

SPRINT-3

Date	15 NOVEMBER 2022
Team ID	PNT2022TMID42281
Project Name	Project – 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

PYTHON SCRIPT TO SCAN QR CODE:

```
import cv2

import numpy as np

import time

import pyzbar.pyzbar as pyzbar

from pyzbar.pyzbar import decode

from ibmcloudant.cloudant_v1 import CloudantV1

from ibmcloudant import CouchDbSessionAuthenticator

from ibm_cloud_sdk_core.authenticators import BasicAuthenticator

authenticator = BasicAuthenticator('apikey-v2-125rwcp4ifi6zz2ly1cq0kakyjn98du2ysgc72h53lzi',
'af693938842290ec2c254461754447b5')

service = CloudantV1(authenticator=authenticator)

service.set_service_url('https://apikey-v2-125rwcp4ifi6zz2ly1cq0kakyjn98du2ysgc72h53lzi:af693938842290ec2c254461754447b5@82d87499-4395-4f46-a190-6a186bee5051-bluemix.cloudantnosqldb.appdomain.cloud')

cap= cv2.VideoCapture(0)

font = cv2.FONT_HERSHEY_PLAIN
```

```
while True:
```

```
    __, frame = cap.read()
```

```
    decodedObjects = pyzbar.decode(frame)
```

```
    for obj in decodedObjects:
```

```
        #print ("Data", obj.data)
```

```
        a=obj.data.decode('UTF-8')
```

```
        cv2.putText(frame, "Ticket", (50, 50), font, 2, (255, 0, 0), 3)
```

```
        #print (a)
```

```
        try:
```

```
            response = service.get_document(db='booking',doc_id = a).get_result()
```

```
            print(response)
```

```
            time.sleep(5)
```

```
        except Exception as e:
```

```
            print("NOT A VALID TICKER")
```

```
            time.sleep(5)
```

```
cv2.imshow("Frame",frame)
```

```
if cv2.waitKey(1) & 0xFF ==ord('q'):
```

```
    break
```

```
cap.release()
```

```
cv2.destroyAllWindows()
```

```
client.disconnect()
```


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
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'}
```



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
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 Dashboard interface in a web browser. The browser's address bar shows the URL: `82d87499-4395-4f46-a190-6a186bee5051-bluemix.cloudant.com/dashboard.html#database/booking/2022-11-15%2C11%3A34%3A34`. The dashboard header includes the text "booking > 2022-11-15,11:34:34" and a JSON icon. Below the header, there are buttons for "Save Changes", "Cancel", "Upload Attachment", "Clone Document", and "Delete". The main content area shows a JSON document with the following fields:

```
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 }
```

The left sidebar contains various icons for database management, and the bottom of the screen shows a Windows taskbar with the date and time "12:13 15-11-2022".