Project Design Phase-II
Data Flow Diagram & User Stories

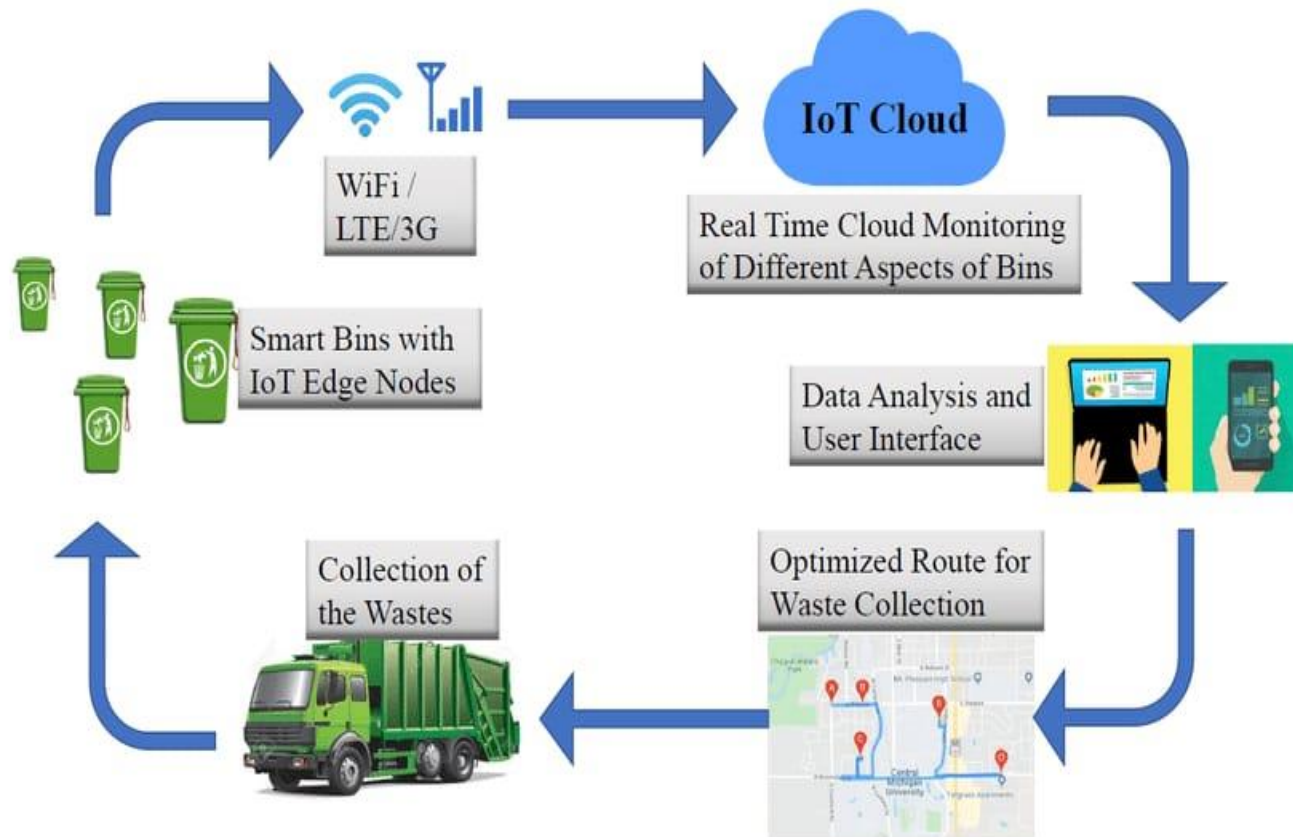| Date	17October 2022
Team ID	PNT2022TMID42807
Project Name	Project – Smart waste management system for metropolitan cities
Maximum Marks	4 Marks

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.
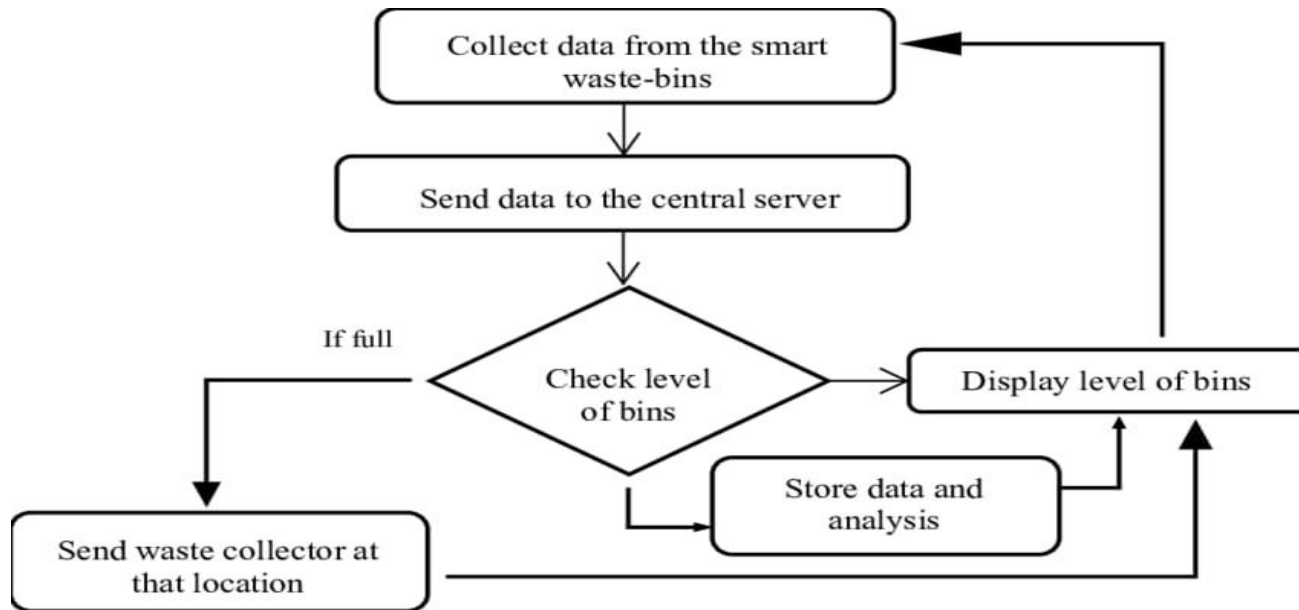
Smart waste management system for metropolitan cities:

- It is a platform uses analytics to translate the data gather in your bin into actionable insights to help to improve our smart city
- The first test conducted is the situation garbage bin empty or full
- Then, the bin is filled 70% it gives the notification the admin.
- When it reaches 90%it gives SMS its full the garbage needs to collect immediately. The admin will post the location and garbage id to the truck driver. Then the truck driver reaches the destination and pick up the trash in a proper time. When used this idea it eliminates the missed pickups.
- The number of bins avoided
- The number of collection services that could be saved
- Driving distance could be saved
- Fuel is saved
- If it not cleared properly the notifications sends to higher authority

Data flow:

WiFi /
LTE/3G

IoT Cloud

Real Time Cloud Monitoring
of Different Aspects of Bins

Smart Bins with
IoT Edge Nodes

Data Analysis and
User Interface

Collection of
the Wastes

Optimized Route for
Waste Collection

Data flow diagram :

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
Admin (manage web server)	Login	USN-1	As an admin, I gave user id and password for ever workers manage them.	I can manage the server	Medium	Sprint-1

User Type	Functional Requirement (Epic)	User Story Number	User Story / Task	Acceptance criteria	Priority	Release
Co admin	Login	USN-2	As a Co admin. I will manage the garbage level monitor. If garbage fill alert I will post location, garbage id to the truck driver.	I can manage the process	High	Sprint-1
Truck driver	Login	USN-3	A s a truck driver, I will follow the routes send by co admin to reach the filled garbage	I can manage the travel through the route in proper manner	Medium	Sprint-2
Local garbage collector	Login	USN-4	As a waste collector, I will collect all the waste from garbage and load into the garbage truck and send them into land fill.	I can collect the waste and kept in a truck and send off	Medium	Sprint-1
Municipality	Login	USN-5	As a municipality I will check the process are going good manner without any issues.	I can manage all these processes going good manner	High	Sprint-1