project
Development
Phase
Delivery of Sprint 3

Date	15 November 2022
Team ID	PNT2022TMID22838
Project Name	Smart solutions for railways

As a TTE, I will cross-check the passenger for their tickets
by scanning the QR code.

Code:

QRCodeScanner.py


```python
import cv2

import numpy as np

import time

import pyzbar.pyzbar as pyzbar

from ibmcloudant.cloudant_v1 import CloudantV1

from ibmcloudant import CouchDbSessionAuthenticator

from ibm_cloud_sdk_core.authenticators import BasicAuthenticator


authenticator = BasicAuthenticator ('apikey-v2-
2stdiumhdpvimevtz15mlesexkro758a3adfu6gzbd2i',
'cf64a065320a016ee67039aa90958562')

service=CloudantV1 (authenticator=authenticator)

service.set_service_url('https://apikey-v2-
2stdiumhdpvimevtz15mlesexkro758a3adfu6gzbd2i:cf64a065320a01
6ee67039aa90958562@03b99f47-5466-4bdd-b1d7-0c89004e3180-
bluemix.cloudantnosqldb.appdomain.cloud')

cap = cv2.VideoCapture (0)
```

```
font = cv2.FONT_HERSHEY_PLAIN
```

```python
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("Valid Ticket")
        #print (a)
        try:
            response = service.get_document (db='bookings',doc_id = a).get_result()
            print (response)
            time.sleep(5)
        except Exception as e:
            print("Not a Valid Ticket")
            time.sleep(5)
    cv2.imshow("Frame", frame)
    if cv2.waitKey (1) & 0xFF== ord('q'):
        break
cap.release()
cv2.destroyAllWindows ()
client.disconnect ()
```