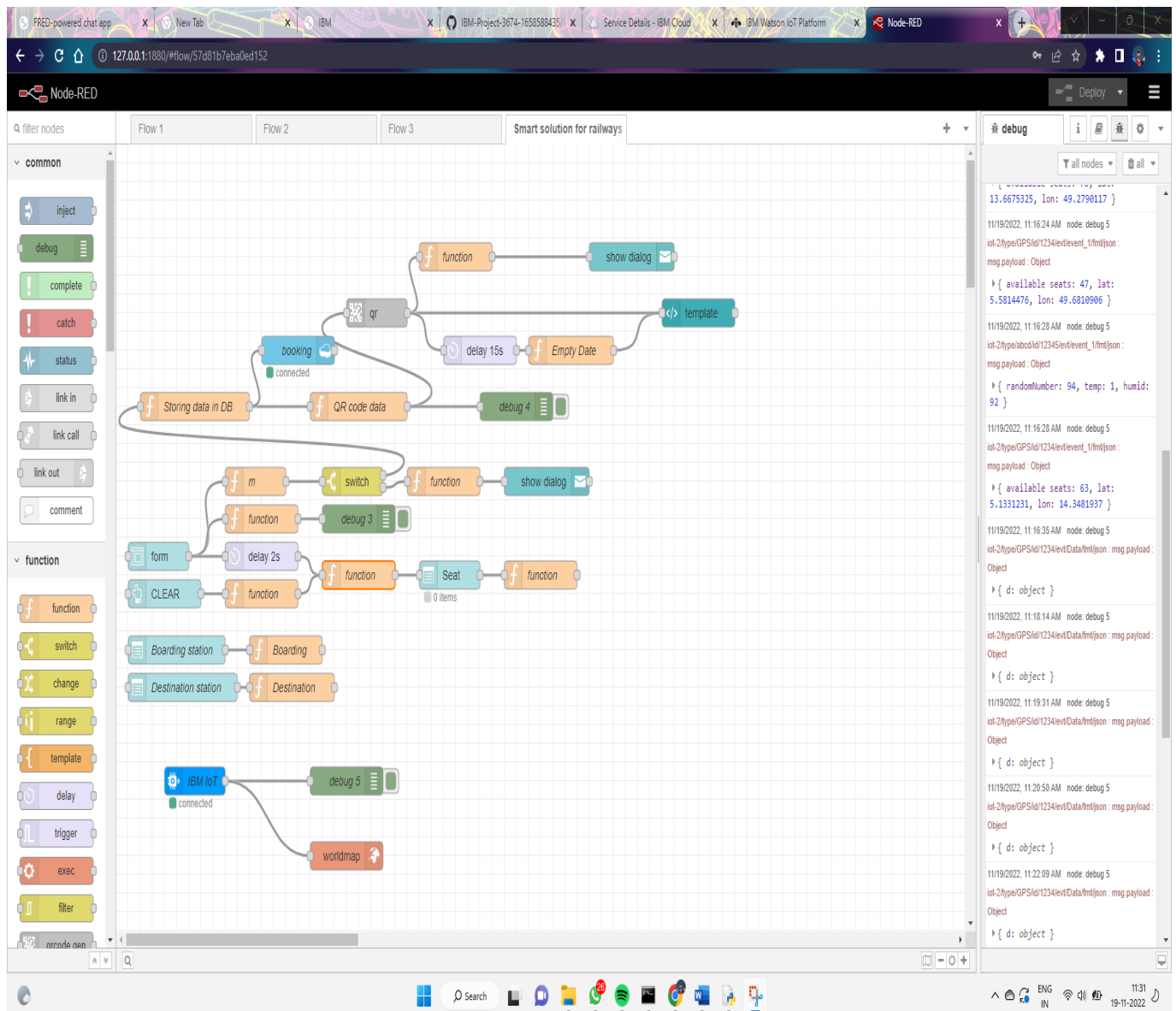


## 1.Node-red flow



## 2. IBM Watson

The screenshot shows the IBM Watson IoT Platform interface. The main panel displays a table of devices, with one device selected and its details shown on the right. The device is a GPS type, and the simulator is configured to send events every minute. The payload is a JSON object containing location data.

Device ID	Status	Device Type	Class ID	Date Added	Descriptive Location
1234	Disconnected	GPS	Device	17 Nov 2022 11:37	5101
12345	Disconnected	abcd	Device	18 Nov 2022 06:28	5101

Device Type: GPS

Event Type name: event\_1

Schedule: 01 Every Minute

Payload:

```
{
  "available seats": random(0, 100),
  "lat": random(0, 17.4367448),
  "lon": random(0, 78.4787318)
}
```

## 3. Python code

```
model.py - C:\Users\yokes\AppData\Local\Programs\Python\Python37\model.py (3.7.0)
File Edit Format Run Options Window Help

# Provide your IBM Watson Device Credentials
organization = "vpt54"
deviceType = "gps"
deviceId = "1234"
authMethod = "token"
authToken = "12345678"

# Initialize the device client.
try:
    deviceOptions = {"org": organization, "deviceType": deviceType, "deviceId": deviceId, "authMethod": authMethod, "authToken": authToken}
    deviceClient = ibmiotf.device.DeviceClient(deviceOptions)
except Exception as e:
    print(f"Caught exception: {e}")
    sys.exit(1)

# Connect and send a datapoint
deviceClient.connect()

while True:
    overpass_url = "https://overpass-api.de/api/trace?data=[{"lat": 17.4367448, "lon": 78.4787318}]"
    response = requests.get(overpass_url, params={"data": overpass_url})
    if response.status_code == 200:
        data = response.json()
        place = data.get("places")
        for place in place:
            coords.append(place["coordinates"])
        print(f"Got {len(coords)} village coordinates")
        print(coords[0])
    else:
        print("Error")

    i = random.randint(1, 100)
    l = coords[i]
    # Send random gps data to Watson
    data = {"d": {"lat": l[1], "lon": l[0]}}
    # Publish data
    def myOnPublishCallback():
        print("Published gps")
    success = deviceClient.publish(data, myOnPublishCallback)
    if not success:
        print("Not connected to IoT")
    time.sleep(1)

deviceClient.disconnect()
```

## 4.QRcode

Generator

QR Code

Name\*  
Jayavarshini, K. P

Age\*  
21

Mobile No\*  
9360824413

SUBMIT CANCEL

Seat 6, 8

Boarding station Vijayawada

Destination Chennai

127.0.0.1:1880/ui/#/17socketid=L0hYWmZT19YjUwZnZAAAAD

Search

ENG IN 11:35 19-11-2022