

SMART TRASH BIN *PROTOTYPE*

BASED IOT WITH WHATSAPP NOTIFICATION

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ABSTRACT

Environmental cleanliness is an important thing that needs to be considered, a clean environment makes us feel safe and comfortable. But there are still many humans who are not aware and do not care about environmental cleanliness, this can be seen from the large amount of garbage scattered around. Internet of Thing is a concept that is connected to the device as an internet-based communication medium. From the above problems, an IoT-based Smart Trash Can Prototype with Whatsapp Notification was made. Where the PIR sensor as a movement detector, an ultrasonic sensor to determine the condition of the trash can level whether it is empty, half full or full which then sends a notification via Whatsapp and a servo motor as a trash can lid driver so that it can open and close automatically. The test method used is testing the sensor against the object and testing the monitoring website by the user. The test results show that all devices can run according to their functions and the monitoring website can receive sensor data and display it to users.

Keywords: *Internet of Thing (IoT), NodeMCU, Ultrasonic Sensor, PIR Sensor, Whatsapp, Prototype.*