SPRINT 3
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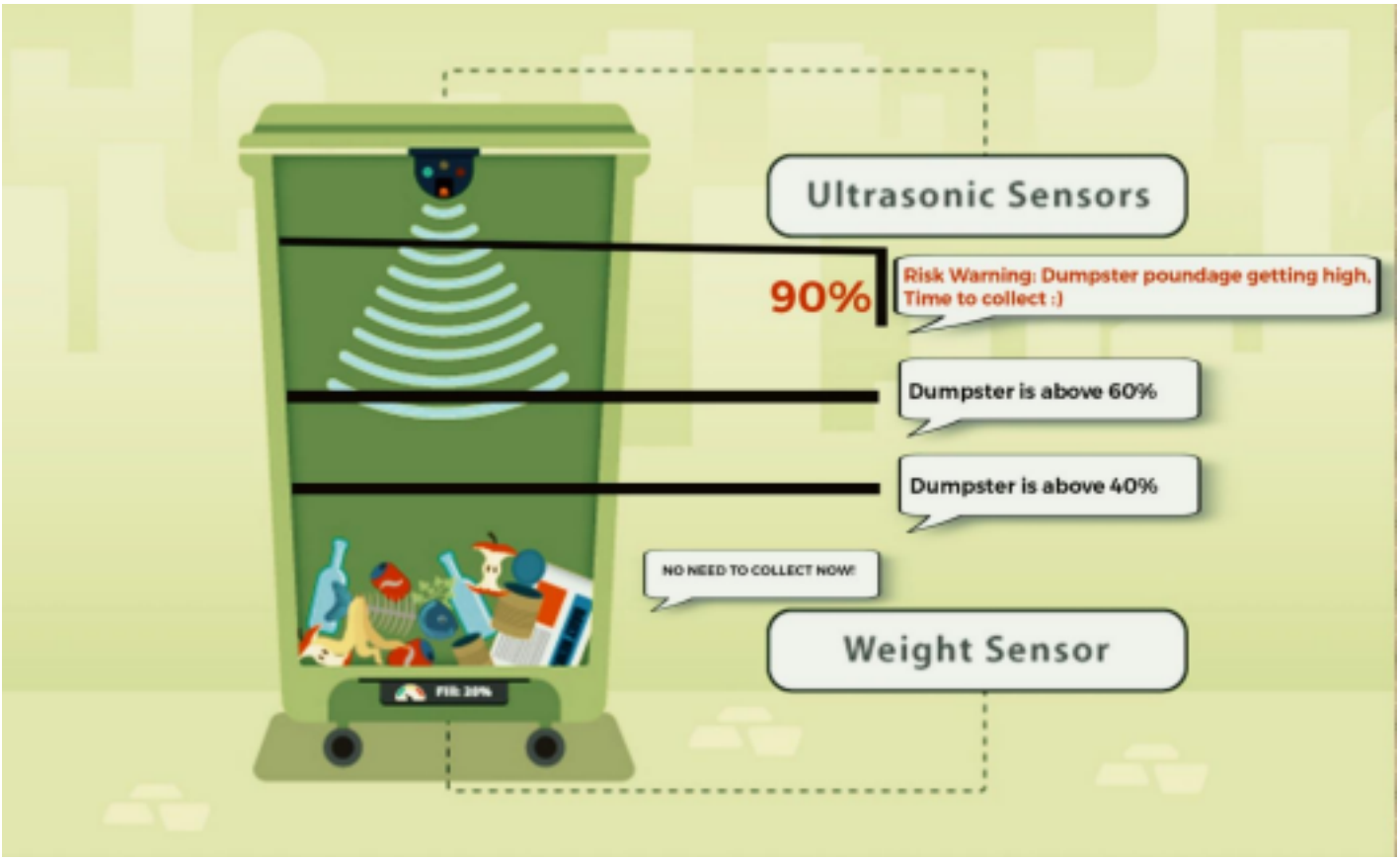
Smart Waste Management System For Metropolitan Cities

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

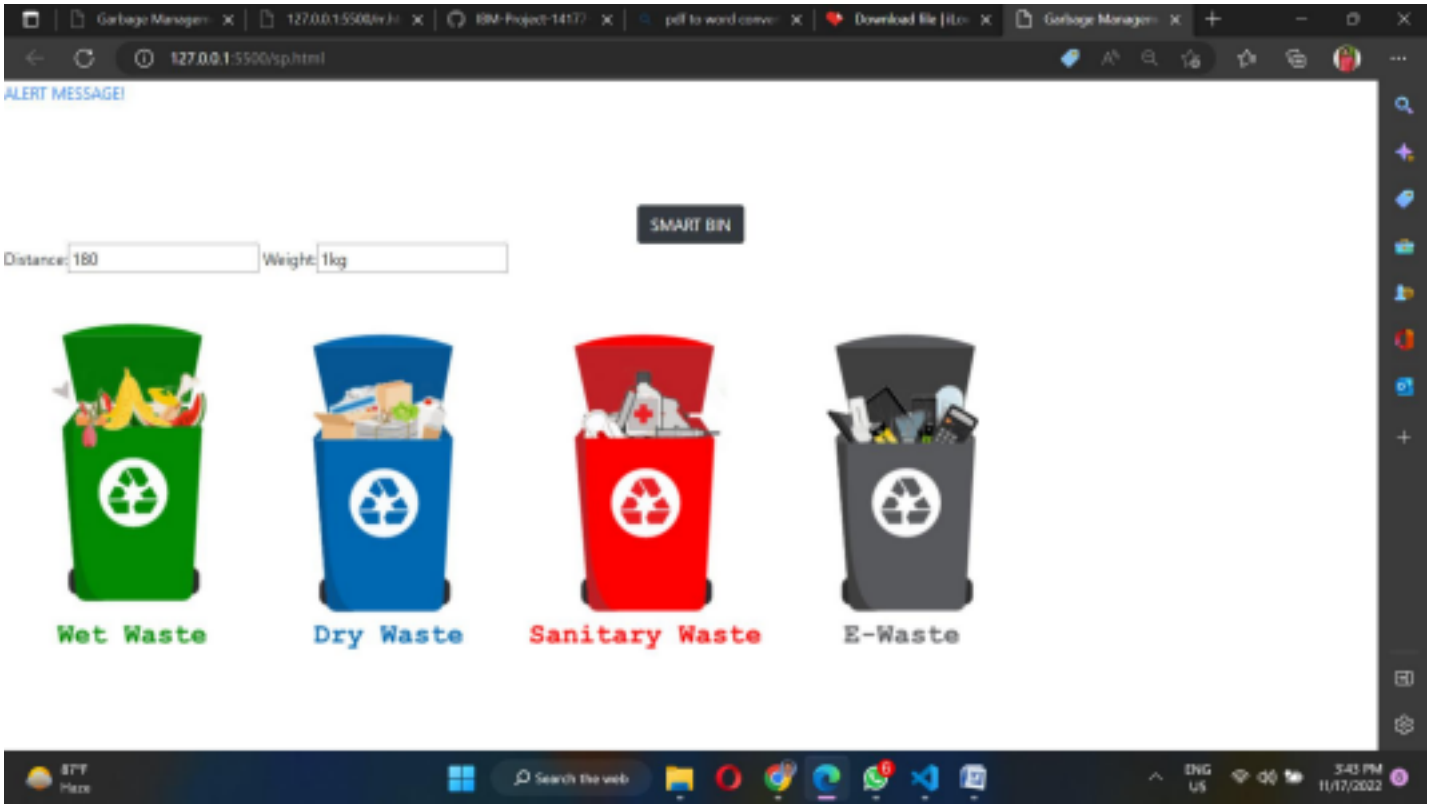
- The length of the trash can is assumed to be 200 cm.
- The maximum weight of the can is assumed to be 2 Kg.
- If the garbage distance goes more than 180cm i.e more than 90% of the trash can , the sensor is has to send to send an alert to the garbage collector.
- If the alert is received , then the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

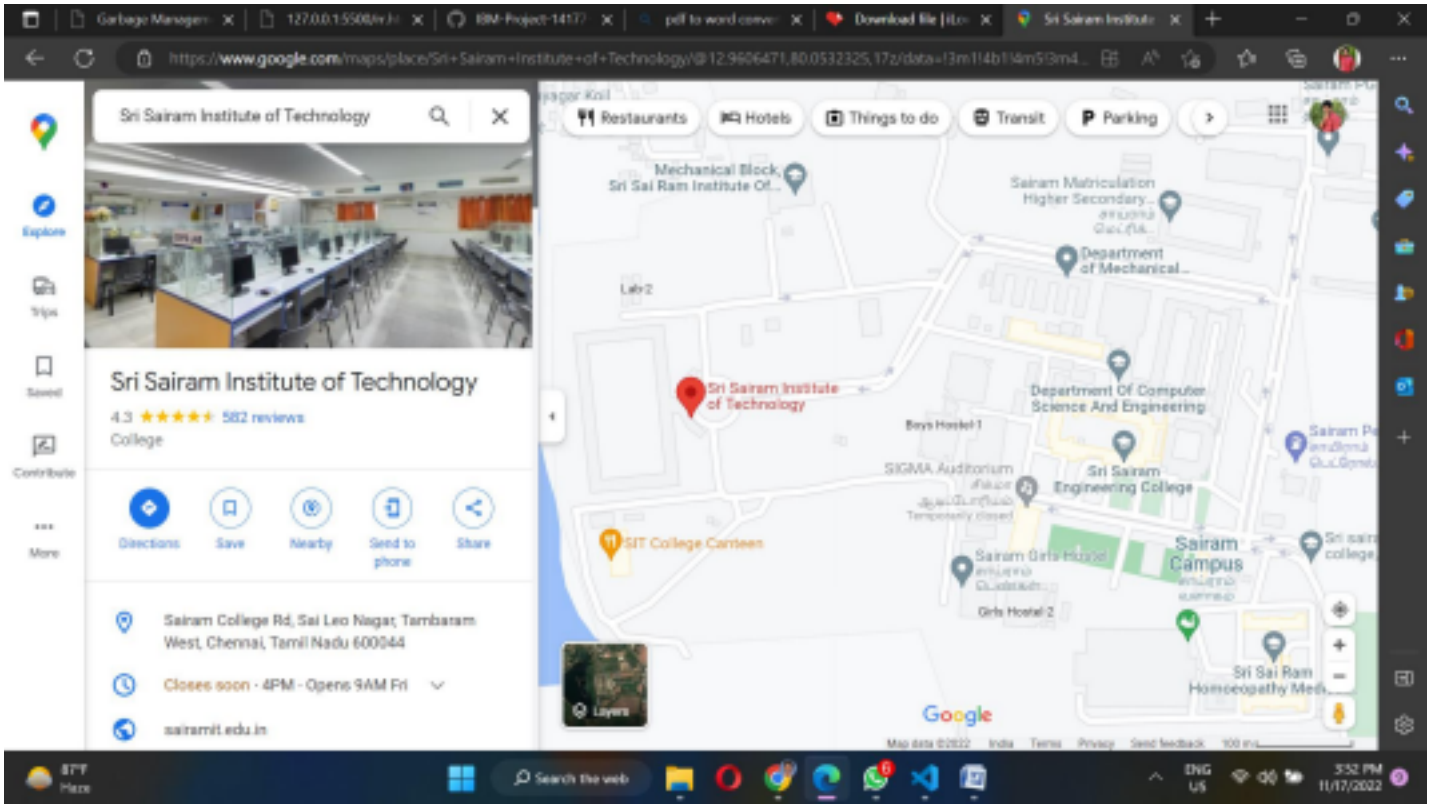
Webpage code:

```
<!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="sha384-
ggOyR0iXCbMQv3Xipma34MD+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.firebaseapp.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">
    <img src="Waste-Segregation-1024x398.png" alt="Waste segregation">
  </div>

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

</body>

</html>
```

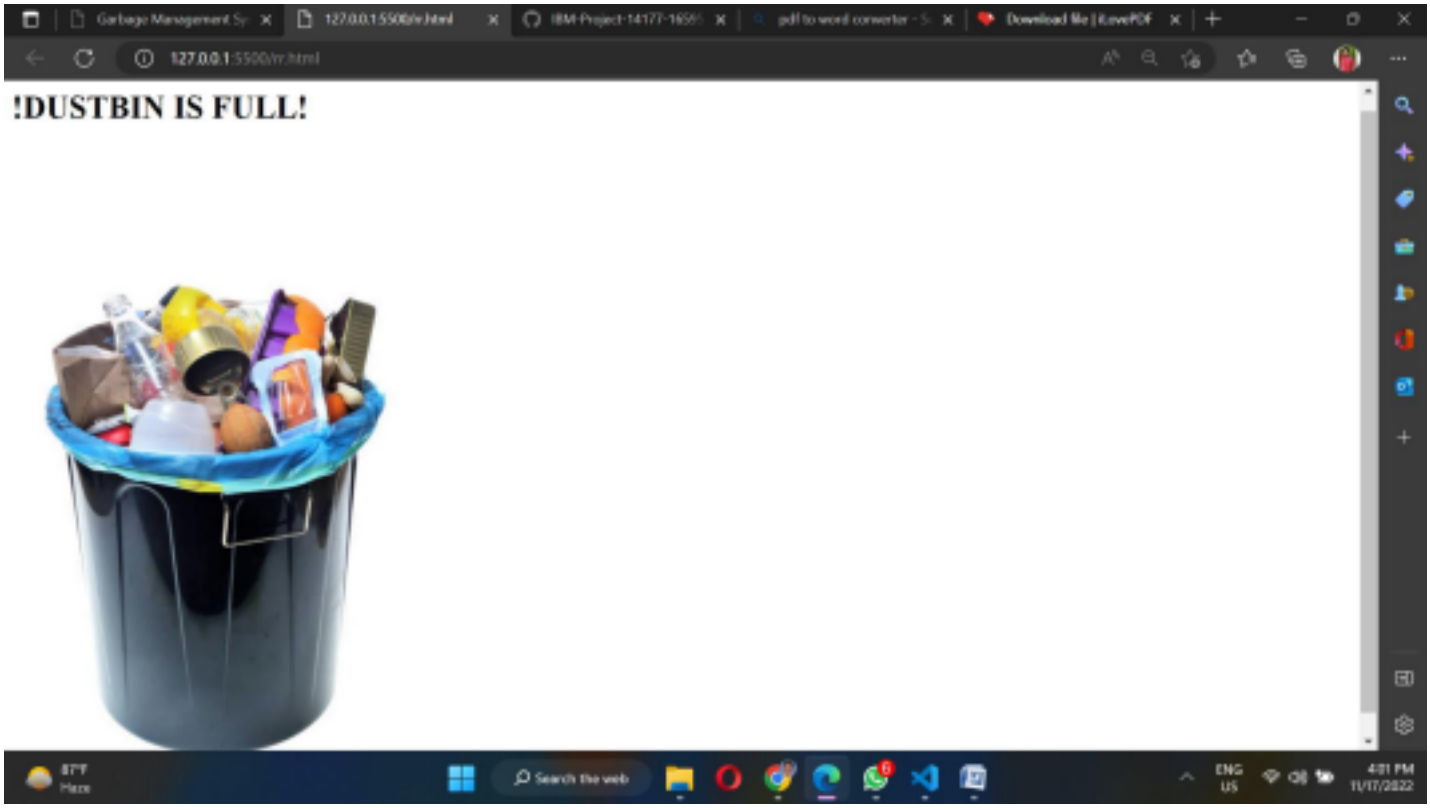
Output :



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



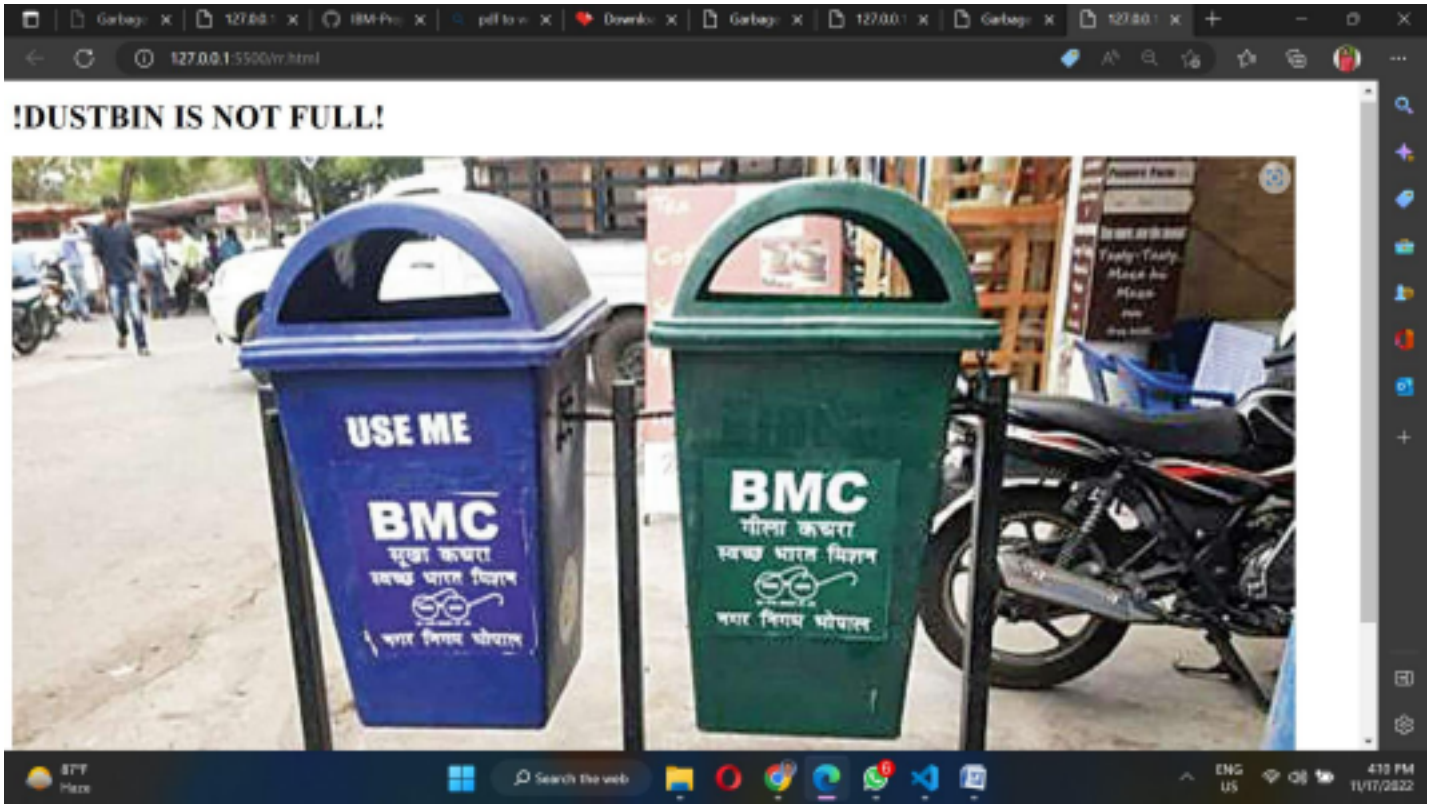
When dustbin is filled:



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.