

LITERATURE SURVEY

Prof. R.M.Sahu, Akshay Godase, Pramod Shinde, Reshma Shinde, “Garbage and Street Light Monitoring System Using Internet of Things” international journal of innovative research in electrical, electronics, instrumentation and control engineering, ISSN (Online) 2321 – 2004, Vol. 4, Issue 4, April 2016.

Hence our problem statement is to design a system based on any microcontroller for collecting the garbage from particular area whose public garbage bins are overflowing with prior concern. It is using a concept of Internet of Things in this project. So, continuous monitoring of garbage bins will helps to keep environment clean and safe. This paper also includes Street light monitoring which avoids accidents during night. Hence this paper will help to reduce power consumption and manpower.

Kanchan Mahajan, Prof.J.S.Chitode, “Waste Bin Monitoring System Using Integrated Technologies”, International Journal of Innovative Research in Science, Engineering and Technology (An ISO 3297: 2007 Certified Organization) Vol. 3, Issue 7, July 2014.

Zigbee and Global System for Mobile Communication (GSM) are the latest trends and are one of the best combination to be used in the project. Hence, a combination of both of these technologies is used in the project. To give a brief description of the project, the sensors are placed in the common garbage bins placed at the public places. When the garbage reaches the level of the sensor, then that indication will be given to ARM 7 Controller. The controller will give indication to the driver of garbage collection truck as to which garbage bin is completely filled and needs urgent attention.

Md. Shafiqul Islam, M.A. Hannan, Maher Arebey , Hasan Basri , “An Overview For Solid Waste Bin Monitoring System”, Journal of Applied Sciences Research, ISSN 181-544X, vol.5, Issue4, February 2012.

In this paper we have introduced an integrated system combined of Radio Frequency Identification (RFID), Global Position System (GPS), General Packet Radio Service (GPRS), Geographic Information System (GIS) and Web camera. The built-in RFID reader in trucks would automatically retrieve all sorts of customer information and bin information from RFID tag, mounted with each bin. GPS would give the location information of the collection truck. All The information of the center server would up-dated automatically through GPRS communication system. GIS map server is being used for truck monitoring. In this system, bin and truck database has been developed in the way that information of bin and truck ID, date and time of waste collection, bin and truck GPS coordinates information, bin status and amount of waste are compiled in a data packet and stored for monitoring and management activities.

Twinkle sinha, k.mugesh Kumar, p.saisharan, “SMART DUSTBIN”, International Journal of Industrial Electronics and Electrical Engineering, ISSN: 2347-6982 Volume-3, Issue-5, May2015

This paper is a way to achieve this good cause. In this paper, smart bin is built on a microcontroller based platform Arduino Uno board which is interfaced with GSM modem and Ultrasonic sensor. Ultrasonic sensor is placed at the top of the dustbin which will measure the stature of the dustbin. The threshold stature is set as 10cm. Arduino will be programmed in such a way that when the dustbin is being filled, the remaining height from the threshold height will be displayed. Once the garbage reaches the threshold level ultrasonic sensor will trigger the GSM modem which will continuously alert the required authority until the garbage in the dustbin is squashed.

Once the dustbin is squashed, people can reuse the dustbin. At regular intervals dustbin will be squashed. Once these smart bins are implemented on a large scale, by replacing our traditional bins present today, waste can be managed efficiently as it avoids unnecessary lumping of wastes on roadside.

Richu Sam Alex, R Narciss Starbell, “Energy Efficient Intelligent Street Lighting System Using ZIGBEE and Sensors”, International Journal of Engineering and Advanced Technology (IJEAT) ISSN: 2249 – 8958, Volume-3, Issue-4, April 2014.

Solar Photovoltaic panel based street lighting systems are becoming more common these days. But the limitation with these ordinary street light systems is that it lacks intelligent performance. It is very essential to automate the system so that we can conserve energy as well as to maximize the efficiency of the system. In this paper a new method is suggested so as to maximize the efficiency of the street lighting system and to conserve the energy usage by the system with the help of ZIGBEE and sensors. It uses a sensor combination to control and guarantee the desired system parameters. The information is transferred point by point using ZIGBEE transmitters and receivers and is sent to the control terminal used to check the state of the street lamps and hence we can take immediate actions if required