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A Web Application for Medicine, Food, Books & Cloth Collection and Donation

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Abstract: ***The increase within the quantity of wastage in terms of Medicines, food, books, clothes make the necessity in terms of donation. There are many those that donates food, clothes and books etc. manually by vising completely different places on their own so as to resolve this crisis of needed things wastage in our country. Donations like Medicines, food, clothes and books once given with correct organization & correct management will save many lives and might ease the suffering of the poor and impoverished ones. The "Altruistic ones" acts as a connecting link between the donors and also the NGOs. Considering the number of wastages goes in a very year, donation of unused medicines together with alternative donations like food, books and clothes appear a decent thanks to get out of it because the world is growing quick with the new technologies individuals also are adapting it. Through our web-based application donor from anyplace will present the items at one platform.***
Keywords: Web Based Application, Food donation, Cloths and books donation, Admin, NGO, Donor

I. INTRODUCTION

Donation Management System could be a mission to finish hunger and no wasting of food and alternative poverty-stricken things to create a hungry-free world. within the current operating state of affairs, several NGOs are battling some problems primarily communication with their member, heads and volunteer whereas NGO are donating. the main target of this project is to cut back the quantity of wastage of poverty-stricken things and being employed to the poverty-stricken individuals. This application goes to assist poor individuals through this application. we have a tendency to are progressing to distribute leftovers, medicines, food, clothes and books of the any category either wealthy or middle individuals to the underprivilege those who want this food to fill their empty abdomen and clothes to wear beside books to coach and unused medicines for correct treatment that they can't afford for themselves. we'll we are going to collaborate with some NGOs that will collect this donation so distribute it to the poor individuals.

Around 469 million Indians do not have regular access to essential components, according to the WHO. Only 20% of the total population can afford the necessary medical treatments and medicines. At such times, it is vital to find a solution out.

Alternatively, it is necessarily made sure that the people in need of medicine and supplies have access to them. A better and suitable way is to donate unused medicines.

So, we've developed a Online Donation System which is a web-based application wherever we've got all roles together with Admin, NGO and User for donations together with medicines, food clothes books.

Admin can Add/Remove/Update any details associated with the system, manage Users, NGOs, donations, registration, details of Users & NGOs, etc. Admin is going to be liable for managing all the registered NGOs on the system. Admin is going to be liable for Accepting/Rejecting donations created by users following sure criteria like checking whether or not medicines are terminated medicines, or unprescribed, the condition of the packaging, etc.it can even check for the right donations created by the user like clothes, books which require to be distributed to the deprived ones. if the given things aren't relevant then admin will reject the donation created by the user/donor.

NGO will mention details of the desired donations, will read donations created by users, collect given things, etc. Users will register themselves, and give things to at least one or a lot of NGOs. Users will realize careful information concerning the NGO on the system. The User have to fill and submit forms, mentioning each detail beside the photographs of the medicines/alternative donation to be given.

Users (Donors) and NGOs alike are going to be able to keep track of their donation connected activity with this application.

The main objective is to make a secured, strong beat one Donation System. It maintains the record of the donations, following users, NGO, history expeditiously in order that it might be simple to access at any time 24*7.

A. Goals or Objectives

1) To reduce lack of awareness.
2) To enable easy interaction between donor and volunteer.
3) To make easy and fastest record finding technique.
4) To make a very much flexible environment to work and user oriented.
5) To make data storage available for a longer period.

II. LITERATURE SURVEY

A. Survey Related to Food Donation

It is indeed unfortunate that despite substantial growth in various sectors, India is still facing challenges in providing access to food to a significant portion of its population, particularly women and children. The statistics you have mentioned indicate that there has been significant growth in the country's economy and food production, yet undernourishment remains a persistent problem. It is essential to understand that the issue of food access is complex and multi-faceted. It can be attributed to various factors such as poverty, lack of infrastructure, inadequate distribution systems, and poor governance. Addressing these challenges requires a comprehensive approach that involves collaboration between various stakeholders, including the government, non-profit organizations, and the private sector. Efforts such as the establishment of food banks and other initiatives to improve food distribution networks can help alleviate the problem of undernourishment. Additionally, targeted interventions to address poverty and improve access to education and healthcare can contribute to long-term solutions.

According to recent reports, the situation of undernourishment and malnutrition in India remains a concern. The latest Global Hunger Index (GHI) 2021 report ranks India at 101 out of 116 countries, indicating a serious level of hunger. The report shows that around 14% of India's population is undernourished, with a prevalence of wasting and stunting in children under five at 17.3% and 32.7%, respectively. Moreover, according to the National Family Health Survey (NFHS-5) 2019-20, around 35% of children under five in India suffer from stunting, which is a result of chronic malnutrition. Additionally, around 36% of women of reproductive age between 15 to 49 years are anemic, indicating a lack of access to nutritious food.

The COVID-19 pandemic has also worsened the situation, with many vulnerable populations facing food insecurity due to economic disruption and job losses. The pandemic has led to a sharp increase in food prices, which has further exacerbated the situation for vulnerable populations. Efforts to address undernourishment and malnutrition in India continue to be a priority for the government and various non-governmental organizations. However, there is a need for sustained efforts and increased investment to achieve significant progress in this area. The paper published in the year of 2016, which is “Donation using a forecasting-simulation model” [1] for food donation, which has come up with an approach developed to measure the donation received by non-profit hunger relief organizations. These organizations work towards reducing hunger across the world and rely on donors for achieving their objectives. However, the amount and frequency of donations received vary, creating challenges in their efforts to eliminate hunger. To address this issue, a simulation model has been developed to predict the expected monthly food donations in a multi-warehouse allocation network designed for storing donations. The model is based on a state-space model for exponential smoothing, and a numerical survey has been conducted using data from a non-profit hunger relief institution. The results show that the approach can achieve excellent evaluation accuracy and can be efficiently used by non-profit hunger relief institutions to forecast donations for proactive planning. The paper ‘Helping Hands’ [2], published in 2016, a modern web-based application that provides a steppingstone for donating old goods and leftover food to all poverty-stricken/institutions. The article presents factual information and data that encourages the use of a donation application, which includes an overview of the current donation system and highlights how the suggested product can contribute to the betterment of society. The drawbacks of this project is that there is no control panel available that is, The system is unable to gather all the necessary information regarding the quantity of items donated or received by individuals by the end of each month.

The paper ‘Beyond food sharing: Supporting food waste reduction With ICTs’ [3], published in 2016, stated that food security plays a major role in enhancing the quality of life of people at all levels of society. The recent economic crisis has led to an increase in the number of people living in food poverty, particularly in developed regions. Despite a growing recognition of the importance of reducing waste and managing food surplus, the role of information and communication technologies (ICTs) in this area remains unclear and poorly documented. This paper explores the use of ICT tools to redistribute food surplus across various stages of the supply chain and outlines a path towards an integrated suite of ICT tools to reduce waste from producers to households.

The paper ‘Food Wastage Reduction through Donation’ [4], published in 2018, stated that large amount of food is wasted in marriages, restaurants, social functions and some other places.

So, they come up with an idea of developing a web-based application through which people would be able to donate their leftovers easily without doing any manual work. They worked on developing a food donation portal in which large retail chains and potentially other organizations can donate food. Their application focused solemnly on food donation and no other items like clothes or books etc. The paper 'Mobile Application for Excess Food Donation and Analysis' [5], published in 2018, stated that 1.3 billion tons of food is usually wasted every year and one third of food consumed are leftover. They focused on developing an android application that utilize data analysis to visualize the impact of excess food, thus reducing food wastage. They aim to feed the starving people and this can reduce the wastage of food at once. They send notification to nearby NGO's, orphanages and volunteers to pick the food. The paper "Food donation portal" [6], which was published in 2015 The paper discusses the evolution of food donation services and presents a novel idea for a food donation grid that can help connect donors with NGOs. It highlights the potential impact of such a system on society and outlines the benefits of reducing food waste while helping those in need. However, one drawback of the proposed system is that there is no tracking service available to help the NGOs locate the nearest donor willing to donate in a particular region. As a result, the burden of finding donors still falls on the NGOs themselves, which can be a time-consuming and inefficient process.

B. Survey Related to Unused Medicine Donation

There are several reasons for the poor availability of medical care in India, particularly in rural areas and slums. One of the main reasons is the lack of infrastructure and resources, including hospitals, clinics, and trained medical personnel. Many rural areas do not have proper healthcare facilities or adequate medical equipment, and there is often a shortage of doctors and nurses in these areas. Another reason is the high cost of medical care, which can be a significant burden for many people, particularly those living in poverty. Even basic medical treatments and medications can be expensive, making them inaccessible to many people.

Additionally, there is often a lack of awareness about healthcare and the importance of preventative measures, such as vaccinations and regular check-ups. Many people in rural areas and slums may not have access to information about healthcare, or they may not have the means to travel to healthcare facilities even if they are aware of them. Poor sanitation and hygiene practices are also major contributors to the spread of diseases in India, particularly in rural areas and slums. Lack of access to clean water and sanitation facilities can lead to the spread of waterborne diseases, while poor hygiene practices can contribute to the spread of other illnesses.

Addressing these challenges requires a multi-pronged approach, including investment in healthcare infrastructure, increased access to affordable medical care, and education and awareness programs to promote good health practices. The government has initiated several programs, such as the Ayushman Bharat scheme and the National Health Mission, to address these issues. However, sustained efforts and continued investment are necessary to achieve significant progress in this area.

1) India has a large population of 1.3 billion people, which is nearly 17.7% of the world's population.
2) Despite recent economic growth, a significant portion of the population still lives in poverty. About 50 million people live on less than USD 2 a day, and approximately 200 million people are undernourished. The growing population will only exacerbate the food security situation.
3) The healthcare system in India is under strain due to the large population and limited resources. As per the country's current population estimate, there is only one doctor for every 1,445 Indians, which is lower than the WHO's prescribed norm.
4) Education is also a challenge in India, with a literacy rate of about 74%. Poverty and illiteracy are closely linked, and India is home to one-third of the world's poverty with the second largest population in the world.
5) Poverty and illiteracy can have serious consequences for public health, as people below the poverty line may not be able to afford expensive medical care. This can lead to further individual and national poverty, and create a public health concern for society. People may prioritize buying food over medicines due to the high cost of medications.

Due to this issue, they suffer from many diseases for a long period of time and that turn into life-threatening issues and uncurable if not taken care in time. People with more per capita income and stable can afford these medical products and also preserve them for further use. Many studies have shown that unused medications in homes have significantly increased in recent years, leading to a lot of medication waste..[7]

Many different medicine donations programs support people in need. As part of the MDP (Mectizan Donation Program), Merck has donated near about 10 lakhs treatments of ivermectin to different countries, since 1987 (Burnham et al., 2004). In United States two NGOs made 16,566 load of donated medicines between 1994 and 1997 to a total of 129 countries (Reich et al., 1999). In the State of Gujarat (India), because of the earthquake in 2001 drugs/medicines of 1,308 tons were donated (WHO, 2011).[8]

Few cases in non-emergencies of medicine donations are considered to be successful because the of life of patients was improved which is a sign of quality improvement.

The majority of these cases took place in partnerships for disease specific programs (IFPMA, 2012). Other studies on non-emergencies, there seems to be inappropriate donations that could be avoided if end-to-end supply chain monitoring existed. This will improve the communication link between the donors, intermediaries and beneficiaries, and also provide a good match of demand and supply and ensure efficient quality of donated medicines (Mariacher et al., 2007).[9]

The vast majority of studies we identified that 25 out of 33 are qualitative analyses, which may be due to the fact that governments and NGOs do not collect or keep data about their operations which may lead to difficulty in identifying the expired or inappropriate medicine usage (Van Dijk et al., 2011) [10]. This may be legitimate in emergency situations, not in non-emergencies where resources time, funds, and personnel can and should be allocated to data collection and proper track of data should be maintained. In either case, the lack of data on medicine donations excludes a clear view on the supply chains that are in place. Therefore, we found no academic research on medicine donations supply chains/disbursement.

Sr.No.	Title of paper	Description	Findings	Limitations
1.	"Donation using a forecasting-simulation model"- Published in 2016.	Focuses on food donation, which has come up with an approach to measure in donation for the non-profit hunger relief institutions/organization.	The outcome shown the excellent evaluation accuracies can be accomplished. The approach stated in this paper can be efficiently use by this non-profit hunger relief institutions to foretell donations for proactive planning. This approach is that point estimates as well as interval estimates can be computed which aids the decision maker in making insightful decisions.	Certain characteristics of food bank donations make the forecasting problem challenging. First, the amount of donations and the type of food received varies with each donation. Second, the donations are received at varying frequencies over the year and in uncertain quantities. This increases the difficulty in choosing a forecasting technique and evaluating the behavior of the donations
2.	'Helping Hands' - The paper published in 2016.	A modern web-based application that provides a steppingstone for donating old goods and leftover food to all poverty-stricken/institutions.	It provides facts and data about the encouragement to come forward with such an application, thereby outlining the current donation system and how the suggested product works for the betterment of society	The drawbacks of this project is that there is no control panel available that is, at the month end the system don't get all the facts and data that how much things are donated or received by someone.
3.	'Beyond food sharing: Supporting food waste reduction With ICTs'- The paper published in 2016.	It stated that food security plays a major role in enhancing the quality of life of people at all levels of society.	This paper tells us about the use of ICT tools to restore food surplus at various stages of the supply chain and also tell us the way forward for an integrated set of ICT tools to mitigate waste out of producers to houses.	Despite a growing awareness about the significance of reducing waste and controlling food surplus, the role of ICTs in this domain is still not so clear and barely documented.
4.	'Food Wastage Reduction through Donation', the paper published in 2018.	It stated that large amount of food is wasted in marriages, restaurants, social functions and some other places.	They come up with an idea of developing a web-based application through which people would be able to donate their leftovers easily without doing any manual work.	Their application focused solemnly on food donation and no other items like clothes or books etc.
5.	'Mobile Application for Excess Food Donation and Analysis', the paper was published in 2018.	It stated that 1.3 billion tons of food is usually wasted every year and one third of food consumed are leftover.	They focused on developing an android application that utilize data analysis to visualize the impact of excess food, thus reducing food wastage.	They send notification to nearby NGO's, orphanages and volunteers to pick the food.
6.	The paper "Food donation portal" [6], which was published in 2015	It tells us about the evolution of food donation services and offers a way to connect donors with NGOs	An idea for a food donation grid is introduced and influence on society through this means is indicated	In this there is no track the person who will pick the donation from the donor which means the system does not permit the institution or NGO to find the closest donor ready to donate in the region and they have to find the donors on their own.
7.	In the State of Gujarat (India), Reich et al., (1999) WHO, (2011) Burnham et al., (2004)	the MDP (Mectizan Donation Program), Merck has donated near about 10 lakhs treatments of ivermectin to different countries, since 1987	In United States two NGOs made 16,566 loads of donated medicines between 1994 and 1997 to a total of 129 countries. In the State of Gujarat (India), because of the earthquake in 2001 drugs/medicines of 1,308 tons were donated.	This was done on official level and some needy ones couldn't get benefit out of it, if they would take the help of some local Ngo they know better about their affected region and thus helping to every individual could be possible as they have a history of underprivileged ones.

8.	Mariacher et al., (2007) IFPMA, (2012).	The majority cases in non-emergencies of medicine donations took place in partnerships for disease specific programs.	The of life of patients was improved which is a sign of quality improvement. An improved communication link between the donors, intermediaries and beneficiaries and provides good match of demand and supply and ensure efficient quality of donated medicines.	The lack of data on medicine donations excludes a clear view on the supply chains that are in place.
9.	Van Dijk et al., (2011)	Few cases in non-emergencies of medicine donations are considered to be successful because the of life of patients was improved which is a sign of quality improvement.	Situations like emergency and non-emergencies where resources time, funds, and personnel can and should be allocated to data collection and proper track of data should be maintained. This would help in exploring contact connection with government as well as non-government and other organizations.	The vast majority of studies we identified that 25 out of 33 are qualitative analyses, which may be due to the fact that governments and NGOs do not collect or keep data about their operations which may lead to difficulty in identifying the expired or inappropriate medicine usage

Table 2.1: Summarized table for survey papers

C. Summary

After going to different survey/articles/generals we came across different situations, where resources time, funds, and personnel can and should be allocated to data collection and proper track of data should be maintained. In either case, the lack of data on medicine donations excludes a clear view on the supply chains that are in place. Therefore, we found no academic research on medicine donations supply chains/disbursement.

This research helped us to come across the idea that there is a need of application where the in the both situation like emergency as well as non-emergencies where there is a need of all-in-one donation management system rather than dedicated to only one type of donations. This will reduce large of unused thing and can be utilized in a betterment of society. This helped us to introduce which an important feature like track of donation with their proper history available for longer period of time. This will not only help in tracking but will help in managing the list of that underprivilege ones who got the benefits and they will be getting it as there are known to us.

III. BACKGROUND

J2EE (Java 2 Enterprise Edition) is a platform for developing enterprise-level software applications in Java. It provides a set of standards, APIs, and tools for building distributed, scalable, and secure applications. J2EE is built on top of the Java SE (Standard Edition) platform and includes additional libraries and components for building web applications, enterprise applications, and other distributed systems. J2EE applications are typically developed using an n-tier architecture, which separates the application into logical layers, including presentation layer, business logic layer, and data access layer. This allows for the application to be developed and maintained in a modular way.

The J2EE platform includes a number of components and technologies for building enterprise applications, including: Servlets and JSPs: for building web-based applications and dynamic web pages. Enterprise JavaBeans (EJBs): for building business logic components that can be deployed on an application server. Java Persistence API (JPA): for object-relational mapping and managing persistence of data in a relational database. Java Message Service (JMS): for asynchronous communication between components in a distributed system.

Java Naming and Directory Interface (JNDI): for accessing naming and directory services. Java Transaction API (JTA): for managing transactions in distributed systems. Java Authentication and Authorization Service (JAAS): for implementing security policies in a J2EE application. J2EE applications can be deployed on any J2EE-compliant application server, such as Apache Tomcat, JBoss, or IBM WebSphere. Application servers provide a runtime environment for J2EE applications, including managing transactions, security, and resource pooling. In summary, J2EE provides a comprehensive set of tools and technologies for building enterprise-level applications in Java. It offers a modular, scalable, and secure platform for developing distributed systems that can handle high volumes of transactions and users.

A. Designing of J2EE

J2EE can be used to develop an online donation system. Here's a brief overview of how J2EE can be implemented into online donation system:

1) *Architecture:* The online donation system can follow a three-tier architecture using J2EE. The presentation layer can be implemented using JSP pages, servlets, and HTML/CSS/JavaScript. The business logic layer can be implemented using EJBs (Enterprise Java Beans) and Java classes. The data access layer can be implemented using JDBC or JPA (Java Persistence API) to interact with the database.
2) *User Interface:* JSP pages and servlets can be used to provide a user-friendly interface to the users. The pages can have forms to collect information from the donors and recipients. The interface can also include features such as search, sorting, and filtering to help users find the required information quickly.
3) *Business Logic:* The business logic layer can handle all the business rules of the system. The EJBs can be used to manage transactions, perform data validation, and enforce security policies. The Java classes can be used to implement complex business logic such as matching donors with recipients based on the type of medicine required.
4) *Database:* The system can use a relational database to store all the data related to the medicines and the users. The database can be accessed using JDBC or JPA. The database schema can include tables such as donor, recipient, medicine, donation, and transaction.

B. Approach using MVC

Model-View-Controller (MVC) is a design pattern that separates an application into three interconnected components: the model, the view, and the controller. The goal of the MVC pattern is to allow each component to handle a specific set of responsibilities, making the application easier to maintain and update. The MVC pattern has been implemented in many programming languages including Java, and over time, various additional tools and frameworks have been introduced to facilitate its implementation in Java.
One of the earliest implementations of the MVC pattern in Java was with JavaServer Pages (JSP). JSP allows us to develop and create dynamic web pages using HTML and Java code. By using JSP, developers could separate the presentation logic (the view) from the business logic (the model) and the control logic (the controller).
With the introduction of JavaBeans, it became easier to implement the model component of the MVC pattern. JavaBeans are Java classes that encapsulate data and provide getter and setter methods for accessing the data. By using JavaBeans to represent the model, developers could further separate the business logic from the presentation and control logic.
The MVC design pattern aims to separate the application logic into three components: model, view, and controller. This separation of concerns helps in maintaining code quality, enhancing scalability, and enabling better teamwork. Here is an overview of how to design an MVC-based enterprise application using Java:

1) Model Component

It handles data storage, data retrieval, and data processing. This component interacts with the database or any external data source to retrieve data and stores it in an object-oriented format. In Java, the Model is implemented using POJOs (Plain Old Java Objects) or Entity Beans.

2) View Component

It renders the data provided by the Model to the user in a user-friendly format. In Java, the View is implemented using JSP (JavaServer Pages), HTML, or any other front-end technology.

3) Controller Component

The Controller acts as an intermediary between the Model and the View. It receives requests from the user through the View and processes them by invoking the appropriate methods of the Model. It also updates the View with the new data received from the Model. In Java, the Controller is implemented using Servlets, which handle the user requests and call the appropriate methods of the Model.

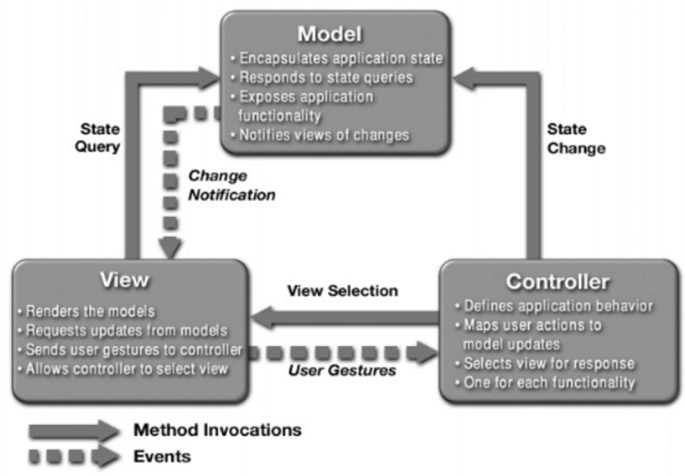

Fig. 3.1- Application Design with MVC

4) Approaches to Implement MVC in Java

a) Front Controller Approach: In this approach, all the user requests are handled by a single Servlet called Front Controller. The Front Controller acts as the central point of control for the application. It intercepts all user requests and delegates them to the appropriate Controller.

b) Dispatcher Approach: In this approach, each user request is mapped to a specific Servlet, called Dispatcher. The Dispatcher acts as a front-end controller, which receives the request and forwards it to the appropriate Controller.

c) MVC Framework Approach: In this approach, a pre-built MVC framework is used to implement the MVC architecture. There are many MVC frameworks available in Java, such as Spring MVC, Struts, and JavaServer Faces (JSF).

Overall, implementing MVC in Java-based enterprise applications helps in better code management, scalability, and code reusability. It also facilitates teamwork by allowing developers to work on different components of the application independently.

C. Data Validation

Procedures are designed to detect errors in data at a lower level of detail. Data validations have been integrated in the system in almost every area where there is a possibility for the user to commit errors. The system will not recognize invalid data.

Whenever an invalid data is keyed in, the system immediately prompts the user and the user must again key in the data and the system will accept the data only if the data is correct. Validations have been integrated where necessary.

The system is designed to be a user friendly one. In other words, the system has been designed to communicate effectively with the user. The system has been designed with popup menus.

Different Type Of validation

1) Data type validation
2) Range and constraint validation
3) Code and Cross-reference validation
4) Structured validation

IV. PROPOSED WORK

A. System Architecture

In system architecture NGO and user i.e Donor both these modules are connected to the Admin. Admin is the super user out of all the modules. If donor is donating medicines, then that donated information which is provided by the donor will go directly to the server, and if NGO request for medicine donation so that request will go to the server Admin will check into the database if any medicines are available and then respectively it will accept the request of the NGO through server as server is directly connected to the NGO.

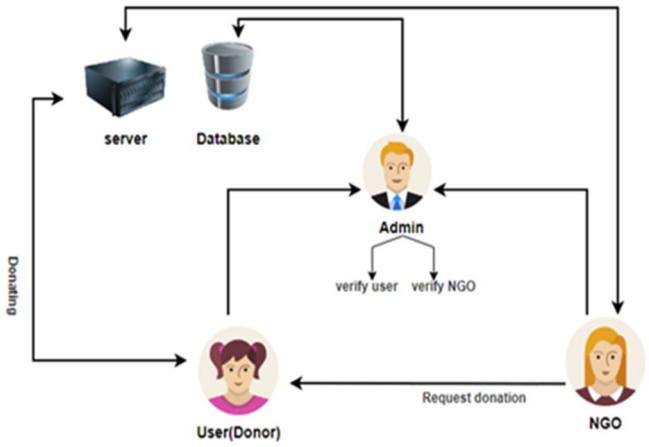

Fig. 4.1: The system architecture for a Web Application for Medicine, Food, Books & Cloth Collection and Donation

B. Flow of the System

Firstly, user needs to Register to our system for making donations and view donation history. For enabling all feature given to user they need to register. Once user has filled up the sign-up page the admin who is the head for all monitoring all functions such as accepting/rejecting the signup as per the information provided by the user. Once admin verify the information given by the user is appropriate then it will allow the user to login into the system, before that user will not be able to login into our system. User can donate the things directly to the NGO upon the request given by them and user can do the needful as per the convenience. They can also donate the thing to the underprivilege once through voluntary donations.

Similarly, NGO needs to register to our system which will be first evaluated by the admin. Once NGO has registered and the verification by the admin is complete the NGO can login and ask

Similarly, NGO needs to register to our system which will be first evaluated by the admin. Once NGO has registered and the verification by the admin is complete the NGO can login and ask for the donation. NGO can ask for the donations which is required as per the location available to them for collecting of this donation. And the donation will receive to NGOs by voluntary donations.

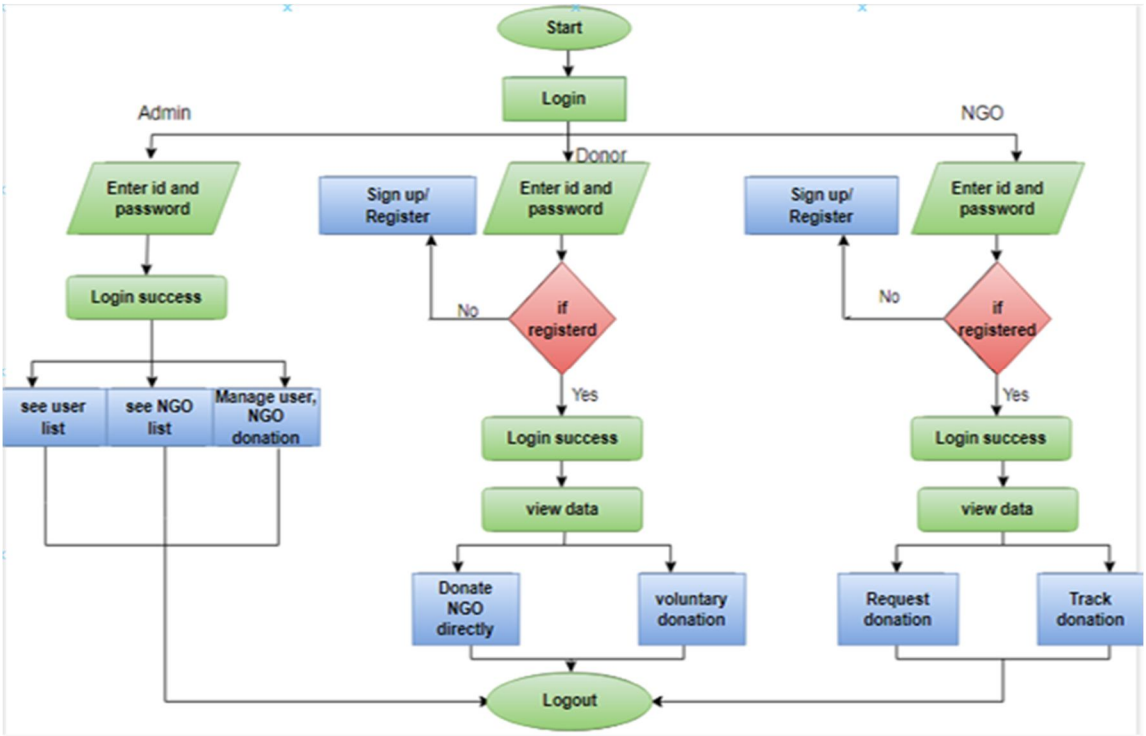

Fig. 4.2 Flowchart for A Web Application for Medicine, Food, Books & Cloth Collection and Donation.

C. Functional Modules

Project is divided into following three section-:

1) *UI Design:* This phase consists of the user interface through which people other than admin are going to interact with the admin using the application. The technologies used for designing the front-end part of the web-based applications are JSP, HTML, CSS, bootstrap, JavaScript.
2) *Database Design:* This phase consists of all the login id details of user, NGO and all the other data that needs to be stored. Database is a necessary component of any application as it is used to store the all the data. It is going to store the data like how much item/things is donated by which user, the date and time of the donation with other necessary details in the forms of tables. We have used Workbench, MySQL technology to create database.
3) *System Design:* The system is divided into three modules they are Admin, NGO & User.

a) *ADMIN:* Admin will be responsible for accepting and denying all the request regarding donation. When someone will post a request for donation than admin can accept the donation request and grant it to a volunteer or NGO, or admin can cancel the request according to then circumstances.

Fig. 4.3 Admin Module

b) *NGO:* NGO will help us in distributing these items to the right places and people. They will register to our application and when admin will grant them a request of donation than they will fulfil it by delivering the item to the receiver.

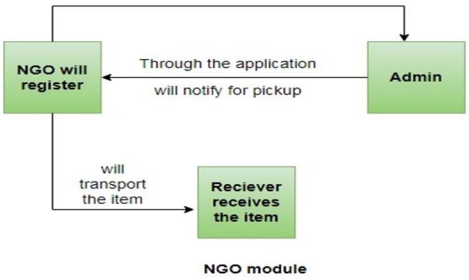

Fig. 4.4 NGO Module

c) *User:* User will also register to the application and login to the application after which he/she will request a pick up for the item they are willing to donate and then if admin accepts the request than someone will collect the item from the user. User can check whether his request has been accepted or not.

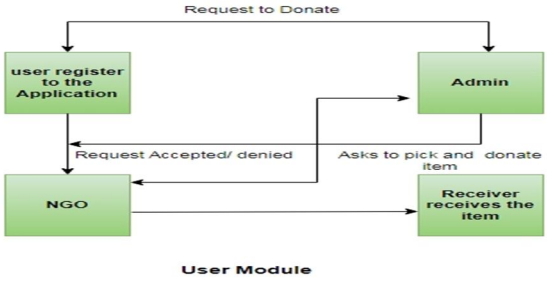

Fig. 4.5 User Module

V. APPLICATIONS

An online medicine, books, food, and cloth donation system would be a web-based application designed to allow users to make donations to registered non-profit organizations. The website applications are as follows:

1) *User Registration and Login:* Users would be able to create an account and log in to the application using their credentials.
2) *Donation Management:* Users would be able to browse through the list of available non-profit organizations and select the ones they want to donate to. They would also be able to choose the type of donation they want to make, such as medicine, books, food, or cloth.
3) *Donation Tracking:* Users would be able to track the status of their donations and receive updates on how their donations are being utilized.
4) *Non-profit Organization Management:* Non-profit organizations would be able to register on the platform and create profiles that showcase their mission, goals, and impact.
5) *Reporting and Analytics:* The application would provide reporting and analytics features that allow users and non-profit organizations to track their donations and measure their impact.
6) *Communication Channels:* The application would provide communication channels, such as messaging and email, that allow users and non-profit organizations to stay in touch and exchange information.

Overall, an online medicine, books, food, and cloth donation system would provide a convenient and secure platform for users to make donations and support non-profit organizations in their mission to help those in need.

VI. RESULT

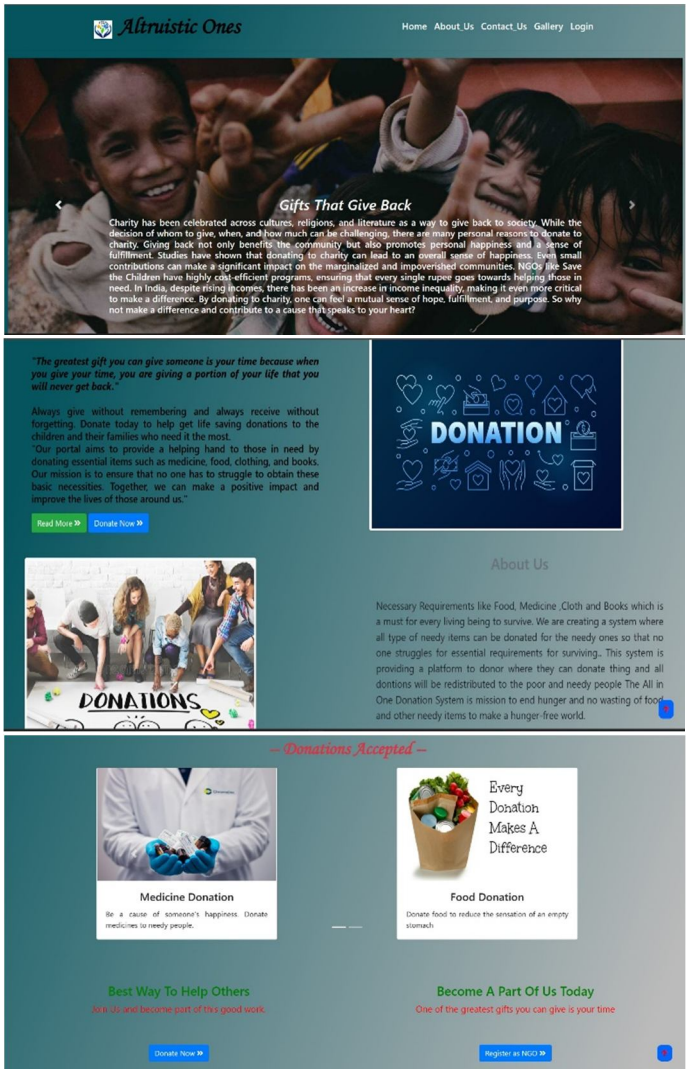

Fig. 5.1 Home Page

This the Home Page of our website by which user can make a to non-governmental organization and getting to or touch is relatively simple and easy.

VII. CONCLUSION

We have designed a web-based application and completed its development. It also provides knowledge about the latest technology used in developing web enabled application and client server technology that will be great demand in future. We have applied engineering knowledge and analyzed the societal problem of the people who struggle for fundamental things that they tend to suffer due to shortage of needy items that they can't afford. We have analyzed the present solution and technology to design a latest and user-friendly portal/website so that management of donations should be easy for the donor as well as for NGO to deliver these things to the needy ones. We have used modern tools such as Servlet, JSP, Java and Eclipse to implement this project. Donation-related activities can be managed more efficiently using the Online Medicine Donation System. Everything will be handled in one place. This application is designed in such a way that any future modification can be done most easily.
This solution can be developed at generalized level for multiple sectors for long-life learning.

VIII. ACKNOWLEDGEMENT

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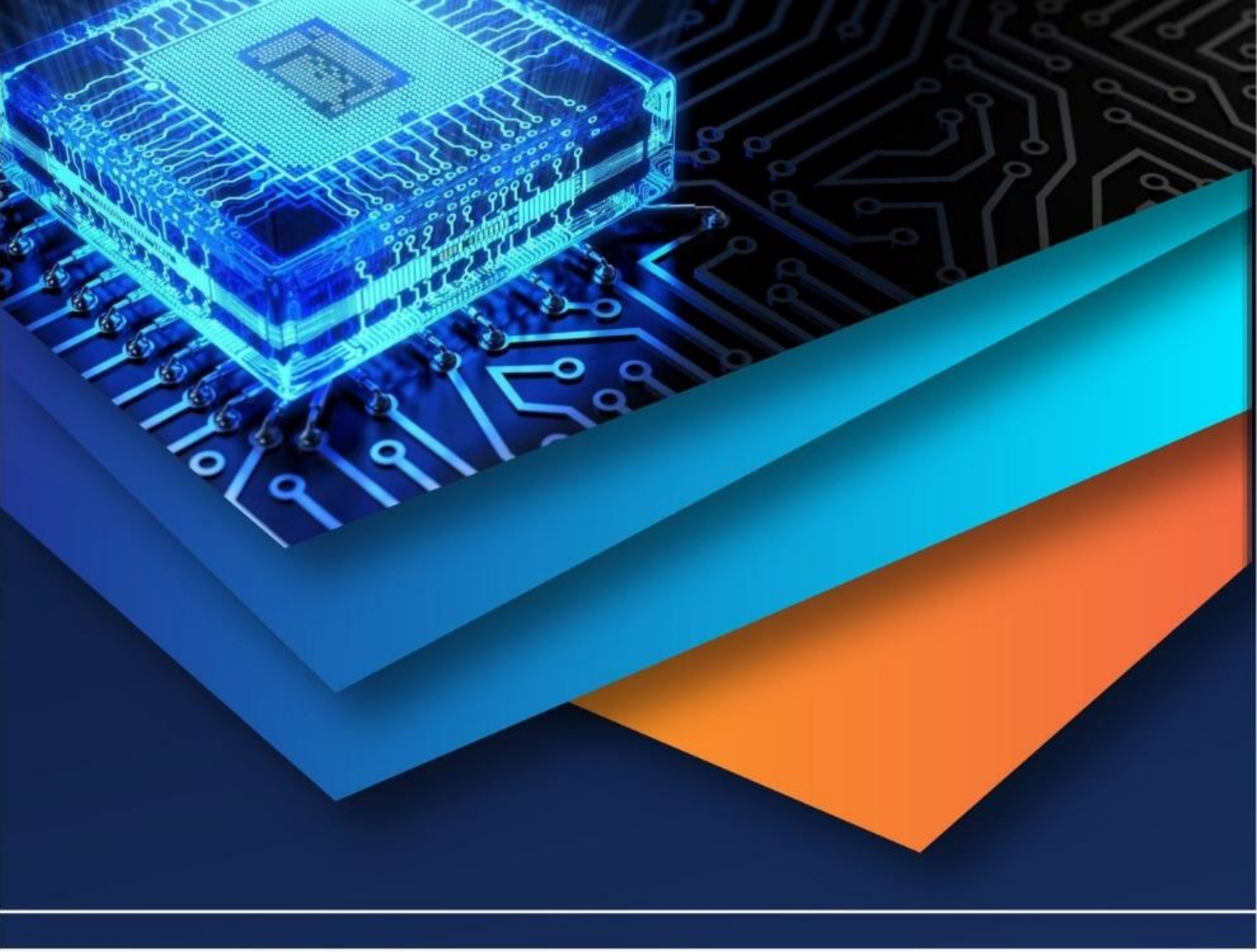

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