**PROJECT DEVELOPMENT PHASE**

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| Team ID | PNT2022TMID40047 |
| Project Name | Smart Waste Management System For  Metropolitan Cities |

**DELIVERY OF SPRINT 3**

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)