

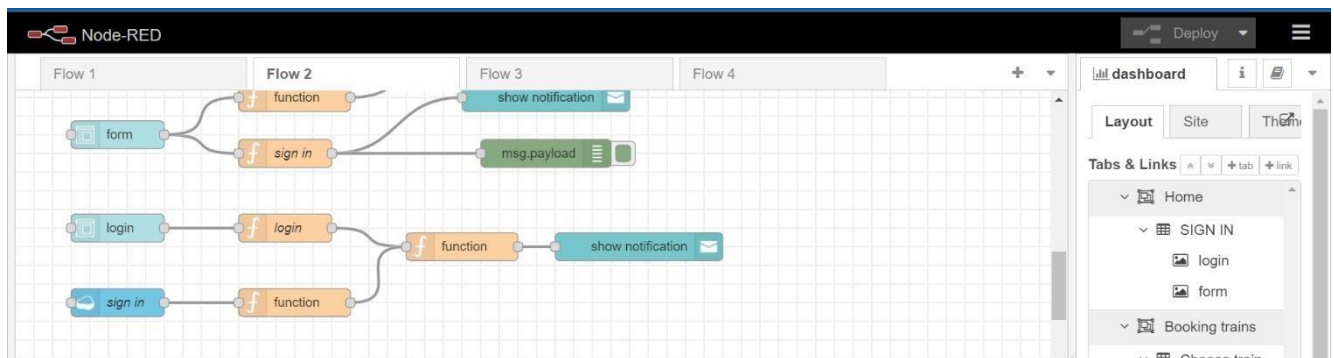
SPRINT-1

Date	19 NOVEMBER 2022
Team ID	PNT2022TMID36291
Project Name	SMART SOLUTIONS FOR RAILWAYS

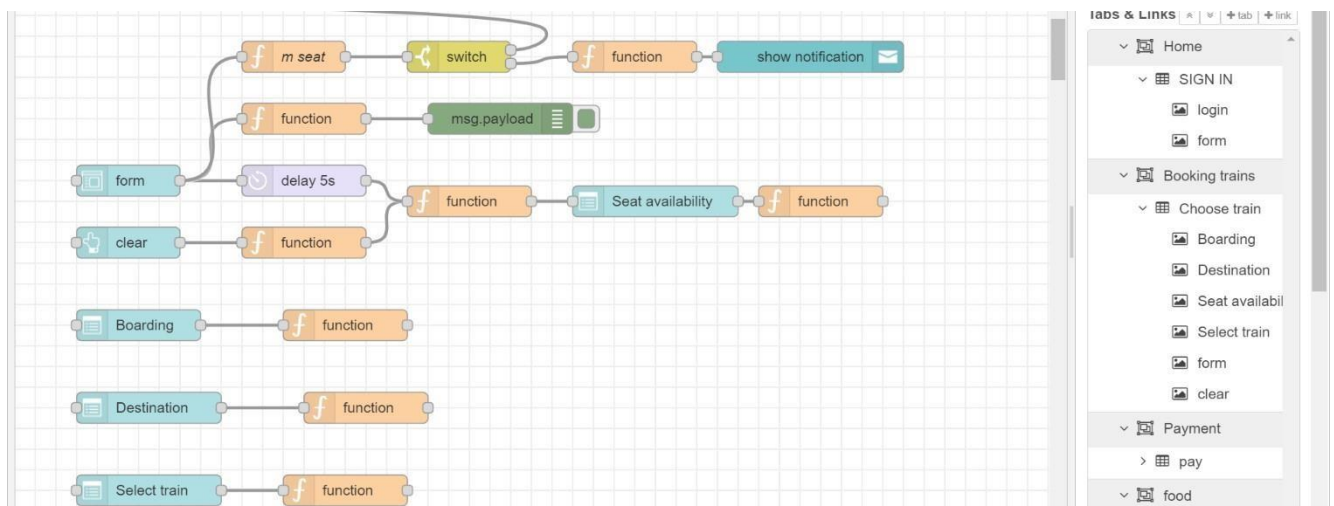
PROCEDURE:

- Srep1: Develop node red application
- Step2: Install the required nodes from manage palette option
- Step3: Connect the node flow
- Step4: Deploy the flow

WEB APPLICATION :



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 shows the Node-RED interface. On the left, the 'Edit form node' panel is open, displaying the configuration for a form node. The 'Properties' section shows the group name '[Booking trains] Choose train', size 'auto', and label 'optional label'. Below this, a table lists the 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"/>		

At the bottom of the form node panel, there is a checkbox labeled 'Enabled' which is currently checked.

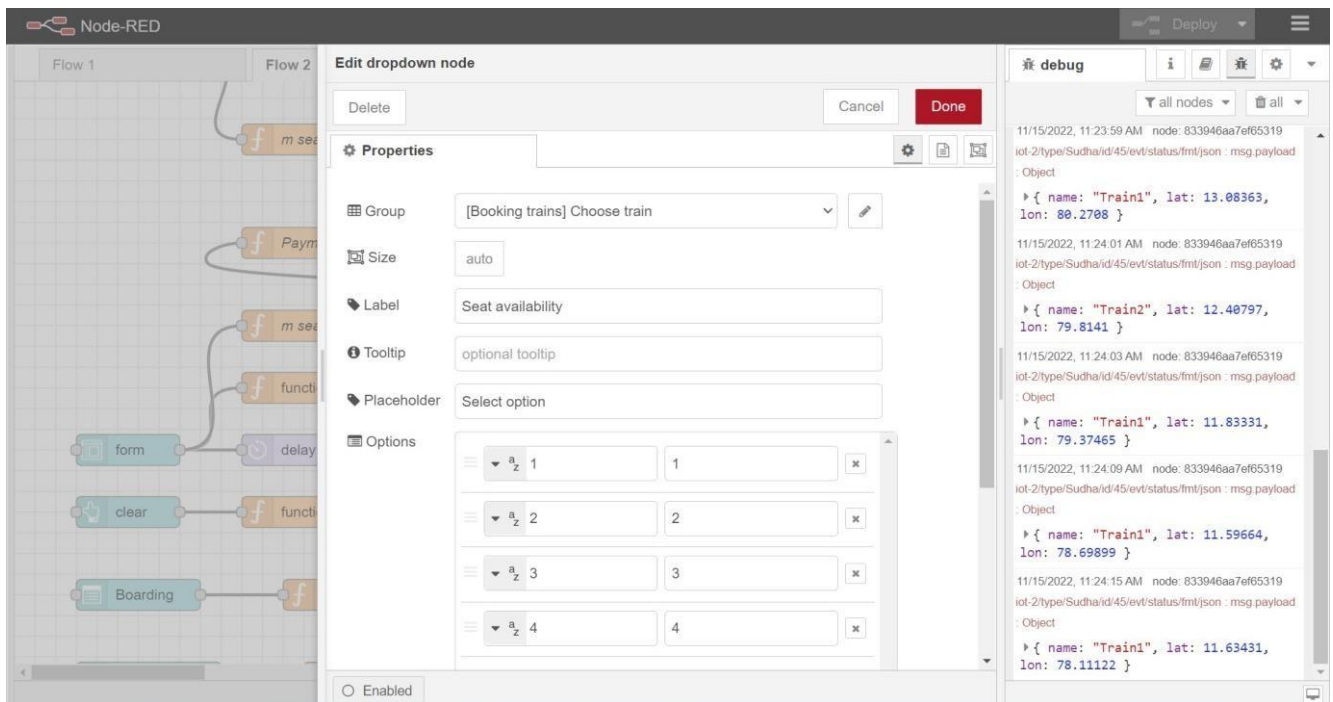
On the right, the 'debug' console is open, showing a list of messages. The messages are JSON objects containing train information, such as:

```

{
  "name": "Train1",
  "lat": 13.08363,
  "lon": 80.2708
}

```

SEAT DROPDOWN BOX:



WEB UI OUTPUT:

Home

SIGN IN

user name *

sudha

password *

55

confirm password *

55

SUBMIT

CANCEL

login

email *

password *

SUBMIT

CANCEL

WEB UI FOR TRAIN BOOKING:

Choose train

Boarding Coimbatore ▼

Destination Chennai ▼

Seat availability Select option ▼

Select train Blue mountain ▼

Name *

sudha

Age *

20

Mobile num *

9876543210

SUBMIT

CANCEL

CLEAR