



SMART WASTE MANAGEMENT SYSTEM FOR METROPOLITAN CITIES



A
PRESENTATION
IOT Garbage Waste Monitoring System
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PRESENTATION OUTLINE

- **Introduction**
- **Problem in Society**
- **Motive of Project**
- **Block diagram**
- **Methodology(Hardware/software)**
- **Application**
- **Conclusions**

Abstract :

- ▶ This project IOT Garbage Monitoring system is a very innovative system which will help to keep the cities clean.
- ▶ This system monitors the garbage bins and informs about the level of garbage collected in the garbage bins via a web page.
- ▶ A web page is built to show the status to the user monitoring it.
- ▶ The web page gives a graphical view of the garbage bins and highlights the garbage collected in color in order to show the level of garbage collected.
- ▶ The LCD screen shows the status of the garbage level.

Main Problem



OVER FLOWING OF BINS

MOTIVE OF THIS PROJECT



IOT BASED BIN

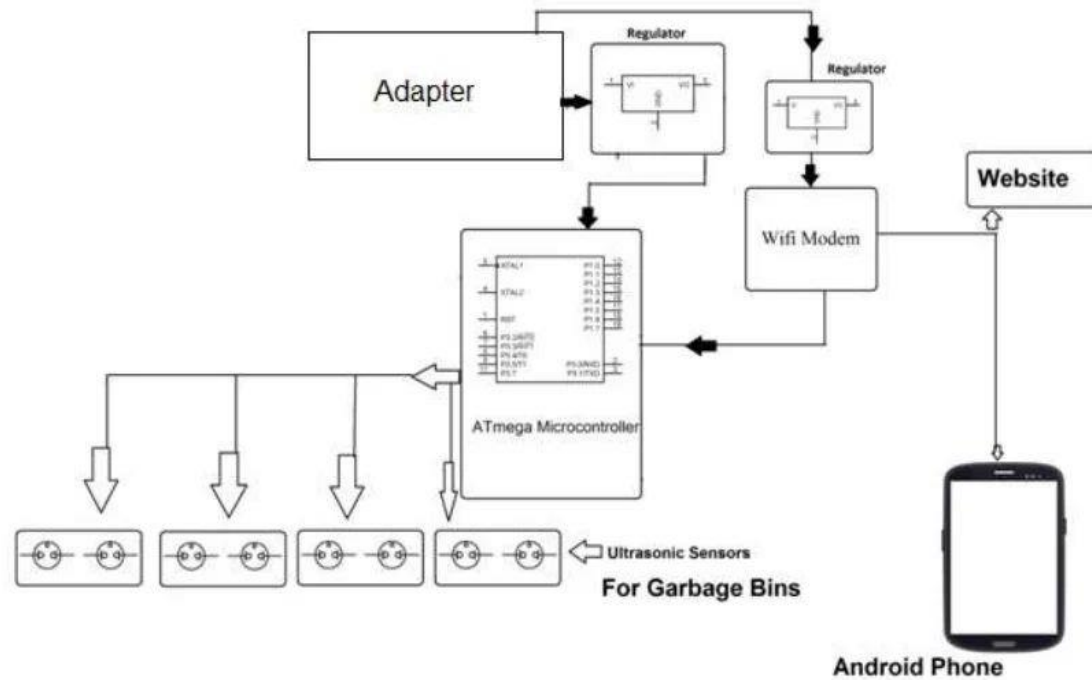


BASE STATION



DUSTBIN LURRY

► BLOCK DIAGRAM



Hardware / Software

Hardware Used

AVR family microcontroller

Wi-Fi Modem

LED's

LCD Display

12V transformer

Ultrasonic sensors

Resistors

Capacitors

Diodes

Software

- Avr studio
- MC Programming Language : Embedded C
- Ardunino software

Application

- ▶ Empowered Swach Bharat Mission
- ▶ Reduce Environmental Pollution
- ▶ Real Time Based cleaning or cities
- ▶ To make our system transparent between
Municipal corporation , workers and public

Summary of use case....

- ▶ The novel cloud-based system for waste collection in smart cities.
- ▶ Integration with modern ITS and lot systems.
- ▶ Development of applications for city administrations, municipal staff.