PROJECT DEVELOPMENT PHASE

Team ID	PNT2022TMID12076
Project Name	Smart Waste Management System For Metropolitan Cities

DELIVERY OF SPRINT 3

```
importRPi.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)


defmailsender():
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("sendedsuccessfull")

else:

print(confirmtion)
```

```
defDataBaseCon():


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")



defledblinkon():

GPIO.output(19, GPIO.HIGH)


defledblinkoff():

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)
```