

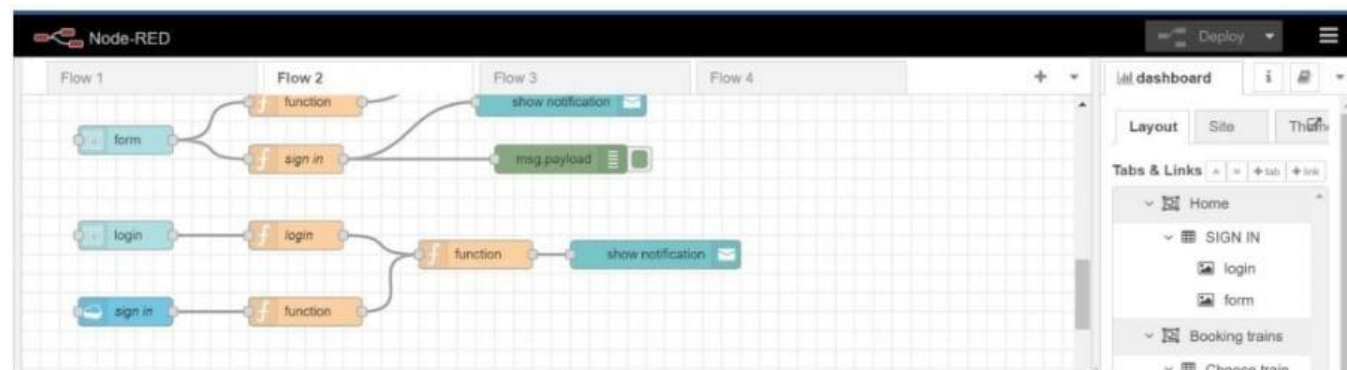
# SPRINT - 1

Team ID	PNT2022TMID37954
Project Name	Project –Smart Solutions for Railways

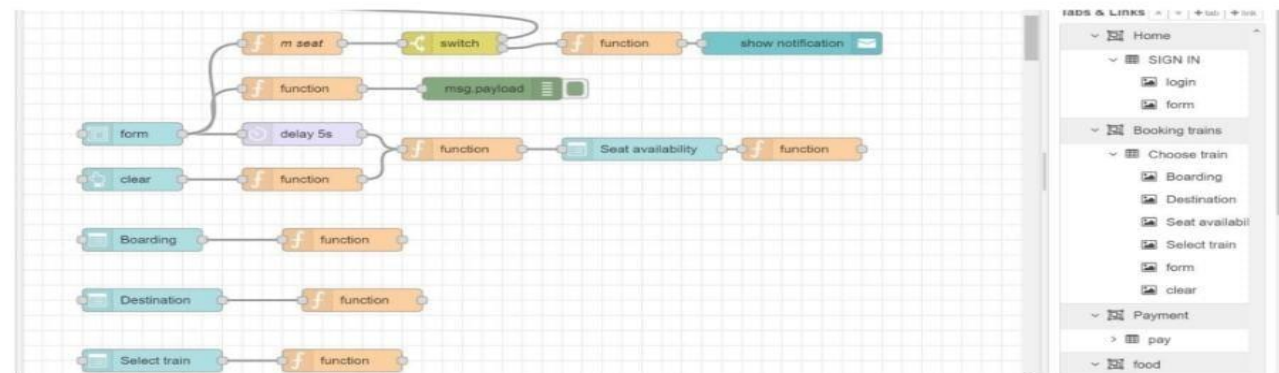
## PROCEDURE:

- Step 1: Develop the node red applications
- Step 2: Install the required nodes from manage palette option
- Step 3: Connect the node flow
- Step 4: Deploy the flow.

## WEB APPLICATIONS:



## 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:

The screenshot displays the Node-RED web interface. On the left, the 'Edit form node' panel is open, showing configuration options for a form node. The 'Group' is set to '[Booking trains] Choose train'. The 'Size' is set to 'auto'. The 'Label' is set to 'optional label'. Below these, a table lists the form elements:

Label	Name	Type	Required	UI Rows	Remove
Name	name	Text	<input checked="" type="checkbox"/>	1	
Age	age	Number	<input checked="" type="checkbox"/>	1	
Mobile num	num	Number	<input checked="" type="checkbox"/>	1	

At the bottom of the panel, there is an 'Enabled' checkbox which is currently checked.

On the right, the 'debug' console is open, showing a series of log messages. Each message is an object with 'name' and 'lat' properties, representing train data. The messages are as follows:

```
11/15/2022, 11:23:25 AM node: 833940aa7ef05319
set: 2?type=Stat&id=45&ev=status/req/json - msg.payload
Object
+ { name: "Train1", lat: 13.08363,
  lon: 80.2708 }

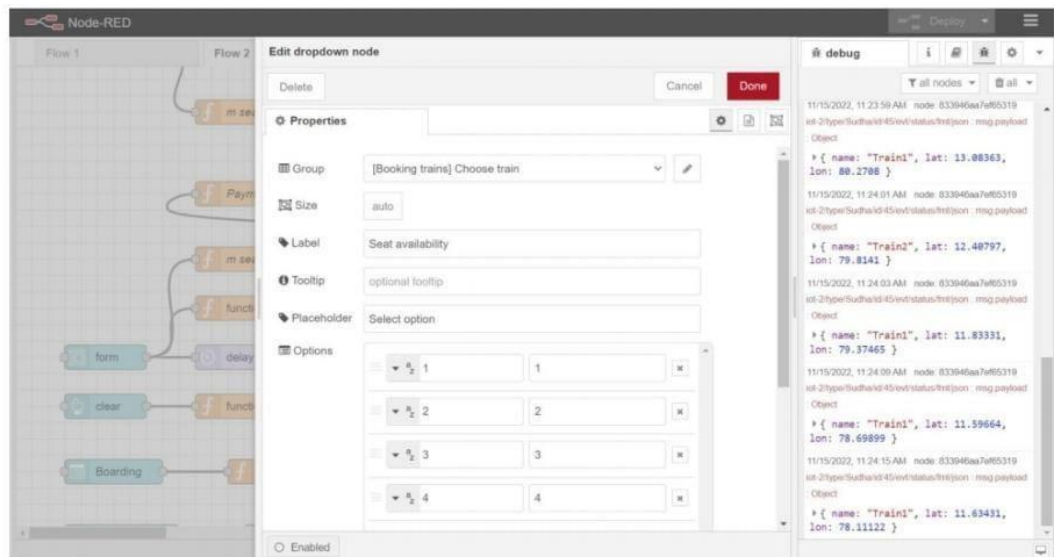
11/15/2022, 11:23:27 AM node: 833940aa7ef05319
set: 2?type=Stat&id=45&ev=status/req/json - msg.payload
Object
+ { name: "Train2", lat: 12.40797,
  lon: 79.8141 }

11/15/2022, 11:23:29 AM node: 833940aa7ef05319
set: 2?type=Stat&id=45&ev=status/req/json - msg.payload
Object
+ { name: "Train1", lat: 11.83331,
  lon: 79.37465 }

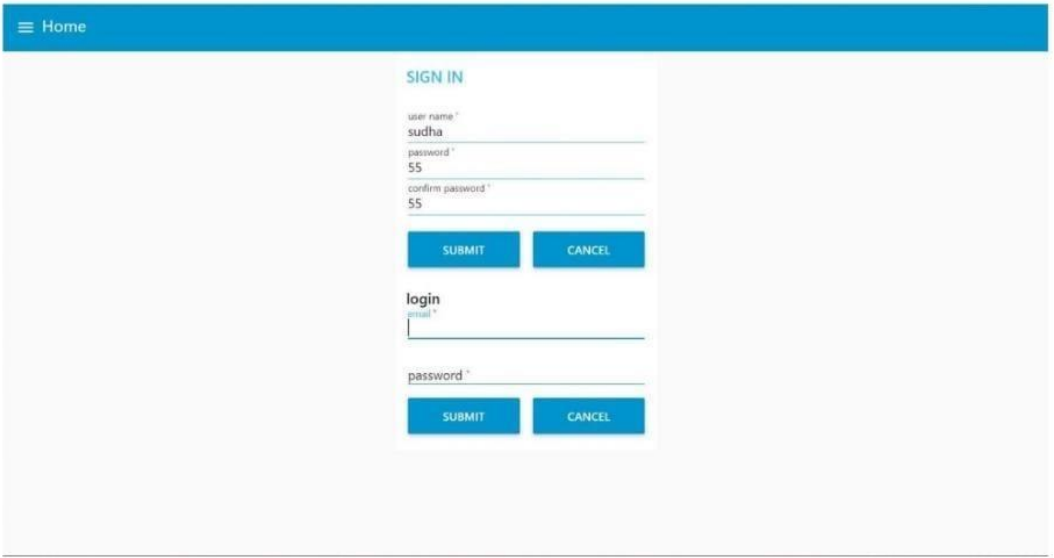
11/15/2022, 11:23:35 AM node: 833940aa7ef05319
set: 2?type=Stat&id=45&ev=status/req/json - msg.payload
Object
+ { name: "Train1", lat: 11.59664,
  lon: 78.69899 }

11/15/2022, 11:23:41 AM node: 833940aa7ef05319
set: 2?type=Stat&id=45&ev=status/req/json - msg.payload
Object
+ { name: "Train1", lat: 11.63431,
  lon: 78.11122 }
```


SEAT DROPDOWN BOX:



WEB UI OUTPUT:



## WEB UI FOR TRAIN BOOKING:

 Booking trains

Choose train

Boarding

Destination

Seat availability

Select train

Name \*

Age \*

Mobile num \*

SUBMIT

CANCEL

CLEAR

