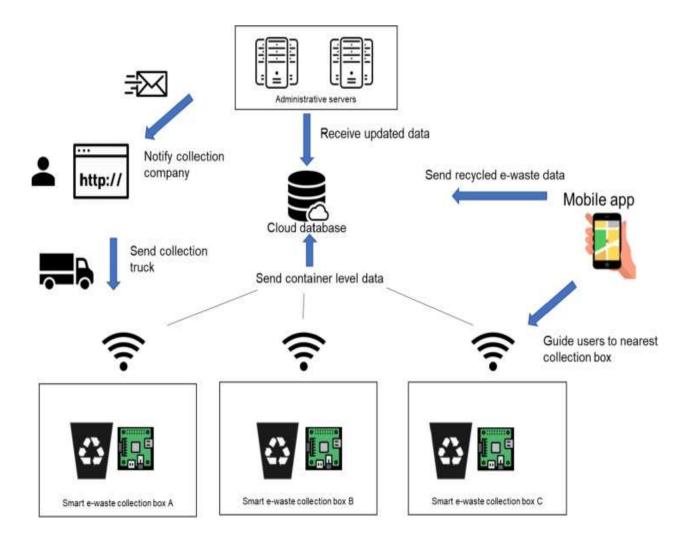
## SMART WASTE MANAGEMENT SYSTEM FOR METEROPOLITAN CITIES

## **TEAM ID: PNT2022TMID15872**



## **Data Flow Diagram:**

A Data Flow Diagram (DFD) is a traditional visual representation of the information flows within the system. A neat and clear DFD can depict the right amount of the system requirement graphically.

It shows how data enters and leave the system, what changes information, and where data is saved.

A smart waste management platform uses analytics to transfer the data gather in your into actionable insights to help you improve your waste service.

You can receive data on metric such as:

- ➤ The first test conducted is the situation where the garbage bin is empty or its garbage level is very low.
- Then, the bin is filled with more garbage until its level has surpassed the first threshold value which is aid to 80% then the first warning SMS is being sent, as depicted
- ➤ The first notification SMS sent by the system, once the waste reaches the level of 85% full
- > The second notification SMS sent by the system, indicating that bin is at least 95% full and the garbage needs to be collected immediately
- ➤ Locations prone to overflow
- > The number of bins needed to avoid overflowing waste
- > The number of collection services that could be saved
- > The amount of fuel that could be saved
- ➤ The driving distance that could be saved

## **User stories**

Use the below template to list all the user stories for the product.

| User Type                          | Functional<br>Requirement<br>(Epic) | User<br>Story<br>Number | User Story/Task  | Acceptance<br>Criteria  | Priority | Release  |
|------------------------------------|-------------------------------------|-------------------------|--|---|----------|----------|
| Admin(Who<br>Manage web<br>Server) | Login                               | USN-1                   | As an Admin, I gave user id and password for ever workers and manage them.   | I can manage web account/dashboard  | Medium   | Sprint-2 |
| Co Admin                           | Login                               | USN-2                   | As a Co Admin, I'll manage garbage level monitor if garbage get filling alert will post location and garbage id to trash truck | I can manage<br>garbage<br>monitoring   | High     | Sprint-1 |
| Truck<br>Driver                    | Login                               | USN-3                   | As Truck Driver, I'll follow the route send by Co Admin to reach the filled garbage  | I can drive to<br>reach the garbage<br>filled route in<br>shortest route<br>given | Medium   | Sprint-2 |

| Local        | Login | USN-4 | As a Waste              | I can collect trach | Medium | Sprint-2 |
|--------------|-------|-------|-------------------------|---------------------|--------|----------|
| Garbage      |       |       | Collector, I'll collect | and pulled to       |        |          |
| Collector    |       |       | all the trash from      | truck and send off  |        |          |
|              |       |       | garbage and load        |                     |        |          |
|              |       |       | into garbage truck      |                     |        |          |
|              |       |       | and send them to        |                     |        |          |
|              |       |       | landfill                |                     |        |          |
| Municipality | Login | USN-5 | As a Municipality,      | I can manage all    | High   | Sprint-1 |
|              |       |       | I'll check the          | these process are   |        |          |
|              |       |       | process are             | going good          |        |          |
|              |       |       | happening in            |                     |        |          |
|              |       |       | discipline manner       |                     |        |          |
|              |       |       | without any issues      |                     |        |          |