



## **DIGITAL COMPLAINT PORTAL FOR URBAN CITIES**

A PROJECT REPORT

Submitted by

**Dr. ARUN ANOOP M(HOD,ASSOCIATE PROFESSOR,CSE)**

**ANJANA (RCE19CS004)**

**NITHINKRISHNA K B (RCE19CS032)**

**SAMEEHA M U (RCE19CS035)**

**SANA (RCE19CS036)**

**AKHIL V A (LRCE19CS048)**

## **ABSTRACT**

Nowadays wastage pollution will increase at associate degreed read rate everywhere the globe. It's the foremost reason behind pollution. The center of a town depends on its purification of Air, cleanliness of the roads and highways and overall, it's close atmosphere. These trends support the development of Digital complaint portal for urban cities concepts, which are intended to improve living in urban areas by using innovative technologies. Smart cities integrate multiple mobile or web solutions to build a comfortable human habitation. One of these solutions is to provide an environmentally friendly, efficient and effective garbage management system. The current garbage collection system includes routine garbage trucks doing rounds daily or weekly, which not only doesn't cover every zone of the city but is a completely inefficient use of government resources. This app proposes a cost-effective mobile or web-based system for the government to utilize available resources to efficiently manage the overwhelming amounts of garbage collected each day, while also providing a better solution for the inconvenience of garbage disposal for the citizens. Also including a system to keep a certain alert system automatically when the garbage is full.

## **OBJECTIVE**

The current garbage collection system includes routine garbage trucks doing rounds daily or weekly, which not only doesn't cover every zone of the city but is a completely inefficient use of government resources. This project proposes a cost-effective web based system for the government to utilize available resources to efficiently manage the overwhelming amounts of garbage collected each day, while also providing a better solution for the inconvenience of garbage disposal for the citizens.

## **FUNCTIONAL REQUIREMENTS**

### **Hardware Requirements**

Processor: Intel Core i3 or better

Memory: 4 GB RAM or Above

Micro controller: Node mcu

### **Software requirements**

Operating System: Ubuntu or Windows

Software: Arduino IDE

Browser: Internet explorer, Google chrome

## **SYSTEM MODULES**

### 1. Administrator

- Admin need login by entering admin ID and password
- Admin will create the bin details by adding location information which include location details of bin.
- Admin can manage the bin details by removing and adding to the database.
- Admin will assign the problem statement to drivers. It helps to driver find the user problem and find the location via Google Map
- Admin will manage the driver details like by adding new driver information and also manage the driver profile.
- Admin can view the complaint details which is sent by user

### 2 General public

- User need to register in this application by adding basic details like username name, email, phone, location and password. By using username and password user can use this application
- User can also find nearby bin details by selecting location
- User can also send the complaint details to admin by entering proper details
- User can also find nearby bin details by selecting location
- User can view the response which is sent by admin

### 3 Driver

- Driver need to login this application by entering credentials
- Driver can view the assigned work details which is assigned by admin
- Driver can select best route information via google map
- Driver need to update service information related to assigned task

## CONSTRAINTS

User must have the knowledge of application working process.

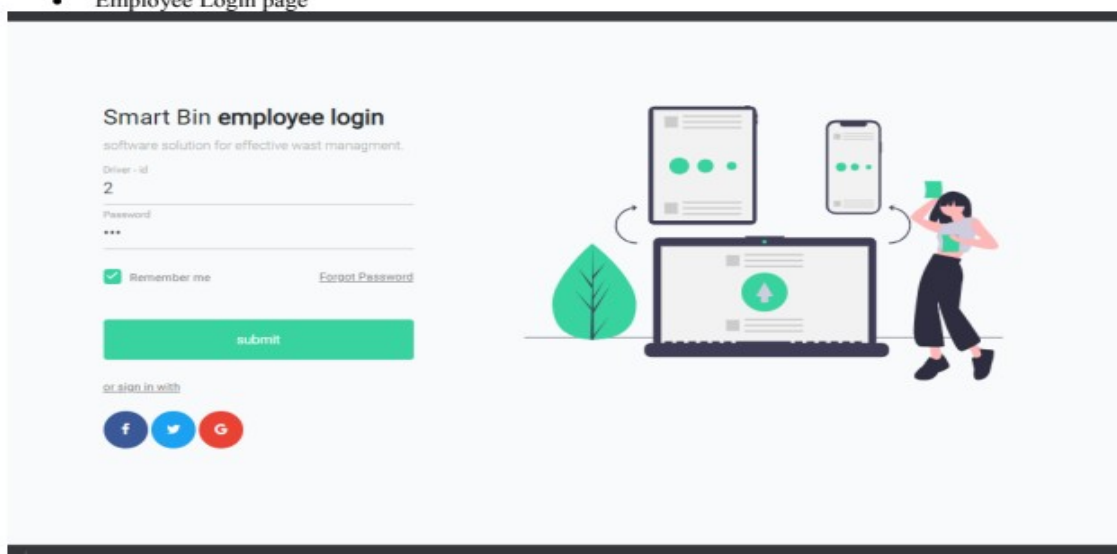
Internet must be necessary for this application.

Multiple users can login.

The Application is available on all the device. It is compatible with all browser and mobile.

## RESULTS

- Employee Login page



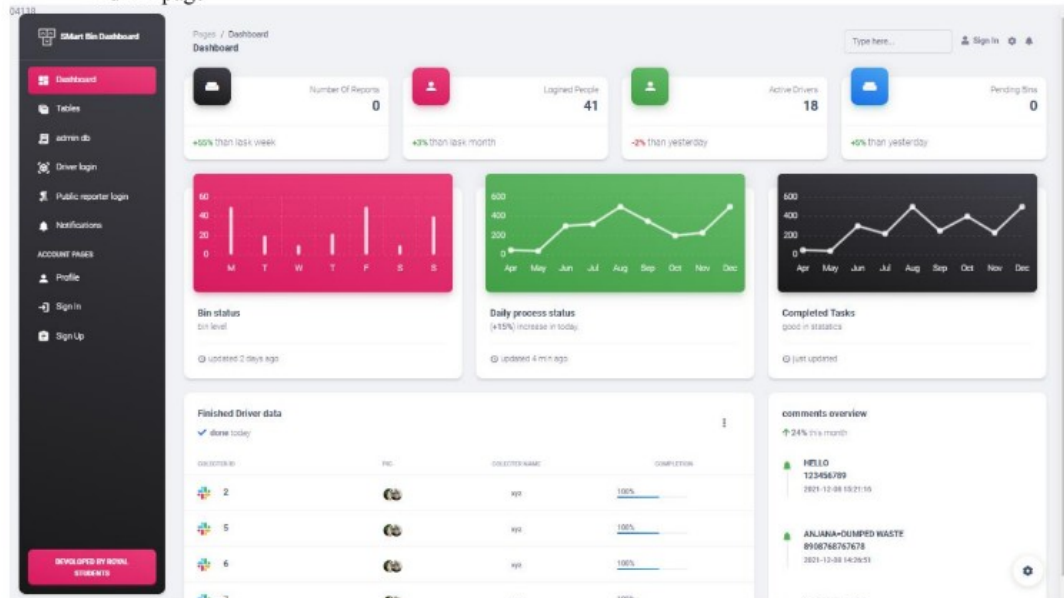
The image shows a screenshot of the 'Smart Bin employee login' page. The page has a light gray background. On the left, there is a login form with the following elements: the title 'Smart Bin employee login', the subtitle 'software solution for effective waste management.', a 'Driver - id' field with the value '2', a 'Password' field with three dots, a 'Remember me' checkbox which is checked, and a 'Forgot Password' link. Below the form is a green 'submit' button. At the bottom left, there are social media icons for Facebook, Twitter, and Google+. On the right side of the page, there is an illustration of a person holding a smartphone, with a laptop and a tablet displaying charts and graphs, and a green leaf icon.

- Report page



The image shows a screenshot of the 'WASTE MANAGEMENT SYSTEM' report page. The page has a gray header with the text 'WASTE MANAGEMENT SYSTEM'. Below the header, there is a form titled 'REPORT HERE'. The form contains the following fields: 'Bin number\*' with the value '21', 'Bin location\*' with the value 'Thirissur', 'Mobile number' with the value '1234', and 'Comments' with the value 'box full'. A green 'Submit' button is located at the bottom center of the form.

- Admin page



## CONCLUSION

This Project describes the development of a smart garbage monitoring system, which is based on web application. It is very useful in improving the efficiency of solid waste disposal management especially in the flat residential areas, where the garbage piles at the bins are one of the residents, major concerns owing to its ability to continuously measure the garbage level in the bin and send the request to municipality for immediate collection. The outputs from the conducted tests shows that all the functionality of the system has performed correctly. The proposed system is suitable to be implemented in all flat residential areas, due to its practicality, reliability, and reasonable cost.