

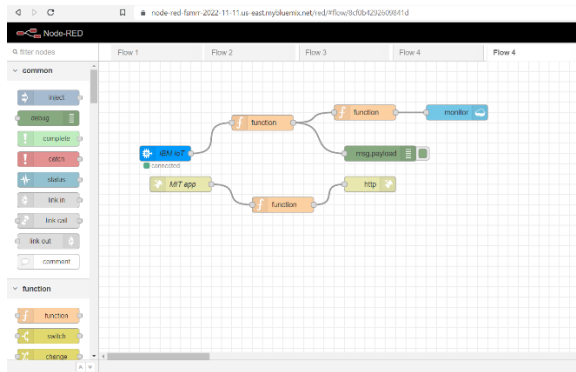
Project Development Phase Sprint-3

Team ID	PNT2022TMID35915
Project Name	Smart Solutions for Railways

Updates:

- Feature for the users to track the train location
- The Health Conditions of the Loco Pilot are constantly updated to authorities

Nodes in Node red:



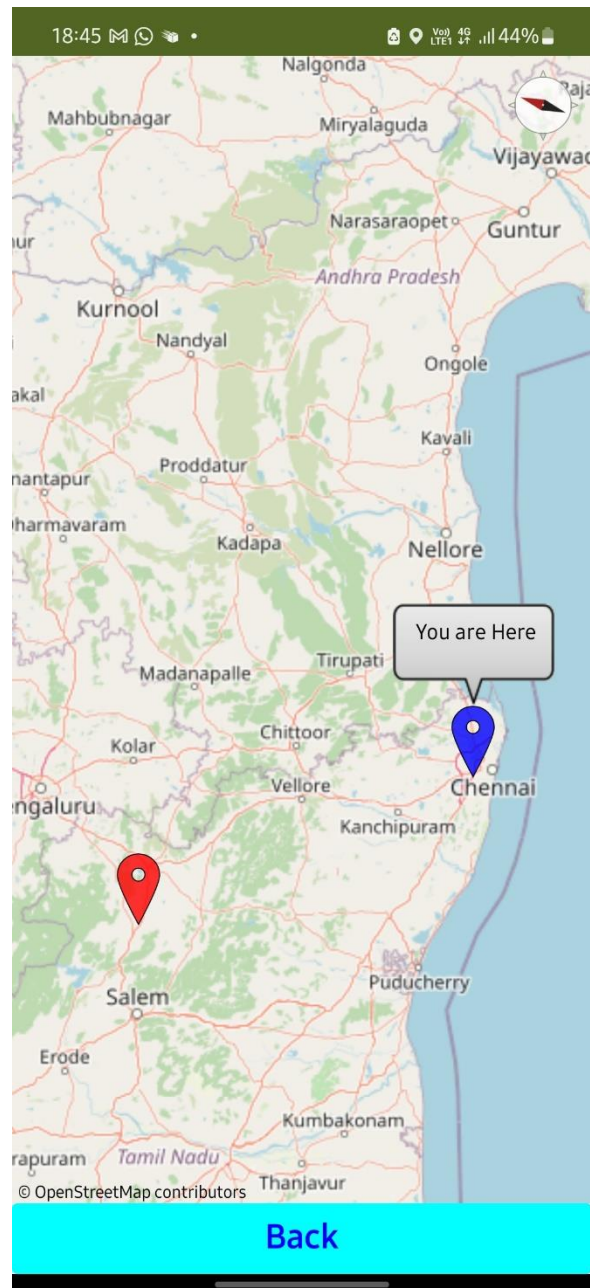
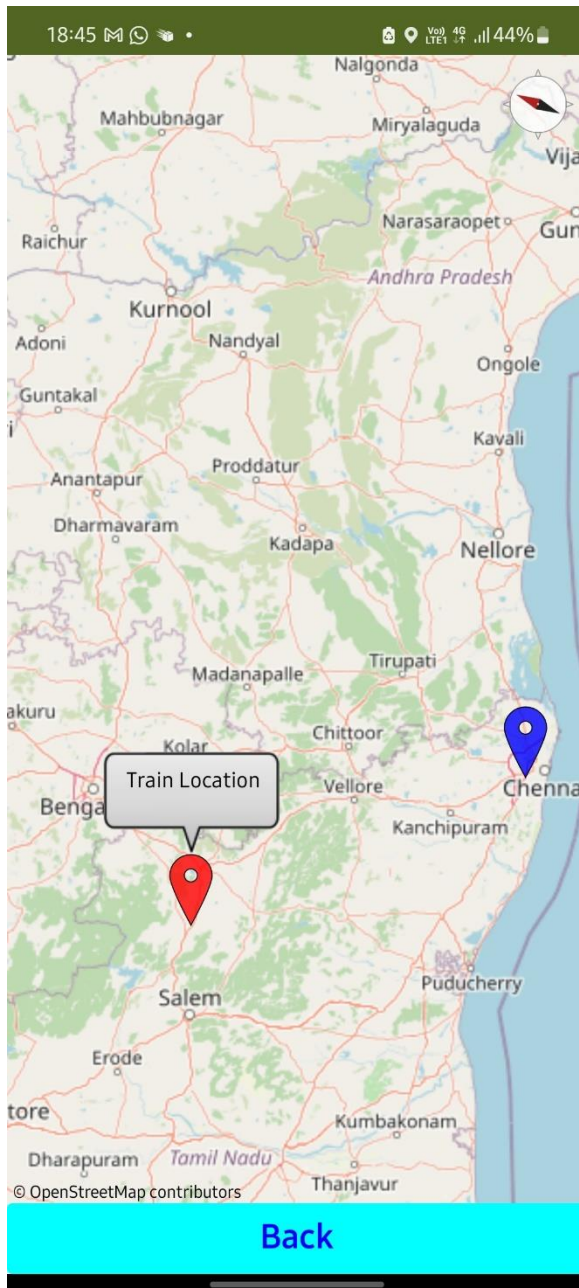
Test Cases

Test Case 1:

The track train location button is made available:



Page Viewed : (Both User's and Train location can be checked)

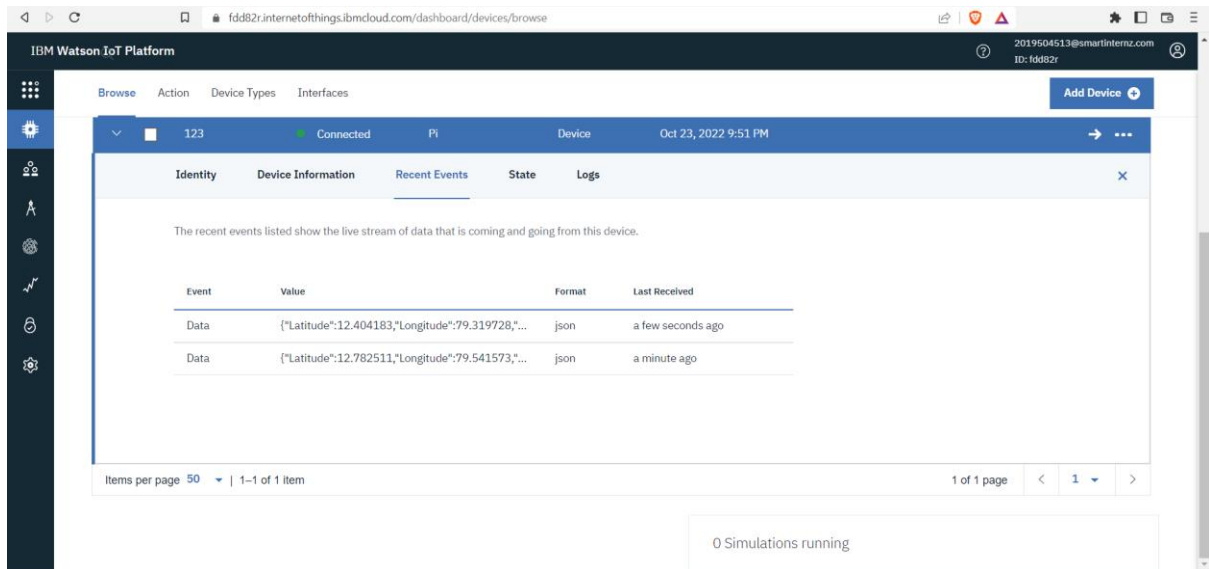


Node red Output: (Random location & health condition data received)

```
11/15/2022, 6:56:26 PM node: 748ff5aa37a5bd48
iot-2/type/Pi/Id/123/evt/Data/fmt/json : msg.payload :
Object
  ▶ { Latitude: 12.782511, Longitude:
    79.541573, Heart Rate: 72, Systole:
    74, Diastole: 102 }

11/15/2022, 6:57:27 PM node: 748ff5aa37a5bd48
iot-2/type/Pi/Id/123/evt/Data/fmt/json : msg.payload :
Object
  ▶ { Latitude: 12.404183, Longitude:
    79.319728, Heart Rate: 61, Systole:
    73, Diastole: 137 }
```

IBM Watson Event: (Random location & health condition data received)



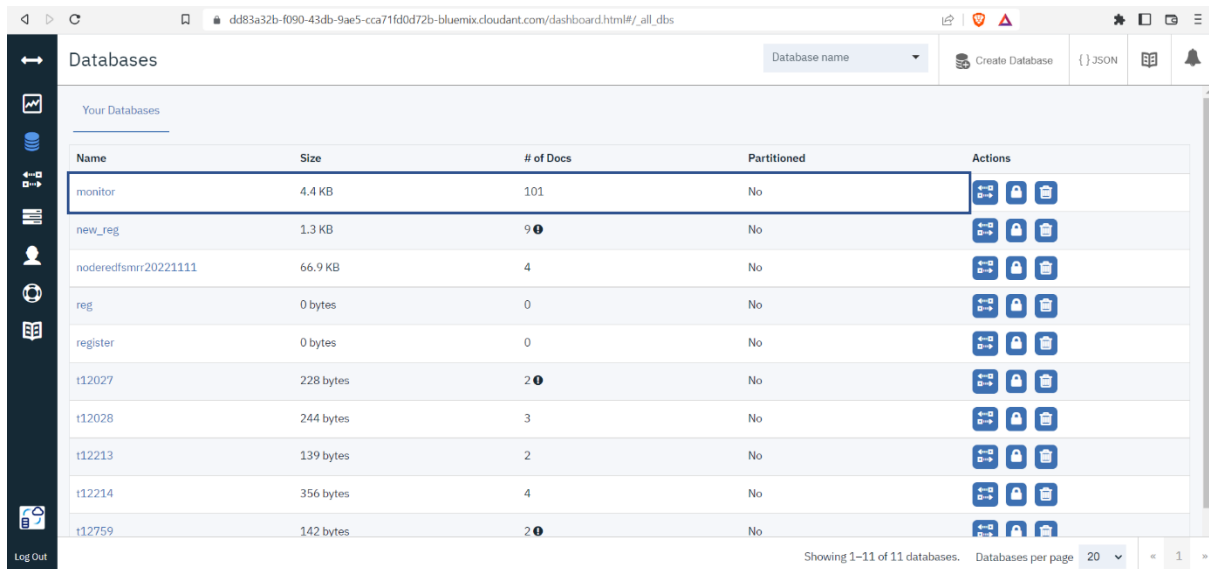
The screenshot shows the IBM Watson IoT Platform dashboard. The top navigation bar includes 'Browse', 'Action', 'Device Types', and 'Interfaces'. A sidebar on the left contains various icons for navigation. The main content area displays a device named '123' with a status of 'Connected' and a timestamp of 'Oct 23, 2022 9:51 PM'. Below this, there are tabs for 'Identity', 'Device Information', 'Recent Events', 'State', and 'Logs'. The 'Recent Events' tab is active, showing a table of events. The table has columns for 'Event', 'Value', 'Format', and 'Last Received'. Two events are listed: one for 'Data' with a value of '{"Latitude":12.404183,"Longitude":79.319728,...}' received 'a few seconds ago', and another for 'Data' with a value of '{"Latitude":12.782511,"Longitude":79.541573,...}' received 'a minute ago'. The table is paginated with 'Items per page: 50' and '1-1 of 1 item'. At the bottom, it indicates '0 Simulations running'.

Event	Value	Format	Last Received
Data	{"Latitude":12.404183,"Longitude":79.319728,...}	json	a few seconds ago
Data	{"Latitude":12.782511,"Longitude":79.541573,...}	json	a minute ago

Test Case 2:

Health conditions updated on the database which is monitored continuously:

Data updated once in every minute



The screenshot shows the IBM Watson IoT Platform database dashboard. The top navigation bar includes 'Database name' and 'Create Database'. The main content area displays a table of databases. The table has columns for 'Name', 'Size', '# of Docs', 'Partitioned', and 'Actions'. The 'monitor' database is highlighted. The table lists several databases, including 'new_reg', 'noderedfsmr20221111', 'reg', 'register', 't12027', 't12028', 't12213', 't12214', and 't12759'. The 'monitor' database has a size of 4.4 KB, 101 documents, and is not partitioned. The 'new_reg' database has a size of 1.3 KB, 9 documents, and is not partitioned. The 'noderedfsmr20221111' database has a size of 66.9 KB, 4 documents, and is not partitioned. The 'reg' database has a size of 0 bytes, 0 documents, and is not partitioned. The 'register' database has a size of 0 bytes, 0 documents, and is not partitioned. The 't12027' database has a size of 228 bytes, 2 documents, and is not partitioned. The 't12028' database has a size of 244 bytes, 3 documents, and is not partitioned. The 't12213' database has a size of 139 bytes, 2 documents, and is not partitioned. The 't12214' database has a size of 356 bytes, 4 documents, and is not partitioned. The 't12759' database has a size of 142 bytes, 2 documents, and is not partitioned. The table is paginated with 'Showing 1-11 of 11 databases' and 'Databases per page: 20'.

Name	Size	# of Docs	Partitioned	Actions
monitor	4.4 KB	101	No	[Icons]
new_reg	1.3 KB	9	No	[Icons]
noderedfsmr20221111	66.9 KB	4	No	[Icons]
reg	0 bytes	0	No	[Icons]
register	0 bytes	0	No	[Icons]
t12027	228 bytes	2	No	[Icons]
t12028	244 bytes	3	No	[Icons]
t12213	139 bytes	2	No	[Icons]
t12214	356 bytes	4	No	[Icons]
t12759	142 bytes	2	No	[Icons]

monitor

All Documents

Query

Permissions

Changes

Design Documents

Log Out

Document ID

Options

JSON

Document ID

Create Document

Table

Metadata

JSON

	Diastole	Heart Rate	Systole	_id
<input type="checkbox"/>	131	68	85	05078b30647910edbec479781...
<input type="checkbox"/>	119	60	87	05078b30647910edbec479781...
<input type="checkbox"/>	100	78	83	07d63ba3e3034030c77b491fc1...
<input type="checkbox"/>	117	92	81	0ee26915af2ed8b29cd1a7a10f...
<input type="checkbox"/>	137	81	70	171321c146c343d27bf0ff9774b...
<input type="checkbox"/>	131	89	87	1d4f489838dae735903feae1d1...
<input type="checkbox"/>	118	87	64	2e93e3b19667d50298407257f0...
<input type="checkbox"/>	111	78	89	2e93e3b19667d50298407257f0...
<input type="checkbox"/>	123	85	61	2e93e3b19667d50298407257f0...
<input type="checkbox"/>	102	76	71	2e93e3b19667d50298407257f0...
<input type="checkbox"/>	139	62	77	2e93e3b19667d50298407257f0...
<input type="checkbox"/>	102	67	84	2e93e3b19667d50298407257f0...

Showing 4 of 5 columns.

☐ Show all columns.

Showing document 1 - 20.

Documents per page:

20

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