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SMART WASTE MANAGEMENT SYSTEM FOR METROPOLITAN CITIES

ABSTRACT

In this paper, a system is introduced to manage waste in big cities effectively without having to monitor the parts 24×7 manually. Here the problem of unorganized and non-systematic waste collection is solved by designing an embedded IoT system that will monitor each dumpster individually for the amount of waste deposited. Here an automated system is provided for segregating wet and dry waste. A mechanical setup can be used for separating the wet and dry waste into separate containers here sensors can be used for separating wet and dry. For detecting the presence of any waste wet or dry can be detected using an IR sensor in the next step for detecting wet waste a moisture sensor can be used. In this process, if only IR is detected motor will rotate in the direction of the dry waste container if both the sensor detects the waste then it will go to the wet container. Both these containers are embedded with ultrasonic sensors at the top, the ultrasonic sensor is used for measuring distance. This makes it possible to measure the amount of waste in the containers if one of the containers is full then an alert message will be sent to the corresponding person.