

Smart Dustbin

Sameer Mankotia

Project executed during: Summer ' 2020

Introduction/ Problem Statement

- With increase in population, the scenario of cleanliness with respect to garbage management is degrading tremendously

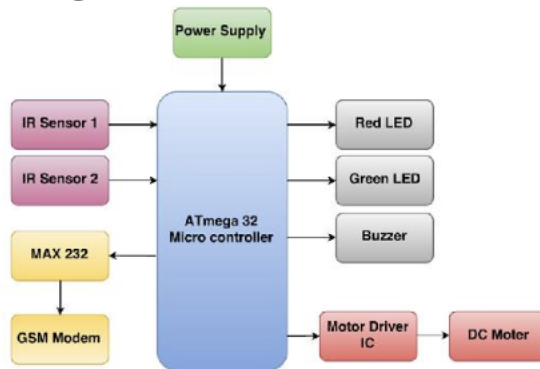


- To straighten out ugly and unhygienic condition in the near by surrounding; by the use of **ICT**, we come up with a project called "Smart Dustbin" which also endorses the ongoing campaign of India "Swachh Bharat Abhiyan"

Results

- Robotic lid** will uncover and cover the dustbin when a person reaches to it
- LED** indicates whether the dustbin is full or not?
- Buzzer** indicates overflow situation
- Smart Dustbin will send an **SMS** to respective municipal authorities which contains the details of successful garbage collection or overflow situation of respective dustbin

Block Diagram



Future Work

- Using technologies like **GPS** we can get optimized routes for garbage collection which results in Less Trucks, Less Fuel, Less Time, **Save Money!**
- By attaching **Photovoltaic modules** on top of the bin, we can generate and store electricity for sensors to work
- A mechanism which automatically compacts the waste inside the dustbin
- More sensors can be implemented for better **Waste Segregation** (e.g. Metal Sensor)