

Availability of food for NGO through Mobile Application: FOOD FOR ALL

Vidhi Panchal¹, Kajal Kuchekar², Snehal Tambe³

^{1,2,3}Department of Information Technology, Vidyalkar Institute of Technology

Abstract - Food For All a mobile application developed with an objective to focus on availability of food for the NGO and to avoid the wastage of food. In current scenario food is wasted daily on large basis in weddings, restaurants, college/school canteens, social events and many other social functions. People nowadays donate food manually by visiting various NGO, organization around them. The proposed system is an internet based application where food donors and volunteers from NGO communicate with each other over internet to discuss the availability of food and other details.

Key Words: Food Donation, Smartphone, NGO, Mobile application, reduction of food wastage

1. INTRODUCTION

The sharp increase in large amount of wastage of food makes the need for donation of food. In highly populated country like India, food wastage is a big issue. A lot of food is thrown away in garbage bins, streets, and landfills have proof to prove it. Marriages, canteen, restaurants, social and family get-together and functions expel out so much of food [1]. Food wastage is not only an indication of pollution or hunger, but also of many economic problems. Instead of wasting food we can put them in use by donating them to various organizations such as orphanages old age home, NGO's, etc.

The product is an internet based mobile application for the NGO named 'Jan Vikas Sangh' located in Bandra East, that provides a platform for donating left over food from different functions hotels, and events to the needy people of the NGO. This system creates a common collaboration between a donor and a volunteer from the NGO where the donor uploads all the food details which includes food type, location where the food is available, cooking and expiry date/time of food and at the same time volunteer receives a notification of availability of the food once the donor uploads its successfully. The volunteer decided whether to accept or reject the food availability. It shows the potential for avoiding the waste of food.

2. LITERATURE SURVEY

'Helping Hands'[1] is an android mobile application which provides a platform for donors and seekers to donate and receive food after they successfully login into the system. The system consist of 3 main components donor, seeker and admin. The donor performs operations like registration/login, and add up items to donate and view the donation request. The receiver performs operations like requesting the items, viewing requested items and claiming

donations. The admin can monitor and update the database. The admin and donor both can view the receiver's location. The items donated by the donor will be shown as notification in donation tab to other users and the message will be stored in database at the backend.

'Food donation portal' [2], paper published in 2015 summaries in brief the concern of food donation activities and offers a platform that connects donors with NGOs. An idea for avoiding wastage of food, reduction of food wastage and increasing food donation network is presented and impact on society through this medium is made available.

The paper 'Beyond food sharing: Supporting food waste reduction With ICTs'[3], published in 2016, guaranteeing food security is key in checking the quality of life of citizens at different levels of society. The recent economic crisis has increased a great number of people living in conditions of food hunger and poverty, especially in developed regions. Despite of growing awareness and concern of how much food is important and reduction of wastage of food and managing food surplus, the role of ICTs in this domain is still unclear and rarely documented.

Happy Life Welfare Society [4], is a nongovernment NGO who are taking efforts to help people provide a better and happier life by donating food to needy and shelters through their online website, wherein people can donate funds, donate food and volunteers for various activities. 'Share my Dabba' is an initiative to get left over food in dabbas to hungry children on street using a tiny sticker and extensive dabbawala network.

3. PROBLEM STATEMENT

The product aims at satisfying in reduction of wastage of food and donate the available left over food to the NGO through donation over the internet. The application shall ask the donor/user to register his/her details into the application and then he/she can login and upload the food details to donate. Similarly the volunteer's from NGO can register/login into the system and view the food donation list donated by the donor. The volunteer decides whether to accept the food donation or reject the food donation. The application is developed using Android Studio and the languages used are XML and core java. The main objective of the proposed system is to reduce wastage of food, making food availability to the NGO which will also inculcate values of sensitivity and sharing among people.

4. PROPOSED SYSTEM

The proposed system is an android application, developed on Android studio 3.3.36 using java, xml which requires internet connection and local host to store the data into the database. The main components of the application is the donor and the volunteer of an NGO. The donor can register/login into the system and enter the available food details in the food donation entries. The donor can enter the food type, cooking and expiry date of food, location (where the food is available) and the availability details of the donor. Once the donor fills in all the details and submits the form the volunteer will receive a notifications regarding the food details. The volunteer can register/login into the system and check the availability of food and food type updated by the donor. If the volunteer wants to claims the food donation he/she accepts the food donation and tries to contact the donor. If the volunteer he/she doesn't want to accept the

food donation or maybe the volunteer is not available at the given location he/she can reject the food donation. The accepted and rejected food details are displayed separately on the accepted food donation entries and rejected food donation entries. The availability of the food from the food donation entry is deleted once it exceeds its date and time limit.

The user interface of this system is simple and user-friendly. Marriages, canteen, restaurants, social and family get-together and functions expel out so much of food. At present we our aiming to avoid the major wastage that is wastage of food. We are expecting and looking to update the same which will add up utility and efficiency of the applications including clothes, stationary, books, etc. Also make this application feasible and available for more NGO's, orphanages, old age house and other organizations

4.1 Flowchart

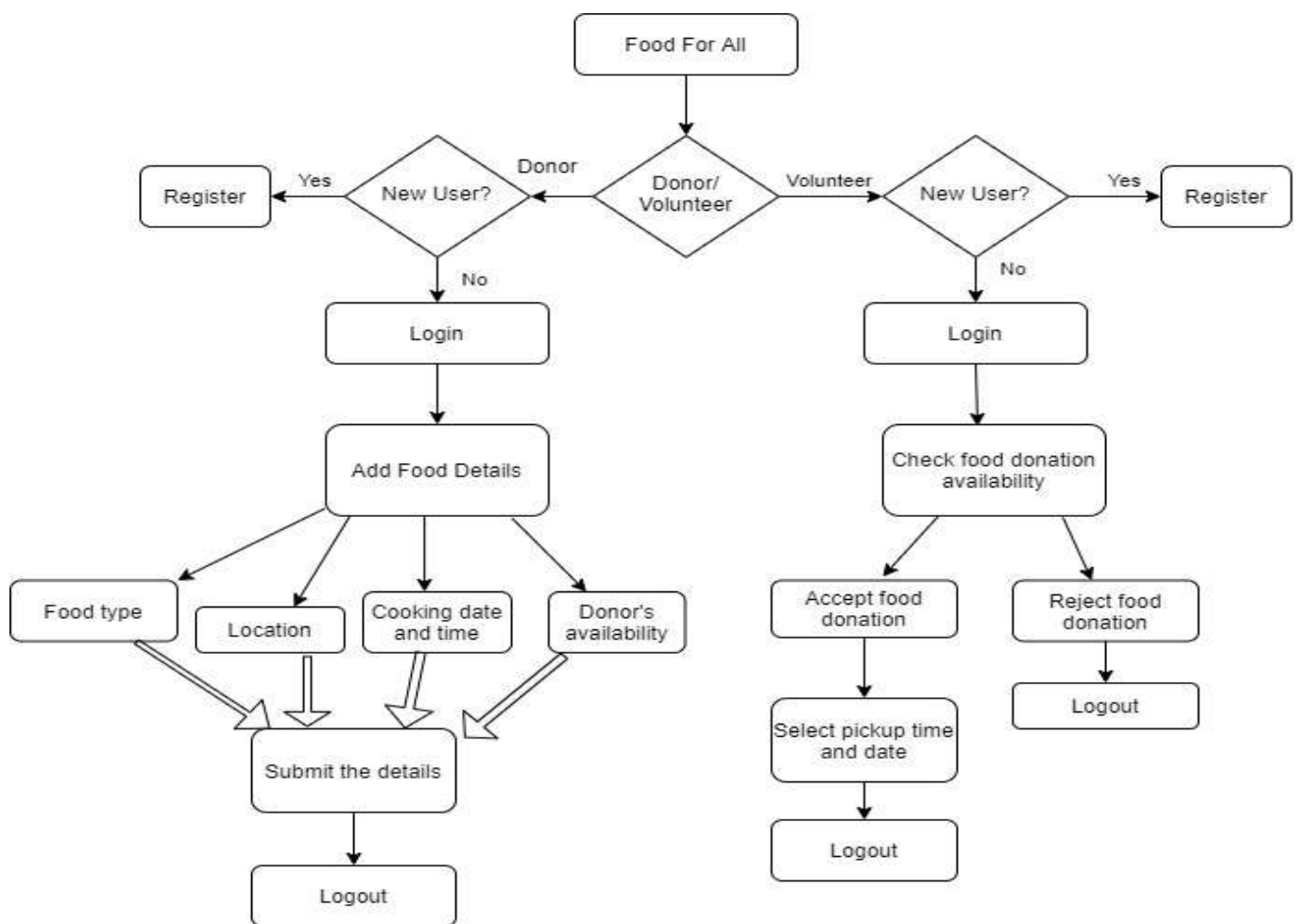


Fig 4.1 Flowchart Diagram

5. IMPLEMENTATION

There are some of the screenshots of our developed project



Fig 5.1 Splash Screen



Fig 5.2 Signup as Donor or Volunteer



Fig 5.3 Login as Donor or Volunteer



Fig 5.4 Food Donation Form



Fig 5.5 Food Donation Entries

6. CONCLUSION

Hundreds and thousands of ton of food is wasted, lost or thrown away while millions of people suffer from malnutrition. Therefore Food For All is a mobile application developed for NGO which gives importance to reduction of wastage of food and focuses on donation of food. At present we are aiming to avoid the major wastage that is wastage of food. We are expecting and looking to update the same which will add up utility and efficiency of the applications including clothes, stationary, books, etc. Also make this application feasible and available for more NGO's, orphanages, old age house and other organizations.

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