**Trash Supervision classification using Cloud computing**

**Introduction**

**Trash management** are the activities and actions required to manage [waste](https://en.wikipedia.org/wiki/Waste) from its inception to its final disposal. This includes the collection, transport, treatment and disposal of waste, together with monitoring and regulation of the waste management process.

Waste can be solid, liquid, or gaseous and each type has different methods of disposal and management. Waste management deals with all types of waste, including industrial, biological and household. In some cases waste can pose a threat to human health. Waste is produced by human activity, for example the extraction and processing of raw materials. Waste management is intended to reduce adverse effects of waste on human [health](https://en.wikipedia.org/wiki/Health), the [environment](https://en.wikipedia.org/wiki/Environment_(biophysical)) or [aesthetics](https://en.wikipedia.org/wiki/Aesthetics).

Waste management practices are not uniform among countries ([developed](https://en.wikipedia.org/wiki/Developed_nation) and [developing nations](https://en.wikipedia.org/wiki/Developing_nation)); regions ([urban](https://en.wikipedia.org/wiki/Urban_area) and [rural areas](https://en.wikipedia.org/wiki/Rural_area)), and [residential](https://en.wikipedia.org/wiki/Residential_area) and [industrial](https://en.wikipedia.org/wiki/Industry) sectors can all take different approaches.

A large portion of waste management practices deal with [municipal solid waste](https://en.wikipedia.org/wiki/Municipal_solid_waste) (MSW) which is the bulk of the waste that is created by household, industrial, and commercial activity. Throughout most of history, the amount of [waste](https://en.wikipedia.org/wiki/Waste) generated by humans was insignificant due to low [population density](https://en.wikipedia.org/wiki/Population_density) and low societal levels of the exploitation of [natural resources](https://en.wikipedia.org/wiki/Natural_resources). Common waste produced during pre-modern times was mainly ashes and human [biodegradable waste](https://en.wikipedia.org/wiki/Biodegradable_waste), and these were released back into the ground locally, with minimum [environmental impact](https://en.wikipedia.org/wiki/Environmental_degradation). Tools made out of [wood](https://en.wikipedia.org/wiki/Wood) or [metal](https://en.wikipedia.org/wiki/Metal) were generally reused or passed down through the generations.

However, some civilizations do seem to have been more profligate in their waste output than others. In particular, the [Maya](https://en.wikipedia.org/wiki/Maya_civilization) of [Central America](https://en.wikipedia.org/wiki/Central_America) had a fixed monthly ritual, in which the people of the village would gather together and burn their rubbish in large dumps. Waste collection methods vary widely among different countries and regions. Domestic waste collection services are often provided by local government authorities, or by private companies for industrial and commercial waste. Some areas, especially those in less developed countries, do not have formal waste-collection systems. Incineration is a disposal method in which solid organic wastes are subjected to combustion so as to convert them into residue and gaseous products. This method is useful for disposal of both municipal solid waste and solid residue from waste water treatment. This process reduces the volumes of solid waste by 80 to 95 percent. Incineration and other high temperature waste treatment systems are sometimes described as "[thermal treatment](https://en.wikipedia.org/wiki/Thermal_treatment)". Incinerators convert waste materials into [heat](https://en.wikipedia.org/wiki/Heat), [gas](https://en.wikipedia.org/wiki/Gas), [steam](https://en.wikipedia.org/wiki/Steam), and [ash](https://en.wikipedia.org/wiki/Incineration#Solid_outputs).

Incineration is carried out both on a small scale by individuals and on a large scale by industry. It is used to dispose of solid, liquid and gaseous waste. It is recognized as a practical method of disposing of certain [hazardous waste](https://en.wikipedia.org/wiki/Hazardous_waste) materials (such as biological [medical waste](https://en.wikipedia.org/wiki/Medical_waste)). Incineration is a controversial method of waste disposal, due to issues such as emission of gaseous [pollutants](https://en.wikipedia.org/wiki/Pollutants).

Incineration is common in countries such as [Japan](https://en.wikipedia.org/wiki/Japan) where land is more scarce, as the facilities generally do not require as much area as landfills. [Waste-to-energy](https://en.wikipedia.org/wiki/Waste-to-energy) (WtE) or energy-from-waste (EfW) are broad terms for facilities that burn waste in a furnace or boiler to generate heat, steam or electricity. Combustion in an incinerator is not always perfect and there have been concerns about pollutants in gaseous emissions from incinerator stacks. Particular concern has focused on some very persistent [organic compounds](https://en.wikipedia.org/wiki/Organic_compound) such as [dioxins](https://en.wikipedia.org/wiki/Polychlorinated_dibenzodioxins), [furans](https://en.wikipedia.org/wiki/Furan), and [PAHs](https://en.wikipedia.org/wiki/Polycyclic_aromatic_hydrocarbon), which may be created and which may have serious environmental consequences.

**MODULES:**

The system is made of the combination of modules which work with collaboration with each other and make it beneficial to accomplish the main aim of the scheme.

1. Admin
2. Trash Manager
3. Labor Manager
4. Trash Inspector
5. Meter Tracking
6. Trash Pick Alert System
7. Public Complaint
8. Complaint Resolved Notification
9. Report Generation

**Admin**

Administrator will manage all the Trash Bin and Labor details. Trash levels will be tracked and controlled by the admin only. Admin will resolve all the issues and complaints in the TrashMonitoring System

**Trash Manager**

This module enhances us to add new Trash placing location with the region code and machine code. These details can be edited and updated in future. If any trash bin has to be removed from the location it can be accomplished by deleting the center by the admin.

**Labor Manager**

The labor manager will organize all the labors in local domains. He is the one who send updates to the Trash Manager.

**MeterTracking andTrash Pick Alert System**

1. Each trash box will be monitored for every hour by this tracker. The tracker will alert in the tracking meter in four stages as follows:
2. Green signal - When the trash bin is cleaned by the labor Manager
3. Warning Yellow signal - When the bin is gone has below 20% of the availability storage level
4. Red alert Signal – when the bin is overflowing
5. Red alert Signal – when the public issue a complaint about the Trash Bin

**Complaint Resolved Notification**

In this module the notifications will be sent to the admin after resolving problems on the bin

**Public Complaint and alert for public**

In case of any issues in Trash bin, End user has the provision to submit a complaint about the Trash bin .

**Request making:**

This interface is mainly for the user to request the system to pick the garbage of their house; they give the details of their home offer to pick the trash at a particular time according to their wish of time.

As he confirms the request to select, the application data will go to the managers, and further, the managers will take care of it to pick the garbage from the house.

**Trash Pick:**

The manager takes the request and comes to the place with their vehicles which is already registered in the system. They come and weigh the garbage, or they can set the estimation and tell the price and loads the garbage move to the dumping yard.