

## **SPRINT-3**

<b><i>Date</i></b>	11 NOVEMBER 2022
<b><i>Team ID</i></b>	PNT2022TMID25832
<b><i>Project Name</i></b>	SMART SOLUTIONS FOR RAILWAYS

### **PROCEDURE:**

Step1: Develop a python script to scan the QR code

Step2: Connect the python code to IBM Cloudant using the credentials


Step3: Run the program

## **QR CODE GENERATION:**

≡ Payment

ticket is generated

pay



Card name \*

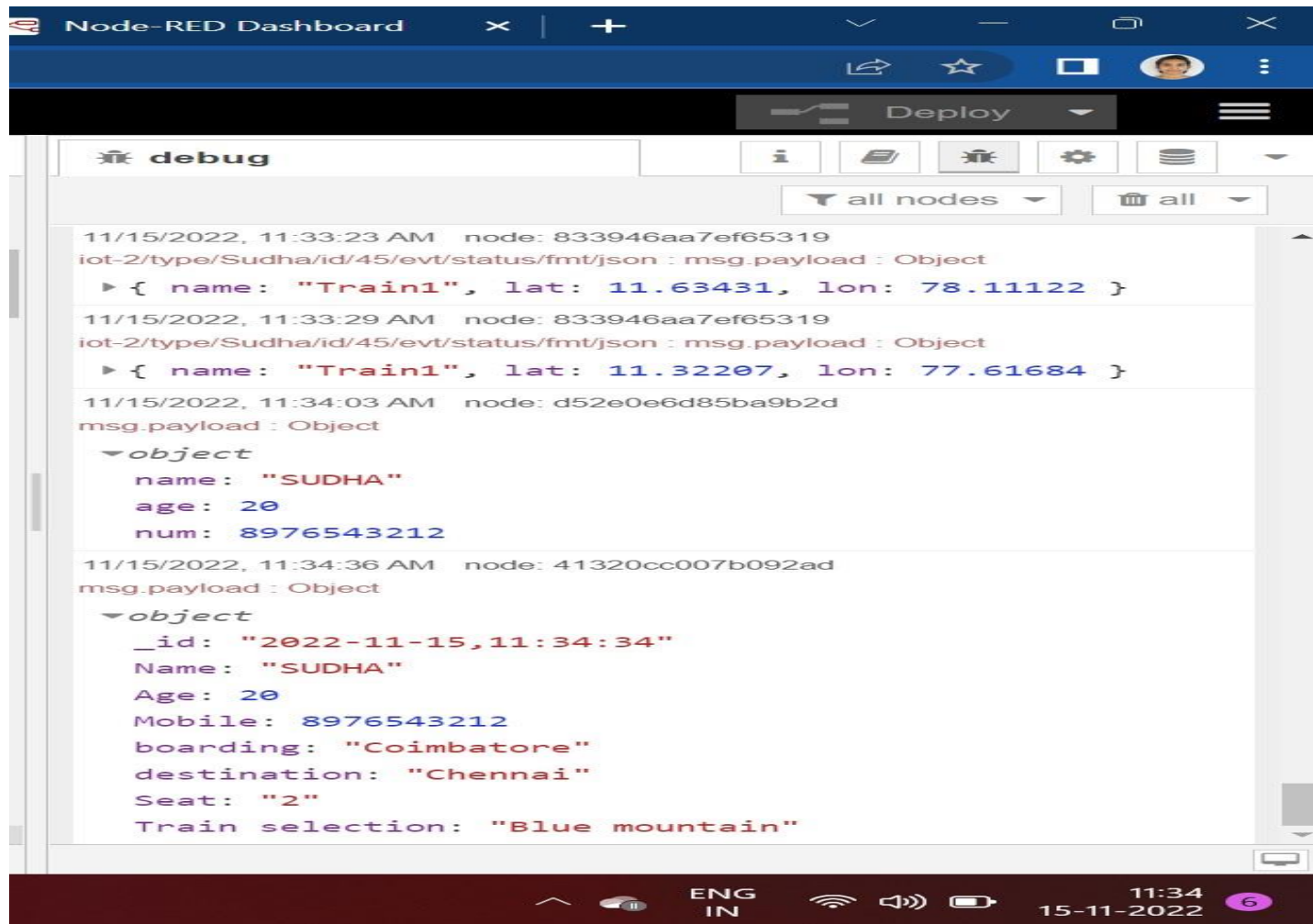
Card number \*

CVV \*

SUBMIT

CANCEL

## **NODE RED OUTPUT:**



The screenshot displays the Node-RED Dashboard interface. The top navigation bar includes the 'Node-RED Dashboard' title, a tab management icon, a 'Deploy' button, and a user profile icon. Below the navigation bar, the 'debug' tab is selected, showing a list of messages. The messages are filtered by 'all nodes' and 'all' types. The output shows four messages with timestamps and node IDs. The first two messages are JSON objects representing train data. The third and fourth messages are objects representing user data for 'SUDHA'.

```
11/15/2022, 11:33:23 AM node: 833946aa7ef65319
iot-2/type/Sudha/id/45/evt/status/fmt/json : msg.payload : Object
  ▶ { name: "Train1", lat: 11.63431, lon: 78.11122 }

11/15/2022, 11:33:29 AM node: 833946aa7ef65319
iot-2/type/Sudha/id/45/evt/status/fmt/json : msg.payload : Object
  ▶ { name: "Train1", lat: 11.32207, lon: 77.61684 }

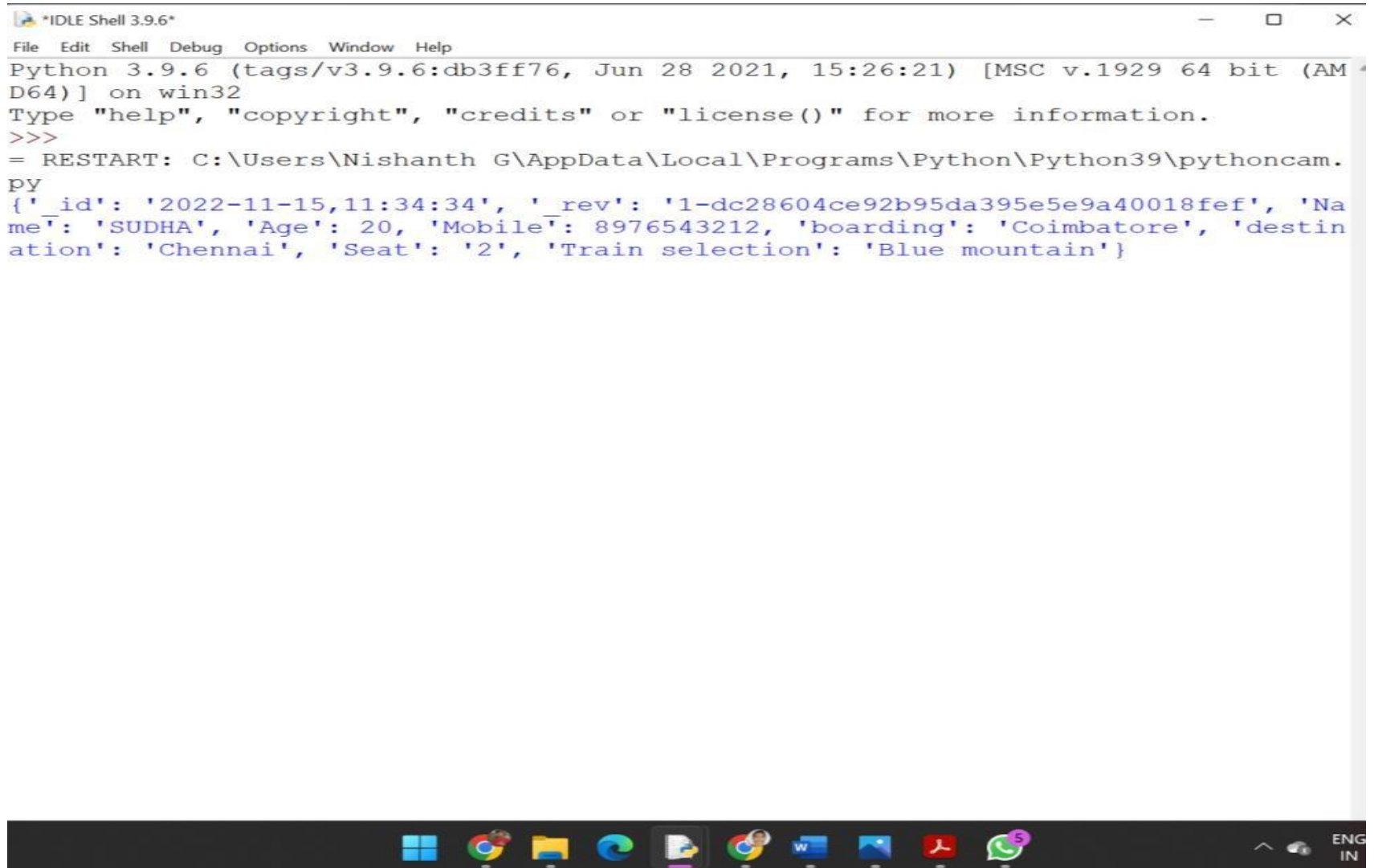
11/15/2022, 11:34:03 AM node: d52e0e6d85ba9b2d
msg.payload : Object
  ▼ object
    name: "SUDHA"
    age: 20
    num: 8976543212

11/15/2022, 11:34:36 AM node: 41320cc007b092ad
msg.payload : Object
  ▼ object
    _id: "2022-11-15,11:34:34"
    Name: "SUDHA"
    Age: 20
    Mobile: 8976543212
    boarding: "Coimbatore"
    destination: "Chennai"
    Seat: "2"
    Train selection: "Blue mountain"
```

**PYTHON CODE OUTPUT:**

```
*IDLE Shell 3.9.6*
File Edit Shell Debug Options Window Help
Python 3.9.6 (tags/v3.9.6:db3ff76, Jun 28 2021, 15:26:21) [MSC v.1929 64 bit (AMD64)] on win32
Type "help", "copyright", "credits" or "license()" for more information.
>>>
= RESTART: C:\Users\Nishanth G\AppData\Local\Programs\Python\Python39\pythoncam.py
{'_id': '2022-11-15 11:24:24', 'name': 'SUDHA', 'Age': '28', 'location': 'Chennai', 'phone': '9876543210', 'email': 'sudha@gmail.com', 'password': '12345678'}
{'_id': '2022-11-15 11:24:24', 'name': 'SUDHA', 'Age': '28', 'location': 'Chennai', 'phone': '9876543210', 'email': 'sudha@gmail.com', 'password': '12345678'}
t()
```

## QR CODE DETAILS:



```
*IDLE Shell 3.9.6*
File Edit Shell Debug Options Window Help
Python 3.9.6 (tags/v3.9.6:db3ff76, Jun 28 2021, 15:26:21) [MSC v.1929 64 bit (AMD64)] on win32
Type "help", "copyright", "credits" or "license()" for more information.
>>>
= RESTART: C:\Users\Nishanth G\AppData\Local\Programs\Python\Python39\pythoncam.py
{'_id': '2022-11-15,11:34:34', '_rev': '1-dc28604ce92b95da395e5e9a40018fef', 'Name': 'SUDHA', 'Age': 20, 'Mobile': 8976543212, 'boarding': 'Coimbatore', 'destination': 'Chennai', 'Seat': '2', 'Train selection': 'Blue mountain'}
```

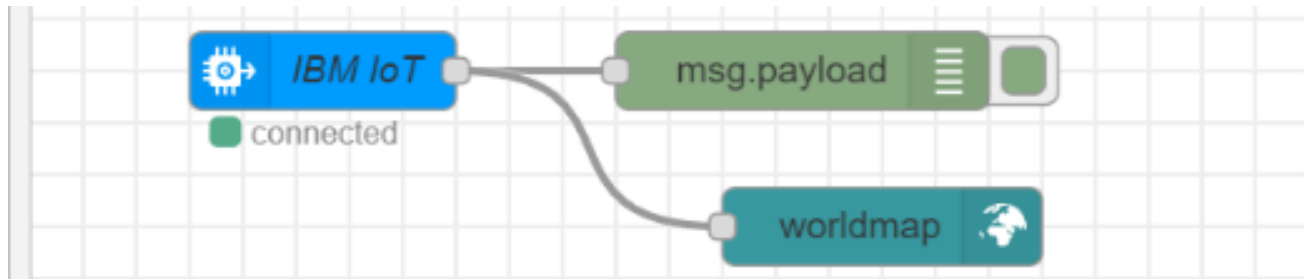
## **DATA STORED IN CLOUDANT:**

The screenshot displays the Cloudant web interface. At the top, the breadcrumb navigation shows 'booking > 2022-11-15,11:34:34'. To the right of the breadcrumb are icons for JSON, a document, and a bell. Below the breadcrumb is a toolbar with a 'Save Changes' button (checked), a 'Cancel' button, an 'Upload Attachment' button, a 'Clone Document' button, and a 'Delete' button. The main area shows a JSON document with the following content:

```
1 {
2   "_id": "2022-11-15,11:34:34",
3   "_rev": "1-dc28604ce92b95da395e5e9a40018fef",
4   "Name": "SUDHA",
5   "Age": 20,
6   "Mobile": 8976543212,
7   "boarding": "Coimbatore",
8   "destination": "Chennai",
9   "Seat": "2",
10  "Train selection": "Blue mountain"
11 }
```

On the left side of the interface is a dark sidebar with various icons for navigation. At the bottom of the sidebar is a 'Log Out' button.

## **NODE RED FOR GPS:**



## **PYTHON OUTPUT:**

```
*IDLE Shell 3.9.6*
File Edit Shell Debug Options Window Help
08}
Published data Successfully: %s {'name': 'Train2', 'lat': 12.40797, 'lon': 79.81
41}
Published data Successfully: %s {'name': 'Train1', 'lat': 11.83331, 'lon': 79.37
465}
Published data Successfully: %s {'name': 'Train1', 'lat': 11.59664, 'lon': 78.69
899}
Published data Successfully: %s {'name': 'Train1', 'lat': 11.63431, 'lon': 78.11
122}
Published data Successfully: %s {'name': 'Train1', 'lat': 11.32207, 'lon': 77.61
684}
Published data Successfully: %s {'name': 'Train1', 'lat': 11.03107, 'lon': 76.96
864}
Published data Successfully: %s {'name': 'Train1', 'lat': 13.08363, 'lon': 80.27
08}
Published data Successfully: %s {'name': 'Train2', 'lat': 12.40797, 'lon': 79.81
41}
Published data Successfully: %s {'name': 'Train1', 'lat': 11.83331, 'lon': 79.37
465}
Published data Successfully: %s {'name': 'Train1', 'lat': 11.59664, 'lon': 78.69
899}
Published data Successfully: %s {'name': 'Train1', 'lat': 11.63431, 'lon': 78.11
122}
Published data Successfully: %s {'name': 'Train1', 'lat': 11.32207, 'lon': 77.61
684}
Published data Successfully: %s {'name': 'Train1', 'lat': 11.03107, 'lon': 76.96
864}
Published data Successfully: %s {'name': 'Train1', 'lat': 13.08363, 'lon': 80.27
08}
Published data Successfully: %s {'name': 'Train2', 'lat': 12.40797, 'lon': 79.81
41}
Published data Successfully: %s {'name': 'Train1', 'lat': 11.83331, 'lon': 79.37
465}
Published data Successfully: %s {'name': 'Train1', 'lat': 11.59664, 'lon': 78.69
```



## **NODE RED OUTPUT:**

able upgraded modules

Deploy

debug

all nodes

all

```
11/12/2022, 8:26:30 AM node: 8efde32a28c7f61e
iot-2/type/Sudha/id/45/evt/status/fmt/json : msg payload : Object
  { name: "Train1", lat: 13.08363, lon: 80.2708 }

11/12/2022, 8:26:32 AM node: 8efde32a28c7f61e
iot-2/type/Sudha/id/45/evt/status/fmt/json : msg payload : Object
  { name: "Train2", lat: 12.40797, lon: 79.8141 }

11/12/2022, 8:26:34 AM node: 8efde32a28c7f61e
iot-2/type/Sudha/id/45/evt/status/fmt/json : msg payload : Object
  { name: "Train1", lat: 11.83331, lon: 79.37465 }

11/12/2022, 8:26:40 AM node: 8efde32a28c7f61e
iot-2/type/Sudha/id/45/evt/status/fmt/json : msg payload : Object
  { name: "Train1", lat: 11.59664, lon: 78.69899 }

11/12/2022, 8:26:46 AM node: 8efde32a28c7f61e
iot-2/type/Sudha/id/45/evt/status/fmt/json : msg payload : Object
  { name: "Train1", lat: 11.63431, lon: 78.11122 }

11/12/2022, 8:26:52 AM node: 8efde32a28c7f61e
iot-2/type/Sudha/id/45/evt/status/fmt/json : msg payload : Object
  { name: "Train1", lat: 11.32207, lon: 77.61684 }

11/12/2022, 8:26:58 AM node: 8efde32a28c7f61e
iot-2/type/Sudha/id/45/evt/status/fmt/json : msg payload : Object
  { name: "Train1", lat: 11.03107, lon: 76.96864 }
```



## ***TRAIN TRACKING:***

