Project Design Phase-II
Data Flow Diagram & User Stories

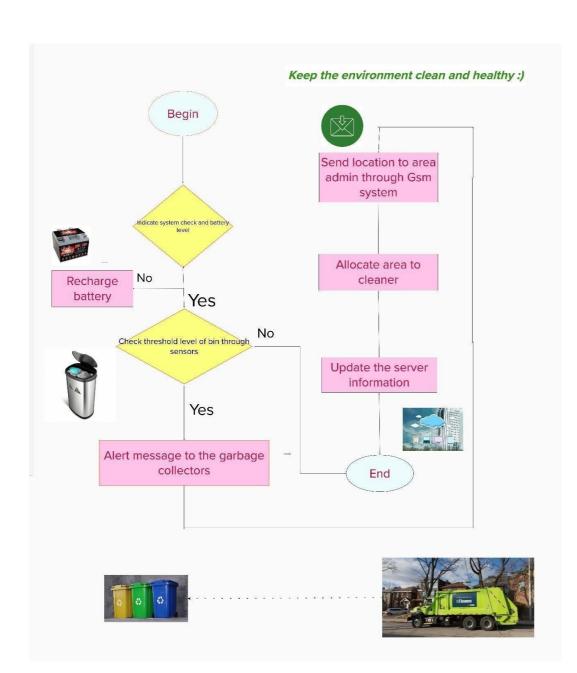| Date	19 September 2022
Team ID	PNT2022TMID26604
Project Name	Smart Waste Management for Metropolitan Cities
Maximum Marks	4 Marks

Data Flow Diagrams:

A Data Flow Diagram (DFD) is a traditional visual representation of the information flows within a system. A neat and clear DFD can depict the right amount of the system requirement graphically. It shows how data enters and leaves the system, what changes the information, and where data is stored.

Flow Diagram:

Our waste generation is constantly growing to form a **global garbage crisis**. Even though we indulge in creating a more sustainable and greener, we still fail to handle our waste generation and management. Combining technology support with a vision of social, economic and environmental sustainability is the best way out of this problem. It is done in the following manner:

- The smart bin system undergoes a thorough system check and battery level monitoring in order to function efficiently.
- If the battery level is found to be low, it has to be recharged immediately, else it can proceed to the next step.
- The threshold level levels of the bin are indicated my multiple sensors attached to bin. If the garbage exceeds the level, then an alert message is sent to the garbage collectors as well as to the municipality or area administration.
- The area in which garbage is found to overflow is allocated to respective garbage collectors in the form of messages through GSM system.
- Once the waste bin is emptied, an information update is sent to the municipality and server is updated.

    This is how the waste from bins can be efficiently handled and managed using technology which in turn keeps the environment clean and healthy.

Keep the environment clean and healthy :)

Begin

Indicate system check and battery level

Send location to area admin through Gsm system

Recharge battery

No

Yes

Allocate area to cleaner

Check threshold level of bin through sensors

No

Update the server information

Yes

Alert message to the garbage collectors

End

User Stories

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

User Type	Functional Requirement (Epic)	User Story Number	User Story / Task	Acceptance criteria	Priority	Release
Customer (Mobile User)	Registration	USN-1	As a user, I can register for the application by entering my email, password, and conforming my password.	I can access my account / dashboard	High	Sprint-1
Customer(Web user)	Login	USN-2	As a user, I will receive confirmation email once I have registered for the application	I can receive confirmation email and click confirm	High	Sprint-1
Customer Care Executive	Dashboard	USN-3	As a user, I can register for the application through Facebook	I can register and access the dashboard with Facebook Login	Low	Sprint-2
Administrator	Login	USN-4	As a user, I can register for the application through Gmail	I can collect the trach, pull it to the truck, and send it out.	Medium	Sprint-1
Municipality officer	Login	USN-5	As a user, I can log into the application by entering email and password	All of these processes are under my control.	High	Sprint-1