PROJECT OBJECTIVE

PROJECT NAME	Smart Waste Management System for Metropolitan cities
TEAM ID	PNT2022TMID19083
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ABSTRACT:

The waste management system operates based on their daily schedule which is highly inefficient and costly. The existing recycle bin has also proved its ineffectiveness in the public as people do not recycle their waste properly. Waste has become great concern for all of us. With Internet of Things (IoT) the usual waste management system can be replaced with sensors which is embedded into the system to perform the real time monitoring which is helpful for better waste management. The main aim of this is to develop a smart waste management system using communication protocol and Tensor Flow based model. This system also adapts with network environment which is collecting information from waste management. The GPS module which is used to locate the system and for easy track of bin by using GPS. Every bins are provided with the ID name. Waste classification and object detection is done in Tensor Flow framework with object detection model.

Ultrasonic sensor is embedded into each of the waste sectors to monitor the filling level of the bin waste. RFID module is used for the purpose of waste management identification. As a result the proposed prototype of smart waste-bin is suitable for many kind of conventional waste-bin.