Smart waste management system for metropoliten cities

1

TeamLead-Abinayashree V

The system is implemented using two ultrasonic sensors which is being controlled by Node MCU. One of the ultrasonic sensor detects the level of the waste in the bin and other detects the person approaching the bin to dispose the waste. This detection helps in automatic opening and closing of the lid. Servo motor is connected to the lid which serves the action of closing and opening of the lid. In this system, level of waste in the bin will be sent to concerned authorities.

2

Member1-Anitha.S

This system helps to solve the problems associated with management of waste material and the IoT-based waste collection for the smart city . The proposed system is capable in the collection of waste efectively, detection of fire in waste material . The IoTbased device performs the controlling and monitoring of the bins. These devices are wirelessly connected with the central hub to transmit the information about the bins flling level with the existing GPS location.

3

Member2-Sirisha.D

The proposed system will alert the municipality through the application when the measured waste level is at a certain point. The proposed system consists of ultrasonic sensor to measure the volume of the bins, the load cell to measure the weight of the bin, and an Arduino Uno which controls the system operation. As soon as it reaches a certain point the arduino will send a notification to the person in charge, so that the waste can be collected immediately.

4

Member3-Sushmitha.C

The development of this system brings a huge significance in which operators would be able to know which trash bins require immediate collection and request for immediate dispatch by collection trucks

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