

Project Development Phase

Sprint-3

Team ID	PNT2022TMID35843
Project Name	Smart Solutions for Railways

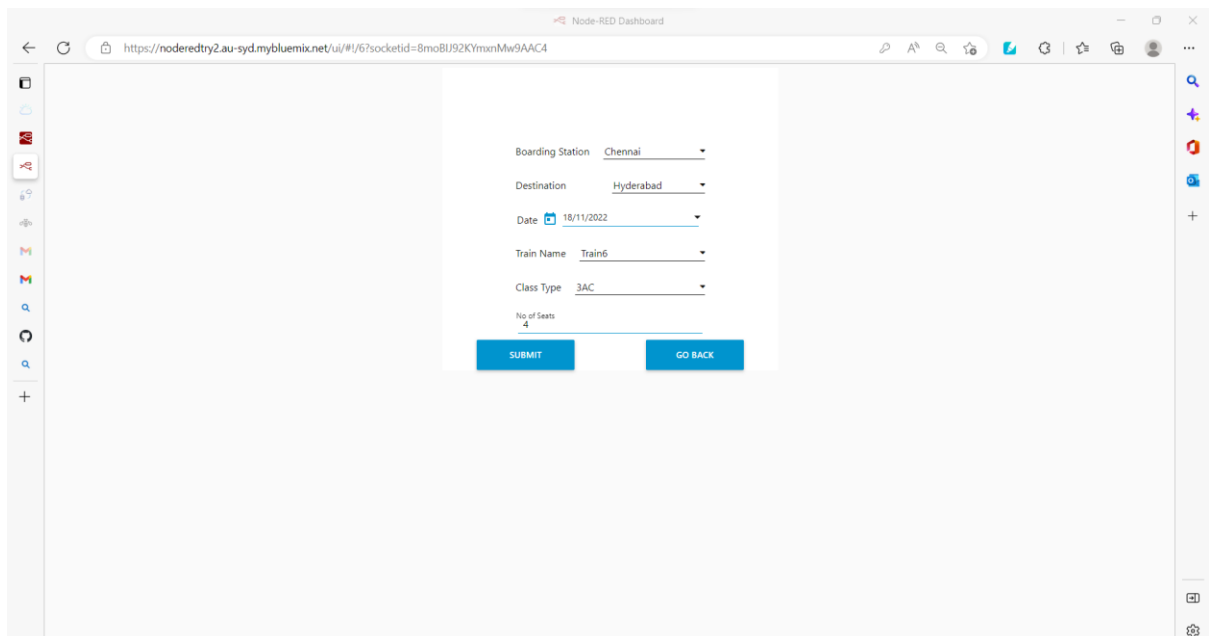
(We have completed up to ticket booking in sprint 2)

Sprint-3 contents

1) Node-Red

- QR-Code generated when Ticket is booked successfully.
- The generated QR-Code is sent to you the user's mail which can be used for further verification.

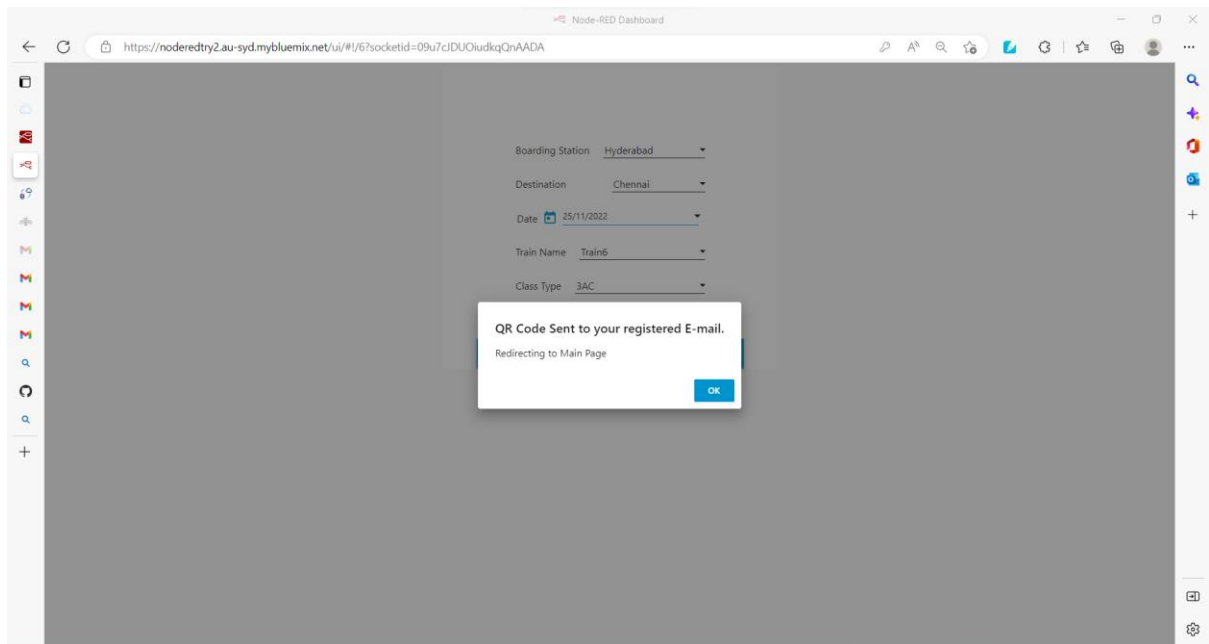
When Booking is complete Notification pops up in UI.



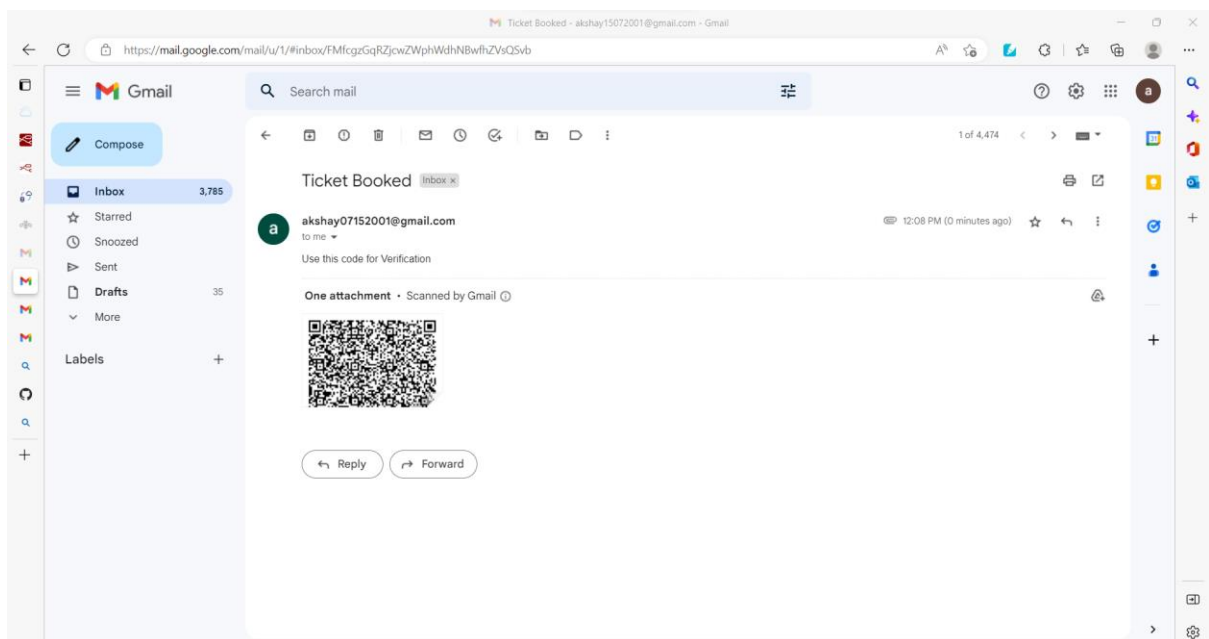
The screenshot shows a web browser window displaying a Node-RED dashboard. The URL in the address bar is <https://noderedtry2.au-syd.mybluemix.net/ui/#/1/6?socketid=8moBU92KYmxnMw9AAC4>. The dashboard features a central form for train booking with the following fields and values:

- Boarding Station: Chennai
- Destination: Hyderabad
- Date: 18/11/2022
- Train Name: Train6
- Class Type: 3AC
- No of Seats: 4

At the bottom of the form are two buttons: "SUBMIT" and "GO BACK". The interface includes a sidebar on the left with various icons and a top bar with the title "Node-RED Dashboard".



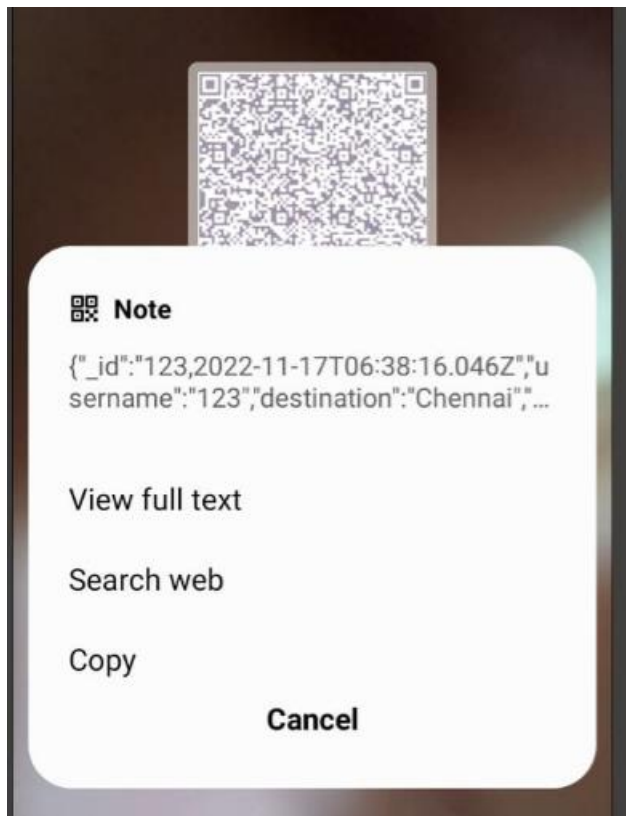
User's registered E-mail



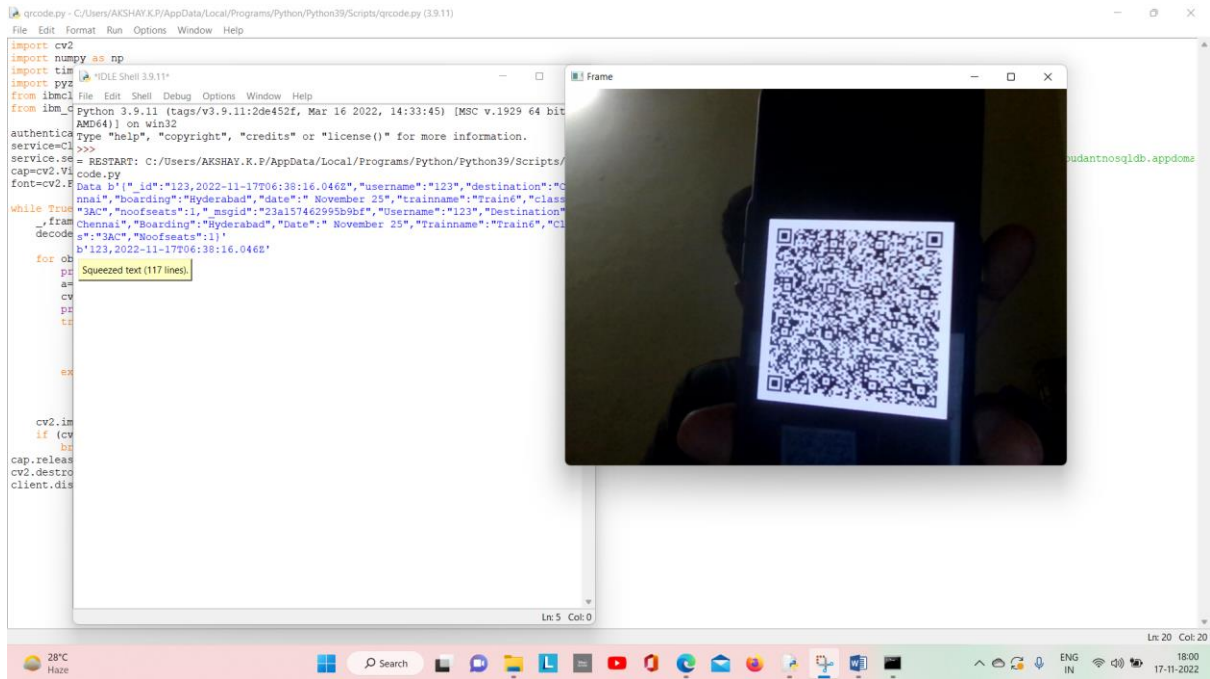
This generated qrcode is stored in the database known as “qrcode” in IBM cloudant.

Once this QR-Code is scanned the following details are displayed from the ticket collectors side.

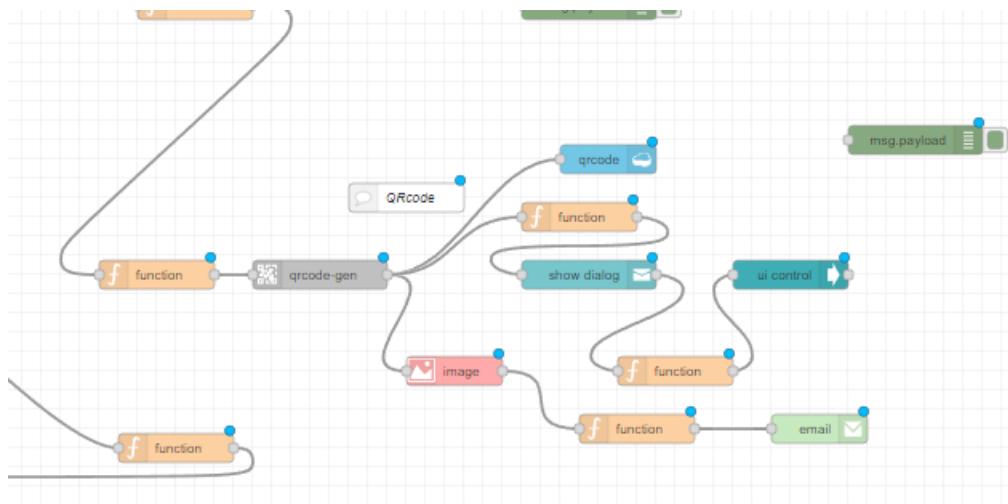
Scanned using mobile phone



Scanned using python script



Node-Red Flow



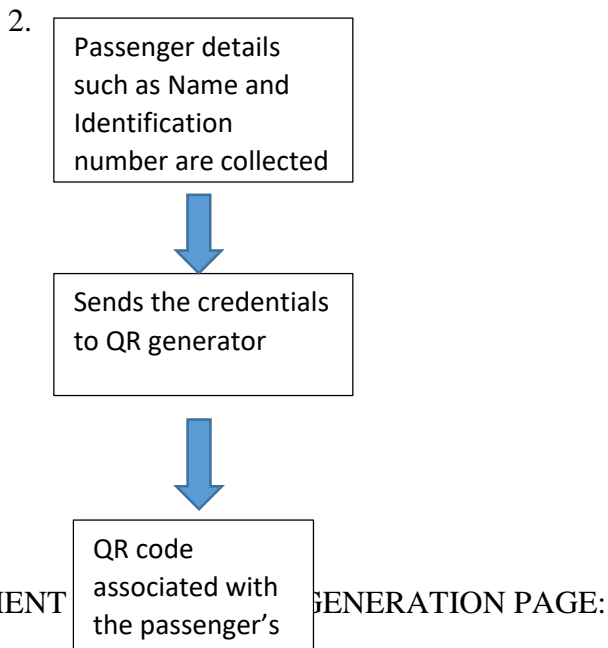
(Python Script used for Scanning will be attached as a separate file)

||) MIT APP INVENTOR ANDROID APPLICATION

On successful choosing of Boarding, destination location, travel date and train in Bookings page, user will be automatically directed to the payment and QR code generation page.

WORK BEHIND QR CODE GENERATION

1. For given certain passenger name and his/her identification number ,an unique QR code will be generated i.e. on scanning the generated QR code , the TTR will be able to retrieve the information of the passenger uniquely without any contradicts.



8:45

Payment and QR generation

Enter Passenger Name:

Enter ID number:

Pay and generate your QR Code

Take a screen shot of QR code for verification

11:09


Payment and QR generation

Enter Passenger Name:

Enter ID number:

Pay and generate your QR Code

Take a screen shot of QR code for verification



Back

QR VERIFICATION PHASE:-

QR code generated in a way that, globally it can be scanned by any scanner.

Here it is validated as say for my example **passenger Name: Diwa and Id.No: 123**

