Smart Waste Management System For Metropolitan Cities

Team Lead: Shaik Mariam Fathima

M1: Alluri Gnapika

M2: Ambati Geetha Sravanthi

M3: Boomika Eswaran

LITERATURE SURVEY:

1)Smart Garbage Monitoring System using Internet of Things(IoT) by Prakash Kanade Researcher in Robotics, Artificial Intelligence. Prajna Alva Lecture, LeenaBOT Robotics Pvt Ltd,

Trash defilement has a significant ecological effect. The components used are an Arduino microcontroller , an ultrasonic sensor, a Wi-Fi module, and a heap battery. Information from the ultrasonic sensor and burden cell is collected by the Arduino microcontroller. Utilizing an ultrasonic sensor, the profundity of the trash in the compartment is resolved and the heaviness of the waste receptacle from The heap cell is estimated For indicating the information, the LCD screen is utilized. The Wi-Fi module sends to the web. In this framework, the executive can plan and track waste disposal. The scavengers will get an alert when the capacity reaches the saturation level. The trash bin information can be viewed and tracked and it saves money.

2)Borozdukhin, O. Dolinina and V. Pechnkin, "Approach to the garbage collection in the Smart clean city Project,"Yuri Gagarin State Technical University of Saratov,Russia, 2016

Andrei Brozdukhin and friends later proposed the new system with two working hands: software components and unique indicator equipment [4]. The unique indicator equipment is attached on the dustbin walls. It is made up of two parts: one is the receiver transmitter and the other is the sensor. The sensor is used for indicating the level of garbage in the dustbin and is attached to the transmitter device that sends the “Dustbin is full, please empty it” signal to the concerned authorities. It is now the job of Artificial Intelligence algorithms to find the shortest path and nearest truck driver to the concerned dustbin and notify them for the waste collection.

3) SMART GARBAGE MONITORING SYSTEM USING IOT Dr. Ihtiram RazKhan, Mehtab Alam, Anuj Razdan Department of Computer Science & Engineering, School of Engineering Sciences & Technology, Jamia Hamdard, New Delhi, India

The main objective of the Smart Garbage Monitoring System using IoT is to reduce the usage of resources and efforts and to improve the city's smart vision. By using a sensor and GSM the environment is clean and hygienic and ensures environmental cleanliness. Improper disposal and storage of household waste create problems for public health and pollution. Smart Garbage Monitoring System using IoT is developed using the ultrasonic sensor as a distance measuring sensor, GPS will help in sending the location of the garbage box and GSM will help in sending the message to the municipal authorities with the current location The Smart Garbage Monitoring System using IoT was developed using Arduino IDE as IDE Tool and Google API as a software tool.

4)F. Folianto, Y. Low, and W. Yeow, "Smart waste management system," in Proceedings of the IEEE 10th International Conference on Intelligent Sensors, Sensor Networks and Information Processing (ISSNIP), Singapore, April 2015.

Waste collection is one of the targets of smart cities. It is a daily task in urban areas and it entails the planning of waste truck routes, taking into account environmental, economic and social factors. In this paper, the Smart bin system identifies the fullness of litter bins. The system is designed to collect data and deliver the data through a wireless mesh network. The system also employs the duty cycle technique to reduce power consumption and maximize operational time. The Smart bin system was tested in an outdoor environment. Through the testbed, data was collected and applied sense-making methods to obtain litter bin utilization and litter bin daily seasonality information