PROJECT DEVELOPMENT PHASE - SPRINT 4

Date	15 November 2022
Team ID	PNT2022TMID42243
Project Name	Smart Solutions for railways

SPRINT 4– Ticket Verification

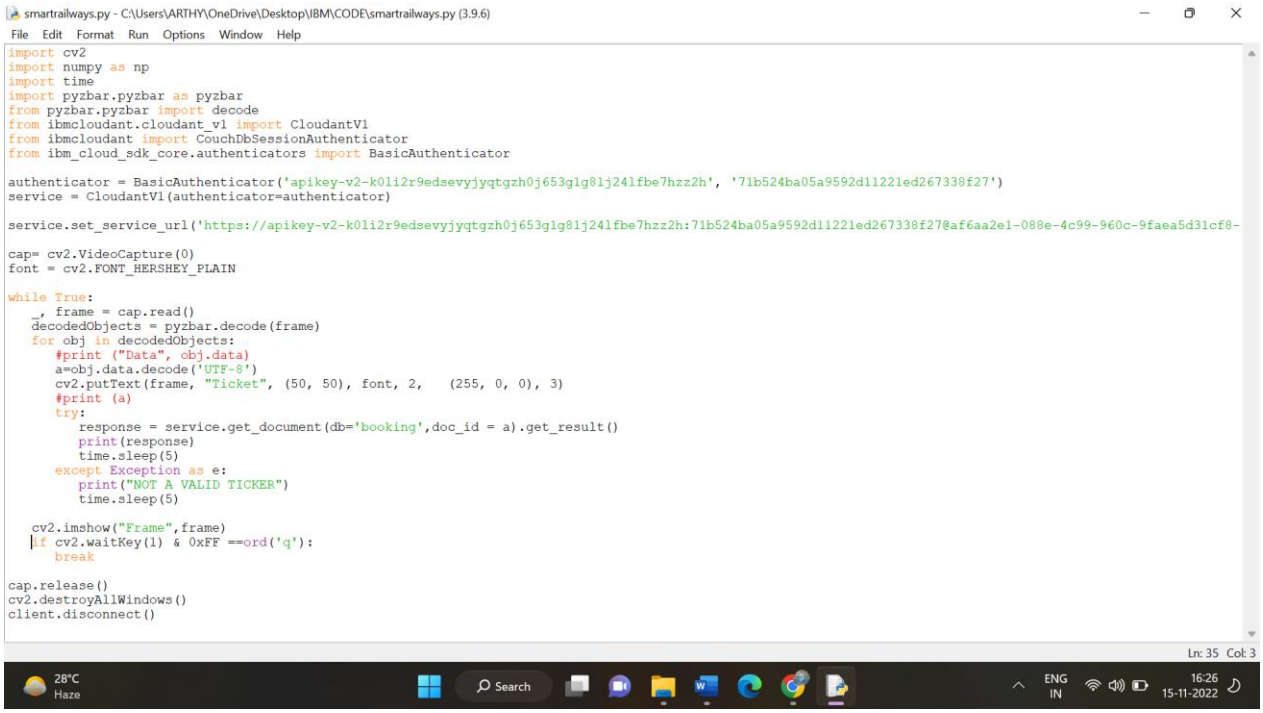
Once the payment is successful, QR Code will be generated. The ticket collector can scan the generated QR Code from the user and verify it.By scanning the QR Code the user details will be displayed.

CODE:

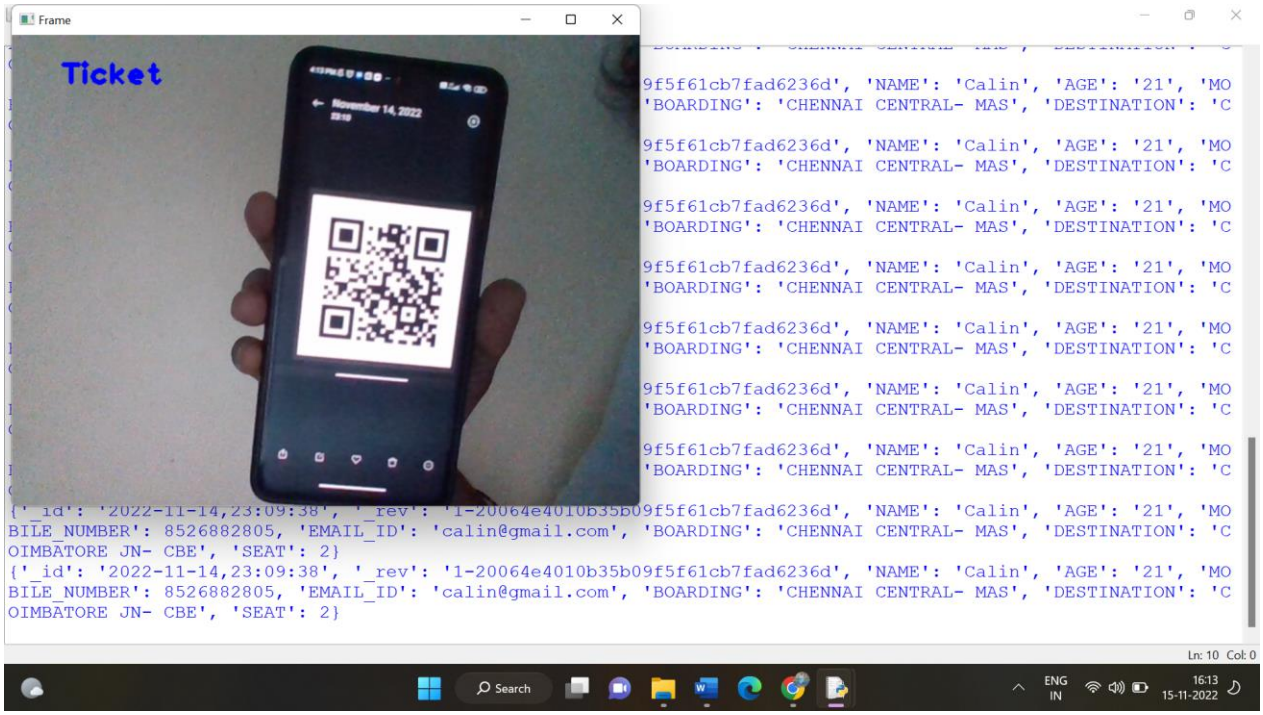
```
import cv2
import numpy as np
import time
import pyzbar.pyzbar as pyzbar
from pyzbar.pyzbar import decode
from ibmcloudant.cloudant_v1 import CloudantV1
from ibmcloudant import CouchDbSessionAuthenticator
from ibm_cloud_sdk_core.authenticators import BasicAuthenticator

authenticator = BasicAuthenticator('apikey-v2-k0li2r9edsevyjyqtgzh0j653g1g81j24lfbe7hzz2h',
'71b524ba05a9592d11221ed267338f27')
service = CloudantV1(authenticator=authenticator)

service.set_service_url('https://apikey-v2-
k0li2r9edsevyjyqtgzh0j653g1g81j24lfbe7hzz2h:71b524ba05a9592d11221ed267338f27@af6aa2
e1-088e-4c99-960c-9faea5d31cf8-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 TICKER")
      time.sleep(5)

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

cap.release()
cv2.destroyAllWindows()
client.disconnect()
```

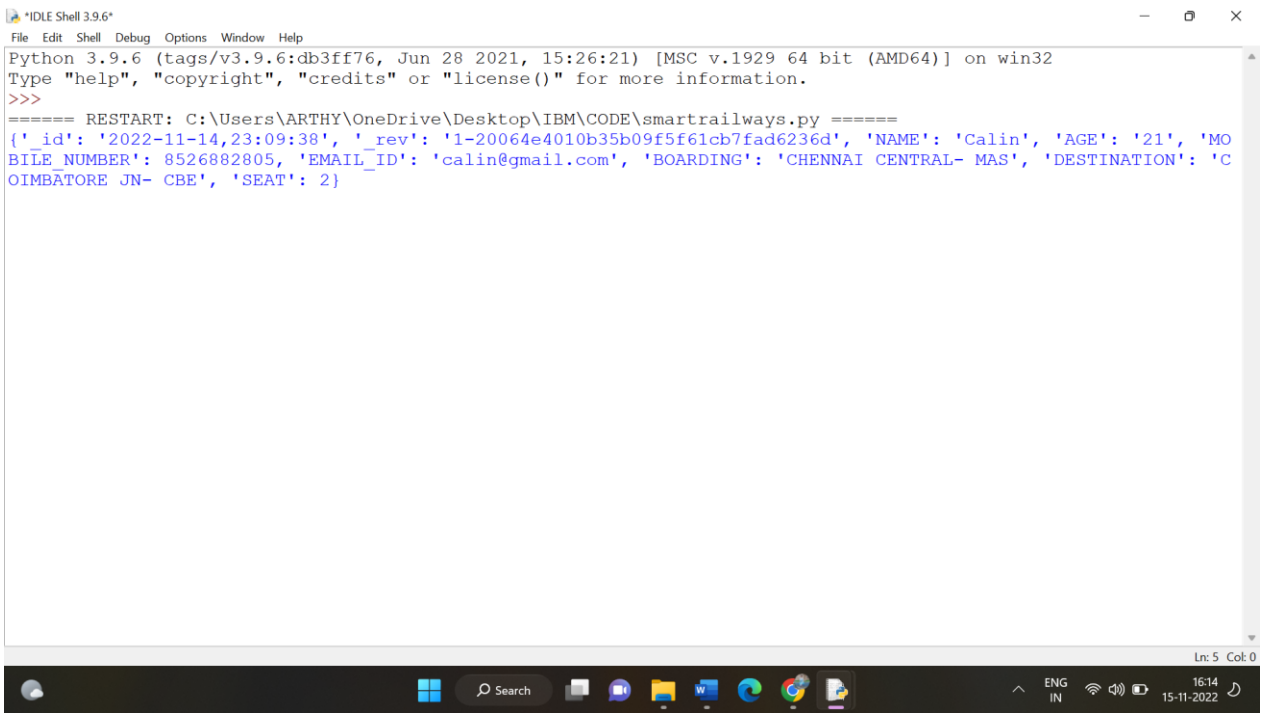
PYTHON CODE FOR QR CODE VERIFICATION:



QR CODE VERIFICATION:



DISPLAYING USER DETAILS:



USER DETAILS STORED IN CLOUDANT: