**Location Based Garbage Management System for Smart City**

**Date**: 25-08-2022

**Guide**: NAVYAMOL KT

1. **Project Overview?**

One of these solutions is to provide an environmentally friendly, efficient and effective garbage management system. The proposed system, where admin manage the garbage app for full online based monitoring and analyze the system. Her admin handle bins, driver, complaints from user and work report from driver. This paper proposes a cost-effective mobile or web based system for the government to utilize available resources to efficiently manage the over whelming amounts of garbage collected each day, while also providing a better solution for the inconvenience of garbage disposal for the citizens.

1. **To what extend the system is proposed for?**

* Solid waste management can be broadly categorized as segregation, collection, and transportation. And also all the house owners register the application based on the area.
* The proposed system, where admin manage the garbage app for full online based monitoring and analyze the system. Her admin handle bins, driver, complaints from user and work report from driver.
* The server will collect the data and store them only a database. This data will be analyzed and displayed on two different dashboards that can be accessed by the workforce and clients.
* Using data analytics, reports will be generated which can be monitored by the admins through the admin dashboard.

Based on the data collected, garbage trucks can be given routes generated through various algorithms and google maps API to efficiently route through all necessary garbage bins and finally reach the dumping site .

1. **Specify the Viewers/Public which is to be involved in the System?**

The General public are involved in the system

1. **List the Modules included in your System?**

**Administrator: -**

* + Login
  + Create Garbage bin
  + Manage garbage bin
  + Manage driver
  + View Garbage Report
  + View complaints from public
  + Manage Vehicle

**General Public: -**

* + Register
  + Login
  + Register complaint
  + My complaint & status

**Driver: -**

* + Login
  + Check daily work updates
  + Choose best route
  + Update garbage load

1. **Identify the users in your project?**

The users are the General public and the agents

1. **Who owns the system?**

The Administrator owns the Garbage management system

1. **System is related to which firm/industry/organization?**

*The system is related to industries. Industries in garbage management establishment engaged in the collection , treatment, and disposal of waste materials.*

1. **Details of person that you have contacted for data collection?**

* Sheeja HK

8086810665

Cleaning Staff

* Plastic /Waste Collection Center

9496434516

Trivandrum Corporation

1. **Questionnaire to collect details about the project? (**min 10 questions, include descriptive answers, attach additional docs (e.g. Bill receipts, certificate models), if any?)
   * + 1. **Is it necessary to collect plastic waste and organic waste separately?**

Yes, plastic waste and organic waste are collected separately.

* + - 1. **How is the waste collected?**

Our Workers reach out to houses to collect the waste.

* + - 1. **Will your agents visit homes to take waste?**

Yes.

* + - 1. **How much is the cost for taking waste?**

It depends on the weight of waste.

* + - 1. **Does the cost vary with the weight of waste?**

Yes, cost varies with weight of waste

* + - 1. **Where is waste deposited?**

Wastes are taken to factories to recycle

* + - 1. **Do you provide biogas facilities?**

No

* + - 1. **Waste collected per day or weekly?**

Waste is collected twice a week.

* + - 1. **Is it government organized system?**

Yes, government organized system.

* + - 1. **Have you ever been educated on proper waste disposal by the council?**

Yes

* + - 1. **In what type of container do you collect waste?**

Waste Basket, Plastic bags

* + - 1. **What type of solid waste comes out from your household?**

Food waste, plastic (bags/bottles), paper & carton.