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Recycle Nation

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ABSTRACT

In today's world waste management is a major issue to handle, many applications are trying to resolve this by using different techniques. The proposed application will work as an intermediate platform between the users and waste management organizations. The users can be an individual, industry, organisations, college, schools, etc. This application is introduced in order to help people to manage the waste in best possible ways and find out the scope for improvement in the management of waste for the welfare of the society. It helps people to dispose of the waste, recycle the damaged products and get the replacements, sell and donate the waste such as e-waste or plastic wastes, transform the useless things in the useful ones.

Keywords : E-Waste, Recycle, Waste Disposal, Waste Management

I. INTRODUCTION

India produces vast amount of waste as compared to other countries. This is because increasing population rate day by day. The increase in population results in increase of needs which further results in more development. According to the Solid Waste Management Analysis of India^[1], the fast urbanisation in all over the country has led to an immense production of waste and garbage. India generates 62 million tonnes of waste every year, of which less than 60% of waste is collected and around 15% is processed. But this estimation doesn't include every remote area.

By scientific analysis^[2], there's no waste as such in the world. Almost all the components of solid waste have some potential if it is converted or treated in a scientific manner. Hence it can be defined that solid waste as "organic or inorganic waste materials produced out of household or commercial activities, that have lost the value."

The disposal of bio waste^[3] and domestic waste have also been a chaos in regions with no garbage dumping yards and collection process. India is one of the countries producing large amount of waste because of the residents too. The empty plots are full of domestic waste because there are no dumping wells in the region. The rivers, lakes and sea shores are unclean with lots of plastic or other discarded wastes floating in the surface.

Due to urbanisation^[4], there are great amount of industries in India today. These industrial waste and E-wastes^[5] with no proper disposal has led to very hazardous chemical production which in indirect way is too much harmful for people to live today.

By keeping all these issues in mind, an application is proposed to make surrounding clean in only few clicks. The application will help to reduce every kinds of wastes whether bio wastes, domestic waste, plastic waste, electronic wastes as well as industrial wastes.

This application will be helpful in following ways:

- Work as an intermediate between users and waste management organizations.
- To dispose and dump the domestic wastes with a proper procedure.
- To recycle the plastic or e-wastes such as the unused or broken products and appliances.
- To create the best things out of wastes which are too good to dispose off or can be used for various other purposes.

II. LITERATURE REVIEW

In today's world having clean environment is one of the basic needs that every human being would like to have. There are apps available on e-waste and other waste management.

Considering the applications, the following are based on waste management:

- ECS e-Waste: Focuses only on e-waste
ECS e-waste mobile App is a platform providing convenience for e-waste disposal and was introduced in 2017. It is for citizens, Institutions, Organizations, Departments, etc. conveniently getting Quotes for the material, finding e-waste collection points, Finding Drop-off bins and Requesting e-waste pickup.
- Erase e-Waste: Focuses on recycling
Erase e-waste app brings recycling to user's doorstep and was introduced in 2017. Payment is entertained at pickup or donated to charity chosen. It uses user location to track their place, and picks up e-waste.
These app either focuses on one or the other things. So, the people have to install a number of apps for waste management and it is the major disadvantage.

III. PROPOSED SYSTEM

The proposed application will be an intermediate between the users and the organizations without the interference of multiple people in between.

The proposed application provides the following features which makes the app beneficial as compared to others. The organizations linked can send the vendors to collect the waste at home, institutions, industries, etc. according to a deal. This application makes it easy to sell the e-waste products easily without wandering to different number of shops to check for reasonable rate.

This application includes the following five modules:

Module 1: Login

The login will be needed for users and organizations as well. The login will be possible through their google accounts or mobile number.

Module 2: Organization feed

This module will include the field where the organization's details are entered regarding its locations, contact details, types of wastes it accepts, waste it recycles, etc.

Module 3: Interaction portal

This module will provide a user to actually deal with the waste interacting with the organizations and fill the details whichever required to manage their waste as per requirement. The user may trade the waste to dispose, recycle, sell, donate, etc.

Module 4: Events and News

This module will notify the events organized by linked organizations such as fun events, motivational events and Survey or Cleanliness as Swachhata Abhiyan. This section will also include the feeds and news related to the organizations.

Module 5: Categories of wastes and Information

This module will provide the information regarding categories of wastes. It also includes the government guidelines and measures taken to manage the waste.

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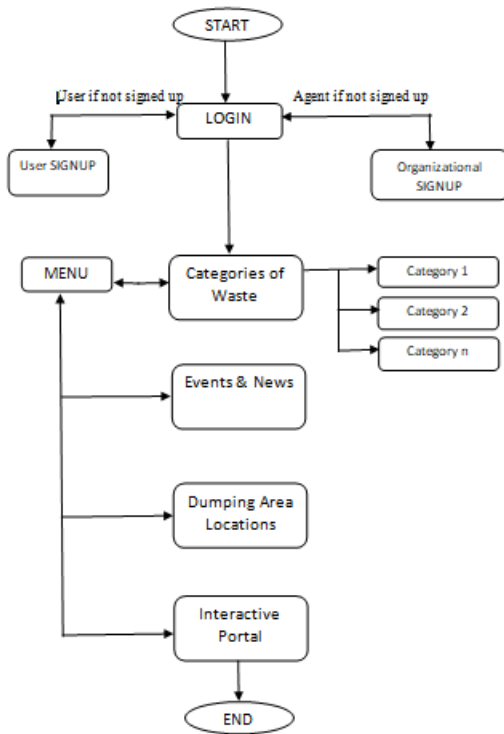


Fig. Flowchart of Recycle Nation

IV. CONCLUSION

As the conclusion to this research, the researchers realize that it is indeed to the community and to the people who lives in that particular area if they'll have a clean place and proper waste disposal; it will make a difference if you are living in a clean place which has a good sanitation. It will also benefit the people to avoid different type of diseases if the place is clean as there is a saying that "Health is wealth".

Therefore, this application will provide easy communication with the customer and the organisation. It will also help the customer to get details about the events held by the organisation and also provide information about the waste.