SPRINT-3

Date	16 NOVEMBER 2022
Team ID	PNT2022TMID33715
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)
```

```python
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()
```
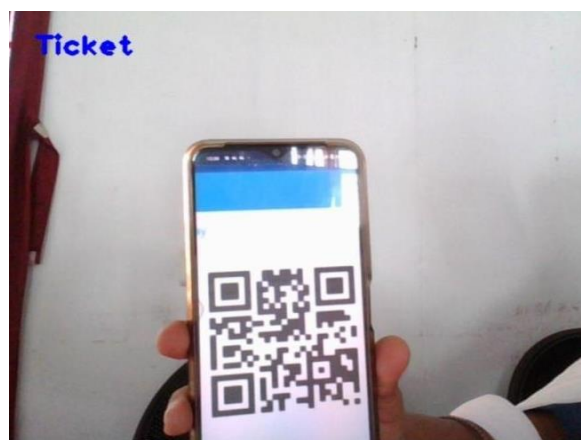
PYTHON CODE OUTPUT:

QR CODE DETAILS:

```
*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 (AM
D64)] 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', 'Na
me': 'SUDHA', 'Age': 20, 'Mobile': 8976543212, 'boarding': 'Coimbatore', 'destin
ation': '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

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 }