

E – Portal For Social Welfare Service

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ABSTRACT

The main goal of this project is to provide a platform for users to help others through a donation system. Finding a blood donor is a challenging problem in almost every country. There are several blood donor finder apps on the market, such as the Red Cross Blood app and Neology's Blood Donor Finder app. However, more reliable applications that meet the needs of users are required. Also, the sharp increase in waste when it comes to food leads to the need for donations when it comes to donations. In today's world, large amounts of food are regularly wasted in our homes, at hotel weddings and parties, and in many other places. Many people donate food, clothes, books, etc. manually by visiting different places themselves to solve the hunger and food waste crisis in our country.

To solve this problem, we are developing a web application to provide a platform for people to donate blood. This platform will greatly benefit people's lives and prevent any wastage of food and people. They can also join us as volunteers who can donate blood, food in their area. This system will create a common collaboration portal for blood banks, hotels/restaurants and NGOs.

KEYWORDS – NGO, web app, mobile app, blood donation, leftovers, server, volunteer, education.

1. INTRODUCTION

Donation systems play a key role in society by providing support and assistance to those in need. Usually, when a patient needs blood, they have to contact a blood bank or a compatible blood type donor from their circle, family and friends. However, it is difficult to find a suitable donor in a limited group of people at a given moment. Additionally, there is no guarantee that blood banks will have a compatible blood type in stock. that ask for donations are also constantly increasing the number of posts asking for blood donations. We will distribute scraps, clothing and books to the middle class and rich through this app people to poor people who need this food to fill their empty stomach and clothes to wear along with books to educate themselves. We will tie up with some NGOs who will give us the details of these people and then they will first collect this food and then distribute it to the poor people who don't and just want to feed themselves to get energy to survive. Donation systems have many advantages for both donors and recipients. For donors, giving can provide a sense of meaning and fulfillment, as well as an opportunity to give back to their communities

2. LITERATURE SURVEY

We used the literature review to generate relevant ideas that could be further refined. I also engaged in critical reflection on these ideas to assess their origins, significance and status in research. During the course of my studies, I continuously returned to the literature review to update it, make it more precise and supplement it with new information and observations.

This article focuses on the donation system. The main goal of this project is to design and develop a platform for mutual assistance of users and donors. The mission of this project is to end hunger and not waste food and create a world without hunger, no people would die just because they didn't find blood in time, and no student's education would be affected by not being able to buy many educational supplies like books, bags, pens etc.

3. THE PROPOSED SYSTEM

The web donation system is a digital platform that allows donors to donate blood, food and other items online. These systems are becoming increasingly popular as they provide a convenient and affordable way for people to donate from anywhere at any time.

3.1 Web-based blood donation systems.

1. Online Blood Donation Platforms: These platforms allow people to register as blood donors and search for blood availability. Donors can also update their personal information and donation history on the platform. These platforms are especially useful in emergency situations where there is an urgent need for blood.

2. Donor Management Systems: These systems use blood donation centers to manage the entire blood donation process, from registration to donation to post-donation care. They help to streamline the blood collection and management process and ensure that the blood is safe and of high quality.

3.2 Web systems for food donation:

1. Food donation platforms: These platforms connect food donors, food banks and food pantries. Food donors can upload information about the type and amount of food they want to donate, and food banks and pantries can browse and request the food they need. These platforms help reduce food waste and ensure that excess food is redirected to those who need it.

2. Online fundraising platforms: These platforms allow organizations to raise funds to purchase food and other necessities for people in need. Donors can donate online and the funds are used to purchase food and other essential items.

3.3 Other internet donation systems:

1. Clothing and Toy Donation Platforms: These platforms allow people to donate clothes and toys online. Donors can upload information about the items they want to donate, and the platform connects them with organizations that can distribute the items to those in need.

2. Online Fundraising Platforms: These platforms are also used to raise funds for various purposes including education, healthcare, disaster relief and other charitable purposes.

4. DESIGN AND IMPLEMENTATION

4.1 IMPLEMENTATION OF THE E-PORTAL

1) User Interface Design – This phase consists of the user interface through which non-administrators will interact with the administrator using the application.

2) System design - The system is divided into three modules, which are Admin, Volunteer and User

3) Database design - This phase consists of all the user, volunteer login and any other data that needs to be stored. A database is an essential part of any application as it is used to store all the data.

4.2 CONTEXT DIAGRAM

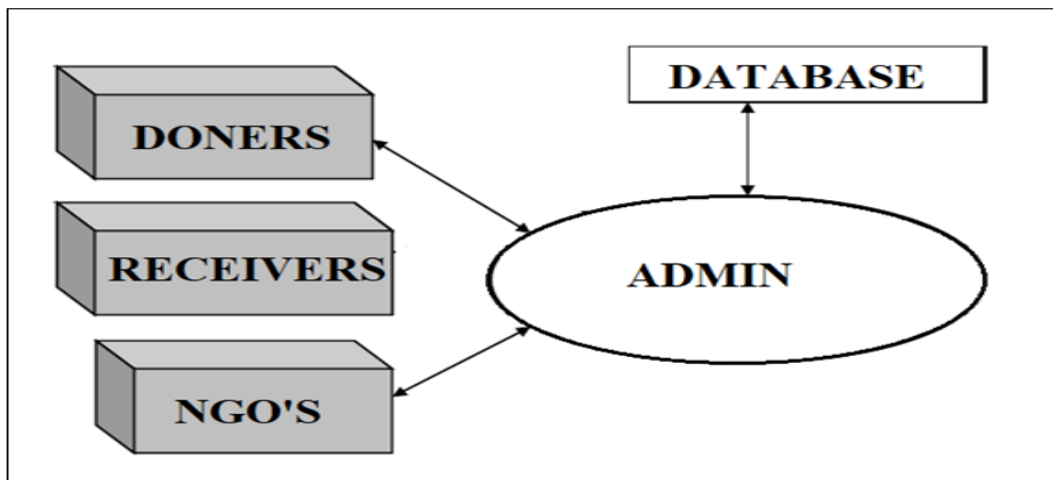


Fig. 4.2: Context Diagram

4.3 DATA FLOW DIAGRAM

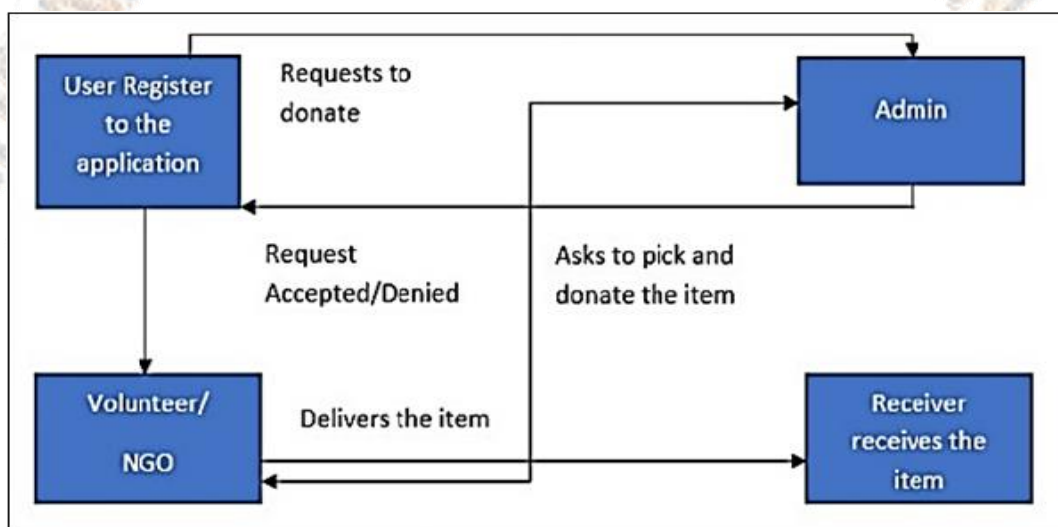


Fig 4.3: Data flow diagram

5. PROJECT MODULE OPERATION

This project contains the following modules:

1) Administrator: The Administrator will be responsible for accepting and rejecting all donation requests. When someone submits a donation request, the administrator can accept the donation request and forward it to a volunteer or NGO, or cancel the request.

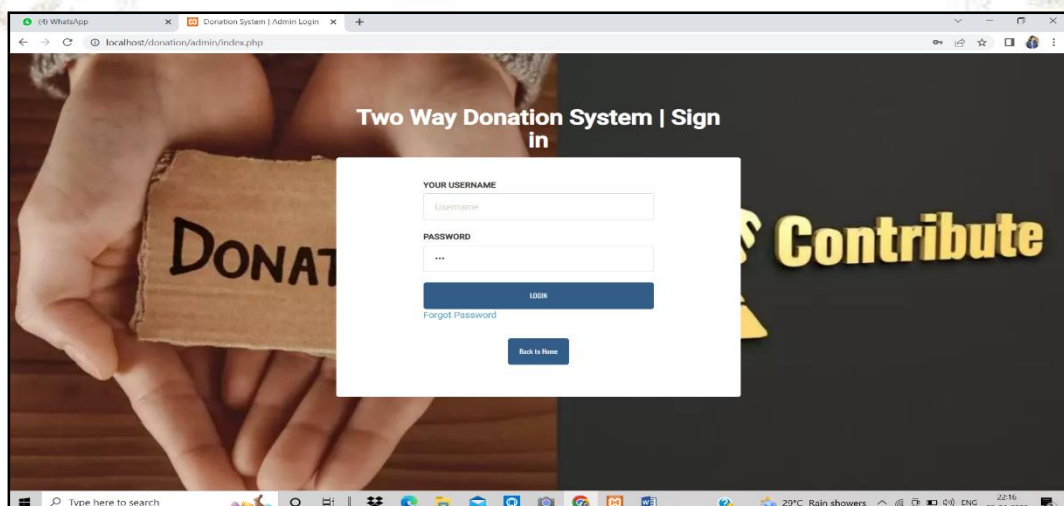


Fig. 5.1: Admin

2) Donor side

- 1: User can register using personal data.
- 2: User can login to their personal account with ID and password.
- 3 (a): Create a new food item with details of quantity, location, contact address if registered under general/food category.
- 3 (b): Create a new blood sample record with details of blood group, location, contact number if you are registered under emergency or blood category.
- 4: Add more food items to the cart for reservation.
- 5: After adding the food/blood details, the user can log out of the system.

The screenshot shows a registration form with the following fields:

- Name:** Text input field.
- Email:** Text input field.
- Password:** Text input field with a strength indicator.
- Age:** Text input field.
- Gender:** Radio button options for Male and Female.
- Blood Group:** Dropdown menu with options: A+, A-, B+, B-, AB+, AB-, O+, O-.
- Address:** Text input field.
- Contact Number:** Text input field.

 At the bottom, there is a red 'Register' button and a link for 'Already Registered? Login Here'.

FIG 5.2: Lateral side of the donor

3) User side:

The screenshot shows the user interface with a search bar containing 'Blood group' and 'Location' fields. Below the search bar is a navigation menu with the following items:

- Home**
- Donor**
- Food Item**
- Cart**
- Profile**
- Logout**

 The background features a banner with the text 'ABOUT US' in large, 3D letters.

FIG 5.2: User Side

6. ADVANTAGES OF THE SYSTEM

- 1. Easy accessibility:** The web-based system allows donors to access the donation platform from anywhere with an internet connection. This makes it easy for people to donate no matter where they are.
- 2. Faster response time:** The online platform allows for immediate communication between donors and the organization, resulting in a faster response time.
- 3. Greater donor engagement:** A web-based system can provide donors with more information about the organization and its mission, which can increase donor engagement and motivation to give.
- 4. Help save lives by providing timely blood supply support.**
- 5. Track food waste in a restaurant.**

6. The user can play a character in saving food waste and helping those in need.
7. You can easily donate food from home and also help in raising children by providing educational items and clothes.

7. LIMITATIONS

1. Incorrect inputs will affect project outputs.
2. Internet connection is mandatory.
3. Android mobile user will not be able to input or view details if the server is down.

8. CONCLUSION

In this paper, we proposed the design and implementation system of a new transformational way of charity and donation with a single form of application. This application has a wide scope in future as India is a developing country which consists of rich and poor people. This blood and food donation app can be developed to further improve the user experience by integrating this app with various social networking application programming interfaces (APIs). Users can thus log in and register using various social networks. This would increase the number of donors and improve the blood and waste donation process. If this donation store is listed online, people can donate their other things without any convenience and those who really need these things can have them. Moreover, this app will be very useful in case of natural calamities like epidemic where people could donate food and clothes to their fellow citizens of India in case of need. During celebrations like wedding or party, a lot of food is wasted just because no one wants to spend time looking for people to donate food... So our app makes it easy for them because they don't have to do anything, just register in this app and someone will pick up the items they want to donate at their door. This application can bring a big revolution in solving the problem of food crisis in India.

9. SCOPE OF FUTURE DEVELOPMENT

This project has future development scope. Computer technology finds new methods and technologies every day. The user interface (UI) may be improved in the future to suit a global audience by supporting different languages in different countries. Data downloads can be done from various social networks and can be viewed in blood and waste request sources. Meetings can be synchronized with Google and Outlook calendars for the convenience of users. Skills that are prominent today will be obsolete in a few days. In order to keep up with technical developments, the system can be further improved. So it's not closed. However, it will improve with further augmentations. Augmentation can be done in an efficient way. We can appreciate it with additional changes and it can be integrated with minimal changes. So the project is flexible and can be improved at any time with more advanced features.

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