

## SPRINT 3

Team ID	PNT2022TMID21058
Project Name	Smart Waste Management System for Metropolitan Cities

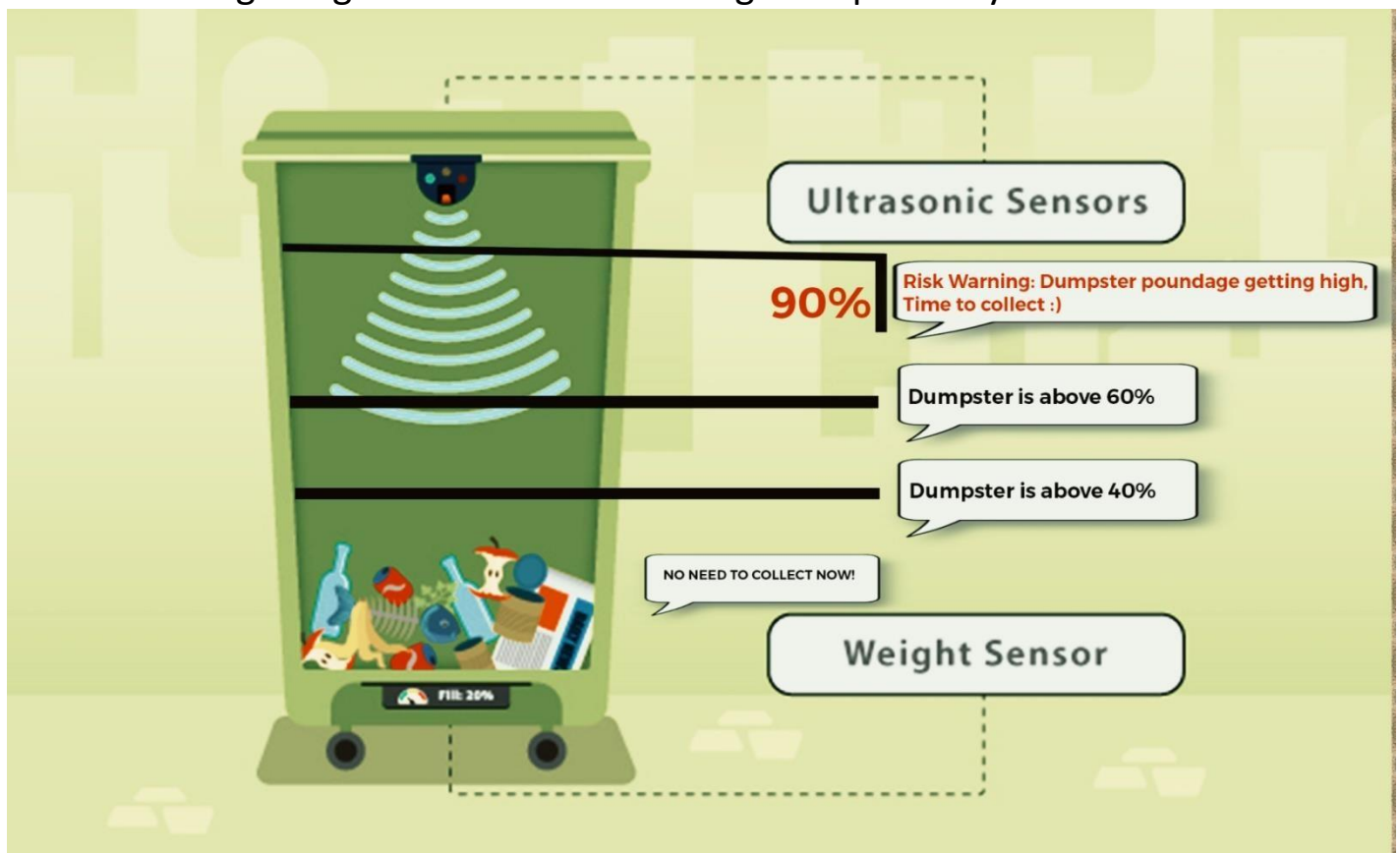
### DESIGN AN WEB PAGE :

#### PARAMETERS ARE:

1. DISTANCE
2. WEIGHT

#### PROJECT MODEL :

The ultrasonic sonic sensor and the weight sensor which are used to calculate the garbage distance and the weight respectively.



There are certain assumptions assumed by us, They are

- The length of the trash can is assumed to be 200 cm.
- The maximum weight of the can is assumed to be 2 Kg.
- If the garbage distance goes more than 180cm i.e more than 90% of the trash can , the sensor is has to send to send an alert to the garbage collector.
- If the alert is received , then the garbage

collector has to come and collect the garbage. ○ The current weight and the garbage distance is to be updated periodically, i.e for 5 minutes.

### Webpage code:

```
<!DOCTYPE html>
<html>

<head>
  <style> .container{ text-align: center; border:
7px rgb(255, 255, 255); width: none; height:
none; padding-top: 100px;

  }
  .smartbin{ align-items: center;

  }

</style>
<link rel="stylesheet" href="https://cdn.jsdelivr.net/npm/bootstrap@4.3.1/dist/css/bootstrap.min.css"
integrity="sha384ggOyR0iXCbMQv3Xipma34MD+dH/1fQ784/j6cY/iJTQUOhcWr7x9JvoRxT2MZw1T"
crossorigin="anonymous"> <meta charset="utf-8">
<meta name="viewport" content="width=device-width">
<title>Garbage Management System</title>
<link rel="icon" type="image/x-icon" href="/Images/DUMPSTER.png">
<link href="style.css" rel="stylesheet" type="text/css" />
<script src="https://www.gstatic.com/firebasejs/8.10.1/firebase-app.js"></script>
<script src="https://www.gstatic.com/firebasejs/8.10.1/firebase-database.js"></script>

<script> var firebaseConfig =
{ apiKey: "AIzaSyB9ysbnaWc3IyeCioh-aJQT_UCMd5CBFeU",
authDomain: "fir-test-923b4.firebaseio.com", databaseURL: "https://fir-test-
923b4-default-rtdb.firebaseio.com", projectId: "fir-test-923b4",
storageBucket: "fir-test-923b4.appspot.com", messagingSenderId:
"943542145393", appId: "1:943542145393:web:9b5ec7593e6a3cbd7966d0",
measurementId: "G-BN7JNX1Q7B"
}; firebase.initializeApp(firebaseConfig)
</script>
<script defer src="database.js"></script>
</head>

<body style="background-color:rgb(255, 255, 255);">
<script src="map.js"></script>

<div id="map_container">

<div id="map"></div>
<div id="alert_msg"><a href="rr.html" target="_blank">ALERT MESSAGE!</a></div>
```

```
</div>
</div>
<div class="container">
```

```
<center><a
href="https://g.page/sairamengg?share"
type="button" class="btn btn-dark">SMART
BIN</a></center></div>
<form>

  Distance:<input type="text" name="Distance" value="180">
  Weight:<input type="text" name="Weight" value="1kg">

</form>
<div class="smartbin">
  
</div>
  <script src="https://maps.googleapis.com/maps/api/js?key=AIzaSyBBLyWj-
3FWtCbCXGW3ysEiI2fDfrv2v0Q&callback=myMap"></script></div>

</body>

</html>
```

## Output :

When you click the smartbin button it will show the exact location where the garbage can is filled.

## When dustbin is filled:

When the smartbin is filled the alert message will be sent to the garbage collector along with the exact location with its co-ordinates .

When the garbage is not filled upto 90% the smartbin is ready to collect the garbage.

## When dustbin is not filled:

We are sending the data of the garbage can with help of Node-red and iot cloud which composed of the value equal to the weight of the garbage can and the distance of garbage present in the can.

