

SPRINT-II

Date	29/10/2022
Team ID	PNT2022TMID49859
Project Name	Smart waste management system

CODING:

```
SoftwareSerial mySerial(9, 10);

#define trigPin 12

#define echoPin 13 void

setup()

{

mySerial.begin(9600); // Setting the baud rate of GSM Module

Serial.begin (9600); pinMode(trigPin, OUTPUT);

pinMode(echoPin, INPUT); delay(100);

}

void loop()

{

long duration, distance; int max = 80; // Let consider as Height of

the Garbage Bin is = 80 cm. float diff, perc; digitalWrite(trigPin,

LOW); delayMicroseconds(2); digitalWrite(trigPin, HIGH);

delayMicroseconds(10); digitalWrite(trigPin, LOW); duration =
```

```

pulseIn(echoPin, HIGH); distance = (duration/2) / 29.1; diff = max -
distance;    // 'diff' variable tells u that, how much the Garbage
Bin is Left to fill. perc = (diff/max)*100;    // 'perc' variable tells u
that, how much percentage the Garbage Bin is filled.

if (perc>=90)
{
    //Serial.println("Garbage Bin is FULL.");

    // When the Garbage Bin is filled more than 90%, then this Error Message will Displayed.

    // Call the Function of Send SMS.

    SendMessage();

    // Send Message Function Call.
} /*

else

{

    Serial.print("Garbage Bin is Filled ");

    Serial.print(perc);

    Serial.print(" %.");           // These 3 Lines are print, that how much the Garbage Bin is Filled...Ex.
    "Garbage Bin is Filled 70%.".

}

*/ /* if (distance >= 400 ||

distance <= 2)

{

    Serial.println("Out of range");

}

else

{

```

```
Serial.print(distance);

Serial.println(" cm");

}

*/ delay(500);

}

void SendMessage()

{

mySerial.println("AT+CMGF=1");           //Sets the GSM Module in Text Mode

delay(1000);                             // Delay of 1000 milli seconds or 1 second

mySerial.println("AT+CMGS=\"+918792574742\\r\"");    // Replace x with mobile number

delay(1000); mySerial.println("Garbage Bin is Full.");    // The SMS text you want to

send delay(100); mySerial.println((char)26);           // ASCII code of CTRL+Z

delay(1000);

}
```