

## SPRINT-3

Date	19 NOVEMBER 2022
Project Name	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@82d874994395-4f46-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()
```

## QR CODE DETAILS:

```
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:

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