**Project Design Phase-II**

**Data Flow Diagram &User Stories**

|  |  |
| --- | --- |
| Date | 13 October 2022 |
| Team ID | PNT2022TMID31883 |
| Project Name | 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.

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

You can receive the data 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 70% then the first warning SMS is being sent, as depicted.

🡪 The first notification SMS sent by the system, once the waste reaches the level 80% full.

🡪 The second notification (Alert) SMS sent by the system, including that bins is at least 90% full and the garbage needs to be collected immediate.

**Condition of Bin**

**USER LOGIN**

**APP**

**User** (Government/Municipality)

**View**

**MESSAGE** to the municipality office

Make the shortest route

**ACCESS** location of filled bin

Engage **Garbage collecting Trucks**

Clean city and Green Environment

**COLLECTION** of bins in that route

**User Stories**

**User Stories:**

| **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 confirming my password. | I can access my account / dashboard | High | Sprint-1 |
|  |  | USN-2 | As a user, I will receive confirmation email once I have registered for the application | I can receive confirmation email & click confirm | High | Sprint-1 |
|  |  | USN-3 | As a user, I successfully installed the app and login to see the bin level in my area. | I can register & access the dashboard. | Low | Sprint-2 |
|  |  | USN-4 | As a user, I can register for the application through Gmail |  | Medium | Sprint-1 |
|  | Login | USN-5 | As a user, I can log into the application by entering email & password |  | High | Sprint-1 |
| Administrator | Login | USN-6 | As a admin, i gave user id and passwords for all workers and manage them. | I can manage web account/ dashboard |  |  |
| Municipality | Login | USN-7 | As a Municipality, I will check the process are happening in discipline manner without any issues. | I can manage all the works are well or not. |  |  |