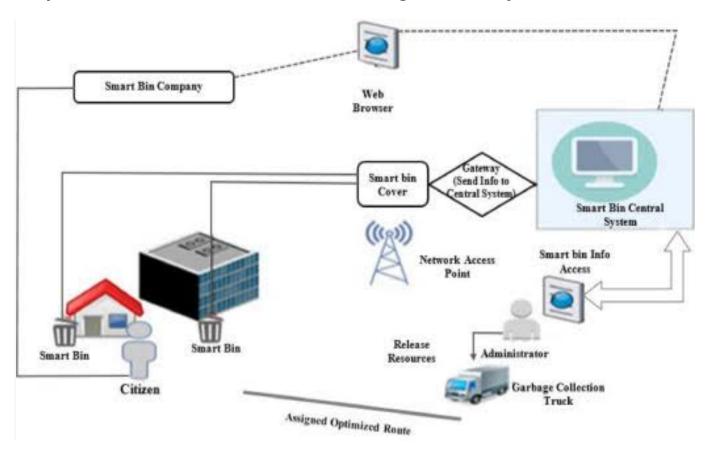
# Project Design Phase-II

## **Data Flow Diagram**

## TEAM ID - <u>IBM-Project-43069-1660712666</u>

Project name - Smart waste management system



#### 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 graphically.

It shows how data enters and leaves the system, what changes the infor ation, and where data is stored.

A smart waste management platform uses analytics to translate the data gather in your bins into actionable insights to help you improve your wast 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 set 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 andthe 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:

USER TYBE	Functional Requirement	User story number	User story /task	Acceptance criteria	Priority	release
Admin	login	USN 1	As an admin, I gave an 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, l'll	I can manage garbage	High	Sprint 1

			manage agarbage level monitor, if garbage get filling alert I will post location and garbage id to truck trash	monitoring		
Truck driver	login	USN 3	As a truck driver,I'll follow the route send by co admin to reach the filled garbage.	I can drive to reach the garbage filled route in shortest route given	Medium	Sprint 2
Local garbage collector	login	USN 4	As a garbage collector, I'll collect all the trash from garbage and load into garbage truck and send them to landfill	I can collect trash and pulled to truck and send off	Medium	Sprint 2
Municipality	login	USN 5	As a municipality, I'll check the process are happening in discipline manner with out any issues	I can manage all these process are going good	High	Sprint 1