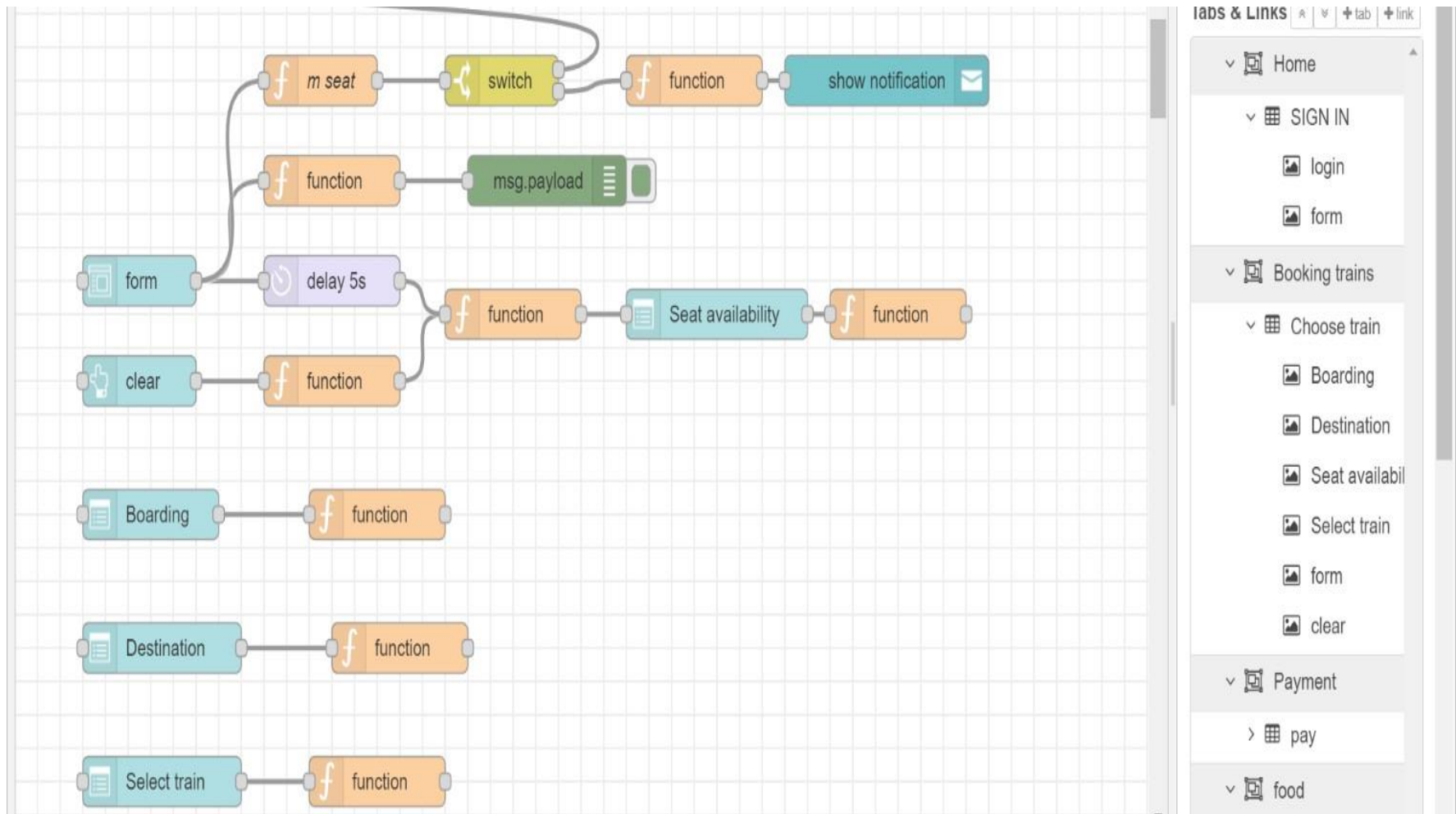


## **SPRINT-2**

|                            |                              |
|----------------------------|------------------------------|
| <b><i>Date</i></b>         | 06 NOVEMBER 2022             |
| <b><i>Team ID</i></b>      | PNT2022TMID26022             |
| <b><i>Project Name</i></b> | SMART SOLUTIONS FOR RAILWAYS |

## ***NODES TO BOOK TRAIN:***



### **FUNCTION NODE COMMAND TO INDICATE THE AVAILABLE SEATS:**

```
var a=global.get('a')
var s= []
for(let i=0;i<a.length==0;i++){
  s.push(a[i])
}
if(s.length==0){
  msg.options=[{"No seats available":0}]
}
else{
  msg.options= s
}
msg.payload= s
return msg;
```

### **FUNCTION NODE COMMAND TO CHOOSE THE AVAILABLE SEATS:**

```
var s=global.get('s')
var a=global.get('a')
function reg(x){
  for(let i=0;i<a.length;i++){if(a[i]==x){
    a.splice(i,1)
  }
}
}
```

```
if(s==1){
    global.set('s1',s)
    reg(s)
}
else if(s==2){
    global.set('s2',s)
    reg(s)
}
else if(s==3){
    global.set('s3',s)
    reg(s)
}
else if(s==4){
    global.set('s4',s)
    reg(s)
}
else if(s==4){
    global.set('s4',s)
    reg(s)
}
return msg;
```

### **FUNCTION NODE COMMAND TO STORE DATA IN DATABASE:**

```
var m=global.get('m')
var d=new Date();
var utc=d.getTime()+(d.getTimezoneOffset()*60000);
var offset=5.5;
newDate=new Date(utc+(3600000*offset));
var n=newDate.toISOString()
var date=n.slice(0,10)
var time=n.slice(11,19)var
d1=date+', '+time msg.payload={
  "_id":d1,
  "Name":m.Name,
  "Age":m.Age,
  "Mobile":m.Num,
  "boarding":global.get('b'),
  "destination":global.get('d'),
  "Seat":global.get('s')
}
return msg;
```

## FORM DETAILS:

Node-RED

Deploy

Edit form node

Delete

Cancel

Done

Properties

Group

[Booking trains] Choose train

Size

auto

Label

optional label

Form elements

|   | Label      | Name | Type   | Required                            | UiRows | Remove |
|---|------------|------|--------|-------------------------------------|--------|--------|
| ≡ | Name       | name | Text   | <input checked="" type="checkbox"/> |        |        |
| ≡ | Age        | age  | Number | <input checked="" type="checkbox"/> |        |        |
| ≡ | Mobile num | num  | Number | <input checked="" type="checkbox"/> |        |        |
|   |            |      |        |                                     |        |        |

Enabled

debug

all nodes

all

11/15/2022, 11:23:25 AM node: 833946aa7ef65319  
iot-2/type/Sudha/id/45/evt/status/fmt/json : msg.payload  
: Object  
▶ { name: "Train1", lat: 13.08363,  
lon: 80.2708 }  
11/15/2022, 11:23:27 AM node: 833946aa7ef65319  
iot-2/type/Sudha/id/45/evt/status/fmt/json : msg.payload  
: Object  
▶ { name: "Train2", lat: 12.40797,  
lon: 79.8141 }  
11/15/2022, 11:23:29 AM node: 833946aa7ef65319  
iot-2/type/Sudha/id/45/evt/status/fmt/json : msg.payload  
: Object  
▶ { name: "Train1", lat: 11.83331,  
lon: 79.37465 }  
11/15/2022, 11:23:35 AM node: 833946aa7ef65319  
iot-2/type/Sudha/id/45/evt/status/fmt/json : msg.payload  
: Object  
▶ { name: "Train1", lat: 11.59664,  
lon: 78.69899 }  
11/15/2022, 11:23:41 AM node: 833946aa7ef65319  
iot-2/type/Sudha/id/45/evt/status/fmt/json : msg.payload  
: Object  
▶ { name: "Train1", lat: 11.63431,  
lon: 78.11122 }

## **SEAT DROPDOWN BOX:**

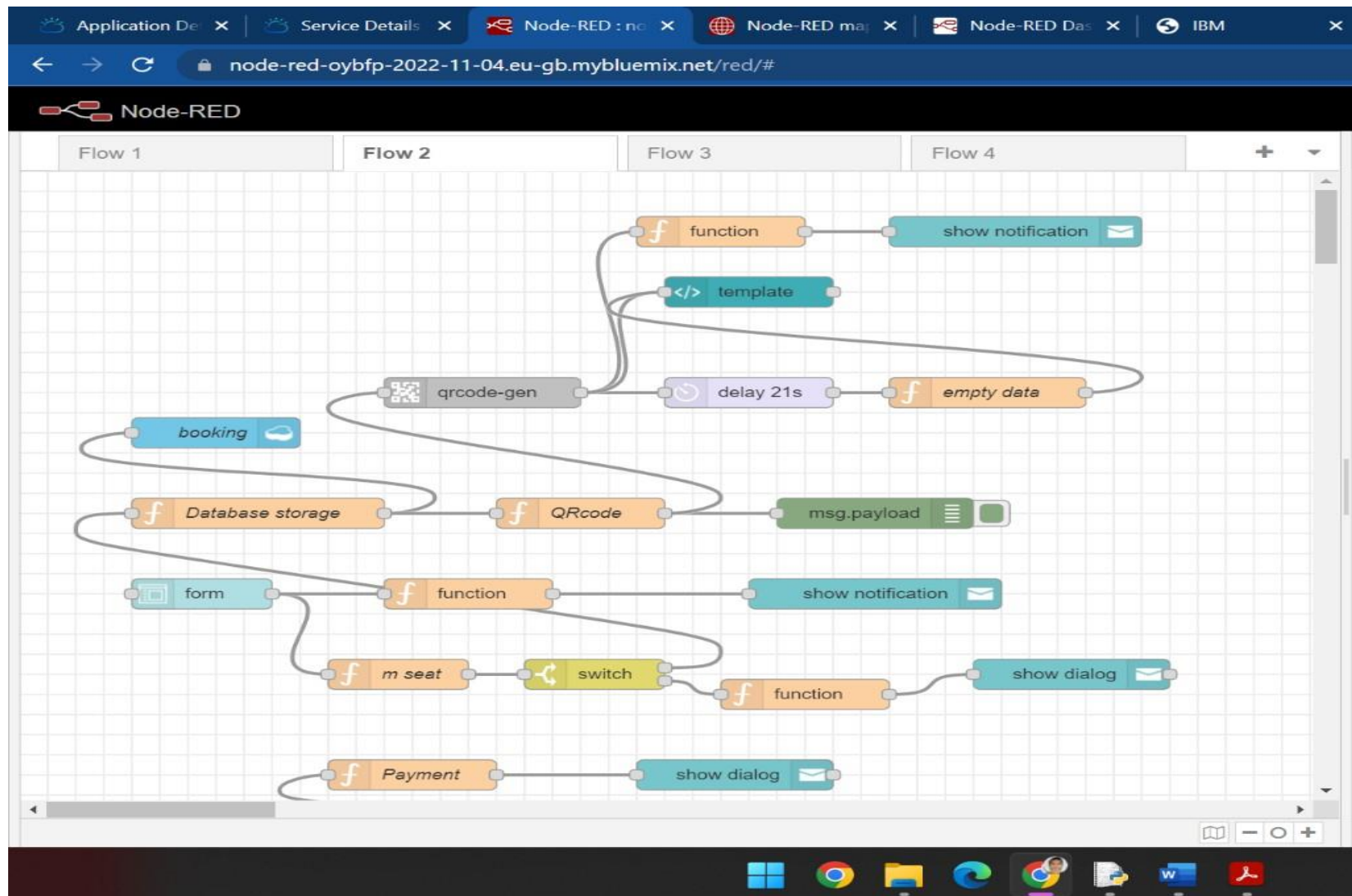
The screenshot displays the Node-RED web interface. On the left, a flow diagram is partially visible with nodes labeled 'form', 'clear', 'Boarding', and several function nodes. The central panel is titled 'Edit dropdown node' and contains the following configuration options:

- Delete:** A button to delete the node.
- Cancel:** A button to cancel the edit.
- Done:** A red button to save the changes.
- Properties:** A section with icons for settings, a file, and a help icon.
- Group:** A dropdown menu set to '[Booking trains] Choose train'.
- Size:** A dropdown menu set to 'auto'.
- Label:** A text input field containing 'Seat availability'.
- Tooltip:** A text input field containing 'optional tooltip'.
- Placeholder:** A text input field containing 'Select option'.
- Options:** A list of four options, each with a dropdown arrow, a label, and a delete button (x):
  - Option 1: Label '1', value '1'.
  - Option 2: Label '2', value '2'.
  - Option 3: Label '3', value '3'.
  - Option 4: Label '4', value '4'.
- Enabled:** A radio button labeled 'Enabled'.

On the right side of the interface, the 'debug' console is open, showing a list of messages. The messages are JSON objects containing train information:


```
11/15/2022, 11:23:59 AM node: 833946aa7ef65319  
iot-2/type/Sudha/id/45/evt/status/fmt/json : msg payload  
: Object  
  { name: "Train1", lat: 13.08363,  
    lon: 80.2708 }  
11/15/2022, 11:24:01 AM node: 833946aa7ef65319  
iot-2/type/Sudha/id/45/evt/status/fmt/json : msg payload  
: Object  
  { name: "Train2", lat: 12.40797,  
    lon: 79.8141 }  
11/15/2022, 11:24:03 AM node: 833946aa7ef65319  
iot-2/type/Sudha/id/45/evt/status/fmt/json : msg payload  
: Object  
  { name: "Train1", lat: 11.83331,  
    lon: 79.37465 }  
11/15/2022, 11:24:09 AM node: 833946aa7ef65319  
iot-2/type/Sudha/id/45/evt/status/fmt/json : msg payload  
: Object  
  { name: "Train1", lat: 11.59664,  
    lon: 78.69899 }  
11/15/2022, 11:24:15 AM node: 833946aa7ef65319  
iot-2/type/Sudha/id/45/evt/status/fmt/json : msg payload  
: Object  
  { name: "Train1", lat: 11.63431,  
    lon: 78.11122 }
```

## ***NODE RED FLOW FOR PAYMENT:***





## WEB UI FOR TRAIN BOOKING:

 Booking trains

Choose train

Boarding Coimbatore ▼

Destination Chennai ▼

Seat availability Select option ▼

Select train Blue mountain ▼

Name \*  
sudha

Age \*  
20


Mobile num \*  
9876543210 ▼

SUBMIT

CANCEL

CLEAR

## **WEB UI FOR PAYMENT:**

 Booking trains

Choose train

Boarding

Destination

Seat availability

Sele

## **PAYMENT PAGE:**

≡ Payment

pay

Card name \*

SUDHA

Card number \*

210031004100

CVV \*

675

SUBMIT

CANCEL