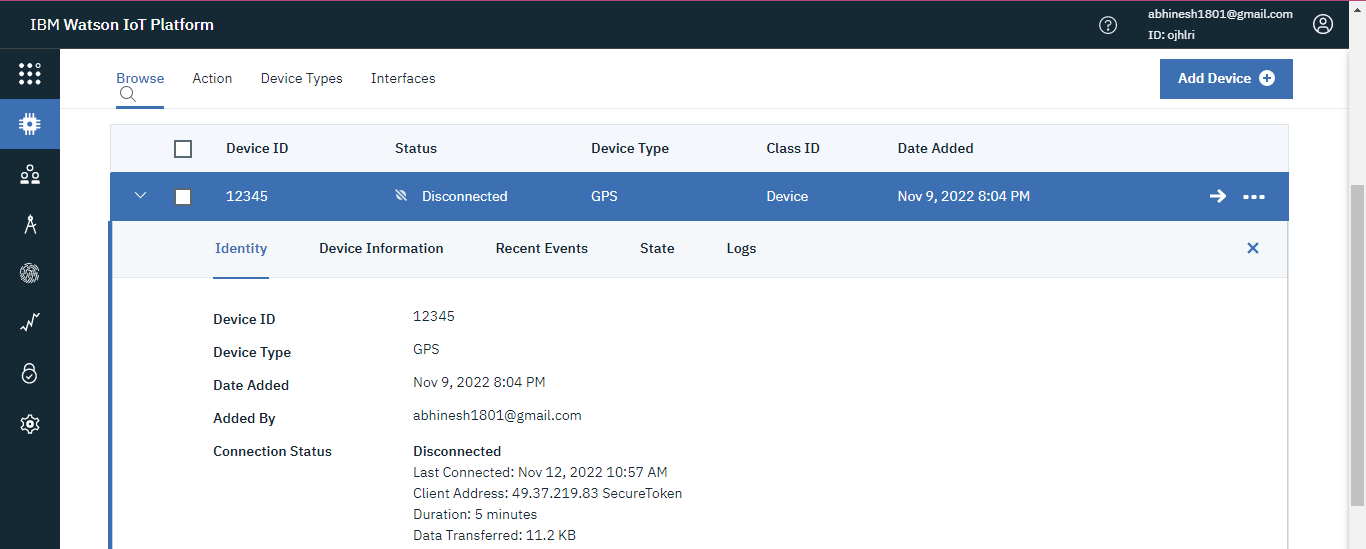
|  |  |
| --- | --- |
| **Date** | **10 November 2022** |
| **Team ID** | **PNT2022TMID00940** |
| **Project Name** | **SMART SOLUTIONS FOR RAILWAYS** |

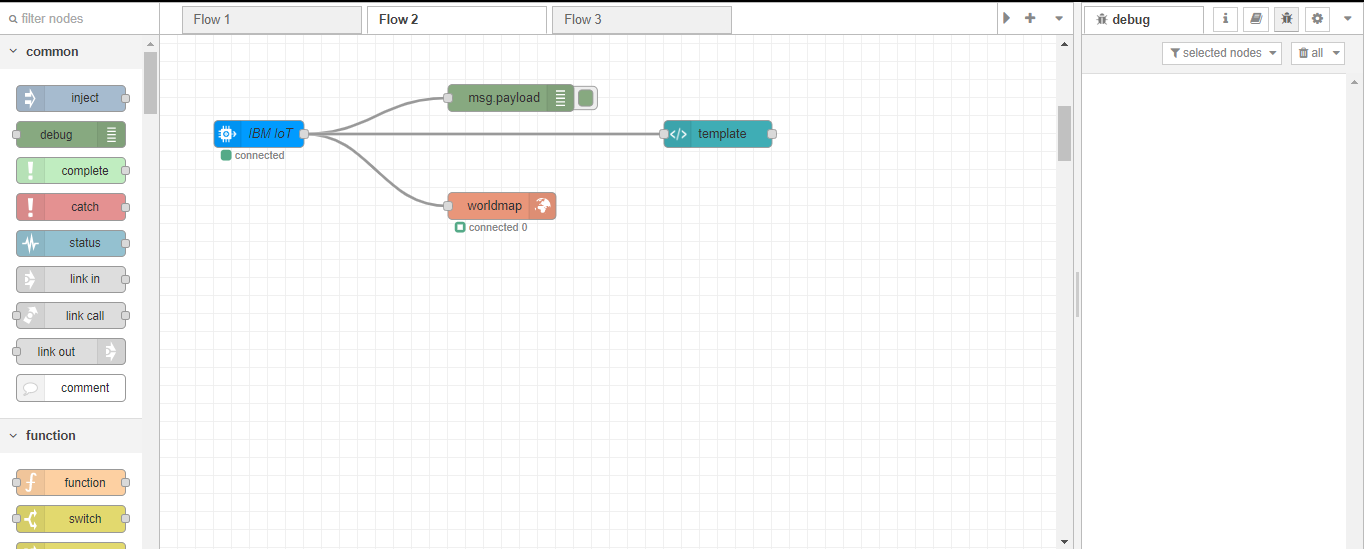
# **SPRINT-4**

**WEB APP CREATON AND TESTING**

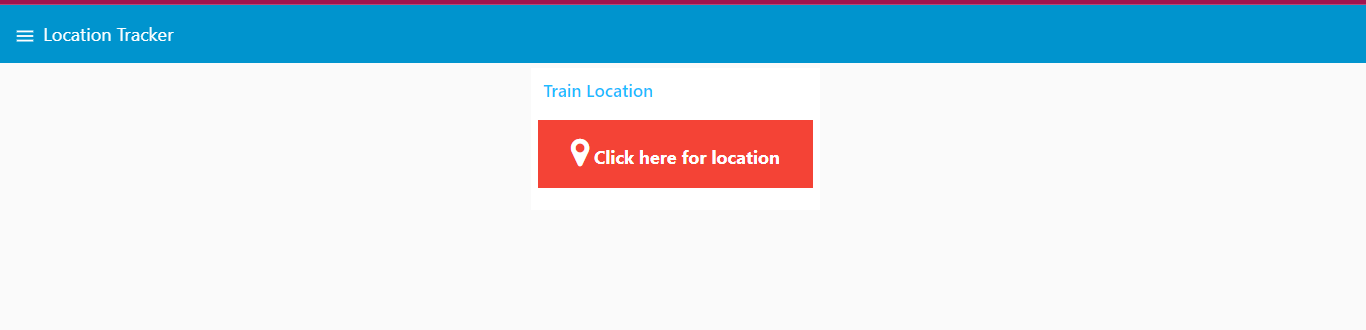
**An IOT device “GPS” is created at IBM Watson:**

****

**Creating a Node-Red Connection using the IBM IOT (connected with GPS(IBM Watson device) ) for tracking the location of the train:**



**Creating a WEB UI with Node-Red to see the location:**



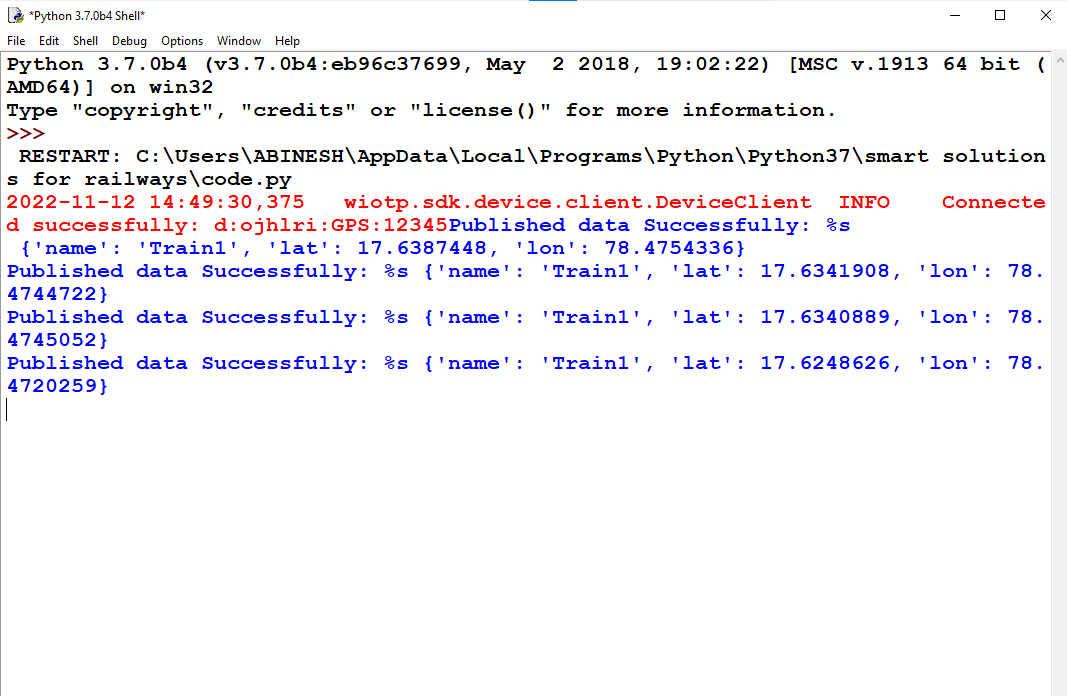
**Link:**

[**https://node-red-gitmx-2022-11-08.eu-gb.mybluemix.net/ui/**](https://node-red-gitmx-2022-11-08.eu-gb.mybluemix.net/ui/)

**Connecting the GPS Device with our Python Code to stimulate the locations:**

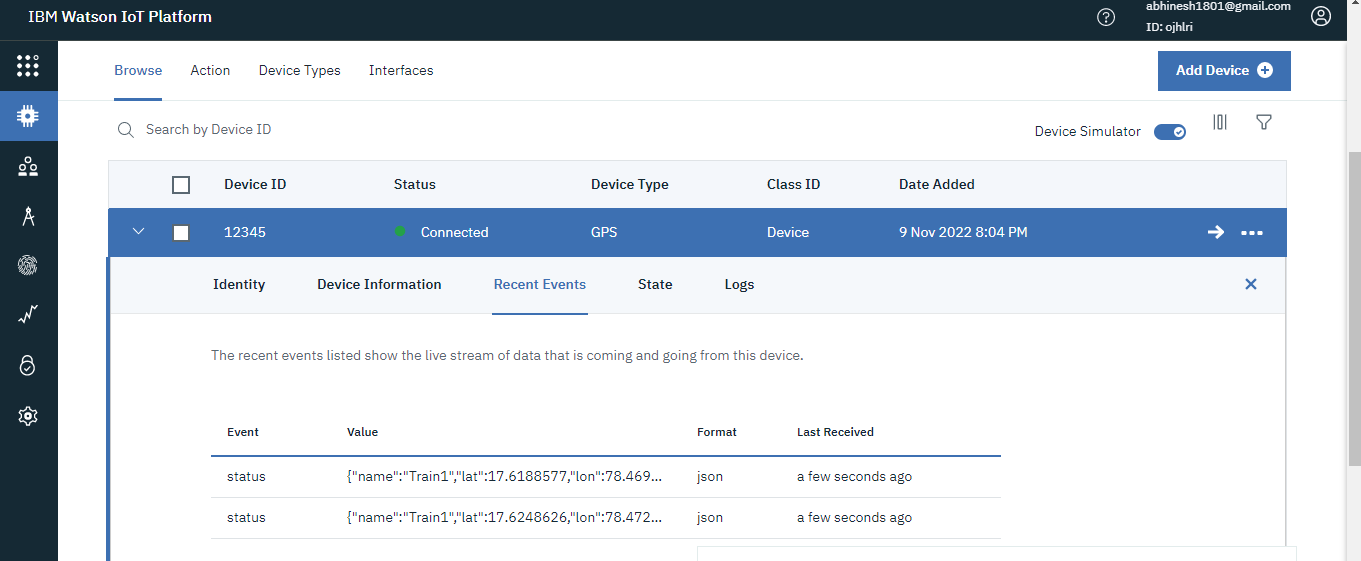


**After linking ,the python code is made to run at python IDE:**



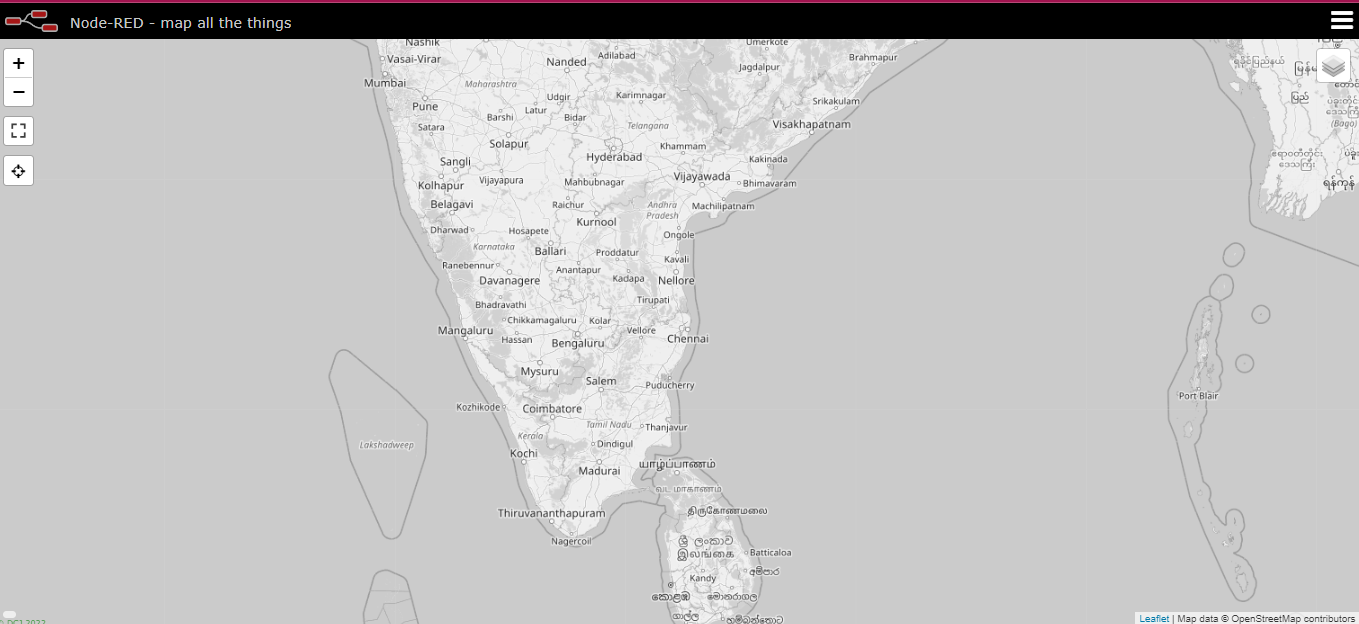
**The IOT Device is conneted and the locations are Received as output.**

**Watson Output:**

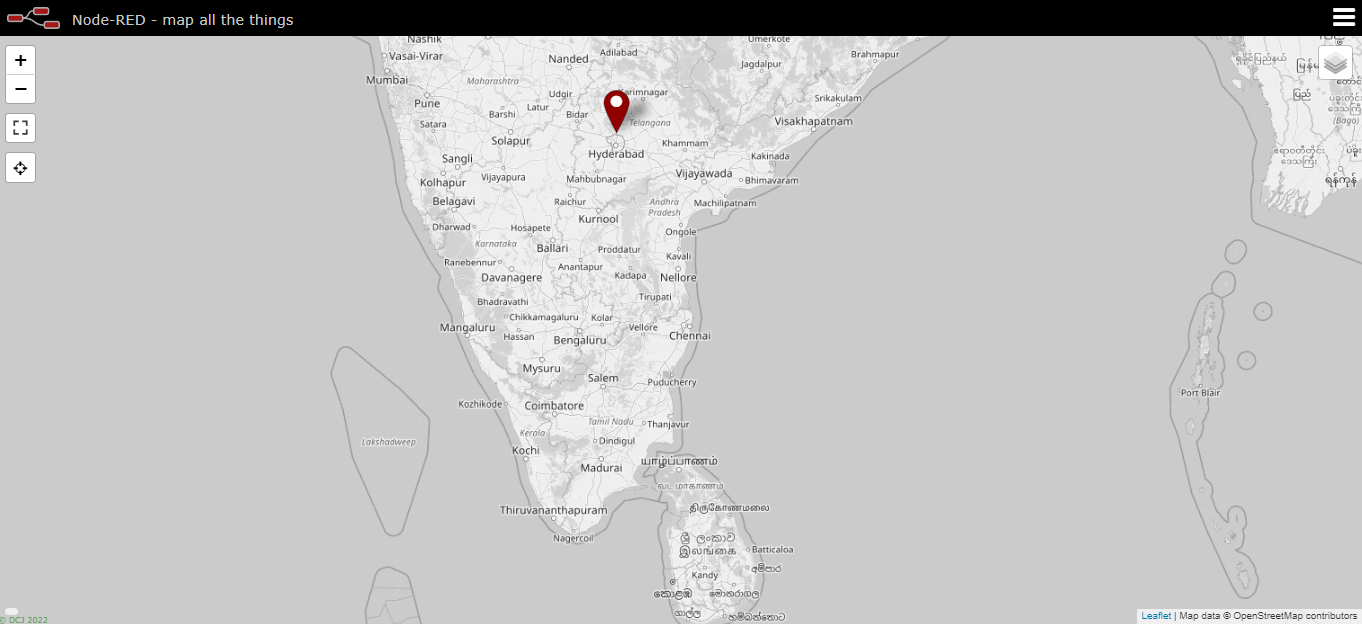


**Initially before the execution of python program:**

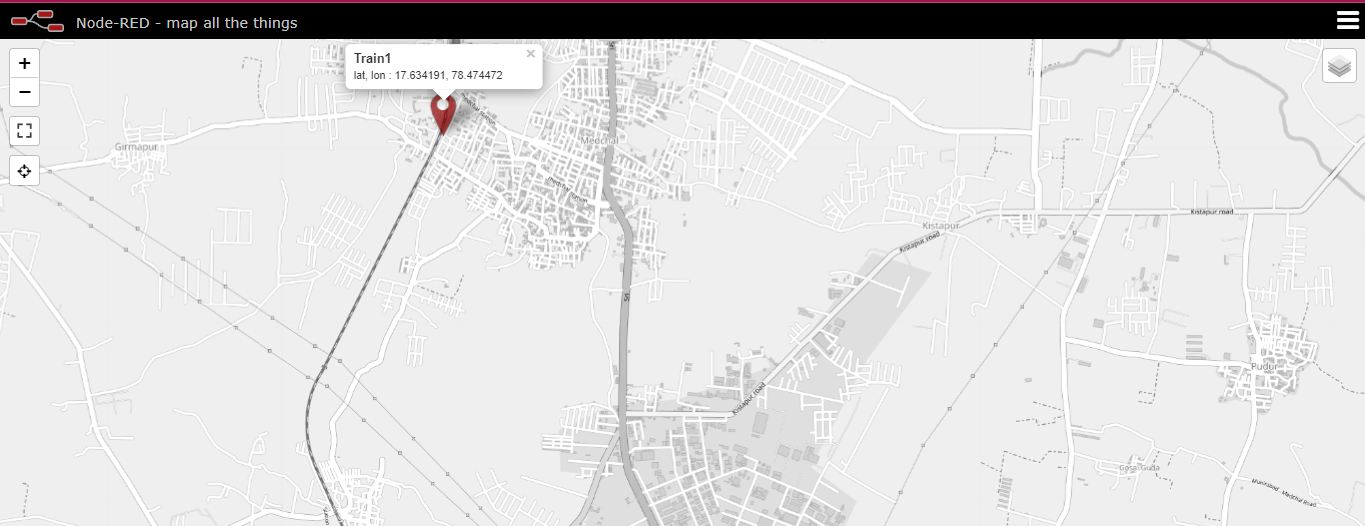
**No location found,**

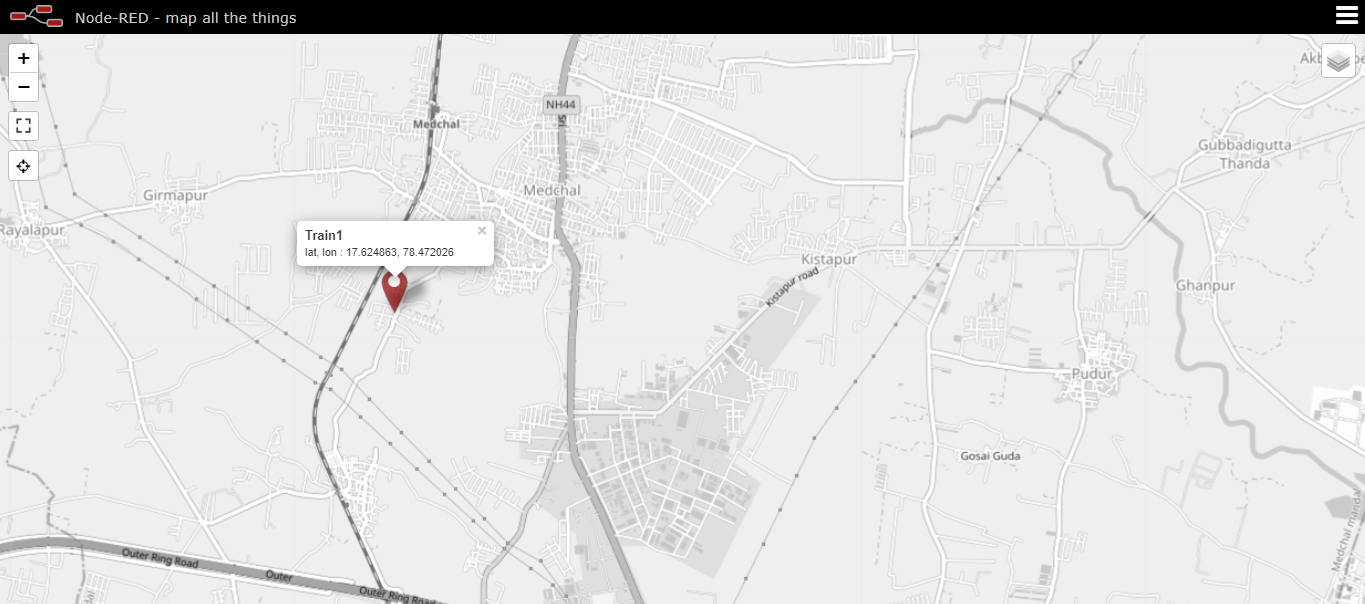


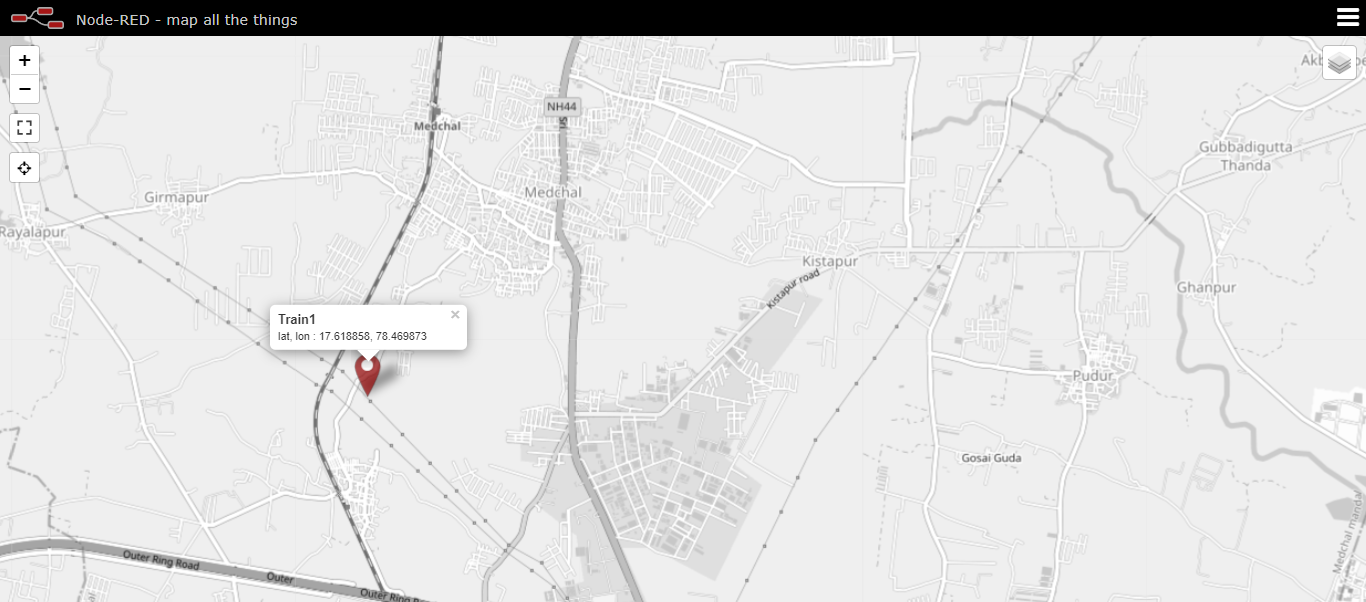
**After execution,**

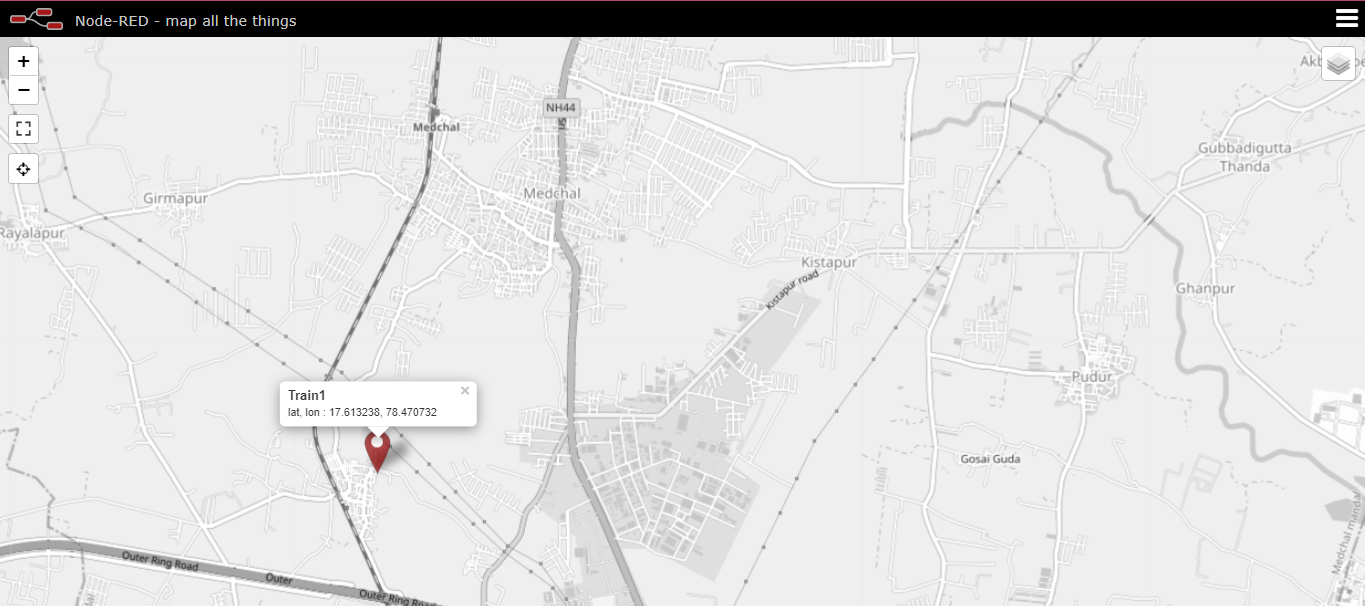


**Below Four images of map show the movement of the train:**







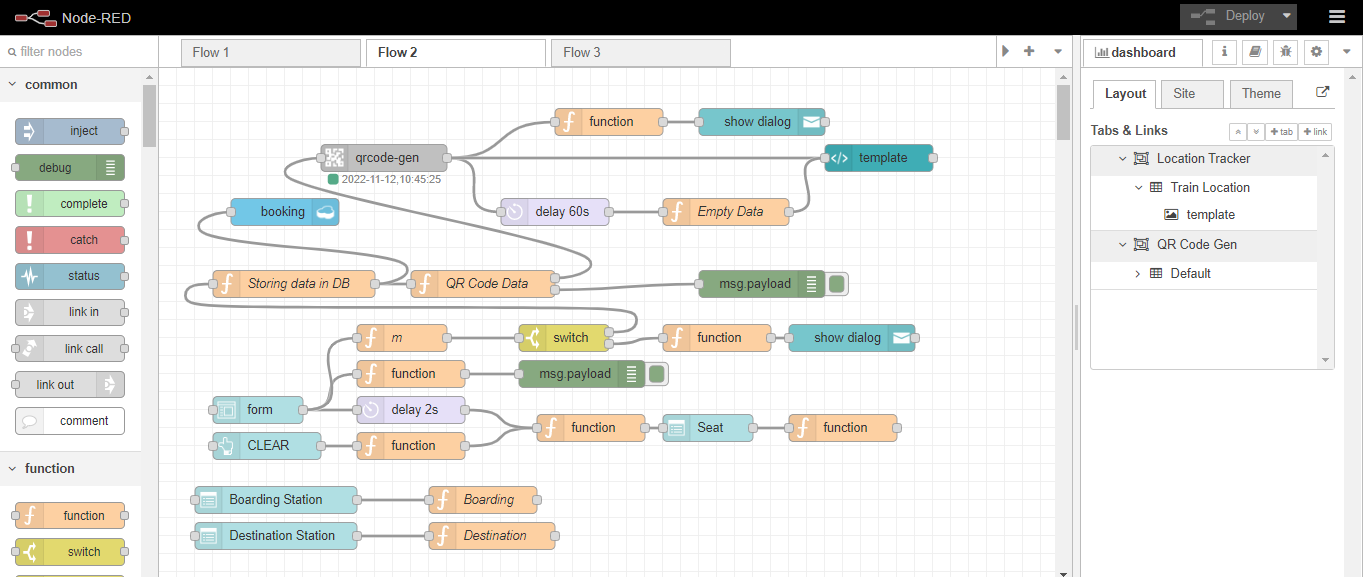


**LINK FOR THE MAP VIEW:**

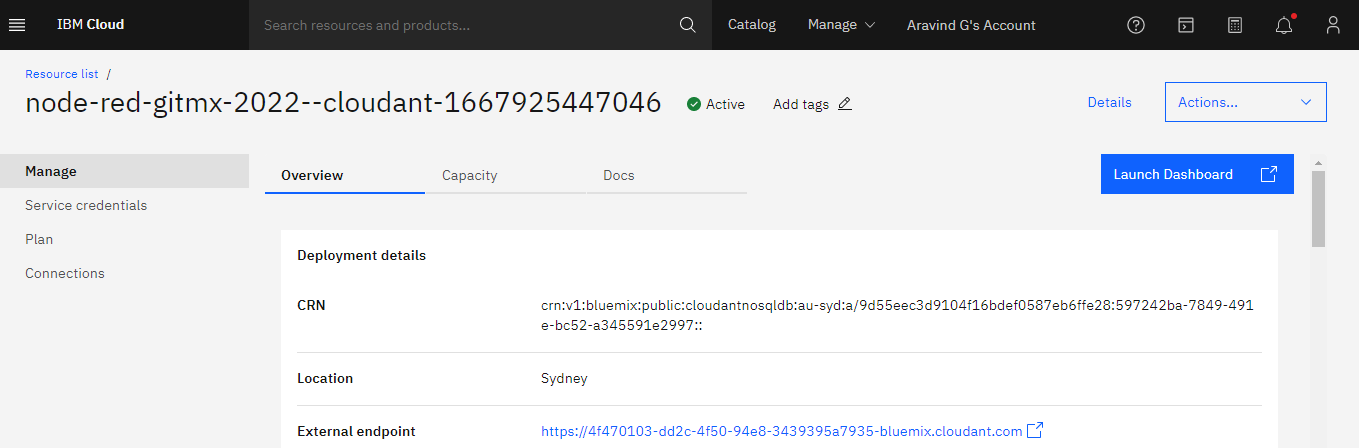
[**https://node-red-gitmx-2022-11-08.eu-gb.mybluemix.net/worldmap/**](https://node-red-gitmx-2022-11-08.eu-gb.mybluemix.net/worldmap/)

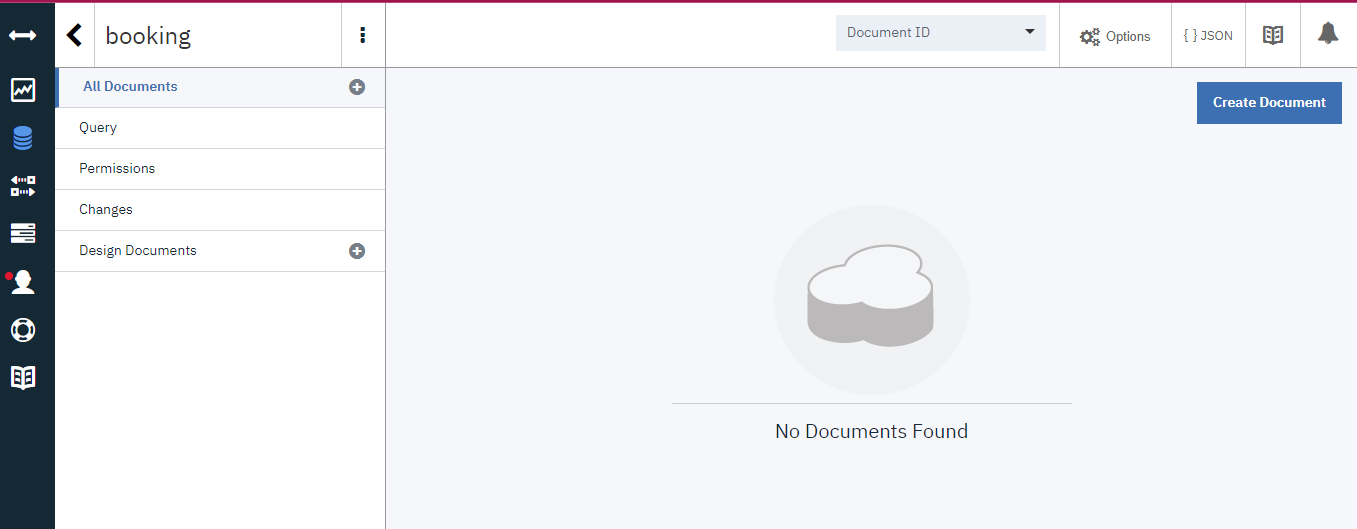
**WEB UI for Ticket Booking and QR Code Generation**

**Node-Red Connection for Ticket Booking and QR Generation:**

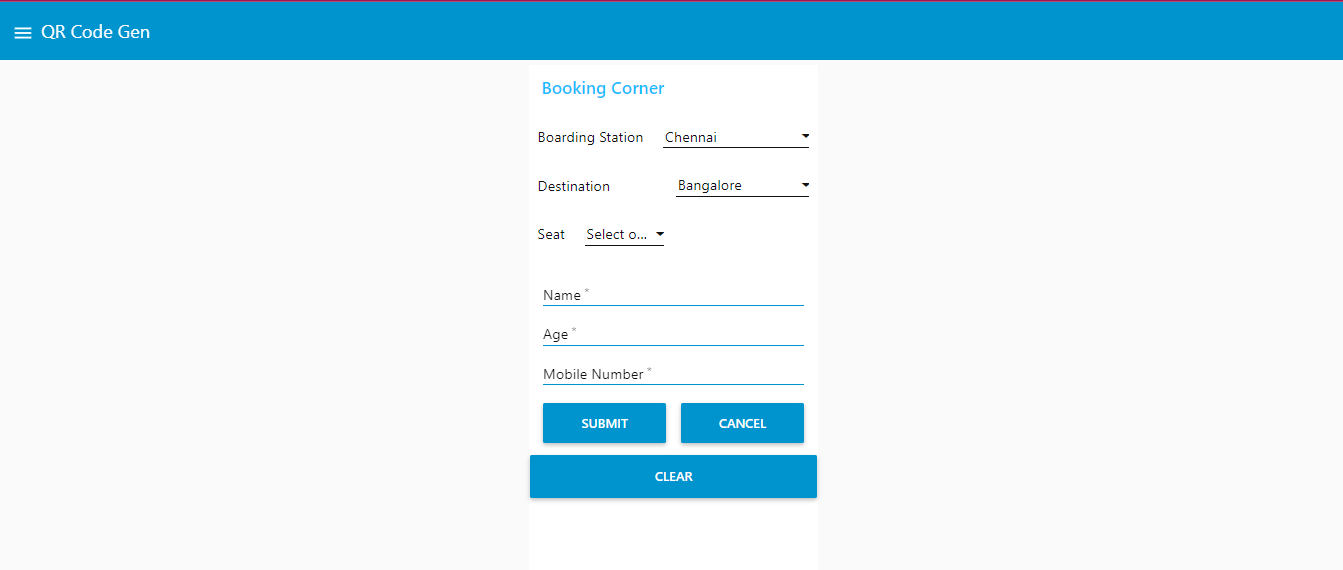


**Creation of Cloudant Database Named “Booking” to store Customer details:**





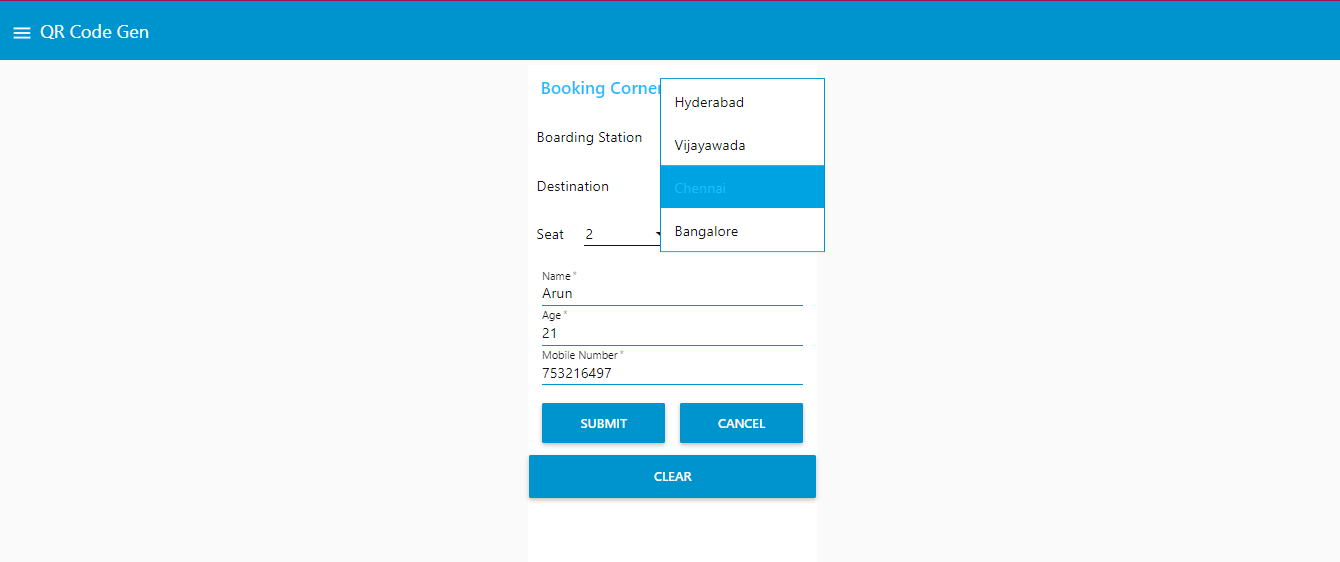
**WEB Application created from Node-Red:**

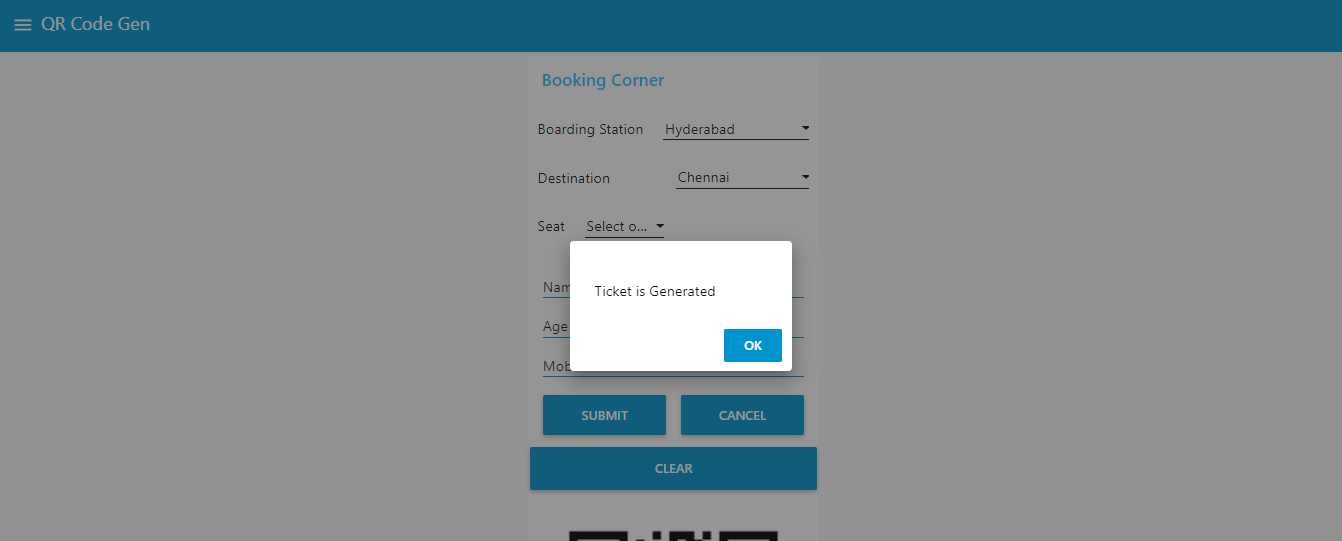


**LINK FOR Booking Corner:**

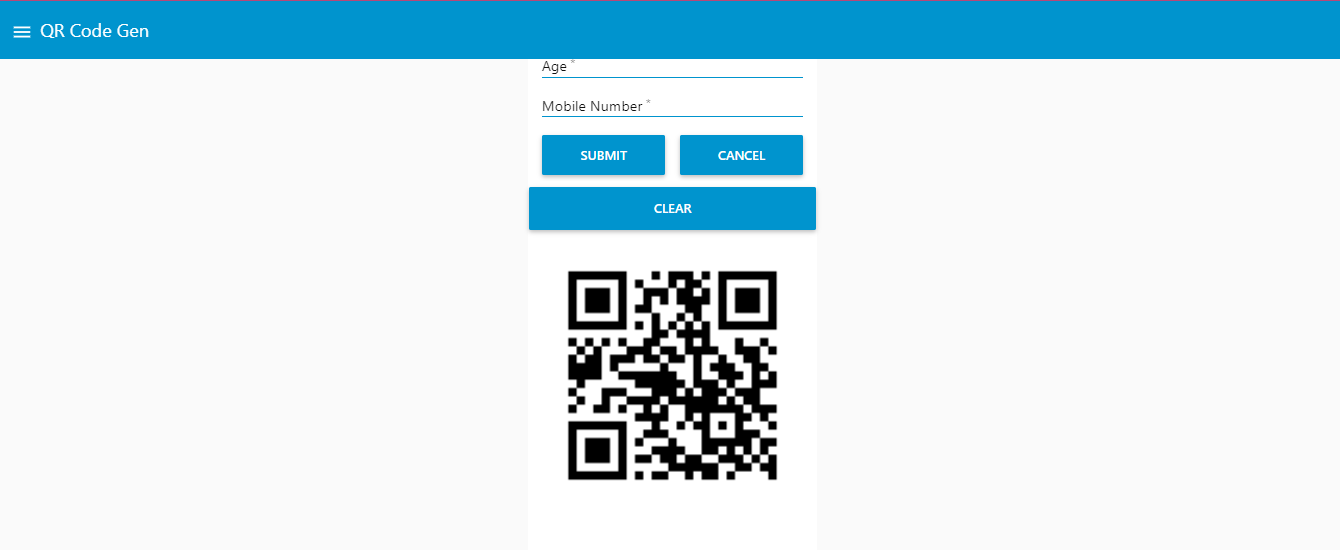
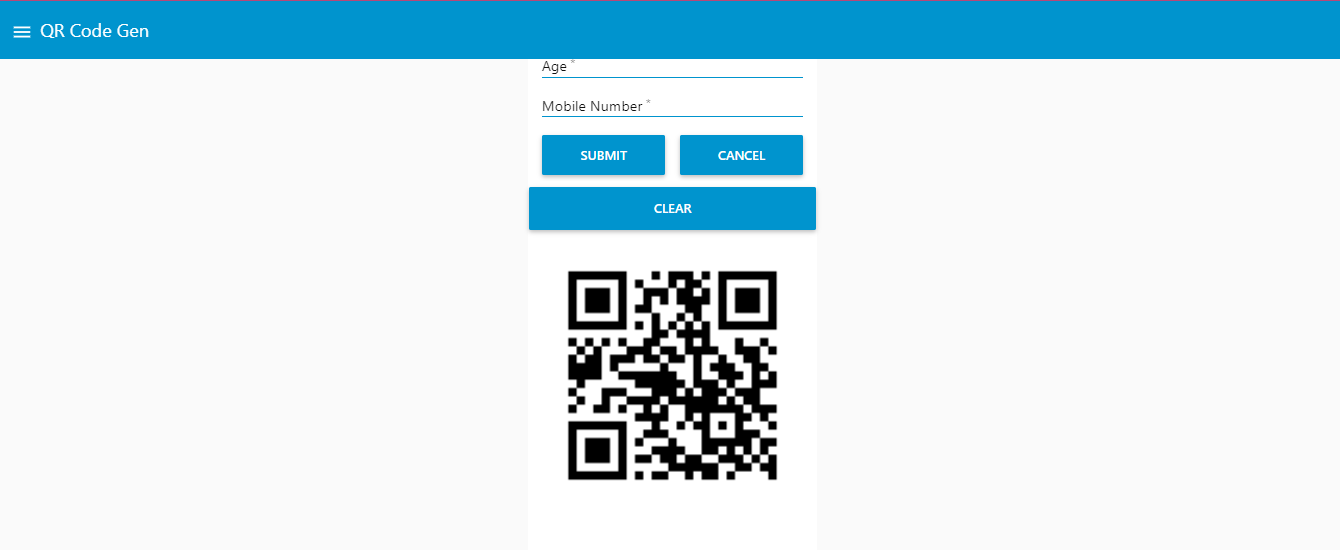
[**https://node-red-gitmx-2022-11-08.eu-gb.mybluemix.net/ui/**](https://node-red-gitmx-2022-11-08.eu-gb.mybluemix.net/ui/)

**Booking Happens :**

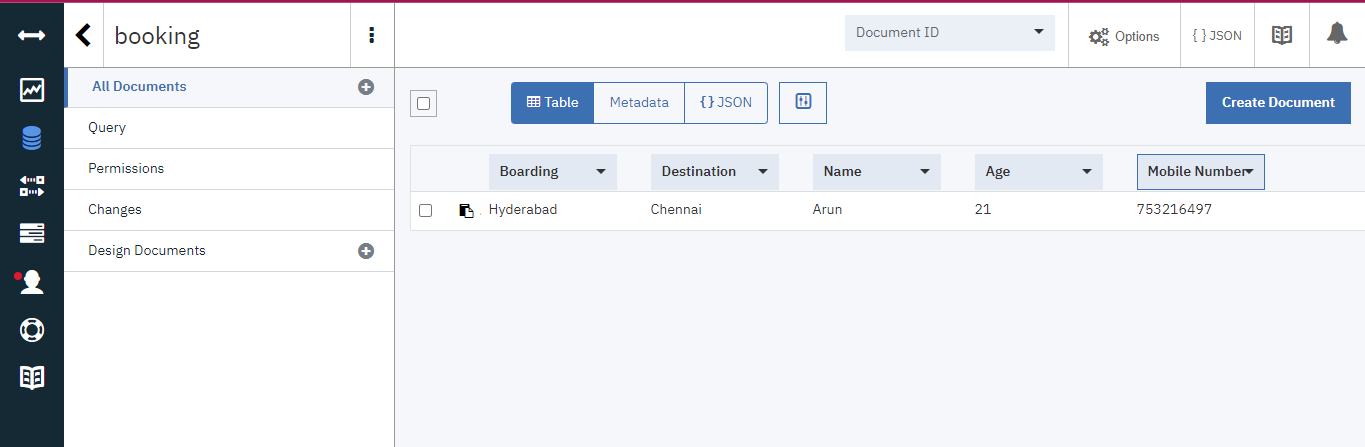


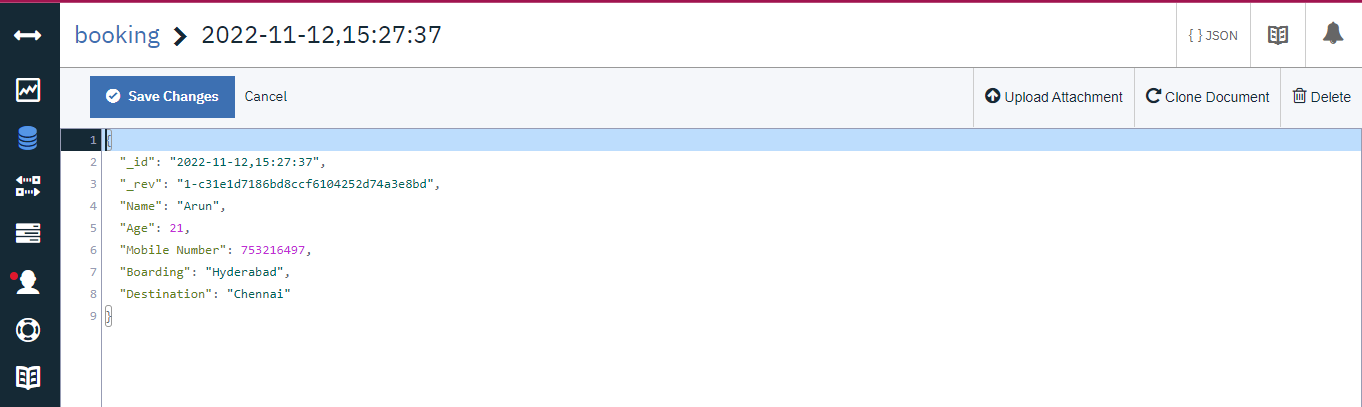


**QR Generation:**

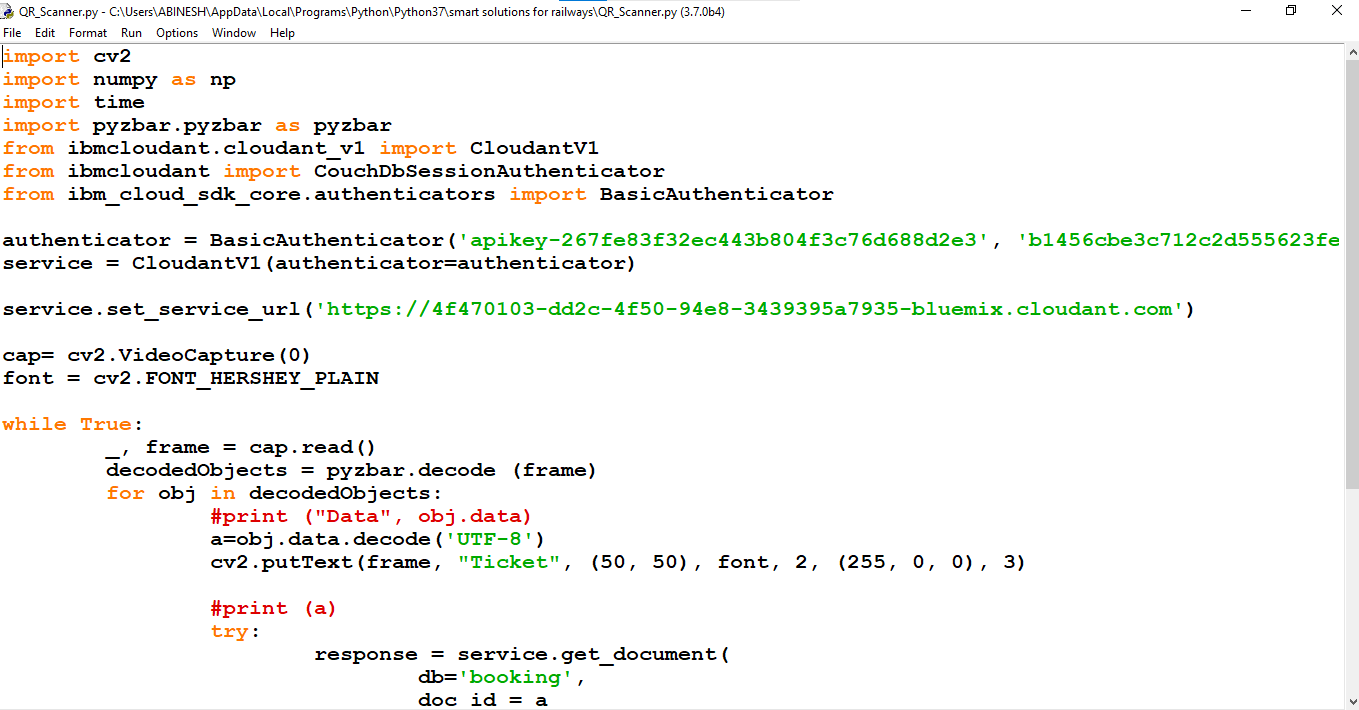


**Details will be stored at Cloudant Database:**





**Building a python code for the Ticket Collector to scan the QR and get details from Cloud:**



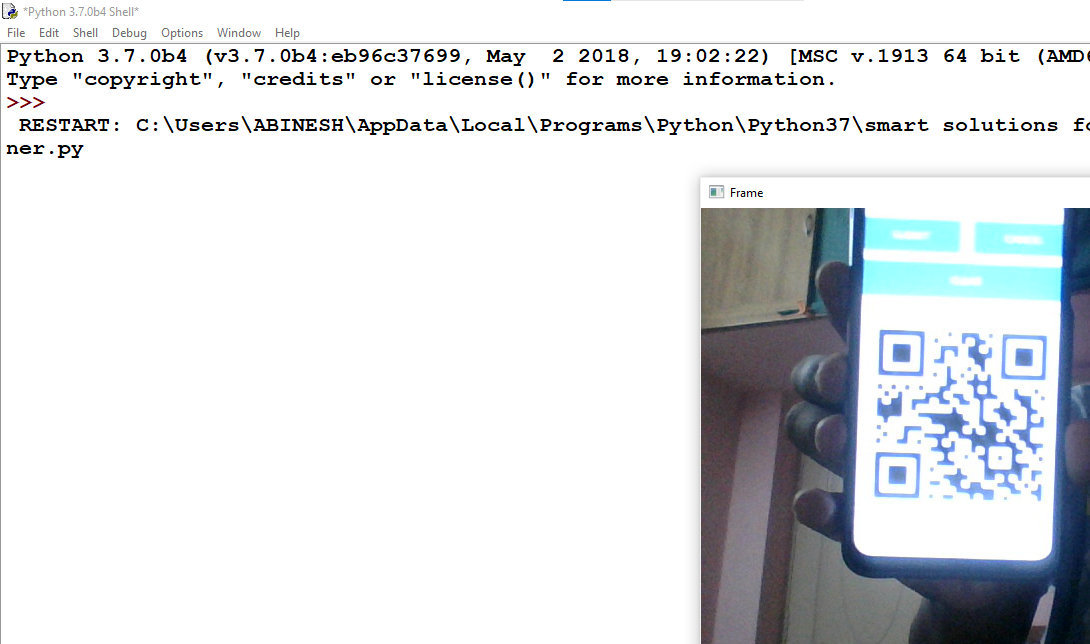
**TESTING:**

**Executing the program:**

**Scanner Opens :**

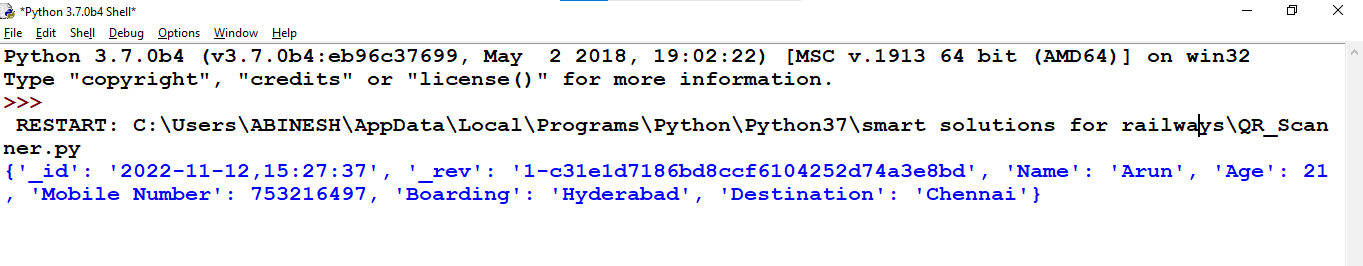


**QR is shown:**

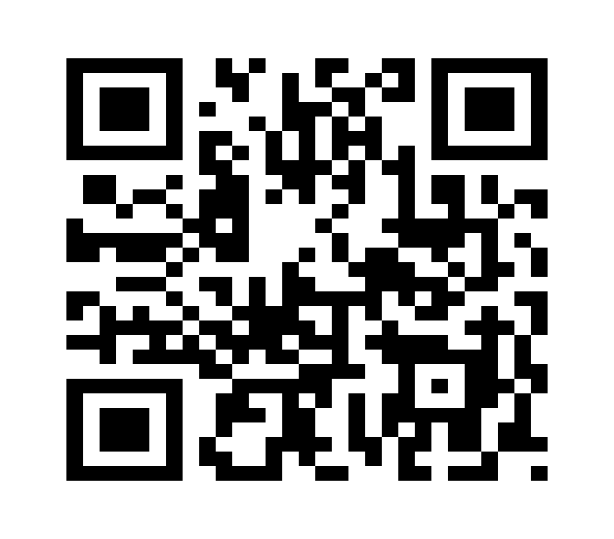


**Data Fetched from Cloud by scanning the QR:**





**Showing a Random Qr From Google:**



**Output: (Shows “Not a Valid Ticket”)**



