

LITERATURE SURVEY

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| Date | 17 September 2022 |
| Team ID | PNT2022TMID11760 |
| Project Name | Smart waste management system for metropolitan cities |
| Maximum Marks | 4 Marks |

| S.NO | PAPER TITLE | YEAR | JOURNAL IEEE | AUTHOR | METHODOLOGY |
|------|---|------|---|--|--|
| 1. | IoT BasedSmart Waste Management System: India prospective | 2019 | 978-1-7281-12534/19/\$31.00 © 2019 IEEE | Rishabh Kumar Singhvi, Roshan Lal Lohar, Ashok Kumar, Ranjeet Sharma, Lakhan Dev Sharma, Ritesh Kumar Saraswat | Ultrasonic sensor senses the filling level of dustbin. Gas sensor measures the toxicity level of dustbin. Due to presence of waste, dustbin produces hazardous gases which increases toxicity of dustbin. If level is less than 10 cm or toxicity of gases is high then message is sent to MC through GSM module. The data of dustbin is also sent to the website after a fixed interval of dustbin so this information remains store on the website. The information is saved with date and time. If MC get to know about filling of dustbin then it will send truck driver to clean it. In this way the dustbins are cleaned timely. |
| 2. | Waste Management System Using IoT | 2018 | 978-1-5386-41231/18/\$31.00 ©2018 IEEE | Mohammed Adam, Mohammed Elnour Okasha, Omer Mohammed Tawfeeq, Mohammed Awad Margan, Bakri Nasreldeen | Ultrasonic sensor sensing the container contents then a wifi module send the sensed data to the web page protocol. If the bin is full it sends alert message to the vehicular car to empty the bin. |

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| 3. | An IoT enabled Smart Waste Management System in concern with Indian Smart Cities | 2018 | 978-1-5386-35704/18/\$31.00 ©2018 IEEE | Pooja Devi, Wajge Shubham Ravindra, Sai Prakash S.K.L.V | The system is implemented by interfacing ultrasonic sensor, DHT22 sensor and air quality sensor to Wi-Fi enabled board ESP8266. The ultrasonic sensor measures the distance between dust and top that is the level of a dustbin. The level measured is given to ESP8266 which as Wi-Fi enabled to put the data on the adafruit cloud. From the cloud, the user/municipality can get the information. The air quality in the surrounding area, temperature and humidity |
| | | | | | values also can be seen and accessed remotely. In this way, the level of waste in the bin can be identified and the problem of overflow can be avoided. Continuous air quality measurement is also guaranteed. |
| 4. | IoT assisted Waste Collection and Management system using QR codes | 2021 | 978-1-7281-58754/21/\$31.00 ©2021 IEEE | Aparna , Bhumijaa , Avila, Thenmozhi , Rengarajan Amirtharaja , Padmapriya Praveenkumar | In the proposed model, QR based tracking and monitoring of household waste were carried out. d. In the proposed method, initially, a QR code is generated based on the customer's registered mobile number. This QR code is stuck against the bin in the customer's household. A mobile application is created for monitoring the trash collected from the households. The MIT app inventor has been used for this purpose. |

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| 5. | IOT Based Smart Waste Management System | 2021 | 978-1-6654-05218/21/\$31.00 ©2021 IEEE | Gayathri, Divagaran, Akhilesh, Aswiin, Charan | Each user has to scan their RFID to open the bin to pour the food waste inside the bin, RFID is used to monitor the food wastage of every individual as every RFID has its unique number. Load cell measures the amount of food wastage of each and every individual in the office premise and is displayed immediately on the screen fixed outside the bin for every time and then the amount of wastage is fed into the database. In the database all the records of every individual are gathered, and an analysis report is generated and the final report is shared to the display of the management website. Then finally management can take necessary measures based on the reports generated by the system. |
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