

Modern Methodology Approach for Food Donation: YWaste App

Mihir Jadeja¹, Parth Sadhu², Vraj Patel³

¹⁻³UG Students in Computer Science, Department of Computer Science, Bits Edu Campus, Vadodara, Gujarat, India

Abstract - Everyday people are wasting lots of food. Therefore we've to scale back that food wastage drawback through on-line mode. The method entitled As "Modern methodology approach for food donation: YWaste App" is an android based application named as YWaste, developed to prevent food waste. If anyone has waste food or leftover food they can simply enter food details such as how much quantity of food is there; address of donor, time, date etc. in that app and post the donation. Additionally the admin also maintain the customer (orphanage, poor individuals etc...) details too. This application is a hugely smart social concept tackles waste food and food financial condition. Also, as each user uses separate account for donating food, their details are maintained confidential.

Key Words: Android based application, Food waste, Leftover food, Quantity of food.

1. INTRODUCTION

Each year regarding billion heaps of food is wasted and at a similar time regarding many individuals don't have access to spare and nutritive food. According to ETNOWNews.com, in 2020 around sixty seven million tons of food is squandered in India consistently which has been esteemed at around Rs. 92,000 centers.

In exceptionally inhabited nations like India, food wastage is associate degree displeasing issue. Marriages, canteens, restaurants, social and family get along food is wasted such a lot. Food wastage is not just a symptom of desire or contamination, nevertheless additionally of various monetary problems.

Wastage of food isn't indicative of solely hunger, however conjointly several economic issues within the economy, like inflation. Despite the fact that the world produces enough food to feed double the worlds gift population, food wastage is incidentally behind the billions of individuals who are malnourished. If food is wasted, there is such a lot of misuse of water utilized in horticulture, labor and power lost in food preparing enterprises and even adds to deforestation.

Rather than wasting food we can place them in use by giving them to different associations like shelters, NGO, advanced age homes, and so on. Ywaste mobile application, as its name would possibly counsel why to waste food is intended to cut back excess quantity of waste food. It permits others to share data about their

requirements and request help in a modern and less embarrassing way.

This application will make it simpler for anybody to give anything they need in a straightforward manner and the least worrying method, since it shows the closest potential individuals who need help. This application is going to help needy individuals of India as through this application we are going to distribute leftovers food to the poor people who need this food to fill their empty stomach.

We would tie-up with some NGOs who might give us insights concerning these individuals and afterward first they will collect this food and afterward convey it to the needy people who needn't bother with taste in the food and simply want to feed in order to get the energy to endure.

2. FACTS CONCERNING HUNGER IN INDIA

The monetary status of India has arrived at a general that numerous and numerous huge loads of food is squandered and discarded in each phase of marketing. The amount of food wasted approximate 25% of the total amount of edible food. Food is most important demanding product group and resource.

India is the biggest home to one of the colossal malnourished and hungry population inside the world. No one intends to waste food in the beginning, in marketing and industrial behavior some situation arises that leads to the wastage of food. Underneath referenced is information of Global Hunger Index (GHI) reports of 2020:

- From the 107 other countries the rank of India is 94th in terms or hunger;
- India's score in hunger category is serious i.e. 27.2.
- If we look at the report of India's hunger chart, there is 14 percent undernourished population.
- The under-five mortality rate of India stands at 3.7 percent.
- India recorded a wasting rate of 17.3 percent in the year 2020 and a 37.4 percent stunning rate among children under five.

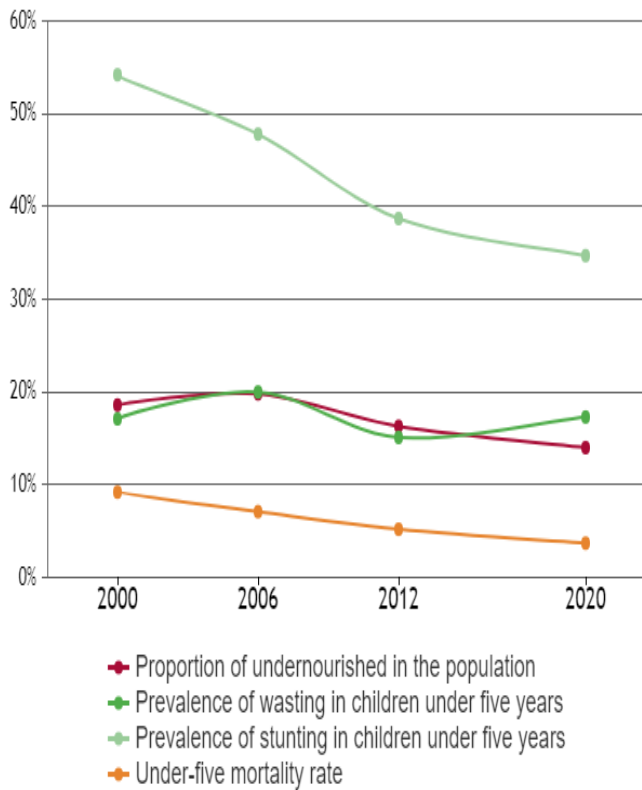


Chart -1: Trend for indicator values-India

3. EXISTING SYSTEM

At present people contribute stuff in two ways things: first, they donate personally by visiting each organization a number of times, and second, they donate via websites, which are not as easy to access and provide no awareness of the service to the world. Because everything is disclosed by intermediaries, there is no proper relationship between the donor and the receiver/NGO. Another reason includes there is no proper active mobile application which solve this kind of problem.

4. PROPOSED SYSTEM

The proposed application is android-based, designed with Android Studio version 1.0 using java and xml requires internet connection and will provide an online platform for donors and receiver after they successfully register into the application. After successfully login with email id and password, if user wants to simply donate food, they just need to add details like food quantity, requirement of vessel (if needed), date, time and address and then post the donation request. Then this request is sent to the admin, after that admin assigns a delivery agent and delivery agent collect and gives the food to mentioned NGO or orphanage etc. The agent send alert message to admin as well as donor. The donor can contact admin if

donor needs any further details regarding the NGO or orphanage.

Users can also see their pervious donation history from the app. However, the application is limited to Android Smartphones and higher versions (Android Jellybean4.1 is recommended). The main advantages of this app are that it uses less memory space in storage. Also, it has attractive UI and it is easy to use as the application is developed using Android Studio. Also, since the pickup is arranged by the admin, the donor need not worry about it.

By using this application, anybody can donate food in least troubling way and simple way. Also, this app is built in simple manner which make easier for everyone (also who don't know much about the phone) can easily access this app.

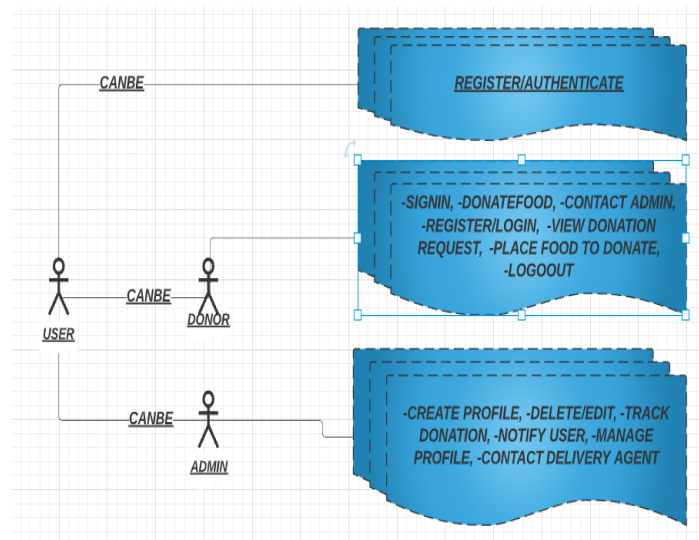


Fig -1: Use case diagram

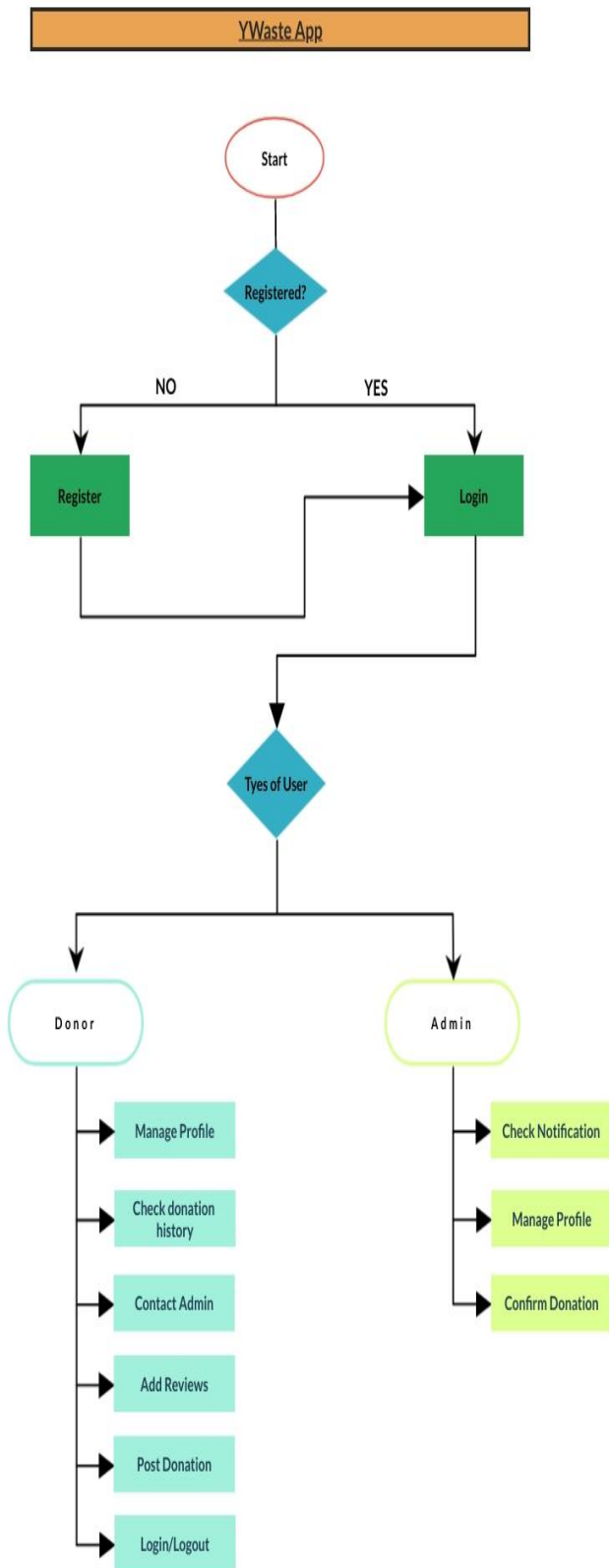
5. COST

In any project, cost is a crucial consideration. It is vital to understand how much it will cost to develop and how much development time will it takes.

Our app focuses specially on helping citizens in gaining access to information as well as recognizing cases that require assistance through profiles and reviews. Because all of the technologies used to create this application were open-source, there were no financial expenditures associated with this project. Time and human effort were the only costs.

Our labor cost was not as such; it only included development costs, and material expense was additionally not as such as it was created on developer's framework. Our developing project's time value was similar to our developing and total expenditure.

6. FLOW DIAGRAM



7. IMPLEMENTATION



Fig -2: Donor/Admin Selection activity

This section contains two buttons: admin and donor. Clicking on the admin button will take you to the admin login screen, while clicking on the donor button will take you to the donor login screen.

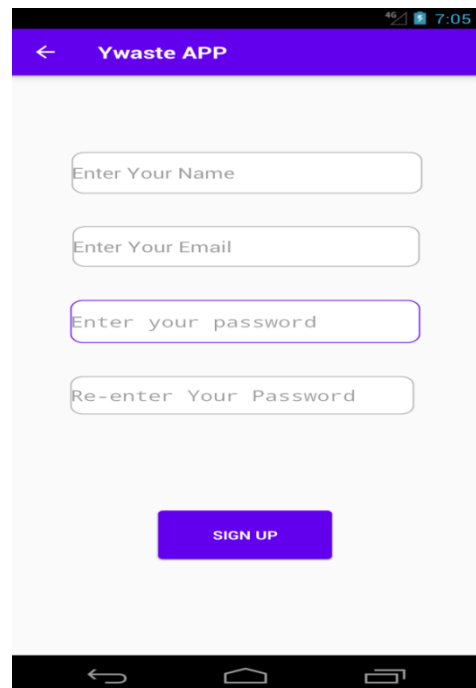


Fig -3: Sign Up/Registration

The user can register in the system by filling out the essential information, such as a valid email address, password, and name, in this part.

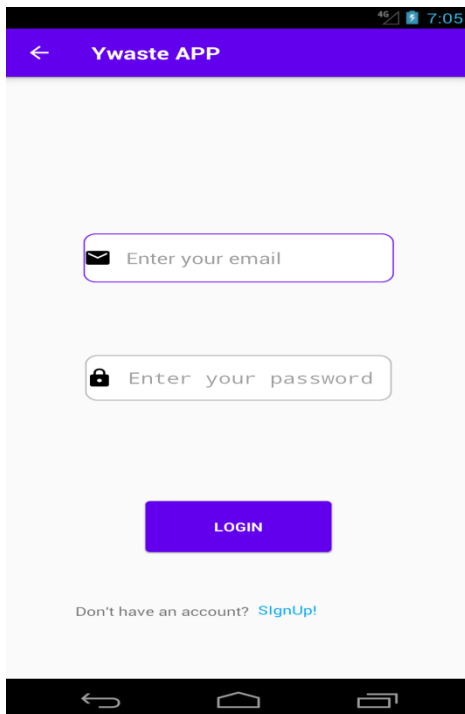


Fig -4: Login activity

After a person has registered or has already registered, he or she can straightforwardly log in to the system and make a gift.

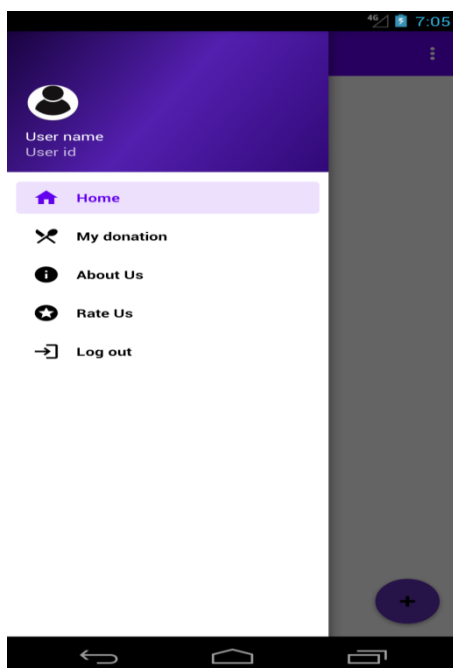


Fig -5: Home page

In this navigation drawer, it includes various fragments such as

- Home page- In this, there is a plus sign button (on the bottom right), which when clicked will take you to the donation area, where you may enter your donation.
- My donation- Here, users can check their donation history
- About us- This section will explain the main goal for building this app
- Rate us- this which will lead you to Google play store where you can rate our application
- Logout- one can easily log himself out by tapping on it

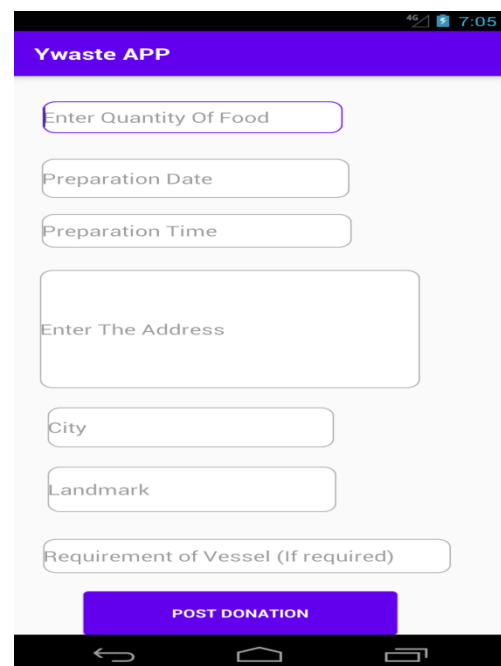


Fig -6: Donation Activity

By clicking the add or plus button (located in the bottom right corner of the home page), users will be directed to this part, where they may enter the necessary information to post their food donation.

8. CONCLUSION

Thus, this application would undoubtedly benefit many individuals throughout the city by contributing food on a daily basis. Hundreds of thousands of tons of meals are thrown away every year, while millions of people go hungry. Instead of tossing it in the trash (which usually is the scenario), it might be utilized to feed the homeless.

Even in any pandemic situation this app will help thousands of people that suffer from hunger and malnutrition.

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BIOGRAPHIES



Mihir Jadeja,
BE in Computer Science,
Babaria Institute of Technology
(Bits Edu Campus) Affiliated to
Gujarat Technological University.



Parth Sadhu,
BE in Computer Science,
Babaria Institute of Technology
(Bits Edu Campus) Affiliated to
Gujarat Technological University.



Vraj Patel,
BE in Computer Science,
Babaria Institute of Technology
(Bits Edu Campus) Affiliated to
Gujarat Technological University.