

## Name of the Organization: Osho Krishna CHS

### SMART TRASH BIN

In today's digital age, smart waste management requires an online presence to enhance impact and provide real-time insights. Our IoT-Based Smart Dustbin project automates waste segregation and overflow detection while ensuring accessible data for wider adoption.

To support this, we developed a web platform that displays real-time sensor data, notifies users of full bins, and offers an interactive dashboard for monitoring and optimization. This platform helps decision-makers streamline waste collection and promote sustainable practices.



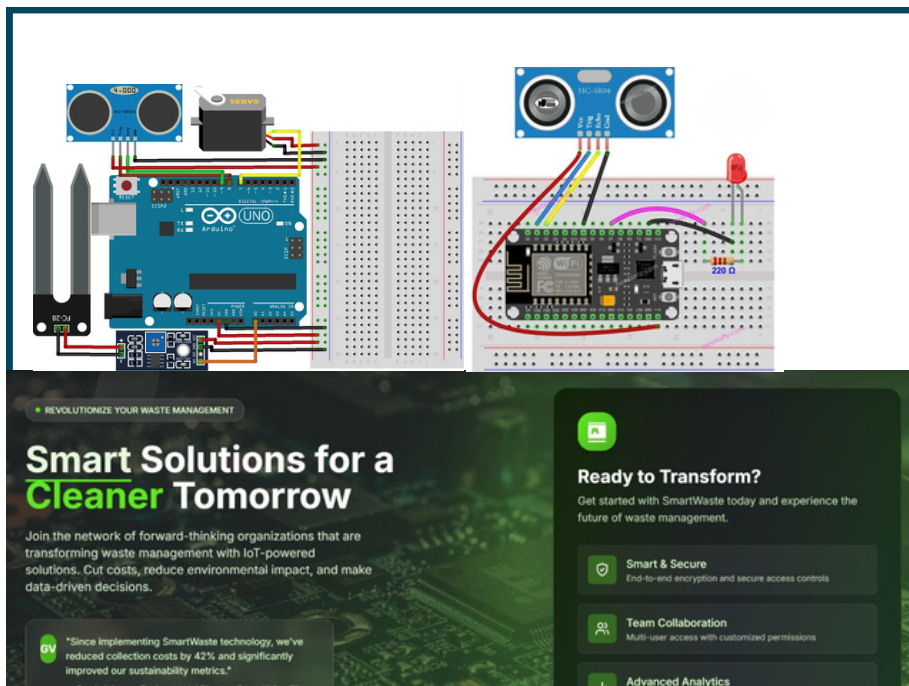
SDG-3

SDG-11

SDG-12

Group no. 17

## Domain: IoT And Robotics



Github Link

Video Link

## Team Members Name

- 1.Soham Kamathi
- 2.Gaurav Khutwal
- 3.Sakshi Kukreja
- 4.Vanshika Somnani

## Mentor

Prof. Mannat  
Doutani

## Proposed Solution



Smart trashbin prototype

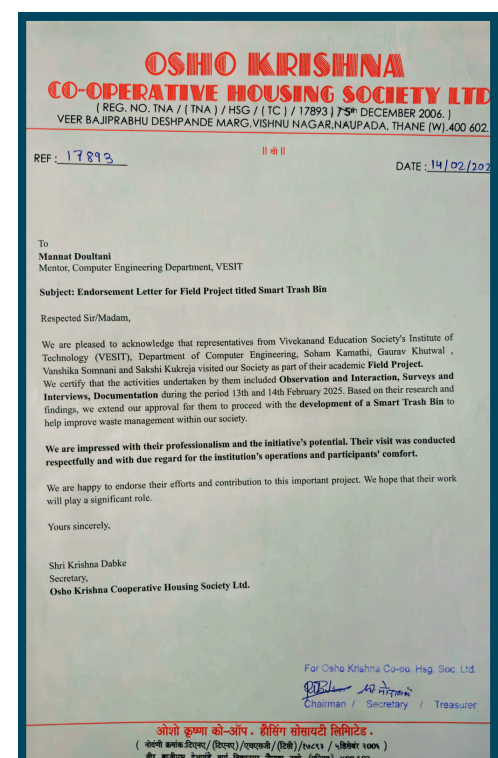
## Tools Used

### Hardware:

- Arduino Uno
- ESP8266 NodeMCU
- HC-SR04 Ultrasonic Sensor
- LED
- Voltage Divider (Resistors)
- Breadboard And Wires
- Servo Motor
- Moisture Sensors

### Software:

- Arduino IDE
- Web platform using React (for data visualization and management)



Endorsement Letter