

DELIVERY OF SPRINT-1

TEAM ID	PNT2022TMID09904
PROJECT NAME	SMART SOLUTION FOR RAILWAYS
DATE	04/11/2022

SPRINT-1

```
#include <LiquidCrystal.h> LiquidCrystal
lcd(5,6,8,9,10,11); int redled = 2; int
greenled = 3; int buzzer = 4; int sensor =
A0;
int sensorThresh = 400;

void setup()
{

pinMode(redled,          OUTPUT);
pinMode(greenled,OUTPUT);
pinMode(buzzer,OUTPUT);
pinMode(sensor,INPUT); serial.begin(9600);
lcd.begin(16,2);

}
void loop()
{
```

```

int analogValue = analogRead(sensor);
Serial.print(analogvalue);
if(analogValue>sensorThresh)
{
    digitalWrite(redled,HIGH);
    digitalWrite(greenled,LOW);
    tone(buzzer,1000,10000); lcd.clear();
    lcd.setCursor(0,1); lcd.print("RAILWAYS");
    delay(1000); lcd.clear(); lcd.setCursor(0,1);
    lcd.print("SMART SOLUTIONS FOR RAILWAYS");
    delay(1000);
}
else
{
    digitalWrite(greenled,HIGH)
    ; digitalWrite(redled,LOW);
    noTone(buzzer); lcd.clear();
    lcd.setCursor(0,0);
    lcd.print("SAFE");
    delay(1000);
lcd.clear(); lcd.setCursor(0,1);
lcd.print("ALL CLEAR");

    delay(1000);
}
}

```

QR CODE:

```
from ibmcloudant import CouchDbSessionAuthenticator from
ibm_cloud_sdk_core.authenticators import BasicAuthenticator
authenticator = BasicAuthenticator('apikey-v2-
    16u3crmdpkghhxefdikvpssoh5fwezrmuup5fv5g3ubz',
    'b0ab119f45d3e6255eabb978')

service = CloudantV1(authenticator=authenticator)

service.set_service_url('https://apikey-v2-
    16u3ermdpkghhxefdikvpssoh5fwezrmuup5fv5g3ubz:b0ab119145d3e6255e
    a bb978e7e2f0')

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 Ticket")
        time.sleep(5)
    cv2.imshow("Frame",frame)
if cv2.waitKey(1) & 0xFF ==ord('q'):
    break
cap.release()
cv2.destroyAllWindows()
client.disconnect()
```