

# Food Waste Management Android Application

Aarya Khanapurkar, Anagha Deshpande, Pratiksha Mahale, Prof. Abhilasha Borkar

Department of Computer Engineering

Cummins College of Engineering for Women, Nagpur, Maharashtra, India

**Abstract:** *This project is used to manage wastage foods in a useful way. Every day the people are wasting lots of foods. So we have to reduce that food wastage problem through online. If anyone has wastage foods they are entering their food quantity details and their address in that application and then the admin maintain the details of food donator. The donator can create the account and whenever they are having wastage food they can login and give request to the admin. And the admin also maintain the buyer (orphanage, poor people,...) details too. After the admin view the donator request and give the alert message like time to come and collect the food. And the admin collect foods from donator through their nearby agent then provide to nearest orphanages or poor people. After receiving the food from the agent by admin and give alert message to that donator. If the donator needs any detail about the orphanage with helping thought they can give request to the admin and collect the orphanage details. This project is food redistribution is an enormously successful social innovation that tackles food waste and food poverty. The user's details are maintained confidential because it maintains a separate account for each user.*

**Keywords:** Food donator, Food wastage problems, collecting foods

## I. INTRODUCTION

The sharp increase in the amount of wastage in terms of food, clothes, books, etc. makes the need for charity in terms of donation. This paper presents 'Helping Hands', a new internet-based application that provides a platform for donating old stuff and leftover food to all needy people/organizations. It provides information about the motivation to come up with such an application, thereby describing the existing donation system and how the proposed product works for the betterment of society. The product is shown to be an effective means of donating things to organizations, etc. over the internet. It shows the potential for avoiding the wastage of food, clothes, books and the other stuff.

In highly populated countries like India, food wastage is a disturbing issue. The streets, garbage bins and landfills have ample proof to prove it. Marriages, canteens, restaurants, social and family get-togethers and functions expel out so much food. Food wastage is not only an indication of hunger or pollution, but also of many economic problems. The high standard of living has resulted in the wastage of food, clothes, etc. because of quick changes in habits and lifestyle. Instead of wasting these things we can put them in use by donating them to various organizations such as orphanages, old age homes, etc. The product is an internet-based android application that basically aims at charity through donations.

Most people don't realize how much food they throw away every day — from uneaten leftovers to spoiled produce. About 95 percent of the food we throw away ends up in landfills or combustion facilities. In 2013, we disposed more than 35 million tons of food waste. Many people wish to donate things to needy organizations. Also, many organizations wish to ask for various things required by them such as clothes, food grains, books, utensils, etc., but there is no source available through which they can satisfy their requirements. Thereby, an Android application has been developed through which people can donate items as per their capacity and the application also allows organizations to put up their requests, i.e. items required by them, if any. The majority of the population today uses smart phones with active internet connection, which is the basic requirement for this product to function properly.

## II. EXISTING AND PROPOSED SYSTEM

### 2.1 Existing System

In existing system if anyone have extra food because of any function or in their home it will be become waste because instantly there is no way to share with anyone if they are having lots of food. Even if they want to give that extra food to any orphanage or poor people they don't have time or don't have an idea about that. So that we have create a application for sponsor that extra food to poor people or nearby orphanage.

## **2.2 Proposed System**

In proposed system we are reduce that food wastage using that application. This project is food redistribution is an enormously successful social innovation that tackles food waste and food poverty. The admin collect foods from donator through their nearby agent then provide to nearest orphanages or poor people. After receiving the food from the agent by admin and give alert message to that donator through this way we can reduce food wastage problem.

The proposed application is android-based, developed on Android Studio using java and xml requires internet connection and will provide a platform for donors and seekers after they successfully register into the system. If a user wishes to donate something, he/she can send a message in application.

This message will be shown as notification in donations tab to other users. This message will be stored in backend in the database. Once a notification is sent, the orphanages who wish to claim the donations can reply to the donor and contact him/her. The user interface of this system will be simple and user-friendly, and the targeted system is android. At present, we are aiming to avoid the major wastage that usually happens in India and that is foodstuffs. We are looking and expecting to update and refine the same which will add up to efficiency and utility of the application including books, stationary, clothes, etc. However, the application is limited Android Smart phones with Gingerbread OS and higher versions. Also, the application will be beneficial if donors and seekers are located near each other. The use case diagram shown above describes 3 actors – Donor, Receiver and Admin.

The Donor performs operations like Registration and Login into the System. He can also put up items for donation and view all donation requests (items required by organizations). The Admin and Donor both can view the Receiver's location. The Admin can also monitor and update the database. The Admin and Receiver both can view the Donor's location. The Receiver can also perform operations like requesting for items, viewing requested items and claiming donations.

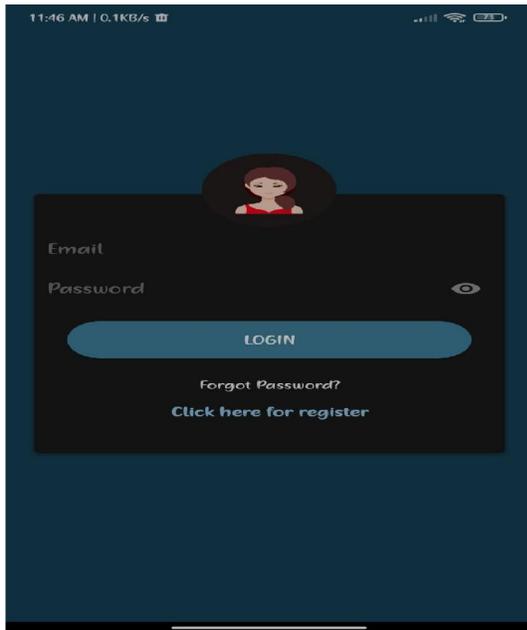
## **III. MODULES**

### **3.1 Donor Module**

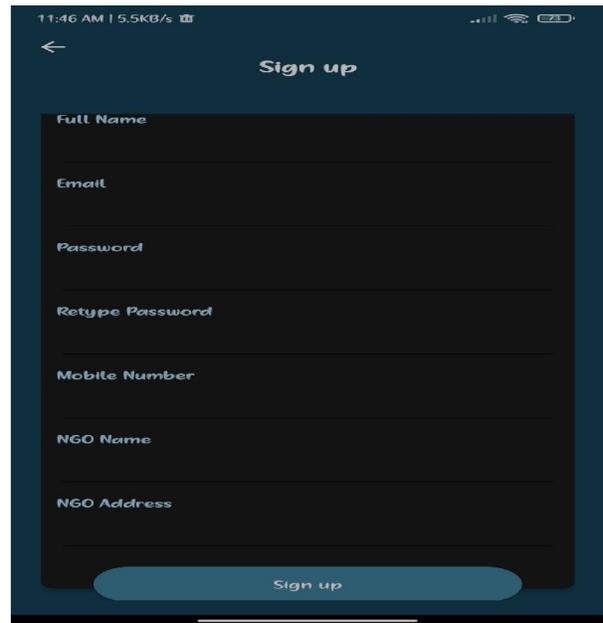
- User registration: This module is utilized to make a user registration form. After registering the successful registration, the user can enter into the process in order to register the user will need to enter some personal information like the required details by the name, age, secret password, location, address etc.
- Login credential: This module is used for public or user login using username and password.
- View Items: This module is used for viewing the item search location wise and books the food items.
- Add Item: This module is used to create a new food item with details of quantity, location, address contact information, etc.
- Update/Delete Food: We can update or delete the food item , if the food item is not relevant to the people.
- Share Current Location: This module can be used to share the address using Gmap or can be used to track the delivery of food.
- Database: This module contains the entire information of the app.

### **3.2 Admin Module**

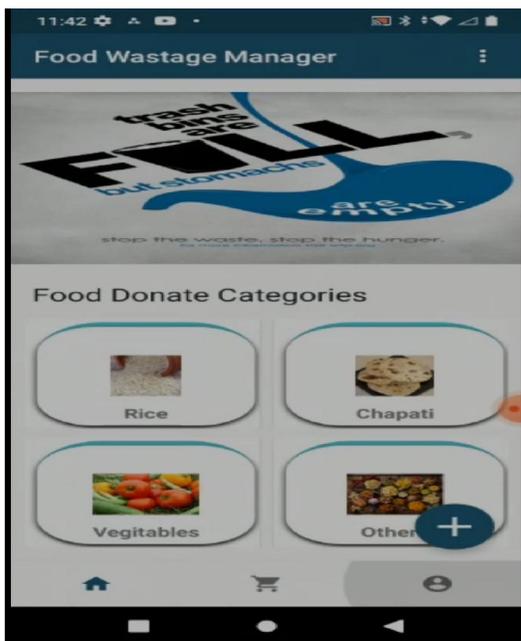
- All the updates and augmentation and clearing out of data identified with places and other data are restored by strategies for this module essentially the administrator has the choice to find a good pace.



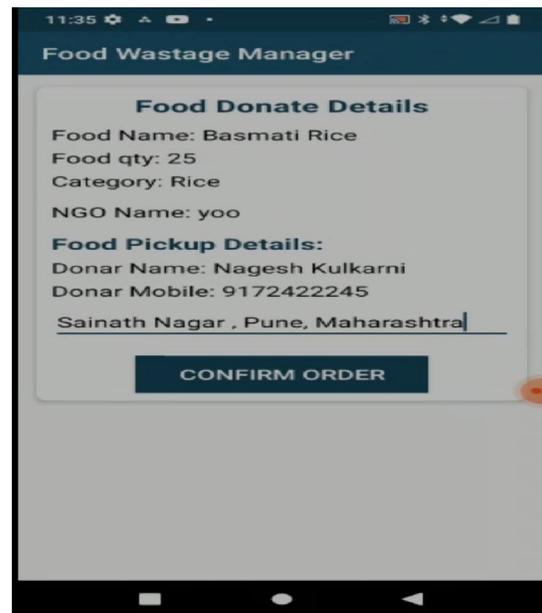
**Fig 1:** Screenshot of Login Page



**Fig 2:** Screenshot of Sign Up Page



**Fig 3:** Screenshot of Home Page



**Fig 4:** Screenshot of Item Details Page



Fig 5: Screenshot of View Item Page



Fig 6: Screenshot of About Page

#### IV. CONCLUSION

The proposed application shall reduce food wastage and also fulfill other requirements like clothes, books, utensils, etc. of needy organizations. As mentioned above in the description there is a lot of food wastage that occurs daily at restaurants and cafes. Instead of throwing away the same as trash (which usually is the scenario), it can be used to feed the homeless. Also, since the pickup is arranged for by the enterprise, the restaurants/cafes need not worry about it. Beneficiaries will be both the restaurants/cafes (reducing the carbon footprint and wastage), and the needy.

In future work, there was no standard food information system on food packages that gives the user the information of both the name of the food, as well as its expiry date. The viable improvement would be get the food name from the product bar code and read the expiry date using OCR tools. However, the level of ease of using this option is only slightly greater than using the manual option of filling the food information. Some companies have started trials with using QR code on their food packages to provide detailed information. Notwithstanding, there is still lot of hurdles to pass for it to become a standard. But for the meantime, this application presents a viable and effective solution.

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