

NALAIYA THIRAN

PROBLEM STATEMENT:

SMART WASTE MANAGEMENT SYSTEM FOR METROPOLITAN CITIES

TECHNOLOGY:

IOT

PROBLEM STATEMENT:

Urban India generates tonnes of wastes annually. Our country faces major challenge associated with waste management. Conventional garbage collection is not efficient since the authorities are not notified until the waste bin is full, and this leads to overflow of waste material. Efficient way of waste disposed garbage is essential for a sustainable and clean India.

This project smart waste management using IOT based waste bin for collection and monitoring the level of waste inside bin. The system is implemented using two ultrasonic sensors which is being controlled by Node MCU. One of the ultrasonic sensor detects the level of the waste in the bin and other detects the person approaching the bin to dispose the waste. This detection helps in automatic opening and closing of the lid. Servo motor is connected to the lid which serves the action of closing and opening of the lid. In this system, level of waste in the bin will be sent to concerned authorities. The IOT data is stored and monitored using app.