Garbage Monitoring System using Internet of Things

Implemented by

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Abstract

Spilled garbage is an important concern prevailing in the streets of India. The improper waste management is the cause of several sanitary issues and diseases. So, we came up with an idea which can help in efficient management of garbage using Internet of things. The project measures and monitors the real time status of every garbage bins in the streets and when the bins fill up to a threshold value (say 70%) the municipal bodies are alerted through a specialized application interface.

In the application interface we can monitor the status of every bin around the streets. The application interface provides a specialized option of assigning the drivers to those bins which need attention which helps in saving a lot of fuel.

The project mainly uses ultrasonic sensor, WIFI module, microcontroller, cloud storage and application interface. The microcontroller analyses the ultrasonic data and sends the data to the cloud. The cloud sends the real time status to the admin application interface which is monitored by the authorities. The data corresponding to the bins which require the attention is send to another application interface which is monitored by the drivers.

Thus, this project is expected to help increase the waste management efficiency and also save the fuel.