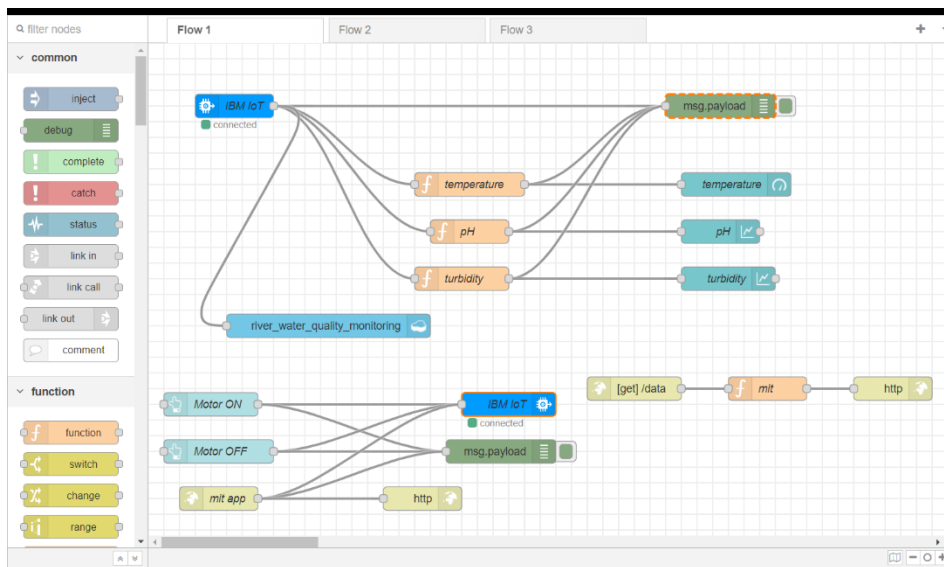


# PROJECT DEVELOPMENT PHASE

## SPRINT – 4

DATE	16 NOV 2022
TEAM ID	PNT2022TMID27339
TITLE	REAL TIME RIVER WATER QUALITY MONITORING AND CONTROL SYSTEM

### COMPLETE NODE RED FLOW



### STORING THE DATA IN CLOUDANT DB

The screenshot shows the Cloudant database interface for the 'river\_water\_quality...' database. The table view displays the following data:

id	key	value
0307d41be79596bd2d5bcbdfcedcfc0	0307d41be79596bd2d5bcbdfcedcfc0	{ "rev": "1-1083acc8bbbedbaf10d999ebc93ce..." }
03cb3bc5c0c7596808b9c781349bad3	03cb3bc5c0c7596808b9c781349bad3	{ "rev": "1-1c8beec3af014e9e5f2ecf924318a..." }
06c3de2cd97daf0f17a7ec6a3b0b9b67	06c3de2cd97daf0f17a7ec6a3b0b9b67	{ "rev": "1-dc2c69735e1ff28fe3e6c2a2103ad..." }
06c3de2cd97daf0f17a7ec6a3b0bd696	06c3de2cd97daf0f17a7ec6a3b0bd696	{ "rev": "1-aceb0f1eed9e16b12656177d1457..." }
06c3de2cd97daf0f17a7ec6a3b0c9f11	06c3de2cd97daf0f17a7ec6a3b0c9f11	{ "rev": "1-346fb3b20d8b32e3f57f36bfd20e..." }
06c3de2cd97daf0f17a7ec6a3b0cc961	06c3de2cd97daf0f17a7ec6a3b0cc961	{ "rev": "1-6a2c3bbc7b2588ed7a1dc298f25c..." }
06c3de2cd97daf0f17a7ec6a3b0ccbe3	06c3de2cd97daf0f17a7ec6a3b0ccbe3	{ "rev": "1-1cc1bf3e0a9b61ade68ee369d2e75..." }
06c3de2cd97daf0f17a7ec6a3b13ca96	06c3de2cd97daf0f17a7ec6a3b13ca96	{ "rev": "1-d86ad28100be295ab1e9002db0a..." }
06c3de2cd97daf0f17a7ec6a3b89c654	06c3de2cd97daf0f17a7ec6a3b89c654	{ "rev": "1-be6469afaa6ad2b2997070799545..." }
08eba1ad42f02081c78fa5c9797914c6	08eba1ad42f02081c78fa5c9797914c6	{ "rev": "1-2fe3a7200843d80ef83711264471..." }
0a76c5c61766f676da91c270db3eb037	0a76c5c61766f676da91c270db3eb037	{ "rev": "1-108fe9ea4e6d2a2aa511703d397d..." }
0a76c5c61766f676da91c270db3ec1ed	0a76c5c61766f676da91c270db3ec1ed	{ "rev": "1-8bea3a7dfff7f5fafa94523e569d..." }
0a76c5c61766f676da91c270db3eee38	0a76c5c61766f676da91c270db3eee38	{ "rev": "1-ed8ca62cb570e1bdd19ea83536aa..." }

Showing document 1 - 20. Documents per page: 20

```
river_water_quality_monitoring > 0307d41be79596bd2d5bcbdfecdcd0

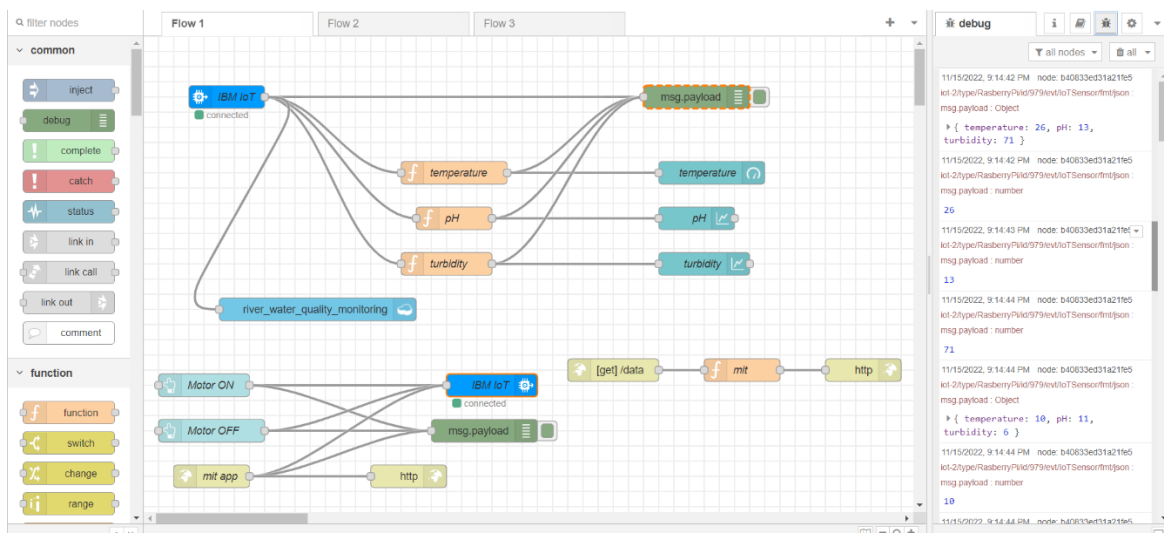
1
2
3
4
5
6
7
8
9
10
11
12
13
14

{
  "id": "0307d41be79596bd2d5bcbdfecdcd0",
  "rev": "1-f983ecc8bbddbf18d99ebc53ce9c5",
  "topic": "iot-2/type/RaspberryPi/id/979/evt/IotSensor/fmt/json",
  "payload": {
    "temperature": 31,
    "pH": 9,
    "turbidity": 72
  },
  "deviceId": "979",
  "deviceType": "RaspberryPi",
  "eventType": "IotSensor",
  "format": "json"
}
```

## NODE RED DASHBOARD



## NODE RED OUTPUT



MOBILE APP

## REAL TIME RIVER WATER QUALITY MONITORING

temperature: **87**

pH: **13**

turbidity: **35**

## SWITCH BOARD CONTROL

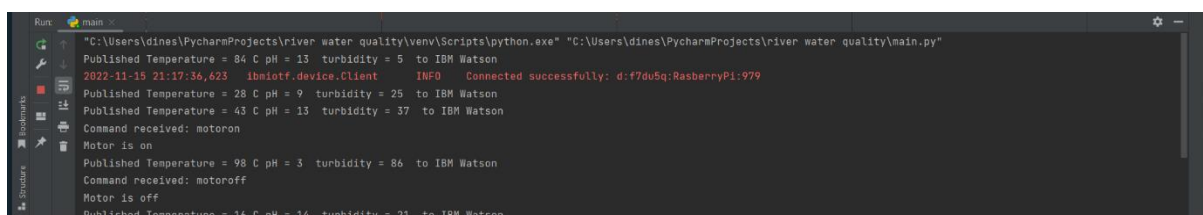
motoron

motoroff

Log out

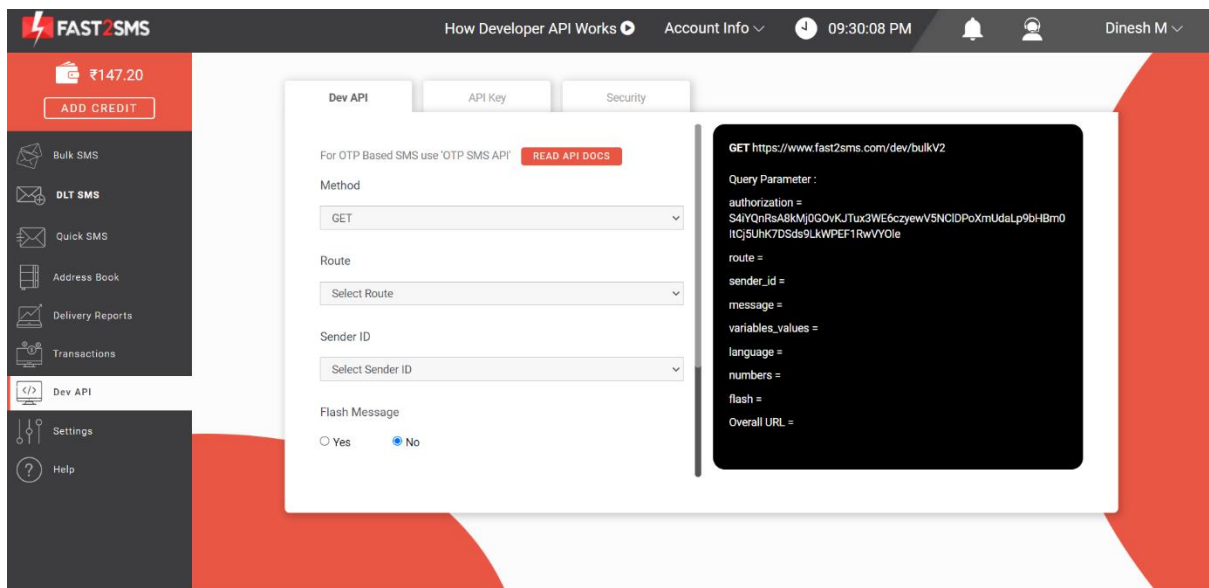
---

IF THE MOTOR ON BUTTON IS PRESSED THE CONTROLLER TURNS ON THE MOTOR

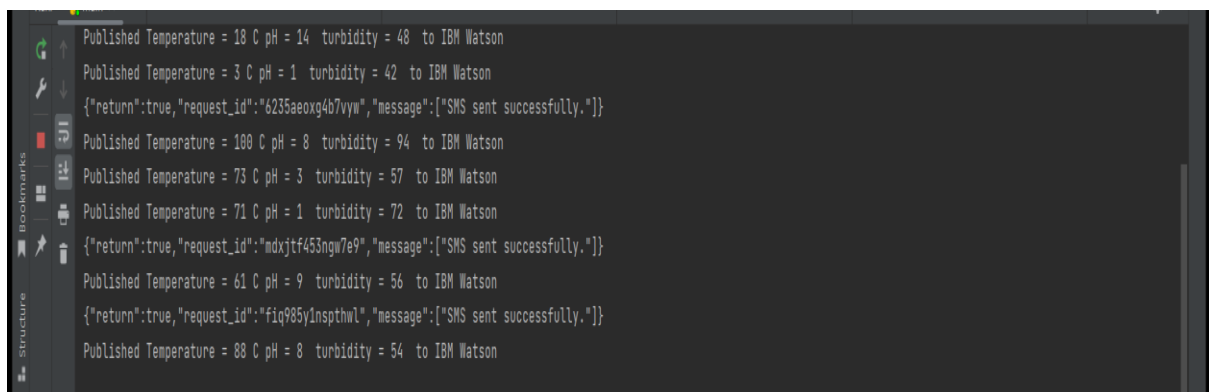


```
Run: main
"C:\Users\dines\PycharmProjects\river water quality\venv\Scripts\python.exe" "C:\Users\dines\PycharmProjects\river water quality\main.py"
Published Temperature = 84 C pH = 13 turbidity = 5 to IBM Watson
2022-11-15 21:17:36,623 ibmiotf.device.Client INFO Connected successfully: d:f7duSq:RaspberryPI:979
Published Temperature = 28 C pH = 9 turbidity = 25 to IBM Watson
Published Temperature = 43 C pH = 13 turbidity = 37 to IBM Watson
Command received: motoron
Motor is on
Published Temperature = 98 C pH = 3 turbidity = 86 to IBM Watson
Command received: motoroff
Motor is off
Published Temperature = 16 C pH = 14 turbidity = 21 to IBM Watson
```

## FAST 2 SMS



## SMS SENT



## SMS SENT TO USER

