

SPRINT-1

Date	19 NOVEMBER 2022
Team ID	PNT2022TMID38248
Project Name	Project – SMART SOLUTIONS FOR RAILWAYS

PROCEDURE:

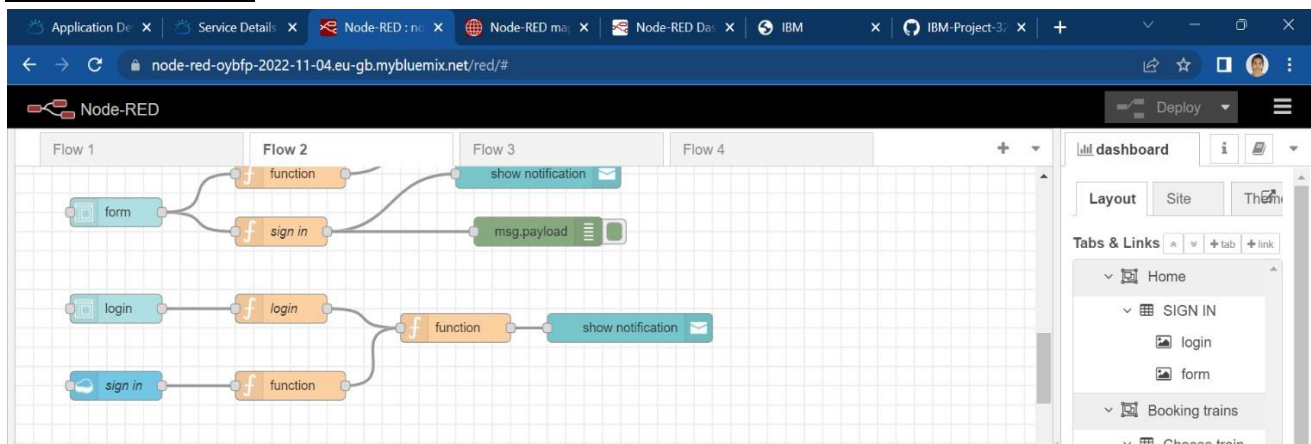
Srep1: Develop node red application

Step2: Install the required nodes from manage palette option

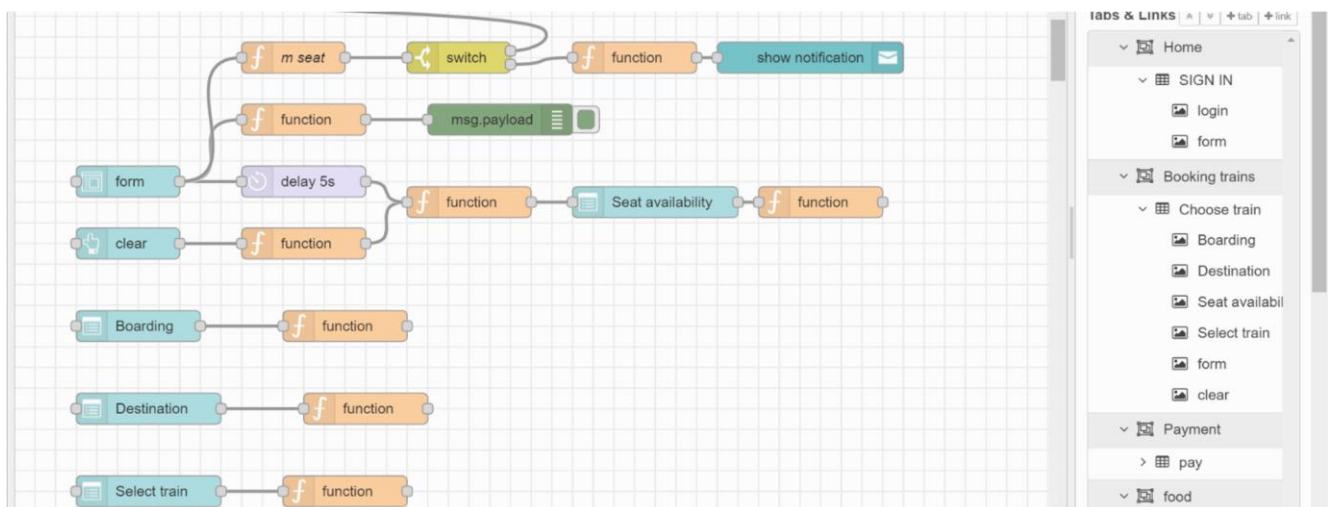
Step3: Connect the node flow

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:

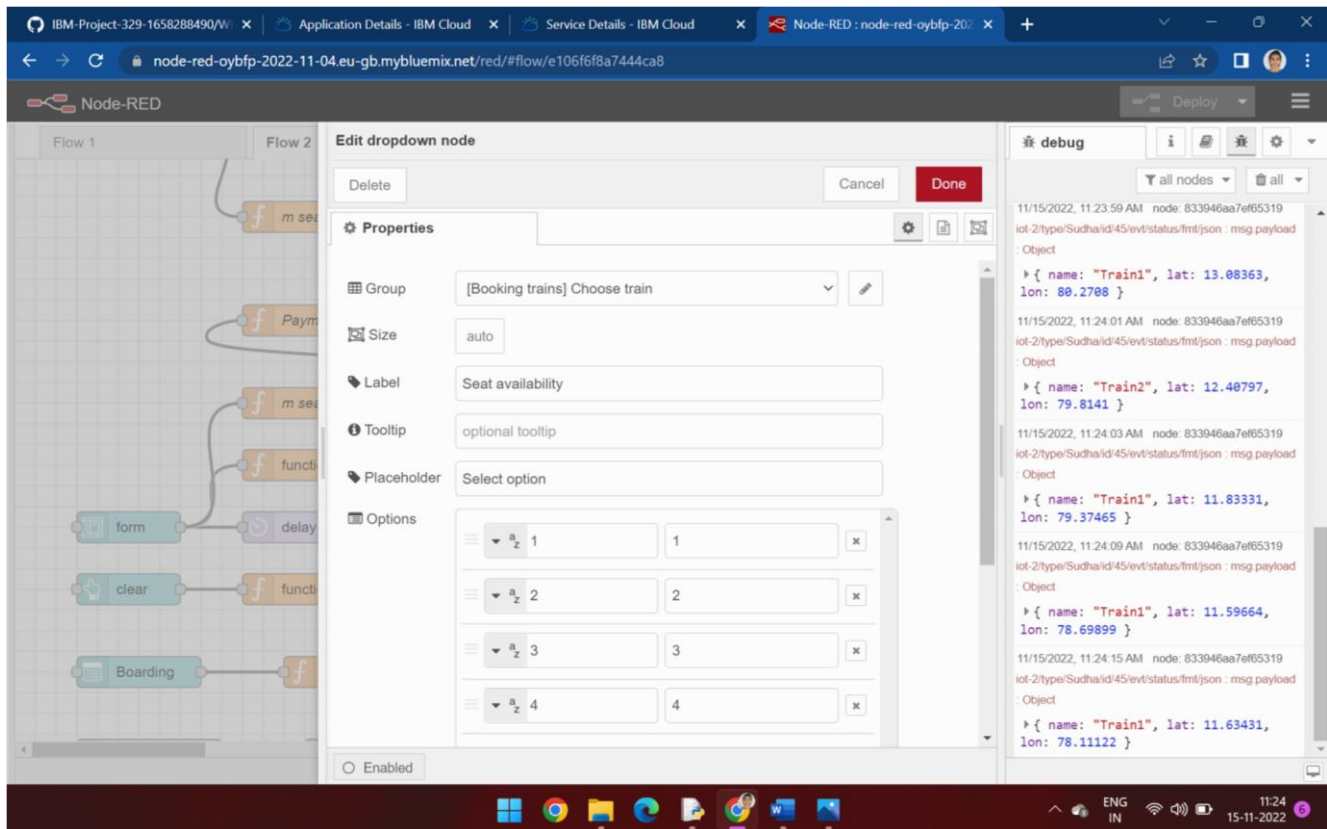
The screenshot displays the Node-RED web interface. The main panel is titled 'Edit form node' and shows the configuration for a form. The 'Properties' section on the left includes a 'Group' dropdown set to '[Booking trains] Choose train', a 'Size' dropdown set to 'auto', and a 'Label' text field containing 'optional label'. Below these, the 'Form elements' section contains a table with three rows of 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"/>		

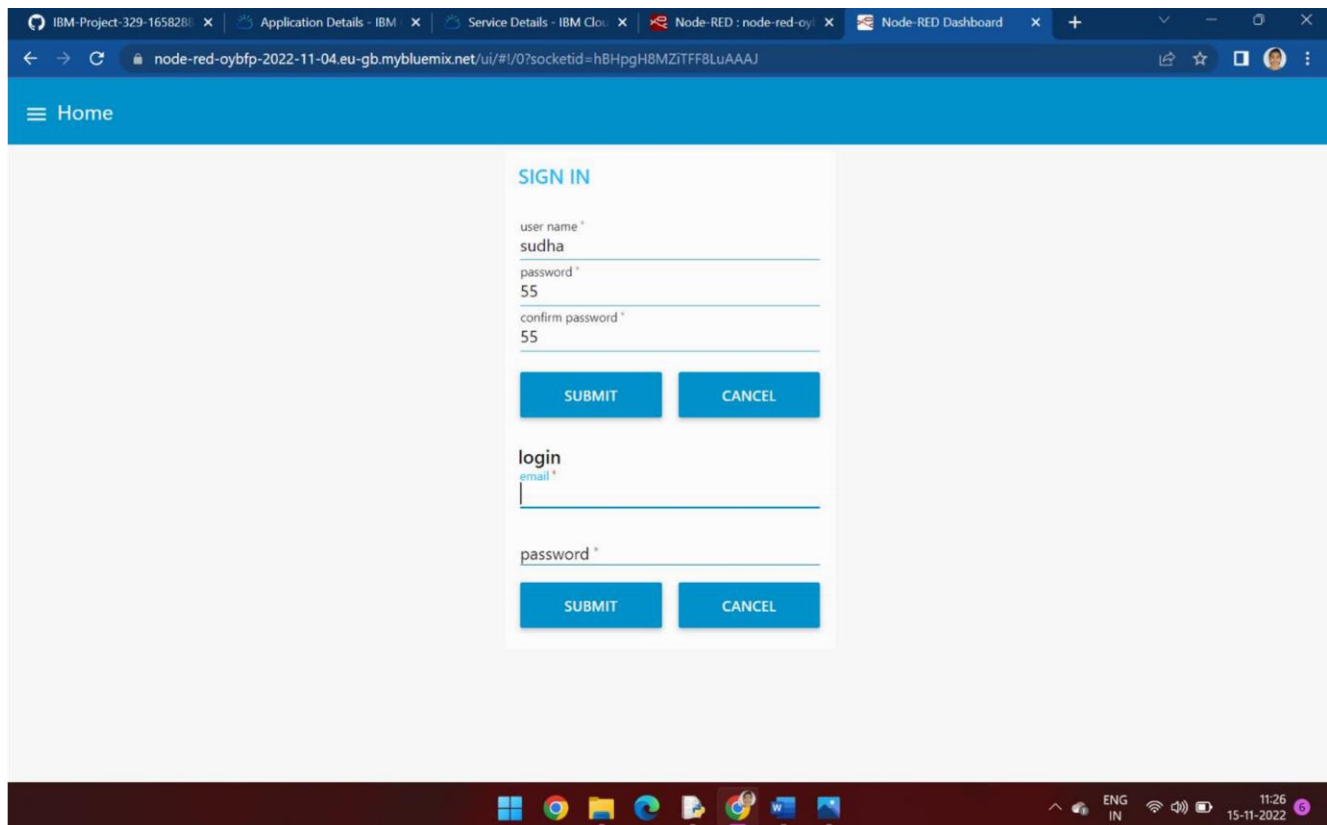
At the bottom left, there is an 'Enabled' checkbox which is currently unchecked. On the right side, the 'debug' console is open, showing a list of messages. The messages are JSON objects containing train names and coordinates, such as:

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

SEAT DROPDOWN BOX:



WEB UI OUTPUT:



WEB UI FOR TRAIN BOOKING:

