

Topic:

Smart Solution for Railways

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SPRINT – 4

PROCEDURE:

- Step 1:** Develop a PYTHON script to scan the QR code.
- Step 2:** Connect the python code to IBM Cloudant using the credentials.
- Step 3:** Run the program.

PYTHON CODE FOR GPS:

```
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-v2-125rwcp4ifi6zz2ly1cq0kakyjn98du2y  
sgc72h53lzi', 'af693938842290ecc254461754447b5')

service = CloudantV1(authenticator=authenticator)

service.set_service_url('https://apikey-v2-125rwcp4ifi6zz2ly1cq0kakyjn98du2y  
sgc72h53lzi:af693938842290ec2c254461754447b45@82d87499-4395-4f46-a190-6  
a186bee5051-bluemix.cloudantnosqldb.appdomain.cloud')

cap = cv2.VideoCapture(0)
```

```

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!")

    time.sleep(5)

cv2.imshow("Frame", frame)
if cv2.waitKey(1) & 0xFF ==
ord('q'):

    break

cap.release()

```

```
cv2.destroyAllWindows()
```

```
client.disconnect()
```

PYTHON CODE OUTPUT:

