

# **Smart Waste Management System**

## **INTRODUCTION:**

The amount of waste produced everyday by the industries and the households is increasing at an appalling rate, and the major reason for this is soaring use of packaged items, textiles, paper, food, plastics, metals, glass etc, thus management of this refuse becomes a crucial part in our everyday life. In most of the developed countries there are many efficient techniques which are used for the proper management of this waste.

The internet nowadays has the world under its spell. Not a single person lives without internet, phone, tab or laptop. It is believed without connectivity you cannot move ahead in today's world but sometimes due to heavy plans or connectivity issues we can't access to the internet, and thus attracting people towards free Wi-Fi. Providing free Wi-Fi facility for dumping waste into the dustbin would solve the issue of waste and the internet facility plus availability of free service would help people go crazy and would act as reward for maintaining cleanliness in the locality.

## **II. LITERATURE SURVEY:**

This is not an original idea, IOT based dustbin was implemented and effectuated much before. Some authors presented systems where the sensors in the bin checked if the bin are filled up to the brim or not. If it was filled an automated message was sent to the server end of the system, through the Arduino SIM module, which used the application of the Arduino board. Once the server received the message it forwarded the message to the worker in

charge, if the worker was available, he would notify his/her presence by accepting the work and would reach the required destination. If the worker was not available, the work would be transferred to another worker.

Some proposed smart garbage management system using IR sensor, microcontroller and Wi-Fi module. This system assured the cleaning of dustbins soon when the garbage level reached its maximum. If the dustbin was not cleaned in specific time, then the records were sent to the higher authority who took appropriate action against the concerned contractor. This system also helped to monitor the fake reports and hence helped to reduce the corruption in the overall management system. It ultimately helped to keep cleanliness in the society

### III. REFERENCES:

- 1.P. Suresh, Vijay. Daniel, R.H. Aswathy, Dr. V. Parthasarathy, "A State-of-the-Art review on Internet of Things" International Conference on Science Engineering and Management Research (ICSEMR), IEEE, DOI: 10.1109/ICSEMR.2014.7043637 19 February 2015
- 2.Parkash, Prabu V "IoT Based Waste Management for Smart City" International Journal of Innovative Research in Computer and Communication Engineering, Vol. 4, Issue 2, DOI: 10.15680/IJIRCCE.2016. 0402029, February 2016.
- 3.[https://www.researchgate.net/publication/341870789\\_Smart\\_Waste\\_Management\\_System\\_using\\_IOT](https://www.researchgate.net/publication/341870789_Smart_Waste_Management_System_using_IOT)