

SPRINT-3

Date	19 NOVEMBER 2022
Team ID	PNT2022TMID41339
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
from pyzbar.pyzbar import decode
from ibmcloudant.cloudant_v1 import CloudantV1
from ibmcloudant.cloudant_v1 import CouchDbSessionAuthenticator
from ibmcloudant.cloudant_v1 import BasicAuthenticator

authenticator = BasicAuthenticator('apikey-v2-125rwc4f6zz2ly1cq0kakyjn98du2ysgc72h53lzi',
                                   'af693938842290ec2c254461754447b5')
service = CloudantV1(authenticator=authenticator)

service.set_service_url('https://apikey-v2-125rwc4f6zz2ly1cq0kakyjn98du2ysgc72h53lzi: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 TICKET")
```

```

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:



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\pythoncom.
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

Save Changes Cancel

Upload Attachment Clone Document Delete

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```
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