## SPRINT - 3

Date	17 November 2022
Team ID	PNT2022TMID42666
Project Name	Smart waste management system for metropolitan cities
Points	20

Send the alert to admin with mail (using smtp)

## CODE

```
import RPi.GPIO as GPIO
import yagmail
import time
import mysql.connector
TRIG=21
ECHO=20
dusbinLevelInper=0
confirmtion=0
GPIO.setmode(GPIO.BCM)
GPIO.setup(TRIG,GPIO.OUT)
GPIO.setup(ECHO,GPIO.IN)
GPIO.setup(19, GPIO.OUT)
def mailsender():
 if(confirmtion==3):
    mydb = mysql.connector.connect(
      host="192.168.143.95",
      user="root",
      password="mysqlpassword",
      database="IbmDataBase"
    mycursor = mydb.cursor()
    confirmtion=0
    sql = "SELECT * FROM dsbn WHERE dusid =1"
    mycursor.execute(sql)
    myresult = mycursor.fetchall()
    Frommailadress="from@gmail.com"
    password="myapp password"
```

```
yag = yagmail.SMTP(Frommailadress,password)
    yag.send("TO@gmail.com",
     "Level of the dustbin is "+str(myresult[0][1])+
     " locations of the dustbin "+str(myresult[0][3])
+" "+str(myresult[0][2])+"")
    print("sended successfull")
  else:
    print(confirmtion)
def DataBaseCon():
  mydb = mysql.connector.connect(
    host="192.168.143.95",
    user="root",
    password="mynewpassword",
    database="IbmDataBase"
  mycursor = mydb.cursor()
  sql = "UPDATE dsbn SET dusLevel =
"+str(dusbinLevelInper)+" WHERE dusId = '1'"
  mycursor.execute(sql)
  mydb.commit()
  print(mycursor.rowcount, "record(s) affected")
```

```
def ledblinkon():
   GPIO.output(19, GPIO.HIGH)
def ledblinkoff():
   GPIO.output(19, GPIO.LOW)
while True:
  print("distance measurement in progress")
  GPIO.output(TRIG,False)
  print("waiting for sensor to settle")
  time.sleep(0.2)
  GPIO.output(TRIG,True)
  time.sleep(0.00001)
  GPIO.output(TRIG,False)
  while GPIO.input(ECHO)==0:
    pulse_start=time.time()
  while GPIO.input(ECHO)==1:
    pulse_end=time.time()
  pulse_duration=pulse_end-pulse_start
  distance=pulse_duration*17150
  distance=round(distance,2)
  print("distance:",distance,"cm")
  time.sleep(2)
  if(distance>=60):
    dusbinLevelInper=0
    ledblinkoff()
```

```
elif(distance<=60 and distance>=45):
    dusbinLevelInper=25
    ledblinkoff()
  elif(distance<=45 and distance>=30):
    dusbinLevelInper=50
    ledblinkoff()
  elif(distance<=30 and distance>=10):
    dusbinLevelInper=80
    ledblinkoff()
  else:
    dusbinLevelInper=100
    ledblinkon()
    confirmtion+=1
    mailsender()
  DataBaseCon()
  time.sleep(20)
```

Level of the dustbin is 100 locations of the dustbin south street ,kk nagar Covai

