



Smart Waste Management System For Metropolitan Cities

TEAM ID: PNT2022TMID01714

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 system requirement graphically. It shows how data enters and leaves the system, what changes the into and where data is stored.

A smart waste management platform uses analytics to translate data gathered in your bins into actionable insights to help you improve your waste services.

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 it's 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 and the garbage needs to be collected immediately
- Locations are 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 Requirement (EPIC)	User Story Number	User Story /Task	Acceptance Criteria	priority	Release
Admin(who manage web server)	Login	USN-1	As an Admin, i gave user id and passwords for ever workers and manage them.	I an manage web account/ dashboard	Medium	Sprint-2
Co Admin	Login	USN-1	As a Co Admin, I'll manage garbage level monitor .if garbage get filling alert i will post location and garbage id to trash truck	I can manage garbage monitoring	High	Sprint-1
Truck 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 reach the garbage filled route in shortest route given	Medium	Sprint-2
Local Garbage Collator	Login	USN-4	As a Waste Collator, I'll collect all the trash from garbage and load into garbage truck and send them to landfill	I an collect trash and pulled to truk and send off	Medium	sprint-2
Municipality	Login	USN-5	As a Municipality, I'll check the process are happening indisciplin manner without any issues	I an manage all these process going good	HIGH	Sprint-1