An Internet Based Mobile Application For Food Hunger

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Abstract- India is a country where economic status has reached a high level that tons of edible food is thrown away and is considered as waste. The amount of edible food that is wasted is approximately 25% per annum. This paper presents a new internet basedmobile application that provides platform for donating leftover food to all the needy people or organizations. It provides information about the motivation to come up with such an application, how the proposed product works for the betterment of society. This application is the effective means of donating food to the poor, the hunger and the homeless.

I. INTRODUCTION

According to the United Nations Development Programme, up to 40% of the food produced in India is wasted. About 21 million tons of wheat are wasted in India and 50% of all food across the world meets the same fate and never reaches the needy. In fact, according to the agriculture ministry, Rs. 50,000 crore worth of food produced is wasted every year in the country. India ranks 63 among 88 countries in Global Hunger Index. Wastage of food is not indicative of only hunger or pollution, but also many economic problems in the economy, such as inflation. The number of hungry people in India has increased by 65 million more than the population of France. According to a survey by Bhook (an organization working towards reducing hunger) in 2013, 20 crore Indians sleep hungry on any given night. About 7 million children died in 2012 because of hunger/malnutrition.Acres of land are deforested to grow food. Food wastage cripples a country's economy to an extent that most of us are unaware. If food is wasted, there is so much waste of water used in agriculture, manpower and electricity lost in food processing industries and even contributes to deforestation. Taking all of into consideration, the actual worth of money per year in India from food wastage is estimated at a whopping Rs. 58,000 crore.While you may not be able to reduce food lost during production, you can certainly reduce food at your personal level of food waste[1].

1.1 Objective

The objective of this paper is to reduce food wastage and the poor hunger to some extent.This system involves collecting leftover food from parties, events and functions and donating it to the poor, hungry and the homeless.
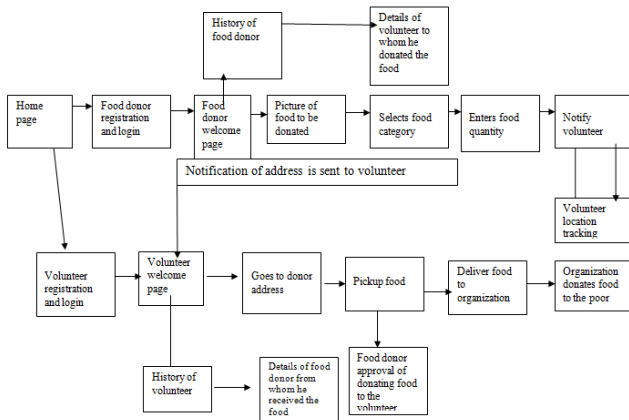
II. EXISTING SYSTEM

In existing system related to food recovery concept have the following features such as NEWS-News related to hungry India and App history- Information about number of donors, amount of food donated by donors.

Problem identified in existing system are No volunteer location tracking, Food donor and volunteer cannot update their profile picture and after the food donor confirms his donation, he cannot cancel the donation.

III. PROPOSED SYSTEM

In this application, extra features are added compared to the existing system. They are:

- VOLUNTEER LOCATION TRACKING-The food donor can track the location of the volunteer. The distance between the food donor and the volunteer is also displayed in meters.
- After the food donor confirms his donation, he/she can cancel the donation.
- The food donor and the volunteer can update their profile pictures,once logged or registered into the application.

3.1 System Architecture

Advantages

The proposed system has the following advantages

- The food donor can track the volunteer location. The distance between the food donor and the volunteer is displayed to both food donor and the volunteer.
- Volunteers get satisfied with their service to the poor.
- With the help of this application, the poor hunger will be reduced to some extent.
- Fast recovery of food from the donor and immediate delivery to the hunger and homeless.

3.1 Modules names and description

There are seven major modules in this project.

1. Application Home page
2. Login and Registration
2.1 Food Donor Registration and Login
2.2 Volunteer Registration and Login
3. Welcome page
3.1 Food donor welcome page
3.2 Volunteer welcome page
4. Picture of food to be donated
5. Food Category
6. Food quantity
7. Volunteer location tracking.
8. Food Donor approval.
9. History.
      9.1 History of food donor.
      9.2 History of volunteer.

Description

3.1.1 Application Home page

In the application home page , we have two options namely 'I AM A FOOD DONOR' , 'I AM A VOLUNTEER'. Based on those options, the user can register and login accordingly. If anyone wants to donate food, they can choose 'I AM A FOOD DONOR' option and register into the application. If anyone wants to work as a volunteer for this application, they can choose 'I AM A VOLUNTEER' option and register accordingly.

3.1.2 Login and Registration

In this module, there are two types of login pages. Such as Food Donor Registration and Login and Volunteer Registration and Login

Food Donor Registration and Login

In this module the food donor who wants to donate the food can register into the application. If he/she is already a user of this application, can directly login into the application. Once the food donor gets registered into the application, he gets a unique ID which will help the volunteer to identify the food donor. By giving unique ID to the food donor, there will be no confusion in identifying the food donors individually.

Volunteer Registration and Login

Anyone can register into this application as a volunteer. There is no rule that the person who donates food should not register as a volunteer and money donor. The food donor can also be as a volunteer or money donor. Once the volunteer gets registered into the application, he gets a unique ID for identifying him from other volunteers.

3.1.3 Welcome page

After registration, the food donor and volunteer will be redirected to their respective welcome pages.

Food donor welcome page.

In the food donor welcome page, he can update his profile picture. His profile picture is displayed on his welcome page. He can even change his profile picture frequently. He also finds other options called 'DONATE YOUR FOOD', 'HISTORY' and 'LOGOUT' on his welcome page. If he selects 'DONATE YOUR FOOD' option, he gets redirected to 'Picture of food to be donated' module. If he wants to logout from the application, he can press logout that leads to application home page.

Volunteer welcome page.

In the volunteer welcome page, he can update his profile picture. His profile picture is displayed on his welcome page. He can even change his profile picture frequently. He also finds other options called 'SEARCH DONORS', 'HISTORY' and 'LOGOUT' on his welcome page.

3.1.4 Picture of food to be donated

The food donor, after selecting 'DONATE YOUR FOOD' option on his welcome page, he gets redirected to this module. In this module, he upload the photo of food that he wants to donate. He can do this either by selecting the picture from gallery or by capturing the image. After uploading the picture, he presses 'NEXT' button that is present at the bottom of the page. Then he gets redirected to 'Food Category' module.

3.1.5 Food category

In this module, he finds the options all categories of food namely South Indian Tiffin's, North Indian Tiffin's, Rice, Curry , Fruits and Diary products. Among these categories, he selects the required categories that he wants to donate.

3.1.6 Food Quantity

After selecting the food category, the food donor gets redirected to the food quantity module where he can enter the quantity of food he wants to donate in bowls.

Then he presses 'NEXT' button. Then he gets redirected to the map where he can track the volunteer's location. The details of the volunteer are displayed on the screen along with the map. Under the details of the volunteer there will be a cancel button. If the food donor wants to cancel the donation, he can click on the 'CANCEL' button such that the details of the volunteer get disappeared. The volunteer gets a notification that the donation has been cancelled.

3.1.7 Volunteer Location Tracking

In this system, volunteer location can be tracked by the food donor. The food donor can view volunteers location in the map. He can also view how many meters the volunteer is away from his current location. This helps the food donor to keep the food ready to give the volunteer. The volunteer can also view how many meters the food donor is, from his current location. This is one of the best features included in this system.

3.2.7 Food Donor approval

After giving food to the volunteer, the food donor opens the application and approves that he have given the food to the volunteer by giving his signature. Once he gave his signature, the details of his donations will be stored in the database.

3.2.8 History

The history of food donor and volunteer are different.

Food donor history

In this module, the details of volunteer to whom the food is delivered along with the time are displayed.

Volunteer history

In this module, the details of food donor from whom he took the food along with time are displayed.
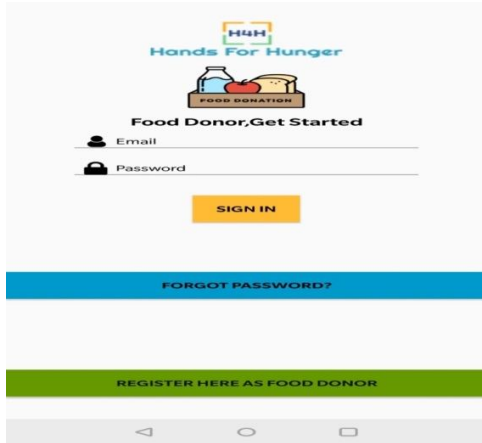
IV. IMPLEMENTATION

In this system, implemented security features and coding standards as follows:
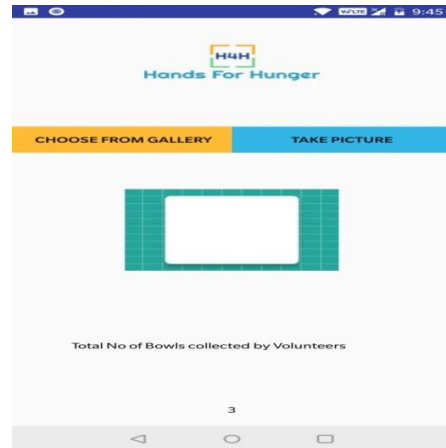
4.1 Security features

Security is the condition of being protected against danger or loss. In thegeneral sense, security is a conceptsimilar to safety. So every application has to besecured againsthackers or anonymous accessofit.Oursystemcontainsonesecurityfeature such as Password Protection.

Password Protection is defined as every user who is to be allowed to access the applicationisgivenhisownusername and password and given his own access rights so that only authorized andauthenticated users can access the project.
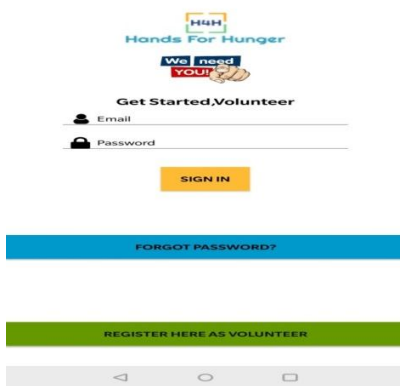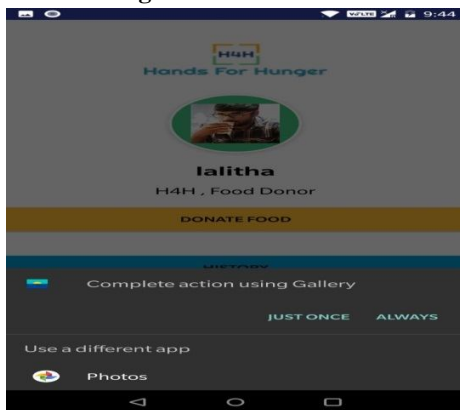
4.2. Result

4.1 Login screen for food donor

4.2 Login screen for volunteer
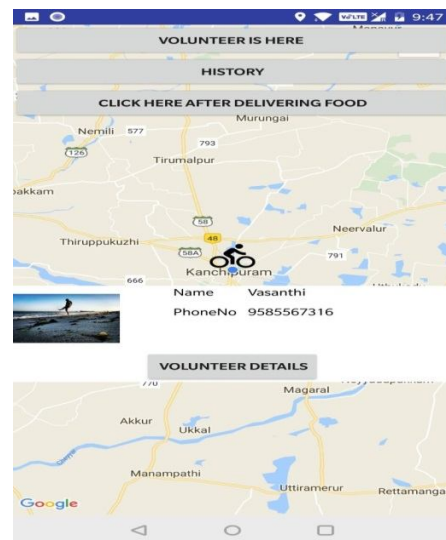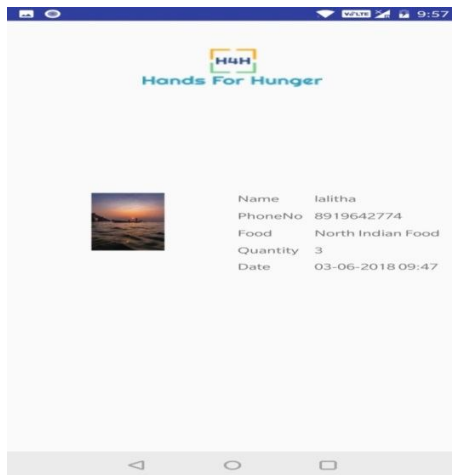

4.3 Donate food module

When the donor clicks on donate food, he gets two options shown in fig 5.4

1. Choose from gallery
2. Take picture, and he also gets info about how many bowls collected by volunteer

4.4 Picture of food to be donated module

4.5 Food quantity module

4.6 Volunteer location tracking

4.7 Volunteer history

V. CONCLUSION

This project shows that acts as a medium for reducing the poor hunger and the food wastage. Volunteer's location can be tracked by the food donor and vice versa. Fast recovery and immediate delivery of food to poor is ensured. This works for the betterment of the society. By using this internet based mobile application, the poor hunger and the food wastage can be reduced to some extent.

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