

SPRINT-3

<i>Date</i>	11 NOVEMBER 2022
<i>Team ID</i>	PNT2022TMID26022
<i>Project Name</i>	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 *

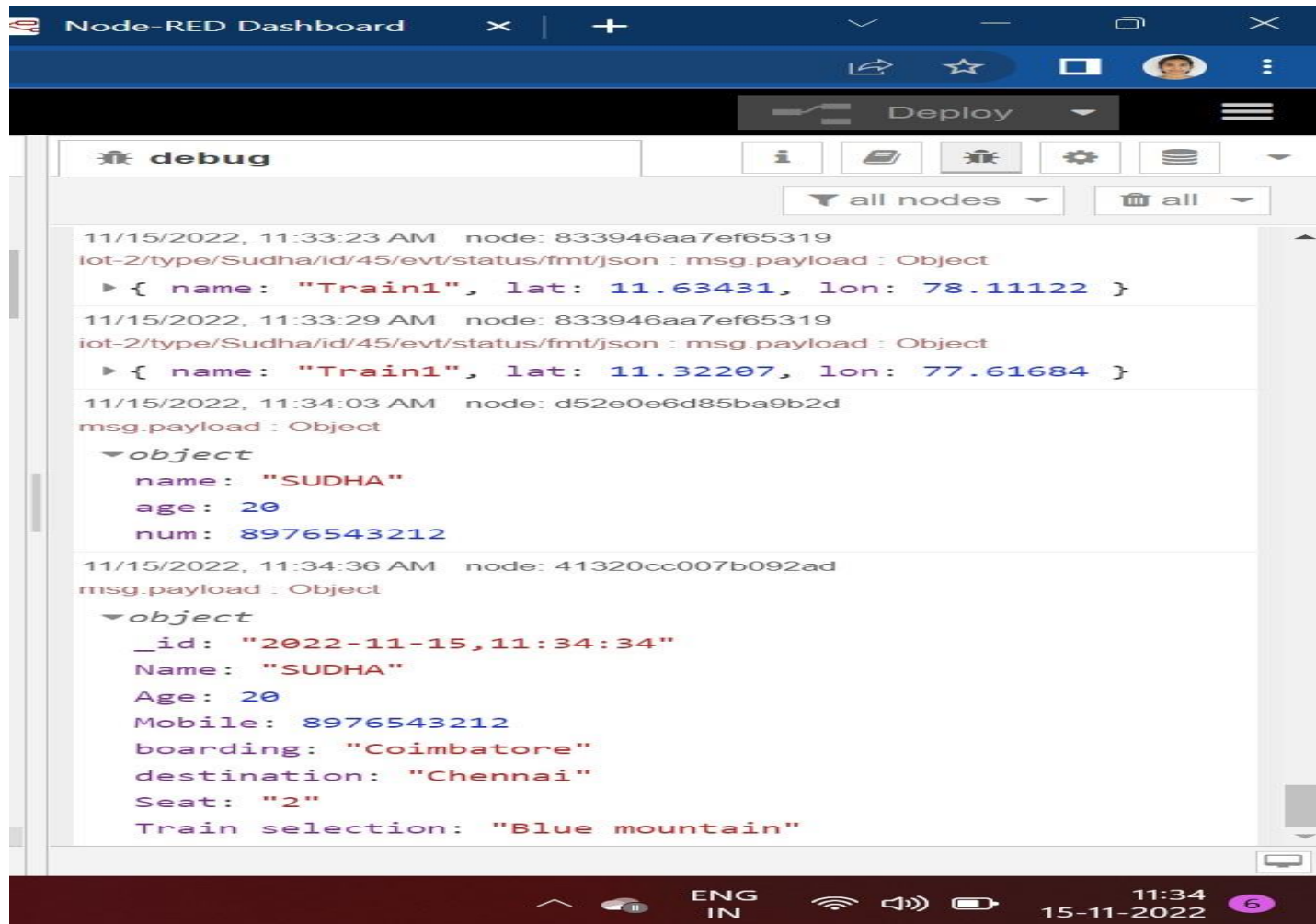
Card number *

CVV *

SUBMIT

CANCEL

NODE RED OUTPUT:



The screenshot displays the Node-RED Dashboard interface. The top navigation bar includes the 'Node-RED Dashboard' title, window controls, and a 'Deploy' button. Below the navigation bar, the 'debug' tab is active, showing a list of messages. The messages are filtered by 'all nodes' and 'all' (trash icon). The messages are as follows:

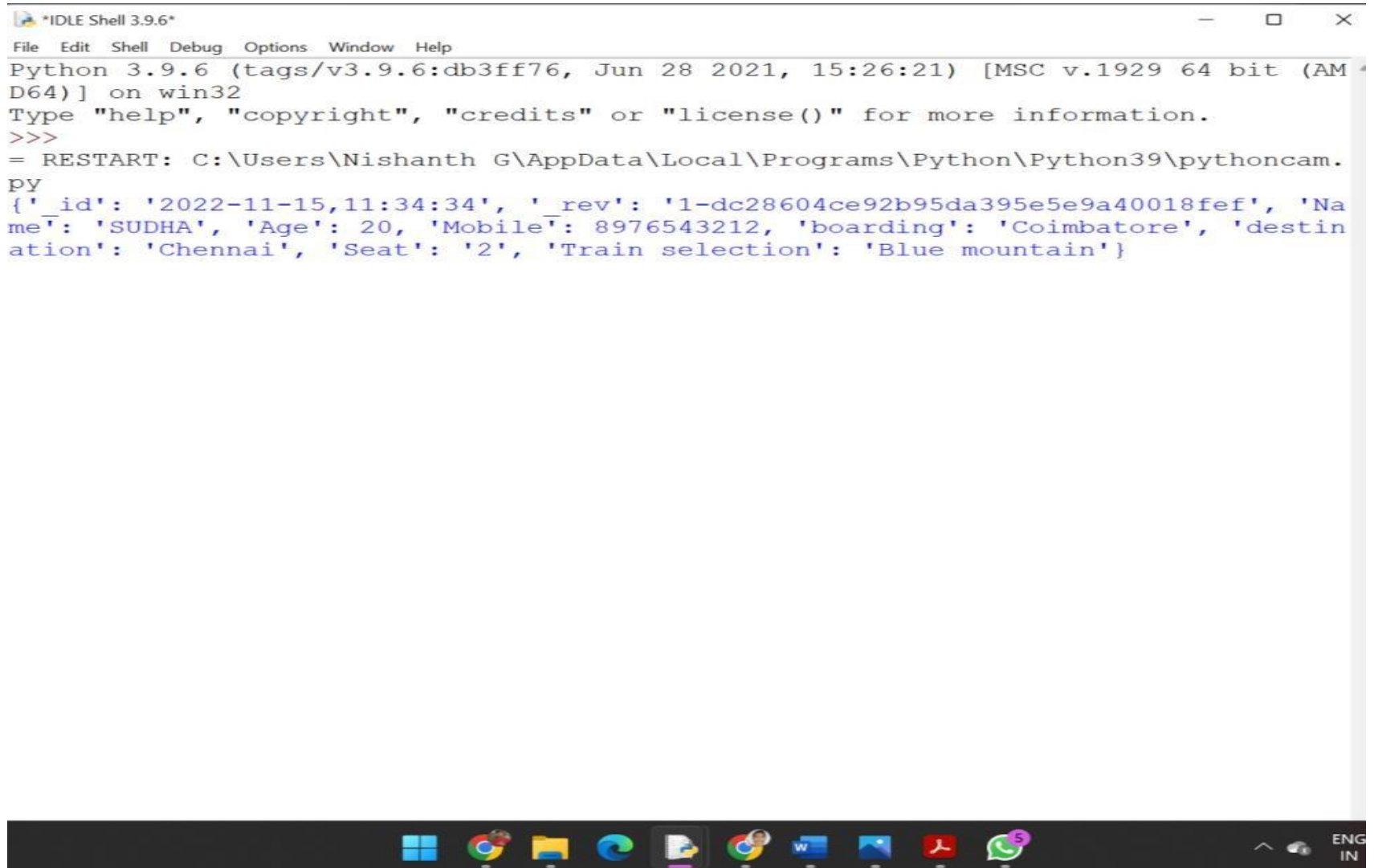
- 11/15/2022, 11:33:23 AM node: 833946aa7ef65319
iot-2/type/Sudha/id/45/evt/status/fmt/json : msg.payload : Object
▶ { name: "Train1", lat: 11.63431, lon: 78.11122 }
- 11/15/2022, 11:33:29 AM node: 833946aa7ef65319
iot-2/type/Sudha/id/45/evt/status/fmt/json : msg.payload : Object
▶ { name: "Train1", 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"

The bottom status bar shows the time as 11:34, the date as 15-11-2022, and a notification icon with the number 6.

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': 'Chennai', 'Na  
me': 'SUDHA', 'Age  
ation': 'Chennai',  
{'_id': '2022-11-15 11:24:24', 'name': 'SUDHA', 'Age': 'Chennai', 'Na  
me': 'SUDHA', 'Age  
ation': 'Chennai',
```

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 for a document titled "booking" with a timestamp of "2022-11-15,11:34:34". The document is shown in JSON format. The interface includes a sidebar with navigation icons, a top bar with document details, and a main area for the document content. The JSON data represents a booking record for a user named SUDHA, aged 20, with a mobile number 8976543212, boarding at Coimbatore, and traveling to Chennai by train (Blue mountain).

booking > 2022-11-15,11:34:34

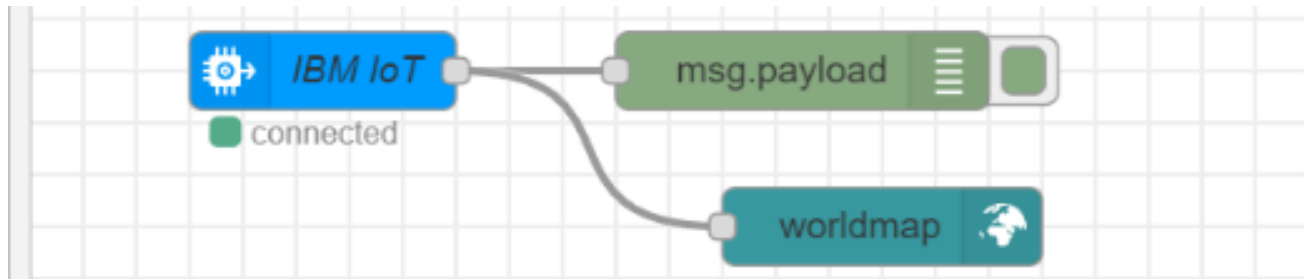
{ } JSON

Save Changes Cancel Upload Attachment Clone Document Delete

```
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 }
```

Log Out

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:

ble 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:

