy the Services and verify the output values.

## OUTPUT IN IBM WATSON IOT PLATFORM:



The screenshot displays the IBM Watson IoT Platform interface. The top navigation bar includes 'Browse', 'Action', 'Device Types', and 'Interfaces'. A sidebar on the left contains various icons. The main content area shows the 'Recent Events' tab for a device. A table lists recent events with columns for Event, Value, Format, and Last Received. Below the table, it indicates 'Items per page 50' and '1 of 1 page'. A status message at the bottom right states '1 Simulation running'.

Event	Value	Format	Last Received
event_1	{"distance":96,"weight":1}	json	a few seconds ago
event_1	{"distance":180,"weight":5}	json	a few seconds ago
event_1	{"distance":148,"weight":9}	json	a few seconds ago
event_1	{"distance":74,"weight":8}	json	a few seconds ago
event_1	{"distance":101,"weight":8}	json	a few seconds ago



The screenshot displays the IBM Watson IoT Platform interface with a modal window open for configuring a device type. The main content area shows a table of devices with columns for Device ID, Status, Device Type, and Class ID. The modal window, titled 'Device Type: raspberrypi', shows the 'Events' tab with a table for event configuration. The table includes columns for Event type name, Schedule, and Payload. The payload is configured as a JSON object with 'distance' and 'weight' fields, each using a random value function.

Device ID	Status	Device Type	Class ID
12345	Disconnected	raspberrypi	Device

Event type name	Schedule	Payload
event_1	20 Every Minute	<pre>{   "distance": random(0,200),   "weight": random(0,10) }</pre>