KONGU ENGINEERING COLLEGE

PERUNDURAI ERODE-638060

DEPARTMENT NAME

KEC IDEATHON

SMART DUST BIN

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Technology Readiness Level: TRL --

Team Mentor with Designation and Department: Mrs.S.Aruna

Team Co-Mentor with Designation and Department:-

Transform Yourself

In association with:

EMDC

INSTITUTION'S INNOVATION COUNCIL
(Ministry of Education Initiative)

TBI-KEC
INCUBATING SUCCESS

Estd : 1984

SYNOPSIS

- INTRODUCTION
- OBJECTIVE
- PROPOSED SYSTEM
- FLOW CHART
- COMPONENTS
- ADVANTAGES
- EXISTING SYSTEM
- CONCLUSION

INTRODUCTION

- Currently almost a huge amount of earth is filled with garbage and is a big problem

- This can lead to many environmental problems

- Endangers life of animals also

- Leads to atmospheric pollution

- Spreads diseases

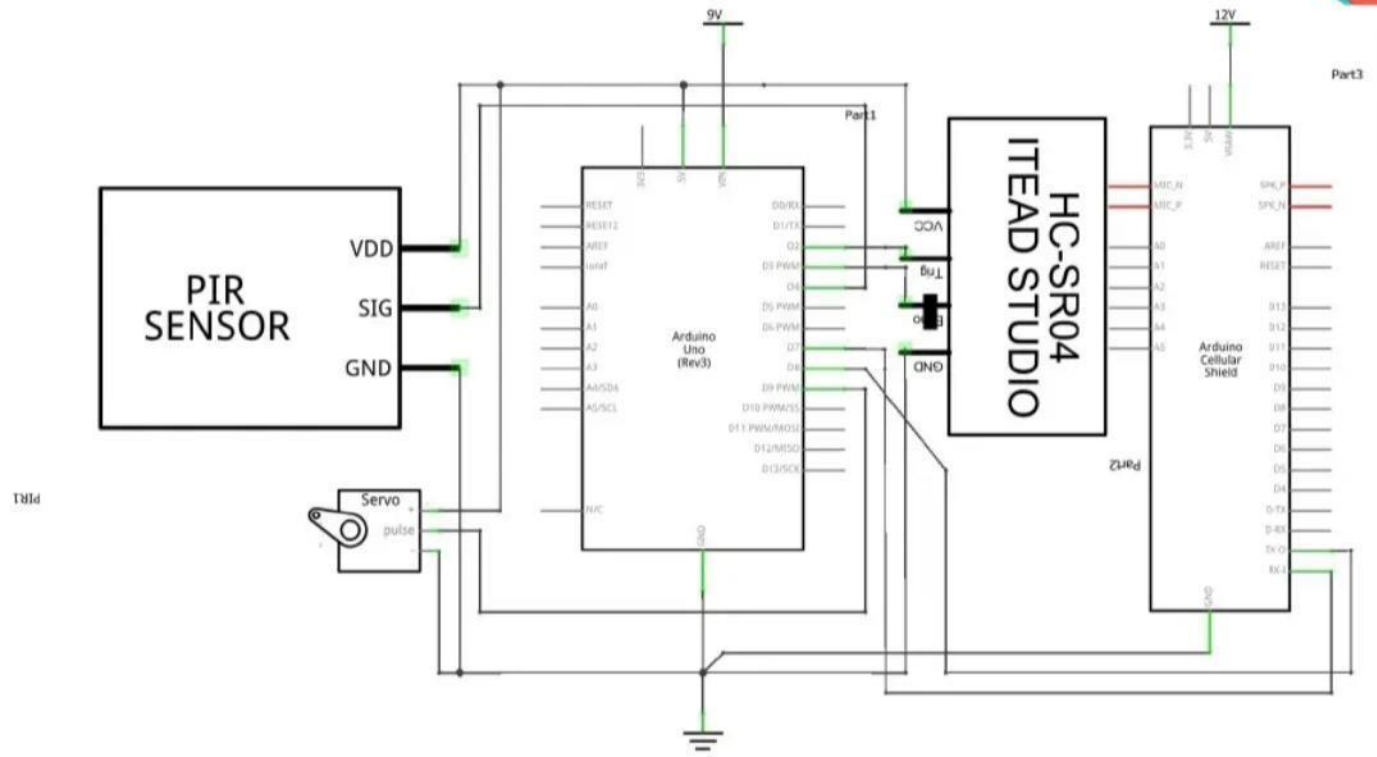- All these problems are due to improper waste disposal

OBJECTIVE:

The main objective of the project is to design a smart dustbin which will help in keeping environment clean and also eco friendly....
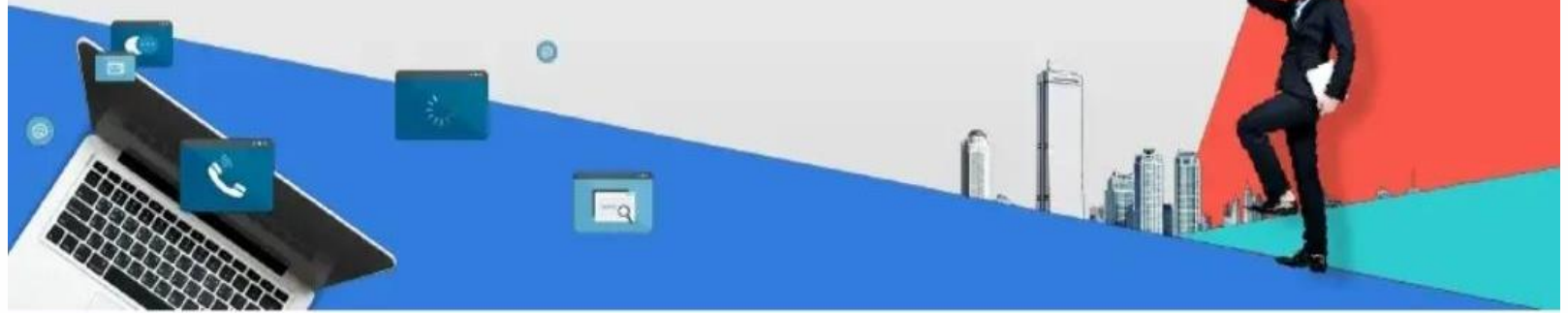
PROPOSED SYSTEM

- It continuously monitors the level of garbage in the bin

- Bin opens automatically when a person approaches the bin

- Informs authorities when it needed to be cleared
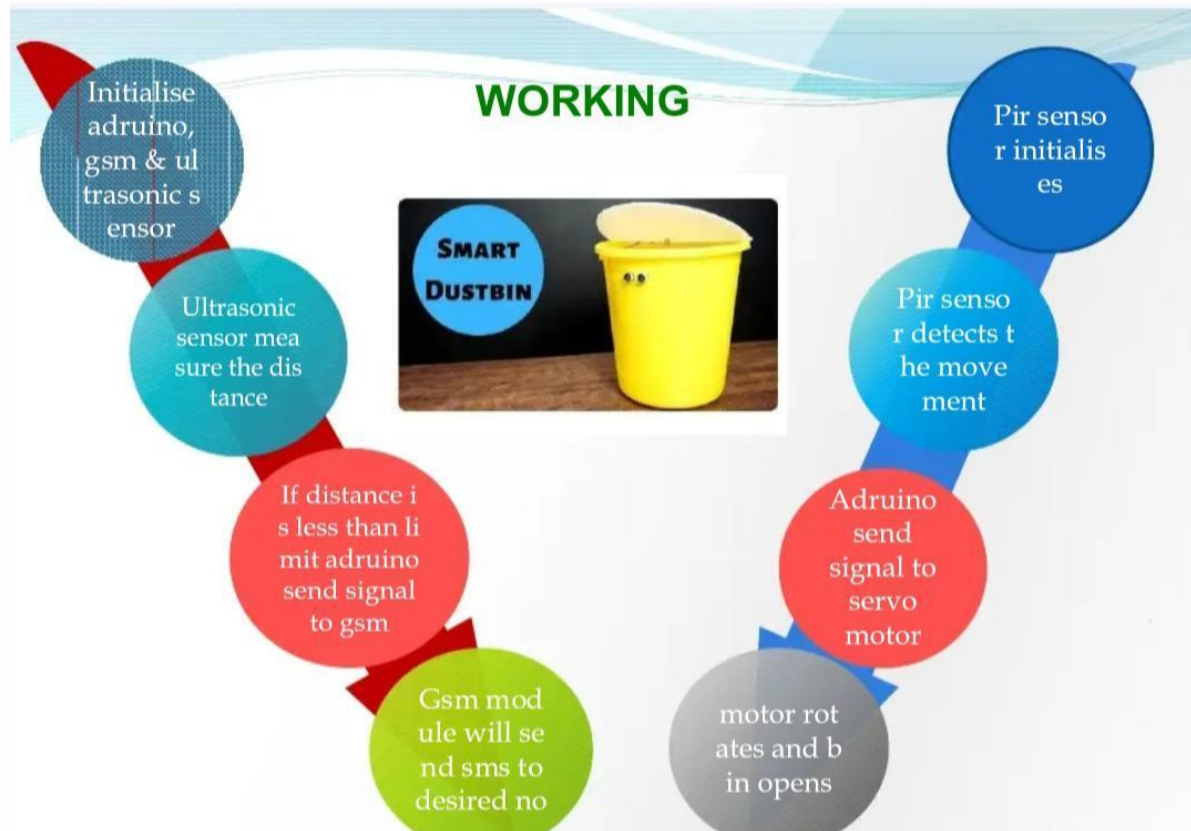
Flowchart / Product workflow

COMPONENTS

1. Arduino UNO

2. HC-SRO4 Ultrasonic Sensor Module

3. TowerPro SG90 Servo Motor

4. A small dustbin with hinged lid

5. 9V Power Supply

DRAWBACKS OF CURRENT SYSTEM

- Garbage overflow

- Unhealthy and untidy surroundings

- Cannot cope up with the amount of garbage

WORKING

Initialise adruino, gsm & ultrasonic sensor

Ultrasonic sensor measure the distance

If distance is less than limit adruino send signal to gsm

Gsm module will send sms to desired no

Pir sensor initialises

Pir sensor detects the movement

Adruino send signal to servo motor

motor rotates and bin opens

ADVANTAGES:

ADVATAGES

* Helps in avoiding garbage overflow
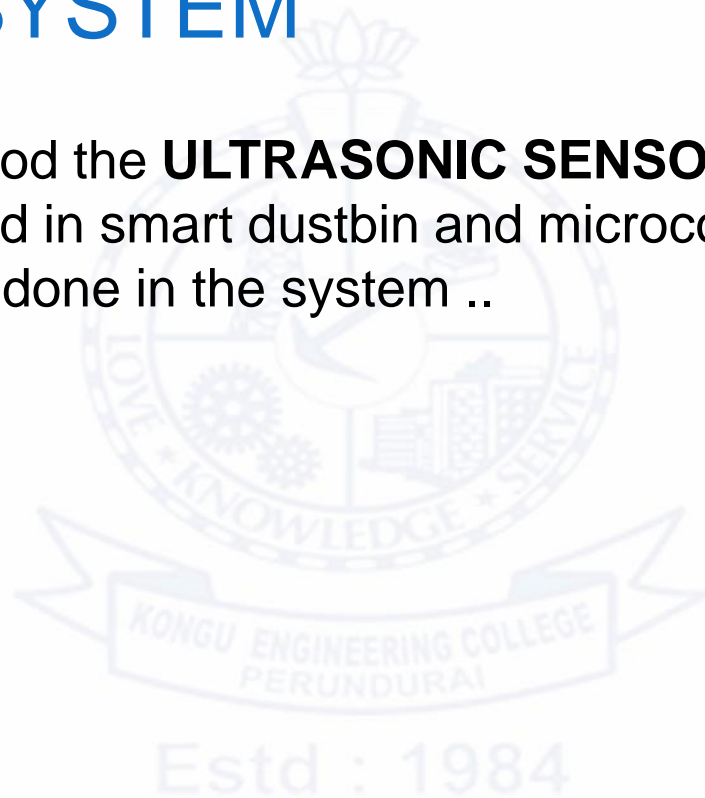- Low operating cost
- Low maintenance requirements

- Requires manual recharging of mobile network subscription
- Security measures depend on build quality and fixed installation of the bin
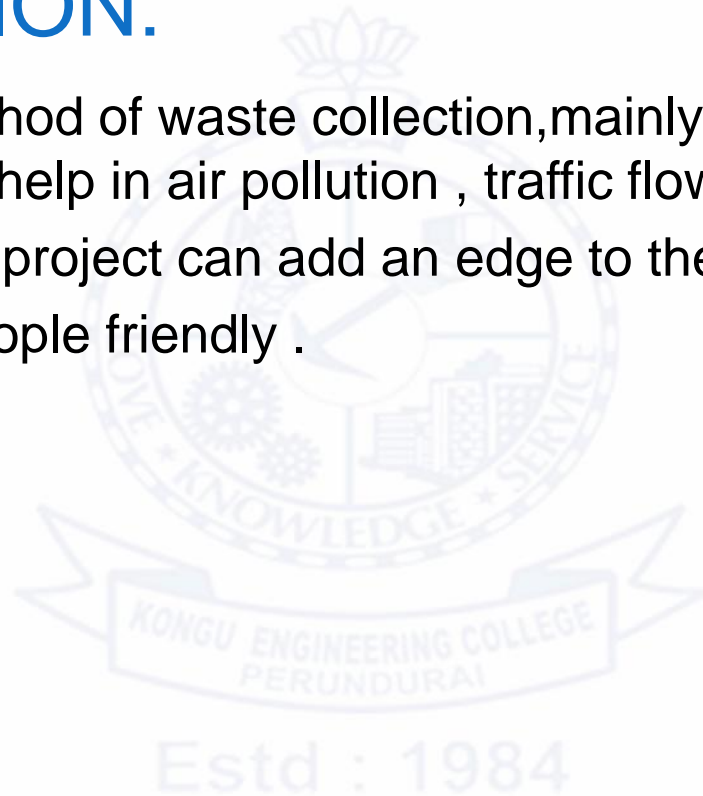- Don't send an alert in case of fire

DISADVANTAGES

EXISTING SYSTEM

➢ In Existing method the **ULTRASONIC SENSOR and MOTION SENSOR** is used in smart dustbin and microcontroller programming is done in the system ..

CONCLUTION:

➢ By using this method of waste collection,mainly in urban areas become easier it help in air pollution , traffic flow ,time ,man power And money .This project can add an edge to the cities aiming to get smart and people friendly .

Thank You !!