

# **Waste Management System**

Submitted in partial fulfillment of the requirements of the degree of

## **BACHELOR OF COMPUTER ENGINEERING**

**by**

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IEN: 12012002

Kunal Nathani

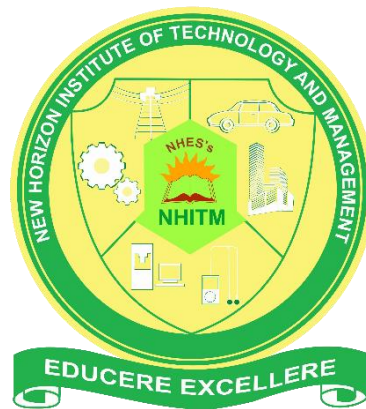
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IEN: 12012003

Guided by:

Ms. Yogita Chavan



Department of Computer Engineering

New Horizon Institute of Technology and Management,

Thane (2020-2021)



## NEW HORIZON INSTITUTE OF TECHNOLOGY AND MANAGEMENT, THANE

### CERTIFICATE

This is to certify that the Project entitled **“Waste Management System”** is a bonafide work of **Akash Gupta (IEN-12012002)**, **Kunal Nathani (IEN-12012052)**, **Asmit Prajapati (IEN- 12012003)** submitted to the University of Mumbai in partial fulfillment of the requirement for the award of the degree of **Bachelor of Engineering in Computer Engineering**

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Ms. Yogita Chavan

(Project Guide)

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Dr. Sanjay Sharma

Deshmukh (Head of Department)

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Dr. Prashant

(Principal)



## NEW HORIZON INSTITUTE OF TECHNOLOGY AND MANAGEMENT, THANE

### Project Report Approval for S.E.

This Project report entitled *Waste Management System* by *Kunal Nathani, Akash Gupta and Asmit Prajapati* is approved for the degree of *Bachelor of Engineering in Computer Engineering, 2021-22*.

Examiner Name

Signature

1. \_\_\_\_\_

\_\_\_\_\_

2. \_\_\_\_\_

\_\_\_\_\_

Date:

Place: Thane

## **Declaration**

We declare that this written submission represents our ideas in our own words and where others' ideas or words have been included, We have adequately cited and referenced the original sources. We also declare that we have adhered to all principles of academic honesty and integrity and have not misrepresented or fabricated or falsified any idea/data/fact/source in my submission. We understand that any violation of the above will be cause for disciplinary action by the Institute and can also evoke penal action from the sources which have thus not been properly cited or from whom proper permission has not beentaken when needed.

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Kunal Nathani (IEN –12012052)

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Asmit Prajapati (IEN –12012003 )

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Akash Gupta (IEN -12012002)

Date:

# **Abstract**

To be a leader in the recovery and conservation of the environment, under our commitment to deliver comprehensive and permanent sustainable solutions to the environmental problems faced by our clients and society. To manage solid waste as a resource, promoting sustainable, environmentally sound and cost effective practices through an integrated system of waste reduction, reuse, recycling, innovative technology, customer service and education. Our main motto is to reduce wastage of resources using "FOUR R'S FOR A BETTER EARTH "that are Reuse, Recycle, Reduce and Recover.

## **Reuse:**

- We take all the Reusable things(Example: Clothes, Books etc.) from the donator's & give it to NGO' s who are in need of such things.

## **Recover:**

- We Recover the Solid waste which is useful for someone from the donator's

## **.Recycle:**

- We Recycle the waste from someone which is useful to someone.

## **Our Mission**

Waste Management is on a mission to maximize resource value, while minimizing - and even eliminating - environmental impact so that both our economy and our environment can thrive. To make earth a better place to live.

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- 1 Introduction
- 2 Problem Statement, Objectives and Scope
- 3 Requirement Analysis and Methodology ...
- 4 System Design and Implementation ...
- 5 Conclusion and Future Scope ...

# **Chapter 1**

## **Introduction**

# Chapter 1

## 1.1 Introduction

To be a leader in the recovery and conservation of the environment, under our commitment to deliver comprehensive and permanent sustainable solutions to the environmental problems faced by our clients and society. To manage solid waste as a resource, promoting sustainable, environmentally sound and cost effective practices through an integrated system of waste reduction, reuse, recycling, innovative technology, customer service and education. Our main motto is to reduce wastage of resources using "FOUR R'S FOR A BETTER EARTH "that are Reuse, Recycle, Reduce and Recover.

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Waste Management is on a mission to maximize resource value, while minimizing - and even eliminating - environmental impact so that both our economy and our environment can thrive.To make earth a better place to live.



## Need of the system :-

Solid waste management affects every single person in the world, whether individuals are managing their own waste or governments are providing waste management services to their citizens. As nations and cities urbanize, develop economically, and grow in terms of population, the World Bank estimates that waste generation will increase from 2.01 billion tons in 2016 to 3.40 billion tons in 2050. At least 33% of this waste is mismanaged globally today through open dumping or burning.

Global problems:

Rich countries (such as the United States, Canada and members of the European Union) represent just 16% of global population, but produce 34% of the world's waste. An estimated 93% of waste in low-income countries is mismanaged, as compared to 2% in high-income countries.

Daily per capita waste generation is estimated to be 4.87 pounds in North America, as compared to 1.01 pounds in Sub-Saharan Africa. Though the World Bank expects waste to triple in Sub-Saharan Africa and to double in South Asia, accounting for a full 35% of global output by 2050.

Collection is more common in urban areas for these low-income countries than in rural areas, but is still far less prevalent than in developed nations. The World Bank found that the amount of collection in low-income countries increased from about 22% to 39% since 2012 — though noted data may not be directly comparable

## Climate issues

Global waste production accounted for about 5% of global emissions in 2016, with an output of 1.6 billion metric tons of carbon-dioxide-equivalent. That number is expected to grow to 2.6 billion billion metric tons by 2050.

Food waste accounted for 47% of those emissions — showing both a monumental problem and an opportunity for gases released by food waste to be harnessed for energy. Silpa Kaza, the report's lead author, told Waste Dive these emissions "are mostly driven by open dumping of waste and then landfilling of waste without landfill gas systems."

Underdeveloped waste management infrastructure may also become a growing sign of global inequality as climate change advances. The open dumpsites in poorer countries can pose multiple hazards in the form of deadly landslides — which may be exacerbated by weather events — or pollution in waterways. Because of this, Kaza said a case can be made for addressing waste as part of broader climate resiliency strategies.

# **Chapter 2**

## **Problem Statement, Objective and Scope**

## **Chapter 2**

### **Problem Statement, Objective and Scope**

#### **2.1 Problem Statement**

To Design a waste collection system that allows citizens to segregate the various types of waste they want to donate and the NGO authorities to efficiently collect the same. The system should be website based.

#### **2.2 Objectives**

- To develop and maintain a modern sustainable ecological system for waste management and recycling technologies of industrial and domestics waste in the programme region.
- To improve waste management system efficiency through creation of the waste exchange in the programme area based on selected best practices in india.
- To encourage and promote the development and progress of online waste collection system towards achieving in the field of computer science and technology for theatre application both for recycling and deployment of waste

#### **2.3 Scope**

India is a developing nation and problems such as hunger and other issues are still prevalent to a larger degree. We shall try to contribute our best by connecting the people in need with the providers and donors. We shall try and expand our site reach and the amount of help we provide.

# **Chapter 3**

## **Requirement Analysis and Methodology**

## **Chapter 3**

### **Requirement Analysis and Methodology**

#### **3.1 Requirement Analysis**

##### **3.1.1 Hardware and System Requirements**

###### **Front End Tools :**

- HTML5
- CSS
- JAVASCRIPT
- PHP

###### **Back end Tools :**

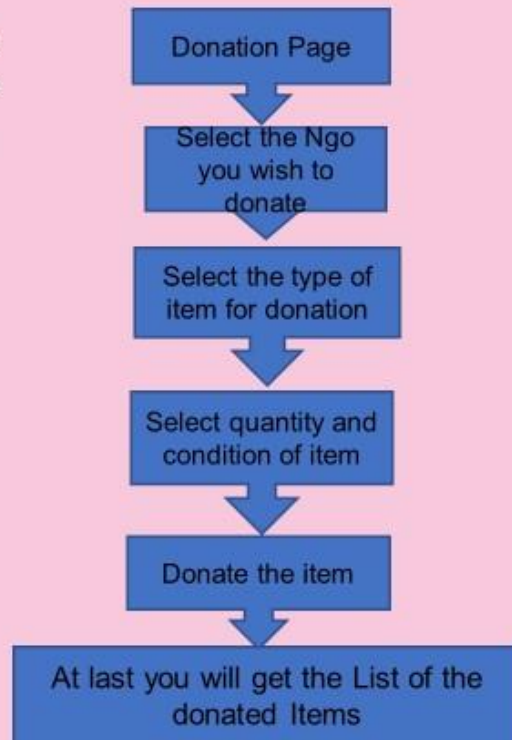
- MYSQL
- SQL SERVER 2008
- SQL LITE

###### **Hardware Requirements:**

- **WINDOWS :-** XP , WIN 10 , WIN 11
- **RAM :-** 512 MB or More
- **HARD DISK :-** 1GB
- **PROCESSOR :-** 1.0 GHz

## **Methodology :**

- **Steps involve to donate items/product once you successfully register & login at our donation website :**



**Fig 3.1- Project Workflow**

# **Chapter 4**

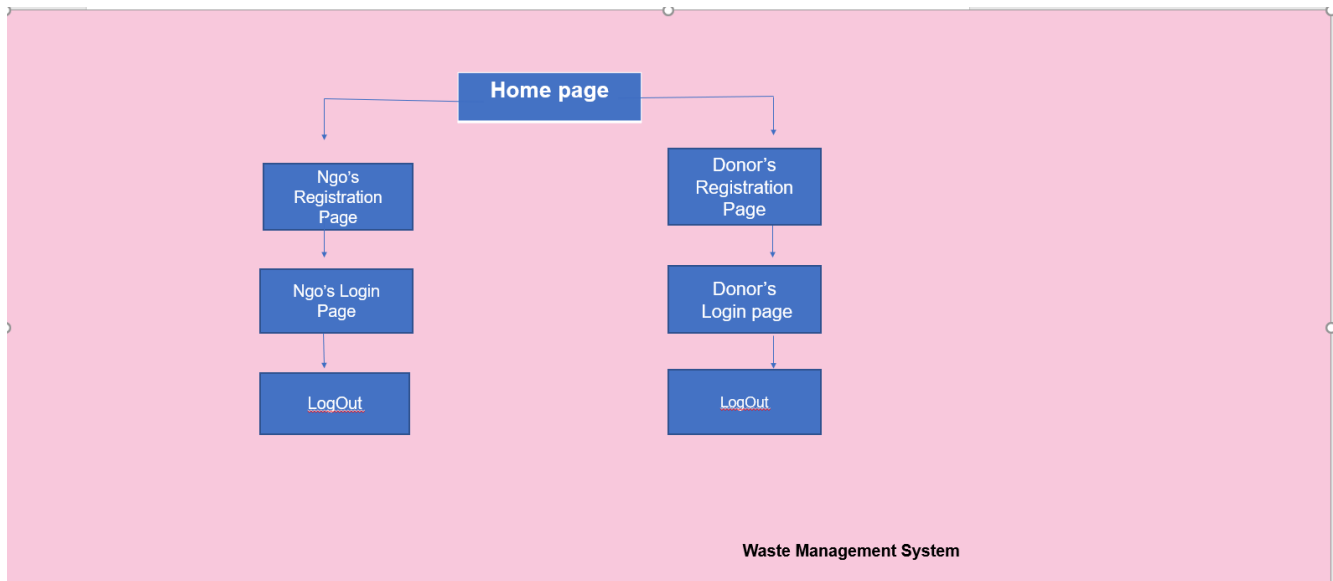
## **Requirement Analysis and Methodology**



# Chapter 4

## System Design and Implementation

### Implementation:



Home Page:



Waste Management System


LoginRegister



### Need of Waste Management System?

Solid waste management affects every single person in the world, whether individuals are managing their own waste or governments are providing waste management services to their citizens. As nations and cities urbanize, develop economically, and grow in terms of population, the World Bank estimates that waste generation will increase from 2.01 billion tonnes in 2016 to 3.40 billion tonnes in 2050. At least 33% of this waste is mismanaged globally today

About us:



### Our Vision

To be a leader in the recovery and conservation of the environment, under our commitment to deliver comprehensive and permanent sustainable solutions to the environmental problems faced by our clients and society.

To manage solid waste as a resource, promoting sustainable, environmentally sound and cost effective practices through an integrated system of waste reduction, reuse, recycling, innovative technology, customer service and education. Our main motto is to reduce wastage of resources using "FOUR R'S FOR A BETTER EARTH" that are Reuse, Recycle, Reduce and Recover.

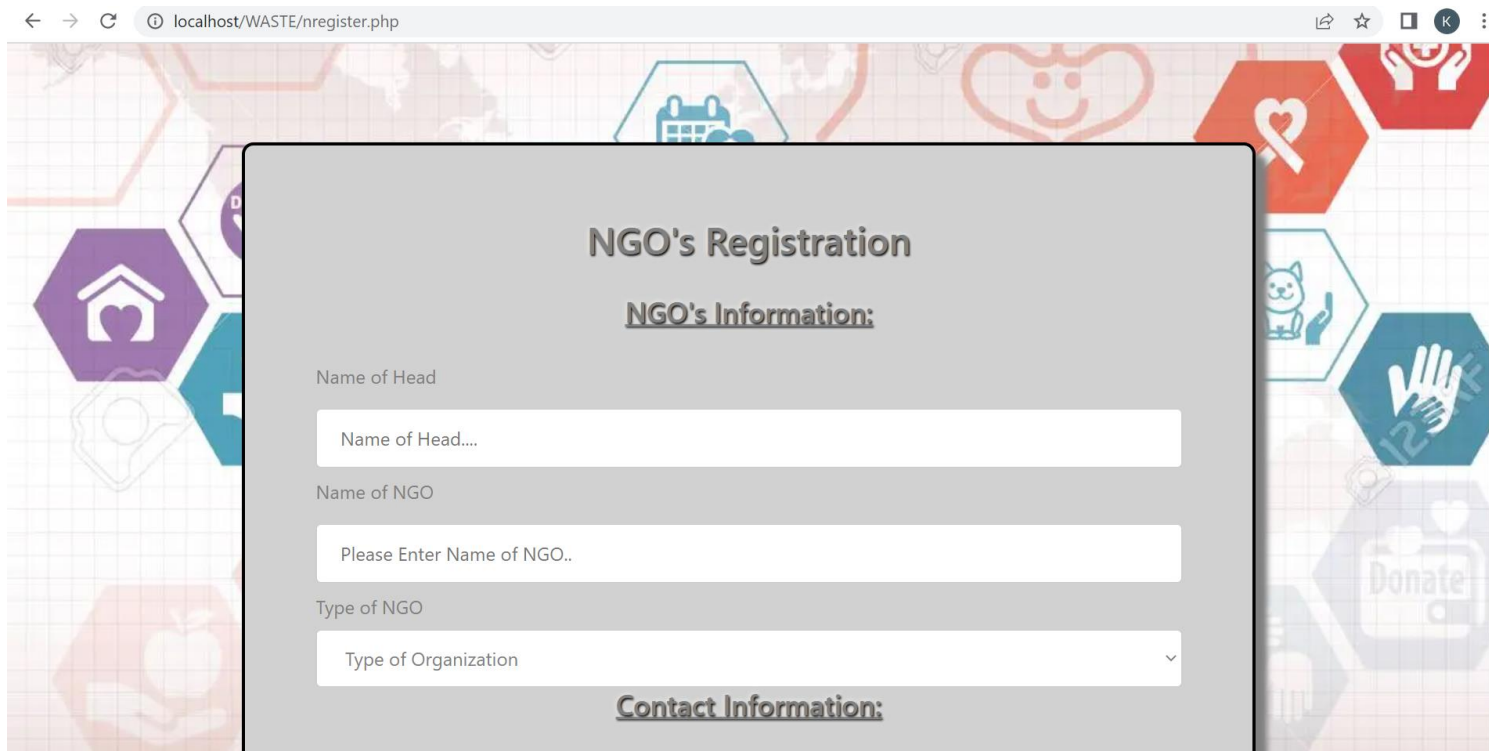
**Reuse:**  
We take all the Reusable things (Example: Clothes, Books etc.) from the donator's & give it to NGO's who are in need of such things.

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**Recycle:**  
We Recycle the waste form someone which is useful to someone.

## NGO Registration :

← → ↻ ⓘ localhost/WASTE/nregister.php



The form is titled "NGO's Registration" and is set against a background of various icons representing social and environmental themes. It is divided into two main sections: "NGO's Information:" and "Contact Information:". The "NGO's Information:" section contains three input fields: "Name of Head" with a placeholder "Name of Head....", "Name of NGO" with a placeholder "Please Enter Name of NGO..", and "Type of NGO" which is a dropdown menu currently showing "Type of Organization". The "Contact Information:" section is currently empty.

### NGO's Registration

#### NGO's Information:

Name of Head

Name of NGO

Type of NGO

Contact Information:

## Event Page:



The event page features a dark background with a large image of a group of people sitting at tables. Overlaid on this is a circular portrait of Mahatma Gandhi. The text is centered and includes a title, a subtitle, and a detailed paragraph about a recent campaign. Navigation arrows are visible on the left and right sides of the text area.

### Event

#### Events Executed by partner NGO's

Our Works



Celebrating Gandhi Jayanthi by Saying No to Plastic  
Akshaya patra Organization

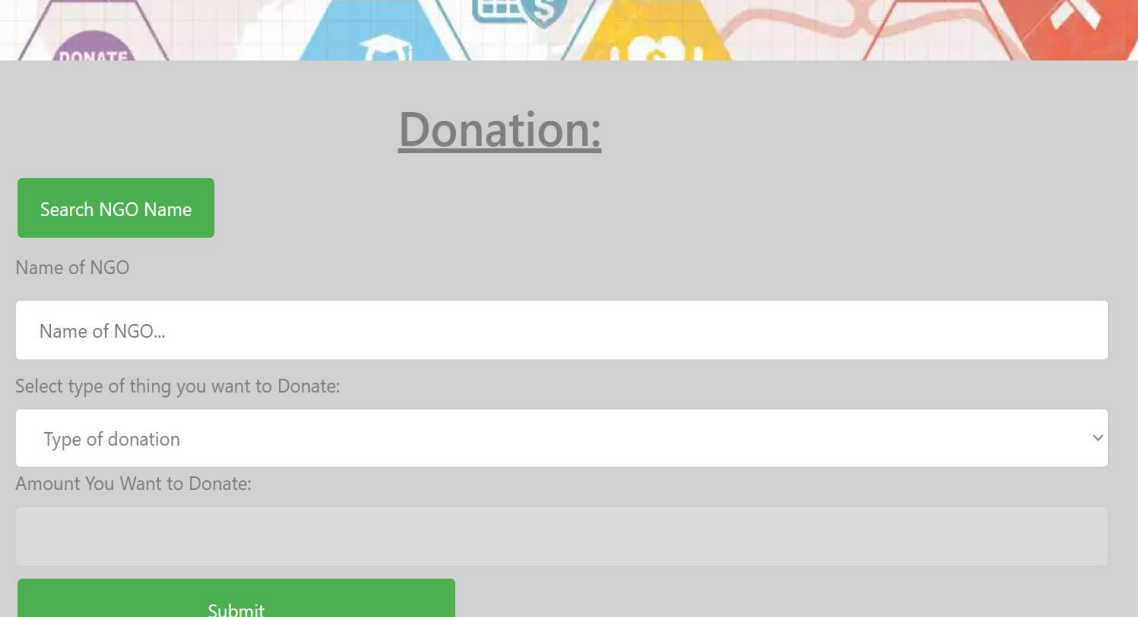
←

To commemorate the 150th Birth Anniversary of Mahatma Gandhi, Aikya Youth, the official volunteering arm of Akshaya Patra, conducted a campaign to spread awareness about cleanliness and the need to reduce & discard single-use plastic. Over 300 enthusiastic young volunteers came out in support of the campaign at Yesvantpur Junction Railway Station, Bengaluru. Thanks to South Western Railways, Bengaluru Division for the warm welcome and whole-heartedly supporting this campaign.

→

localhost/waste/event.php#testimonial4

## Donation Page:



localhost/WASTE/donor/donation.php

## Donation:

Search NGO Name

Name of NGO

Name of NGO...

Select type of thing you want to Donate:

Type of donation





Amount You Want to Donate:

Submit

## Testimonial Page:


100% — + Reset

Our Work:  
Total Donation: 300000

Distribution of Blankets 100+ Distribution of Wheel Chair 1000+ Distribution of Food 10000+ Distribution of Clothes 100000+

Our Testimonial



◀ I had heard a lot about Waste Management Organization and I respect them for their wonderful work. My blessings are with you and hope you have a good treatment. ▶

**NGO Login Page:**

← → ↻ ⓘ localhost/WASTE/nlogin.php

NGO's Login

Email

Your Email id..

Password:

Please Enter Password..

☐ Show Password

Submit

Signup

**Donor's Login Page:**

← → ↻ ⓘ localhost/WASTE/dlogin.php

Donor's Login

Email

Your Email id..

Password:

Please Enter Password..

☐ Show Password

Submit

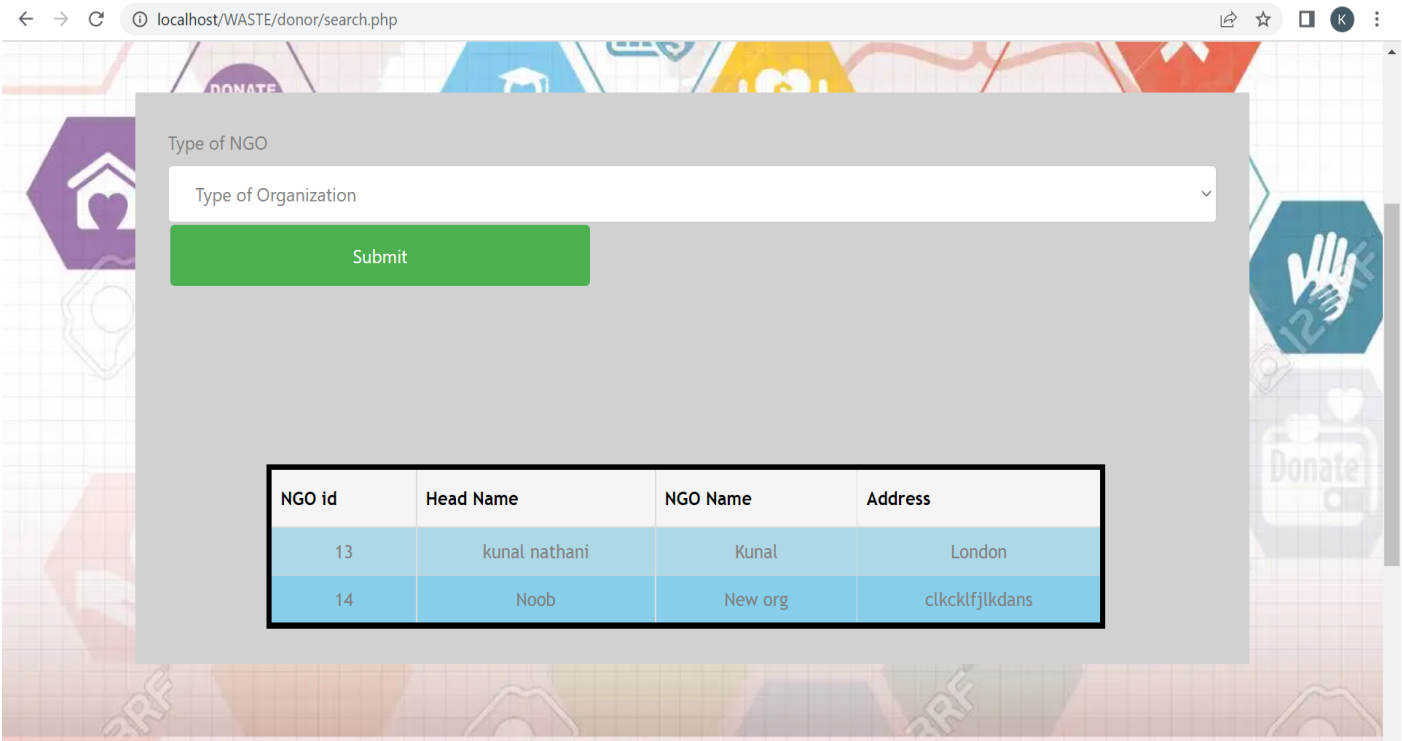
Signup



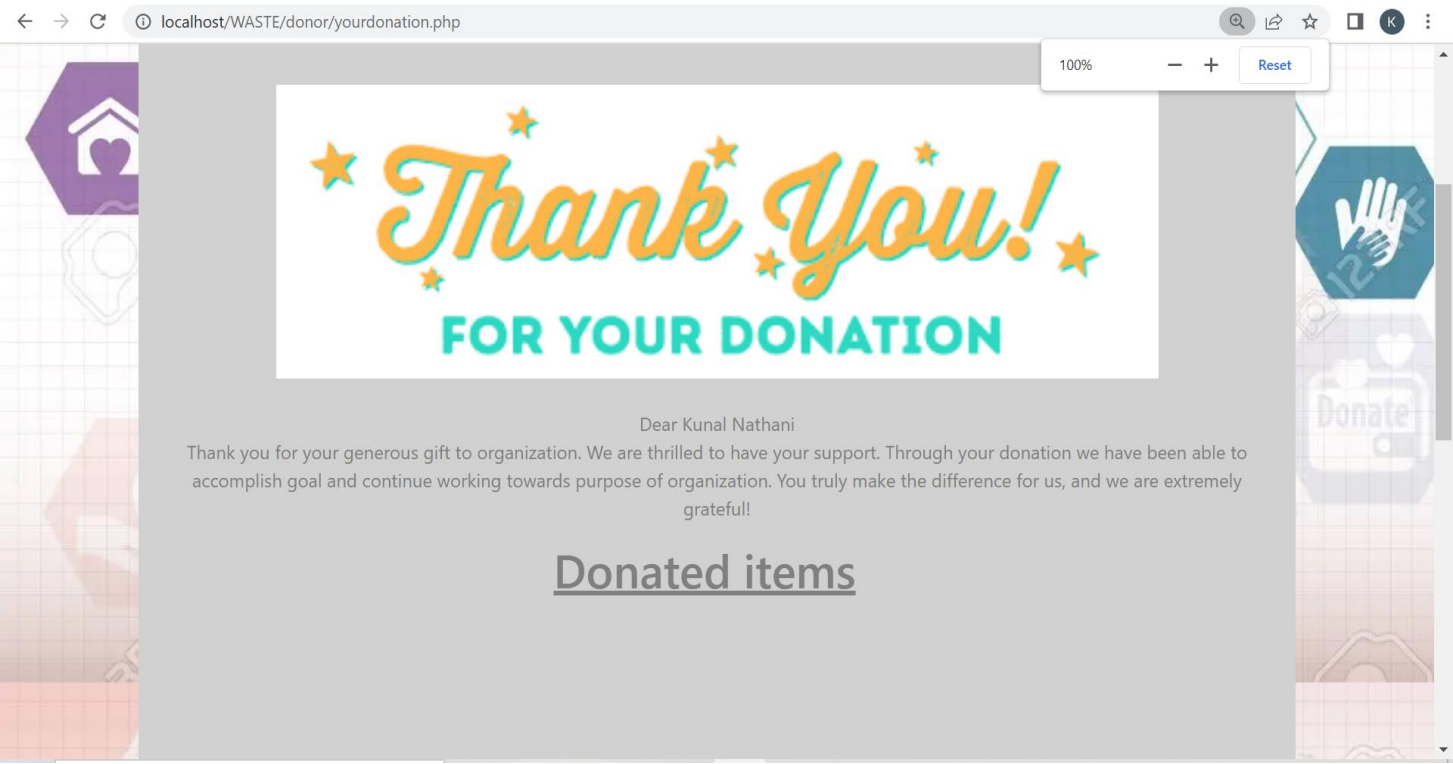
**NGO/Donor Home Page:**



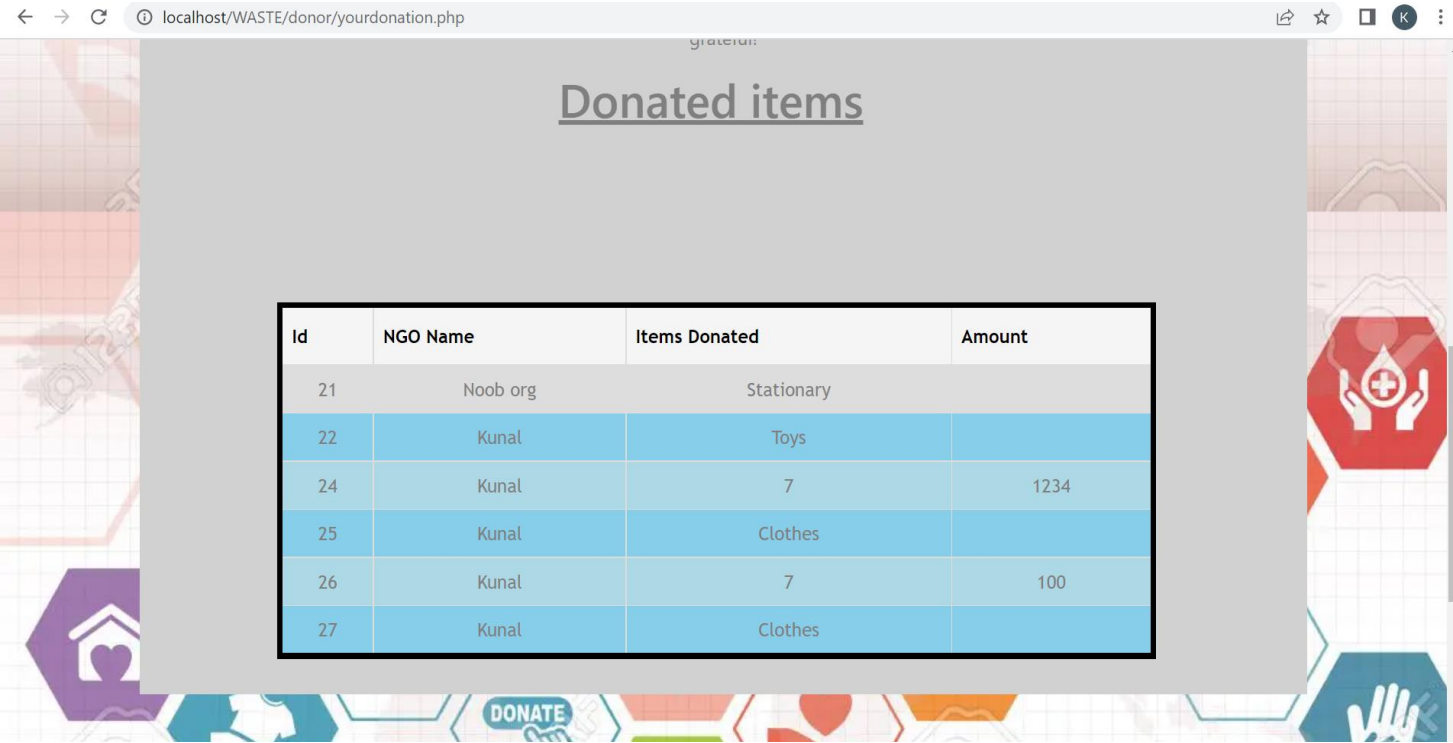
**Synthesis Page:**



**Your Donation Page:**



**Donor's Donation Page:**



# Feedback Page:

← → ↻

localhost/WASTE/donor/feedback.php

🔍 ☆ 📱 K ⋮

Feedback

Email

Your Email id..

Give Feedback:

Your Feedback..

Rate Us:

☆☆☆☆☆

Submit

# NGO Donation Page:

← → ↻

localhost/WASTE/ngo/donor.php

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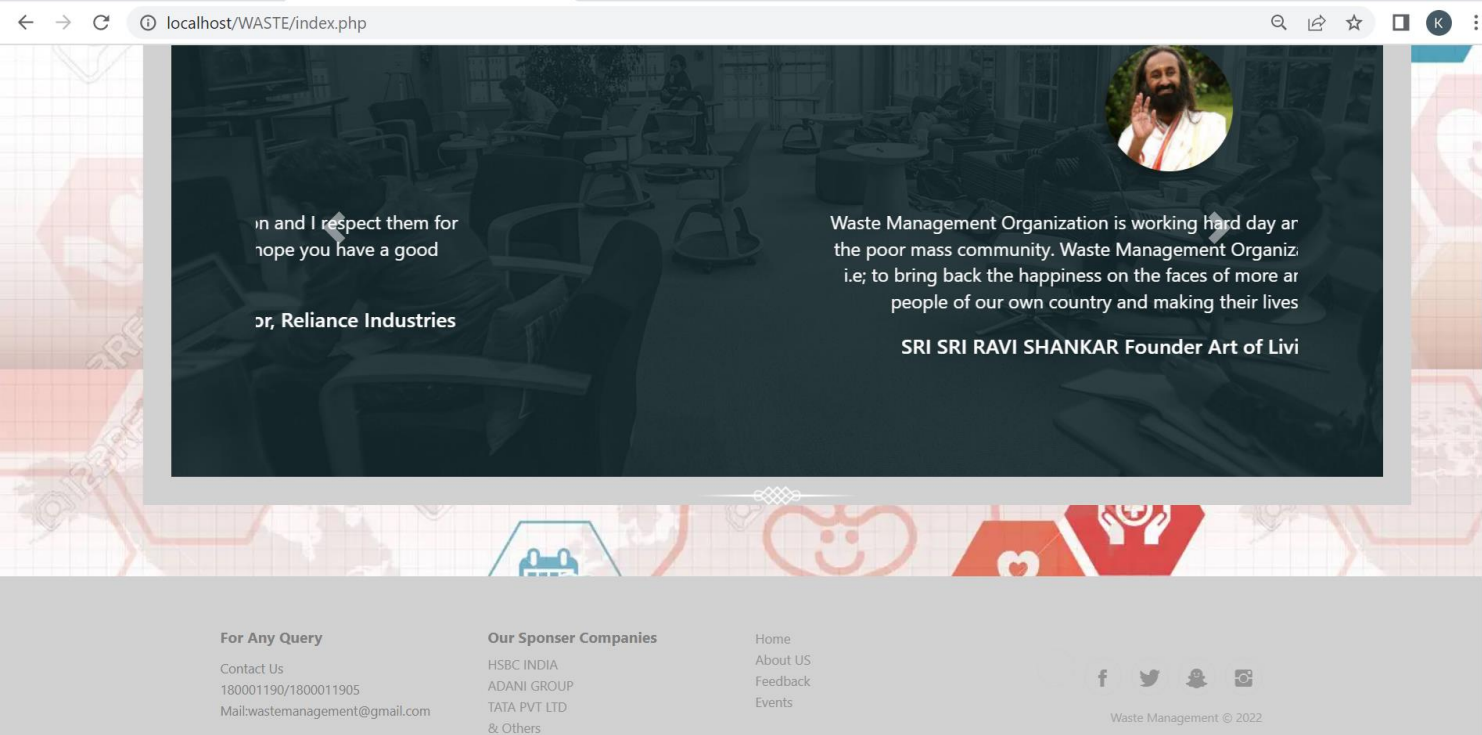
PEOPLE  
NONGOVERNMENTAL ORGANIZATION  
PARTNERS  
RESPONDS  
DONORS  
CHARITY  
DONATIVE  
VOLUNTEERS  
SOCIAL  
HUMANITY  
HELP  
NGO  
COMPROMISE  
UNITY  
RIGHTS  
FOUNDATION  
DONOR  
VOLUNTEER ASSISTANCE  
PEOPLE  
HUMANITY  
CHARITY  
NONGOVERNMENTAL ORGANIZATION  
VOLUNTEER

Donated items:

Donor id	First name	Last Name	Things donated	Amount Donated	phone	email
22	Kunal	Nathani	Toys		12390832	Kunal.n@somaiva.edu
23	k	nafdnslc	7	100	749874398	Kunal@13.gmail.com
24	Kunal	Nathani	7	1234	12390832	Kunal.n@somaiva.edu
25	Kunal	Nathani	Clothes		12390832	Kunal.n@somaiva.edu
26	Kunal	Nathani	7	100	12390832	Kunal.n@somaiva.edu
27	Kunal	Nathani	Clothes		12390832	Kunal.n@somaiva.edu



## Footer Page:



# **Chapter 5**

## **Conclusion and Future Scope**

## **Chapter 5**

### **Conclusion and Future Scope**

#### **5.1 Conclusion**

We would like to conclude that our project aims at helping the needy by connecting them with donors by using the NGOs as an intermediary who shall do their job aided by the website that we shall provide them. Our website shall aim to mitigate issues like lack of awareness among donors, lack of transparency in the donation process and this acts as a bridge between the people in need.

#### **5.2 Future Scope**

India is developing nation and problems such as hunger and other issues are still prevalent to a larger degree. We shall try to contribute our best by connecting the people in need with the providers and donors. We shall try and expand our site reach and the amount of help we provide .

# **Chapter 6**

## **References**

## References

- GeeksforGeek
- Stack overflow
- Donation websites  
(for eg. Milaap.org, giveindia.org, akshayapatra.org, etc.)
- Youtube