SMART DUSTBIN

Abstract:

In city many times we see that the garbage bins or dustbins placed at public places are overflowing. It creates unhygienic conditions for people. Also it creates ugliness to that place. At the same time bad smell is also spread.

We have observed that the municipal officer or the government authorized person will monitor the status of dustbin. Generally we see that they have a regular schedule of picking up these garbage bins or dustbins. This schedule varies as per the population of that place. It can be once in a day or twice in a day or in some cases once in two days. However we see that in case there is some festival or some function, lots of garbage material is generated by people in that particular area. In such cases the garbage dustbin gets immediately full and then it overflows which creates many problems.

To avoid all such situations we are going to implement a project called Smart Dustbin. In this project we are going to place an Ultrasonic (Dust level) sensor under the dustbin. Using WIFI continuously we will update dust level to web page. Server software will observe the dust level of each dustbin, any of the dustbin dust level reaches to threshold level SMS will be sent to the respective Municipal / Government authority person. Then that person can send the collection vehicle to collect the full garbage bins or dustbin.

In this project we are providing Dustbin Door control. When the person comes to the dustbin at that time only dustbin door will be open. We have so many advantages for door control, to stop spreading Bad Smell and Fly control.

Mechanical Structure of Dust Bin:



Electronics:



Components:

- 1. Controller with Wifi Module
- 2. SMPS
- 3. OLED Display
- 4. Ultrasonic Module
- 5. Servo Motor for Door Control or Hydraulic Door control

WEB Page View:



