DELIVERY OF SPRINT-1

TEAM ID	PNT2022TMID23589
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);
      digit1Weite(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(greenlad,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:b0ab119145d3e6255ea
    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()
```