

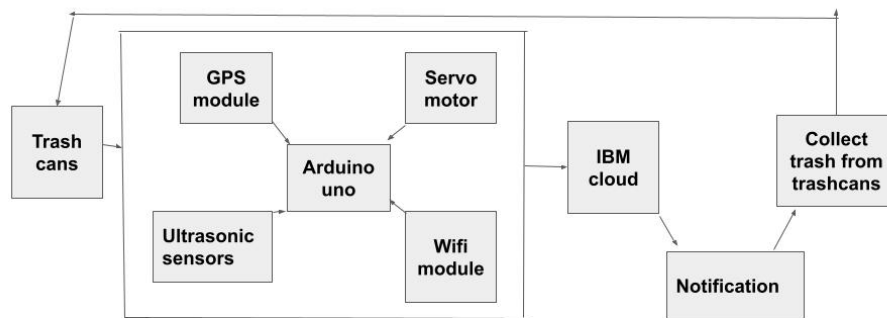
## Project Design Phase-II

### Data Flow Diagram & User Stories

|              |  |
|--------------|--|
| Date         | 12 May 2023  |
| Team ID      | NM2023TMID01588  |
| Project Name | Project - IOT based smartcity waste management system with connected trashcans |

#### 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'.



## 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 | Team Member  |
|------------------------|-------------------------------|-------------------|--|--|----------|--------------|
| Customer (Mobile user) | Registration and Login        | 1                 | As a customer, I want to be able to register and log in to the mobile app.         | <ol style="list-style-type: none"><li>1. The app should provide a registration screen where I can enter my details such as name, email, and password.</li><li>2. After successful registration, I should be able to log in using my registered email and password.</li><li>3. The app should validate the entered credentials and display appropriate error messages if there are any issues.</li></ol>                                | High     | Abitha       |
|                        | View Nearby Trashcans         | 2                 | As a customer, I want to view the nearby trashcans on a map within the mobile app. | <ol style="list-style-type: none"><li>1. The app should display a map with markers indicating the locations of nearby trashcans.</li><li>2. Tapping on a marker should provide additional information about the trashcan, such as its status (empty, half-full, full) and last collection time.</li><li>3. The app should update the trashcan information in real-time, reflecting any changes in status or collection time.</li></ol> | High     | Maha lakshmi |

|                         |                         |   |  |  |        |                |
|-------------------------|-------------------------|---|--|--|--------|----------------|
|                         | Request Trashcan Pickup | 3 | As a customer, I want to be able to request a trashcan pickup when it is full.   | <ol style="list-style-type: none"> <li>1. The app should provide an option to request a pickup for a specific trashcan.</li> <li>2. When requesting a pickup, I should be able to select the trashcan from a list or map view.</li> <li>3. After submitting the pickup request, the app should display a confirmation message.</li> </ol>  | Medium | Vijaya lakshmi |
| Customer (Web user)     | View Trashcan History   | 4 | As a web user, I want to view the historical data of a trashcan, such as its fill level and collection history.                    | <ol style="list-style-type: none"> <li>1. The web interface should provide a search or selection mechanism to choose a specific trashcan.</li> <li>2. Once a trashcan is selected, the web interface should display a graph or table showing its fill level over time.</li> <li>3. The web interface should also show the history of collection events, including dates and times.</li> </ol>      | Medium | Narmatha       |
| Customer Care Executive | Receive Pickup Requests | 5 | As a customer care executive, I want to receive pickup requests from customers and assign them to the appropriate collection team. | <ol style="list-style-type: none"> <li>1. The customer care executive should receive notifications or alerts for new pickup requests.</li> <li>2. The executive should be able to view the details of the pickup request, including the trashcan location and fill level.</li> <li>3. The executive should have the ability to assign the pickup request to a specific collection team.</li> </ol> | High   | Abitha         |

|               |                           |   |  |   |      |                |
|---------------|---------------------------|---|--|---|------|----------------|
|               |                           |   |  |   |      |                |
| Administrator | Manage Trashcan Locations | 6 | As an administrator, I want to be able to manage the locations and details of the trashcans. | <ol style="list-style-type: none"><li>1. The administrator should have access to an interface to add, edit, or delete trashcan locations.</li><li>2. The interface should allow the administrator to specify the geographical coordinates and other details for each trashcan.</li><li>3. The changes made by the administrator should be reflected in the mobile and web apps.</li></ol> | High | Vijaya lakshmi |