

CUSTOMER JOURNEY:

- This Waste management is one of the serious challenges of the cities, the system now used in cities, we continue to use an old and outmoded paradigm that no longer serves the entail of municipalities, Still find over spilled waste containers giving off irritating smells causing serious health issues and atmosphere impairment.
- The Smart Waste Management System will simplify, with the Web applications and mobile phone, the solid and hydric waste inspecting process, and the management system of this presentation's total collection process.
- The proposed system is a GPS based. The suggested device and implementation will track waste storage and monitor the vehicle's waste driver.
- This method helps to make the customer aware of accountability behind the job such as the system for solid waste inspection and management, integrating communications technology for truck control systems such as GPS.

FUNCTIONAL REQUIREMENT:

Hardware Units

1. GPS- GPS refers to the satellite-based navigational system that informs and navigates where you are - GPS consists of three components: space, control and user section GPS consists of three components. GPS trackers are used to track the location and also show the way to a particular destination. We have implemented the GPS module and tracker to track the vehicle and its path. In this project the GPS will be fixed in the vehicle.

2. IOT- IOT (Internet of Things) refers to the system in which the object is connected to the internet and is able to transfer the data and collect the data with the help of the internet without the interference of humans. We have implemented IOT in our project so that it can collect the data from the source and deliver it to the destination. These devices will be attached in the dustbins for collecting the data of the dustbin and notifying the end users i.e. whether it is full or overloaded, the vehicles need to come or not.

3. RFID TAGS and RFID READER- RFID is a technology used for reading, collecting, and transferring data by using radio frequencies waves. It composes a tag and reader where the tag is attached to the particular object. And the reader can read the radio-frequency wave and collect the data through an antenna. Here tag is also known as a data transmitter and the reader is also known as data receiver. As it is a wireless technology and can read and collect the data from a distance of 12 meters to 100 meters depending on passive and active RFID tags. We have used this technology in our project for sensing the vehicle and marking whether the vehicle has arrived to collect the garbage or not. The RFID tag will be placed on the dustbins and the reader on the vehicles.

i. Reports (login, dashboard)

The Normal user app will consist of login and register page initial screen and the success of the login or registration the user will be redirected to the dashboard, where he/she can enjoy the features like tracking of the garbage vehicle, booking feature and complaining for the particular issues through the app.

ii. Garbage collector app

Another app is for the garbage collector where he can monitor the garbage level in the bins and he can also accept the booking for the garbage collection from any location.

iii. Admin Panel

The admin panel will be designed and developed in such a way; the admin can easily track the worker information in one go. The basic features like tracking of the garbage collector vehicle, bins garbage collection level and the complaints for any issues raised by the society people through App