Smart Garbage Management System Using Internet of Things (IOT)

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***Abstract*:**

One of the major applications of Internet of Things (IoT) is waste management. The IoT-based smart garbage monitoring system is a web-based system that uses a wireless network for data transfer and exchange to provide IoT services for efficient garbage discharge. In a smart garbage system, sensors monitor the capacity of the smart garbage bins and communicate the information to the microcontroller. The information collected on each bin is then processed and transferred to the mobile application using Wi-Fi to provide the IoT services for garbage disposal accordingly. Information is updated after every garbage disposal process of the smart bins and the location and number of smart bins to be discharged show on the mobile application. The proposed IoT technique of waste management contributes to optimal waste level detection and efficient solid waste management.

***Index Terms:***

ESP 32, MIT App Inventor, Waste Management, Firebase, DHT11, Ultrasonic Sensor, My SQL, Tableau

