

SPRINT – 3

TEAM ID	PNT2022TMID29193
PROJECT NAME	Smart Solutions for Railways

USN-4: As a TTE, I will cross-check the passenger for their tickets by scanning the QR code.

Code:

QRCodeScanner.py

```
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)
```

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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("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 ()

Output:



