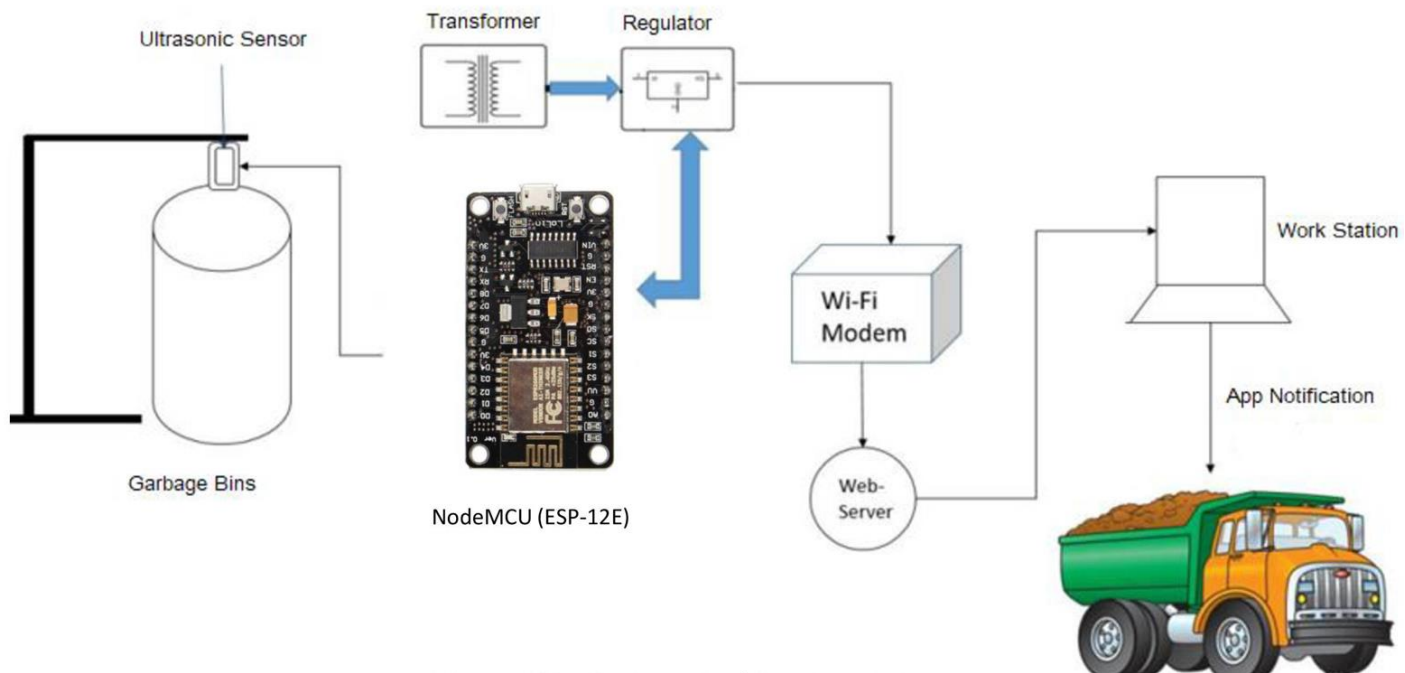


## Project Design Phase-II

### Technology Stack (Architecture & Stack)

|               |                                       |
|---------------|---------------------------------------|
| Date          | 19 October 2022                       |
| Team ID       | IBM-EPBL/IBM-Project-10972-1659249039 |
| Project Name  | Smart Waste Management System         |
| Maximum Marks | 4 Marks                               |

### Technical Architecture:



**Table-1 : Components & Technologies:**

| S.No | Component         | Description   | Technology         |
|------|-------------------|---|--------------------|
| 1.   | User Interface    | Using a web UI, the user engages with the application   | Android or ios app |
| 2.   | Application Logic | The environment is written in <b>Java</b> and based on Processing and other open-source software    | Java / Arduino     |
| 3.   | Database          | The data obtained through the sensors installed in the trash can be transmitted to a MySQL database | MySQL              |

**Table-2: Application Characteristics:**

| S.No | Characteristics          | Descrsiption  | Technology      |
|------|--------------------------|---|-----------------|
| 1.   | Open-Source Frameworks   | The Framework Directive sets the basic concepts and definitions related to waste management, including recycling and recovery | Java, MySQL     |
|      | Security Implementations | It Alert when it is full  | Smart Sensors   |
| 2.   | Scalable Architecture    | Application server, Database server   | NodeJS, MongoDB |
| 3.   | Availability             | The user can access through mobile application  | Android or ios  |
| 4.   | Performance              | Multiple user can access this through the application   | WMS Components  |

**References:**

[https://www.nhp.gov.in/references-for-waste-management\\_pg](https://www.nhp.gov.in/references-for-waste-management_pg)

<https://aws.amazon.com/architecture>

<https://medium.com/the-internal-startup/how-to-draw-useful-technical-architecture-diagrams-2d20c9fda90d>