

HELPING HAND-DONATION SYSTEM

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Abstract - Due to COVID -19, many people experienced a scarcity of resources. In addition, taking the poverty line of the country and the recent natural disasters into consideration, there are many helpless and deprived people. Majorly there is a scarcity of some basic resources like food, clothes, utensils, etc. Our main goal is to eradicate the wastage of such useful resources by providing a platform for donating them. Our website Helping Hand aims to make the majority of the process online, from creating and running campaigns to supporting social causes. Thus, attempting to solve all the above problems.

plausible initiative is the food donation portal within which giant retail chains and probably different organizations will give food. This food is collected and delivered to nongovernmental organizations. A food donation portal can facilitate thousands of individuals that suffer from starvation and additionally consume food that was wasted for no reason. As a consequence, analysis and actions are units required to boost the potency of the food donation portal.

Key Words: Goodwill, Food, clothes, donation, NGOs

1. INTRODUCTION

Nowadays, computer technologies have become an essential part of everybody's daily life. It has been observed that online services are preferred over their traditional counterparts in this digital world. The popularization of web applications in recent years has led to people expecting efficient, quick, and reliable services from the comfort of their homes. Hence, it has become mandatory to create useful websites which fulfill user's needs. Helping Hand is an innovative solution to navigate donations in a way that is comfortable at both ends of the process.

1.1 PURPOSE

Make a platform easy and convenient to use to influence more people to opt for donations. Also, providing donations for current issues. Thus, contributing to eradicating resource wastage, hunger, etc. Becoming a medium between the NGOs/Ashrams and donors makes the process more feasible for both, also providing a user-friendly web application.

1.2 SCOPE

The development of this product surely prompted several new areas of investigation. This product has a wide scope of implementation by creating it live. Furthermore, this product creates several edges for the business and also the community. By taking it online, it'll help many folks throughout town by donating food daily. Hundreds of thousands of food units are either lost or wasted whereas a lot of individuals suffer from deficiency disease. A

2. LITERATURE SURVEY

1. Pavan Manjunath et al, "IOT Based Food Wastage Management System" [1]. In this paper, we are majorly focusing on the food wastage management system that is taking place in the office premises. It provides a real-time input on the food wastage on a live computer-based dashboard. Using Cloud Computing and IoT, this is targeting only office premises. Thus, helps in saving costs and also creates a greater impact on the day-by-day food wastage at the office.
2. Divyesh Jethwa, Ayushi Agrawal et al. "Food Wastage Reduction through Donation". [3] In this paper, the product is a web application that aims to establish a link between restaurants and charity homes/needy households to enable excess food donation. The proposed system presents a new internet-based application that provides a platform for donating leftover food to all needy people/organizations. It shows the potential for avoiding waste of food. This system is a connecting link between the hotels/restaurants and charity organizations. Charity connects with the restaurant with excess food and report generation which will show how much food is donated by which restaurant and provide reward points for them.
3. Anggy Pradiftha Junfifthrana et al. "Rice Donation System in Orphanage based on IOT, Raspberry-Pi, and Blockchain". [4] This paper proposes an IoT-based system where Rice stocks in orphanages can be detected by Raspberry Pi which is connected to a network that can be accessed and monitored by mobile applications. This application is designed for service providers,

donors, and rice suppliers. Donors send rice through financial transactions with service providers and rice suppliers will ship items to the orphanage.

4. Dr. T. Sankar, R. Raghavi, "Food Waste Reduction Through Donation Application"[6] A large amount of food is wasted in marriages, restaurants, college canteens, social functions, and other places, according to this paper. As a result, they propose the creation of a web-based application via which people may easily donate their leftovers without having to do any manual labour. This web-based site, which includes huge retail chains as well as restaurants/NGOs/organizations, can donate excess food. Their application can only be used to donate food. This application cannot be used for other objects such as clothing, food grains, books, or tools.
5. Deni Lovrencic, Nenad Vretenar, Zoran Jezic, "The Challenges of Establishing Systems" [7] This paper describes food donation organizations that have responsibilities for collecting food from businesses and individuals, storing it, distributing it to the food banks, and finally forwarding it to the people of the community who are starving from particular goods. The main objective of this paper is to address some organizational issues that are set in the way of the creation of a sustainable food donation system.
6. Ali Fawzi, Nazeen Al-Shammari, Ahmed Fadhil, "Foodwise: Geolocalised Food Wastes Tracking and Management" [8] Leloca Application LELOCA is an associate degree application to scale back the quantity of food waste in restaurants. Leloca provides geo-localized eating coupons by showing tags on the map. Through this method, restaurants decrease their surplus waste. In this application, the food needs to be purchased rather than giving it for free.

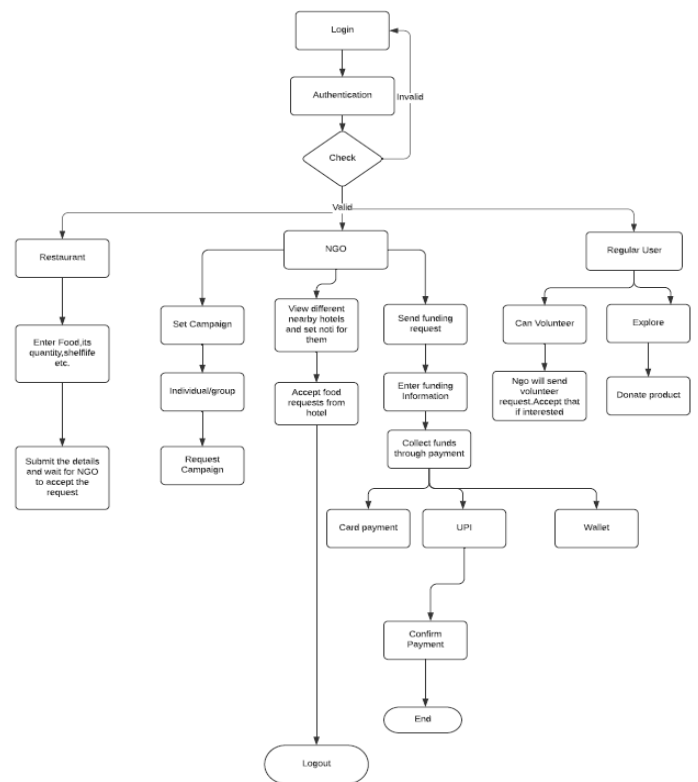


Fig 4.1 Control flow diagram

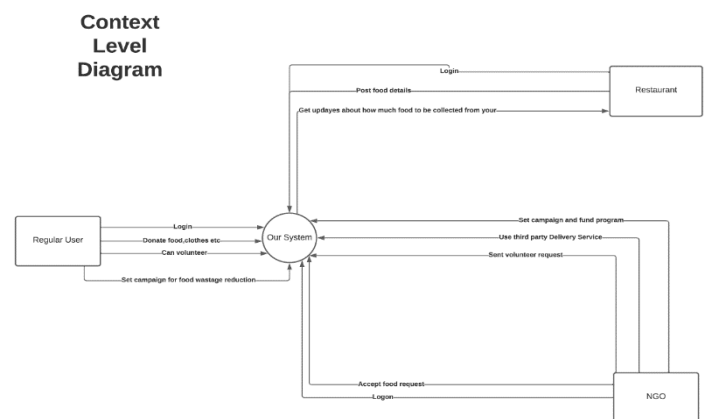


Fig 4.2 Context level diagram

4. PROJECT FLOW

The control flow diagram depicts how the user will move through the system and how their data will be sent. The figure below illustrates how user input will be translated to output based on the user's wishes. The graphic depicts the system's decisions in order to get the intended result. The graphic depicts the intermediary phases.

5. REPORT ON PROJECT INVESTIGATION

This paper looks at most of the donations, that even today happen on site, usually taking place at charitable organizations or community events. The donor is often required to visit the donation center and make donations. As most donation centers aren't technologically up to date, the donor would have to visit the site regularly for future donation or updates. The process is tedious and not efficient as both the donors and the volunteers.

In existing system there are few problems:

Every year 1.3 billion tons of food is devastated and 1 in every 7 people in the world go to bed hungry. Everyday more than 20,000 children below the age of 5 die from hunger. According to the waste database Bangladesh, food and vegetable waste embraces approximately 67.75% of urban solid waste [16]. This food will be become wasted because there are no ways to share food with anyone if they are having much extra food. If they want to donate extra food to any charity or orphanage or starving people, they don't have any idea about that. Food is the major element that has seen wastage in past years. Along with that there are several things that can be donated for better use of someone else. That's why we have developed a website for donating their extra stuff food to charity, orphanage, and street people by which food waste will be reduced in our country. Taking orders is automated.

Our application is a one stop solution for the all the people who are deprived of certain things in life. It proves a medium for all the generous citizens to donate and help the poor and needy to live a better life.

What makes our application special from rest of the other existing donation portal :-

- a) Proof is provided in a form of receipt and record of all the donations is maintain meticulously.
- b) Donor has direct contact with the Ashrams/NGO. Complete transparency is maintained.
- c) Donors will get live status of their donation ,thus ensuring the donations made are fruitful.
- d) Some lucky donors get the chance to receive some exciting cashbacks which makes our app more engaging.
- e) Since every interaction is carried out online the process is smooth and convenient for everyone.

6. PROPOSED SYSTEM FOR PROJECT

When the user visits our website, they can explore different things like campaigns arranged by different NGOs or people, the various fund campaigns for the needy. User needs to login for further processes. If a valid user, then grant them the access. Otherwise, enter the credentials again. Based on the type of user, the web page loads.

1. If the user is a Restaurant, then while entering their credentials, they would be provided with a secret id and secret password to identify them as a restaurant. If the restaurant doesn't exist, they need to register themselves first. After logging in they need to upload the details of the food. The food details include, the name of the food, its

type whether it's non-veg or veg, the category of the food i.e., raw or cooked(raw materials include pulses, grains, etc.), the shelf life of the food, servings. Submit the details and wait for the NGO to accept the request As soon as the NGO accepts it, they will come and collect the food. Once food is handed over to them, the restaurant service/session ends.

2. If the user is an NGO, they are also provided with special credentials to identify them as an NGO. If the NGO not created an account, they need to register themselves first. Once NGO logs in they can explore the home page. Check different campaigns and funding set by them. They can also check the nearby restaurants in the map provided on the website and set a notification alert for those restaurants. So, whenever the restaurant posts food details on the site these NGOs will be notified. Apart from that they can also check if any other restaurant/user has uploaded anything for donation and accept the request. After accepting the request, NGO can send the pickup address to the third- party delivery agent or can themselves collect the items. Once received they need to end the request so that the respective donor would be notified about the delivery of their items.

3. If the user is a regular user, they can check different donation campaigns or the funding campaigns for different NGO and can contribute accordingly. They can also check different NGO listed on our website and the work they do and donate food, money, toys, clothes, utensils, etc. Apart from that they can volunteer for the delivery of items from donor to NGO.

7. CONCLUSIONS

Our web application not only makes donations easy and accessible for everyone but also increases the number of people donating through its user-friendly interface, simple stepped processes and secure payment functionalities. Our website acts as a reliable mediator in the proceedings and, when used effectively, it can be the most powerful medium to combat social issues and maintain balance within communities.

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