



PORTAL ASSOCIATED WITH NGOs TO HELP STRAY ANIMALS AND NEEDY PEOPLE

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Abstract: Food is one in all the fundamental necessities of humans, and it stands first among all basic needs – food, shelter, and clothing. It's important because it nourishes the human body- sustaining the very existences of humans. However, with the rising population and development of this country, food wastage has risen to a replacement high. There are many folks who wish to donate food to the needy but are unaware of how exactly they will execute that. Our application revolves around helping the needy by connecting NGOs and customary people. The donors shall be able to see a plurality of options by which they will donate. The NGOs will get the main points of the persons wishing to donate via our application and thus a network is established between donors, folks that aid the donors in donating (NGOs) and also the actual needy people to whom the donated item is distributed. Our application aims to evoke transparency, clarity and swiftness within the process of donation thus attending to mitigate prevailing issues in whatever zone it's possible for us to try to so.

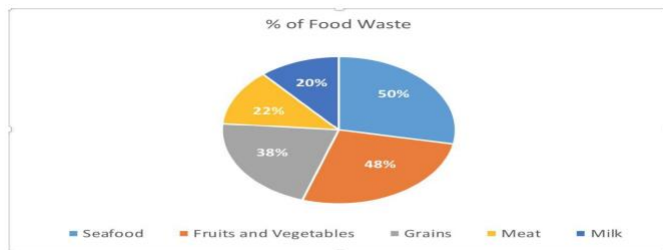
KEYWORDS: WEB APPLICATION DEVELOPMENT, NGO'S, CONTRIBUTION, DONATION, HELPFULL FEELING .

I. INTRODUCTION

Food Donation is a mission to complete hunger and no wasting of food to create a hungry-free world. As per the foremost recent survey, 1.3 billion lots of food is thrown as waste each year. Additionally, one-third of the food consumed is considered as leftovers. The most focus of this project is to cut back the amount of food wasted and being employed to the needy people. Therefore, a website is developed by which restaurant owners or personal can donate food to NGO's with their capacity and at the identical time the applying lets the organization to put their request on their requirements. The essential

prerequisite to use this application could also be a Smartphone and an active Internet connection.

The website for food donation acts as an interface between the users who are looking for a channel to supply the excess food without wasting it. It enables us to donate the excess food by notifying nearby users with the tiny print of the food that's available. The required users claim the notification. The system allocates the food items supported the priority.[1]



India is home to the largest undernourished population in the world

189.2 million people i.e. 14% of our population is undernourished

20% of children under 5 are underweight

34.7% of children under 5 years of age are stunted

51.4% women in the reproductive age (15-49 years) are anemic. [2]

In this system, we've got tried to scale back restaurant and party food wastage by giving waste food to NGOs. NGOs or restaurants either can raise asking or giving, just in case of any leftover food restaurants have. This request is distributed to the restaurant manager of that specific restaurant. The NGO Manager then approves the request and assigns it to at least one of the NGO employees for takeaway and forwards the request to the restaurant.

The leftover food at the restaurant are often given to NGOs at the tip of the day. The admin can track the history of restaurants and NGOs for the leftover foods.

The application is supposed to be in such a way that the users have two options to select.

If the user looking to donate food, login using username and password and add the below information within the application:

- Name of the food item and also the surplus quantity.
- Location of the user using GPS.
- Contact address details to mention excess food.

The donor's information is posted on the appliance and any number of users can claim the food.[3]

If the user is asking for the food, then he must enter the contact details of the organization that he belongs to with the address. The system is meant within the way that one or more users can claim the food. If there's over one user to mention the food, then the applying does the work scheduling and thus the request is accepted to the user on a priority basis. The food quantity and the person or organization that donated the food is displayed on the Donation Board. The success rate is calculated supported the impact of reducing the hunger rate.

II. PROBLEM STATEMENT

There are a lot of food NGO's are there in India but there is no portal for those NGO's to connect to the normal

people. So we created this portal to connect NGO's and normal people. If anyone wants to donate food he/she can update on portal and if NGO's or anyone need food they can request it on portal.

III.SCOPE OF AAHAR PORTAL

The scope of the project is the Aahar (food) portal that is developed. This project is developed to help the needy people and stray animals by donating the extra food left at our house or at party.

IV.NEED OF AAHARA PORTAL

Need of the portal is very necessary to reduce the wastage of food and to help the needy people and stray animals to provide them food and through this we are also giving platform to genuine people who wants to donate the food but they don't know where to donate and how to donate. People like them can also donate the food by this portal.

V. REQUIREMENT ANALYSIS

Functional Requirements:

- Easy to keep track of resources
- Quick production of statistics
- Cross-platform functionality

NON-FUNCTIONAL REQUIREMENTS:

•Performance

Helps in keeping the track and updating of records. There are two types of requirements:

Static Requirements- requirements which do not impose any constraints of the application on the execution characteristics of the system.

They can be:

Number of Terminals The application makes use of an underlying database that will reside at the server, while the front end will be available to the users.

Number of Users The number of users may vary, as this application finds relevance in almost all departments of an organization.

Dynamic Requirements – requirements which give errors/constraints on the time of the application on the execution of the system. They include response time and throughput of the system. Although these factors are not applicable to the proposed application, it will suffice if the response time is high or throughput is low.

RELIABILITY

The application will not be able to connect to the centralized database in the event that the server goes down due to hardware or software failure. The portal perform consistently without lagging use latest technology which prevents from lags and perform reliable and consistent.

AVAILABILITY

The application will be available to all existing user of a particular facilities while it is admin user or the client user it broadcast on the hosting services using EC2 services They can access the application anywhere they want but the hardware source is necessary.

SECURITY

Administrator is the only one who can handle the software and it can be used only by certain authorized users. Only the administrator has the right to create, delete or modify any new/existing user's data. Only users can access the application with the required credentials. Both Admin and user side have their different UI(User Interface)/UX.[4]

MAINTAINABILITY

Backups for database should be available and the website is dynamic which is maintain particular time basis and admin already changes on the website according current situation and thus developers team already change according to loads or more user access at current patch up or access denied situation.

PORTABILITY

The web application is cross-platform it means it can be used on both desktop or in mobile phone. Hence it is both OS and platform independent. If we are able to fulfill the requirements which are related to hardware then we are able to resolve all the issue regarding the portability.

DESIGN CONSTRAINTS

This web application also provides security. The login form is made such that it is safe and secure from the user such that it can harm the website. This web application is also authentic and faultless . The system is developed to handle invalid inputs. The administrator should know how to create, delete and edit the resources.

VI. DEVELOPMENT PLAN

1. To identify the general purpose and timeline of the project.
2. By creating the context & establishing all the features of our project.
3. Before starting the project keep in mind to consider "SMART" goals (Specific, Measurable, Achievable,

Relevant and Time Bound).

4. For completion of project collect all resources which are necessary(software's, APIs etc.) .
5. Understand the risks and try to find the proper or feasible solution to it.
6. Project should be tested under all circumstances and debugging should be done if required.
7. If there are any bugs or errors remove them.

VII. PROCESS MODEL

The design methodology employed for this application is SDLC technique which is the **Waterfall Model** which might even be denoted as **Linear Sequential Life Cycle**. This model is employed in building, designing and preserving information on industrial systems and computer software's. It's quite common and is the oldest software development architecture. This approach is extremely easy to know something completely and mostly employed for minor projects during which their requirements are well- recognized.

It involves various phases during which all are necessary to every other or one after the opposite given below:

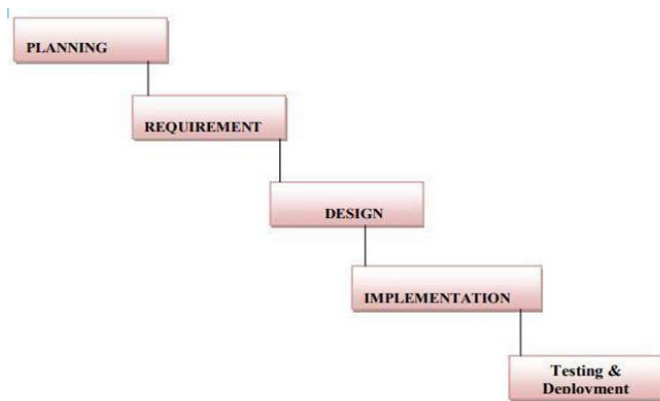
In the first phase (requirement phase), the end users, administrator and client are interrogated to discover their aim and objectives, requirements, and expectations from the application.

In the second phase (design phase), the application is designed to meet the end user's requirements. This Thesaurus the data flow diagram, context diagram and the use case diagrams.[5]

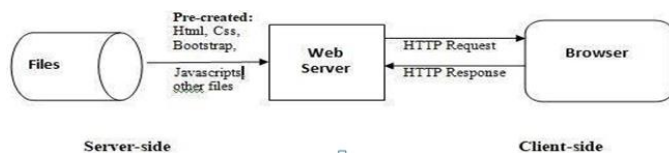
In the third phase (implementation phase), the graphical user interface of the system is designed with HTML, CSS, Bootstrap and PUG.Js[6] used as front-end tools and Node.Js and firebase as back-end design in addition with APIs such as Google Maps JS API[7]. The application interconnects with the Firebase database located on Firebase console. It is to make sure that the application is mobile responsive so as to make it easier for both the administrator and the employees to use the application.

In the fourth phase (testing phase), the work of each component of the website designed was tested and is integrated into a system, Test web application using selenium. [8]

Finally, in the last phase (deployment phase), we deploy the application we developed.



VIII. TOOLS AND TECHNOLOGIES



IX. SOFTWARE REQUIREMENTS

Frontend:

- Pug.js
- HTML, CSS, JavaScript
- Bootstrap

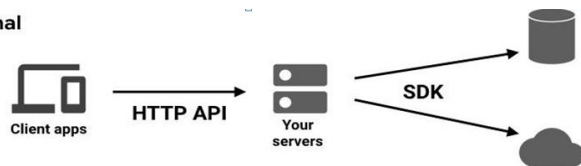
Backend:

- Node.js[9]
- Firebase

Database:

- Firebase Real Time Database[10]

Traditional



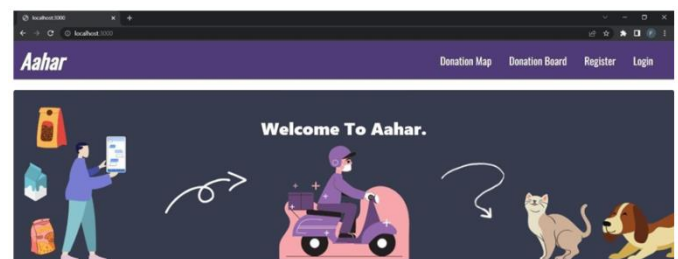
Firebase



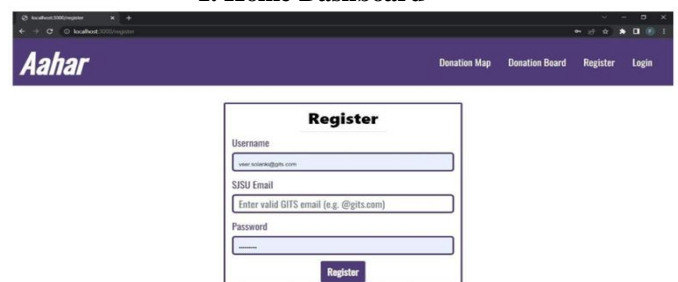
X. RESULT

Scientific knowledge advances have created necessary opportunities for developing our website which support stoppage of food wastage, which is a major problem of our country, particularly food wastage is a issue in restaurants and parties, so to overcome this issue, we have developed a platform where an individual or restaurants owner voluntarily donate food so that there will be no wastage and the needy will get the food also. NGO's will play an important role in this process, so this platform provide both features to the client and users to donate and receive food on a single platform

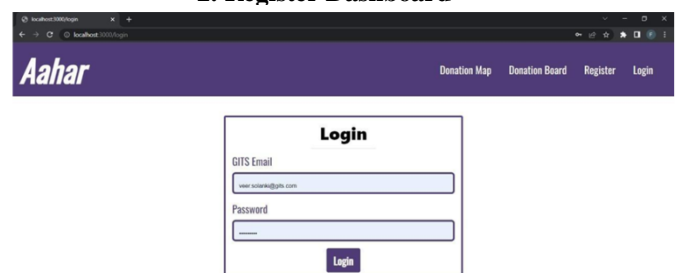
only. In this paper, we review our website Aahar and it's features alongside the design challenges and opportunities of the website for different individuals/users and the NGO's who will eventually supply the food to the needy.



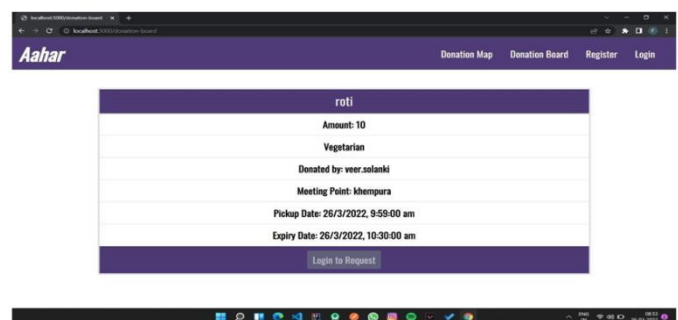
1. Home Dashboard



2. Register Dashboard



3. Login Dashboard



4. Login Dashboard Donation

Aahar Donation Map Donation Board Donate Inbox Send Message My Donations My Requests Logout

Food Item: Enter food item

Amount: Enter food amount

Meeting Point: Enter a meeting point

Pickup Date: dd-mm-yyyy

Expiration Date: dd-mm-yyyy

Food Lifestyle: ☐ Vegetarian

Publish

5. Donate

Aahar Donation Map Donation Board Donate Inbox Send Message My Donations My Requests Logout

roti
Amount: 10
Vegetarian
Meeting Point: khempura
Pickup Date: 26/3/2022, 9:59:00 am
Expires: 26/3/2022, 10:30:00 am
No Requests Delete Donation

6. My Donations

Aahar Donation Map Donation Board Donate Inbox Send Message My Donations My Requests Logout

daal
Amount: 50
Donated by: veer.solanki
Vegetarian
Meeting Point: Udaipur
Pickup Date: 26/3/2022, 4:04:00 am
Expires: 26/3/2022, 6:21:00 am
Request fulfilled Hide Donation

7. My Requests

Aahar Donation Map Donation Board Donate Inbox Send Message My Donations My Requests Logout

To: Enter recipient username

Listing Name: Enter listing name

Message: Enter message

Send

8. Send Message

XI. CONCLUSION

The conclusion leads to the challenges and opportunities for the NGO's who are receiving food and also the individuals who are donating or giving out the excess food. The portal is developed to provide surplus amount of food from restaurants owners or individuals who voluntarily donate the food which was somehow getting wasted earlier; they all get the resources and facilities at the same place.

The surplus food from the functions and gatherings can be donated easily. The visualization impact of the donation can create a positive impact on the users, minimizing and reducing food wastage and feeding stray animals and needy people is the main goal of the food donation project (Aahar). The application is targeted in two ways, the user who is donating the food and the person/organization that is claiming the food.

An Admin can do all modifications on the platform/portal, He/She is the person who monitors all the availability of resources that user/client requires. He/She can only create, edit, view, replace or delete any resources data, only an admin has the power to create, edit or delete a resource and products.

He/She doesn't have an influence to edit his/her profile. In web development, 'client side' implies that everything during a website that's displayed or takes place on the client side. This describes that what the user sees, like text, and also the remainder of the computer program, together with any actions that an application performs within the user's browser. Client-side explains the environment to the situation where processes run, while front-end mentions to the forms of processes that run client-side. Client performs some operations which interact with the databases of the resources and strike to the Admin (Server-side) to shop for or used the resources per the supply.

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