

FOOD WASTAGE MANAGEMENT USING ANDROID APPLICATION

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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 mobile. If anyone has wastage foods they click message send button and it will send the message of food availability, location information and their registered mobile number to nearest (30km) food donators. Then who will make a call first they will get the food. This system is android based application provides interaction between mobile users and NGO's.

Keywords– Food Wastage Management, Short Message Service, Google Maps.

I. INTRODUCTION

Everyone enjoys the functions with a lot of food and other products and most of them left waste or unused. We all are waste food for various reasons. Typically it's as a result of there has been an amendment of plans and it's out of our management, however, most of the time we tend to waste identical varieties of food for identical a pair of main reasons: We've got bought or read an excessive amount of, or we've got forgotten to use it on time. Regardless of the rationale why you throw out food, you got it and currently, its cost accounting you to throw it out.

So, after you square measure throwing out food, or recording the food you've got wasted, cash A note the explanations for your scraps and see if there square measure tiny changes that you just will build to cut back this waste and prevent plenty of dollars. In current system 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. If anyone sees this information through this application they will go and collect the food and serve to poor people. There are many disadvantages in the current system like

- It does not send any alert notification
- It does not provide location information through GPS.
- Sometimes it delays the process and may be food expired.

To solve these problems we come up with a system which can take request from the users who want get settle with the waste food, they can request to donate or sell at cost to our systems managers who comes to them at given

time and pick the order and further park that food to needy place where most people are without food according to need status.

The proposed system is android based application, which provides the interaction between the mobile users and NGO organizations. This system is able to share the location information and user registered mobile number through sms. This alert the NGO's to collect the food before it expires. This makes food wastage management easier and efficiently handles food.

II. BACKGROUND WORK

In every Indian wedding, food is the most important part and the most wasted too! In India, statistics related to food wastage at weddings have been quite shocking, given the fact that it is the same country where countless number of people have to survive without the basic necessity of two meals a day. Following list by VenueMonk will give you an idea as to how much food is actually being wasted. Have a look:

As the ranks of India's wealthy surge with rapid economic growth, many families are staging extravagant displays of food at their children's weddings to show off their newfound affluence. About one-fifth of the food served at weddings and social gatherings is discarded. The prodigious waste that follows has horrified many in a country where food prices are skyrocketing and tens of millions of young children are malnourished.

Guests invited in weddings are mostly responsible for the food wastage because of different thoughts, mostly they have the fear that if they go second time to take the food they won't get it, for the first time they have seen the food they have never eaten before or due to lack of education they do not realize that if they take extra food it will get wasted. Around 100,000 weddings and social events are held in India every day. Food wasted each day at weddings and family functions in Mumbai alone would be enough to feed the city's vast slum population.

About 58 per cent of people in the country are food insecure, says the findings of the National Nutritional Survey (NNS) 2011. The country has enough food to feed its people but that poor cannot afford even two-square meals a day. Some 15-20 per cent of food is wasted in marriages and various such social functions. In some cases, the waste is to the extent of 20-25 per cent when the number of dishes exceeds the number of guests invited to the marriage halls.

About 21 million tonnes 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. The wastage of food in social gatherings in India is at an alarming rate and needs to be looked at immediately. One should opt for various ways to avoid such exorbitant wastage. The next time you savour a wedding feast, spare a thought for the masses which go without two square meals a day!

III. PROPOSED WORK

System Model

The system can be shown in the Figure 1 in which mainly have two entities 1) NGO and 2) Mobile User and these are considering main modules of the system.

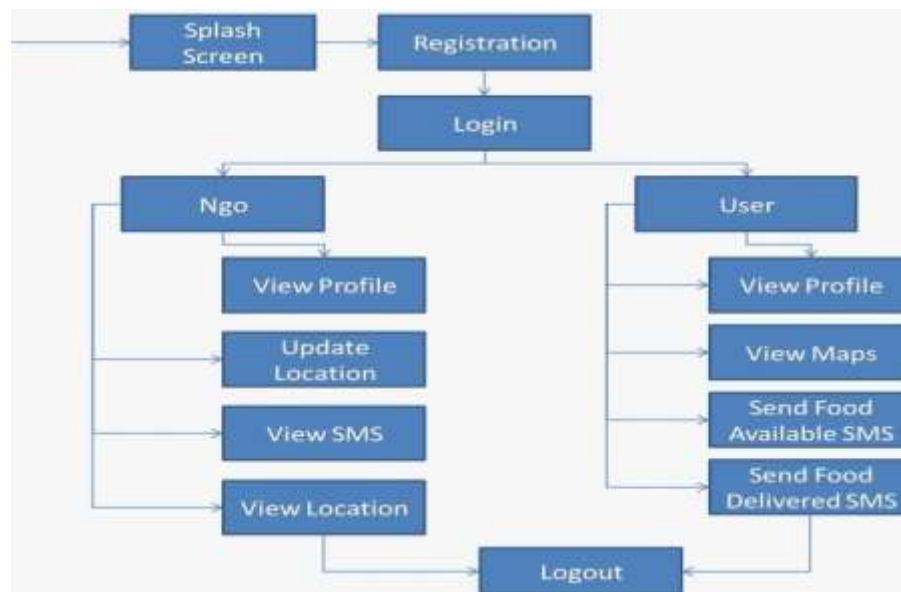


Fig. 1: System Overview

The system has following implementation modules:

Mobile User

In this module mobile user able to interact with NGO's to avoid the food wastage in functions, parties and soon. In this mobile user can register, login and performs the following activities:

- Set the current location

- Search the NGO's availability
- Send sms to Food availability to NGO's
- Send sms to Food Delivered to NGO's after delivery is completed.

NGO Module

- This module provides interface to the NGO's.
- In this module NGO's register to the app and login and update the details.
- View the Food information.
- And view the location of mobile user who send the food availability SMS.
- And if he interest make call to mobile user.

Send SMS

- In this module, the system will send the SMS to the recipient using SMS Manager in the Telephony Service.
- In this we have the recipient number and the message to be send. We will first create a object for SMS Manager in the Telephony service, using the method *sendTextMessage* system will sent the message.
- After sent SMS to desired recipients.

Database Module

- It is crucial Module to maintain the all the data in proper way.
- In this module we create the table and store the NGO's details, mobile users details, history data and soon.

The proposed system can be implemented as follows: In this proposed system we implemented android application to efficiently enable communication between NGO's and users. In this system we use SQLite DB to store the information about users and NGO's. This System utilizes SMS service and Google Maps Efficiently.

IV. RESULTS AND DISCUSSION

In this system we developed mobile based Food Wastage Management to reduce the food wastage in parties. The following screens show that our system is more users friendly and efficient.

The user interface of the android application is as shown below figure

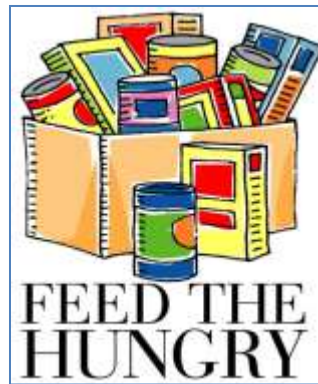


Fig. 2: Loading Page

This application has two types of users, NGOs and non-NGOs to get register

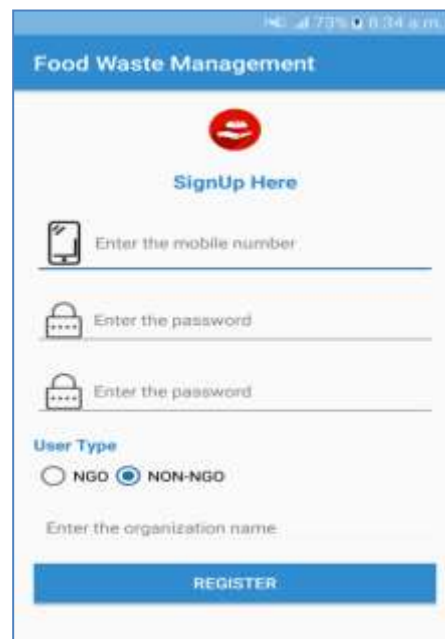


Fig. 3: Registration Page

After the registration process, the user login screen will appear as

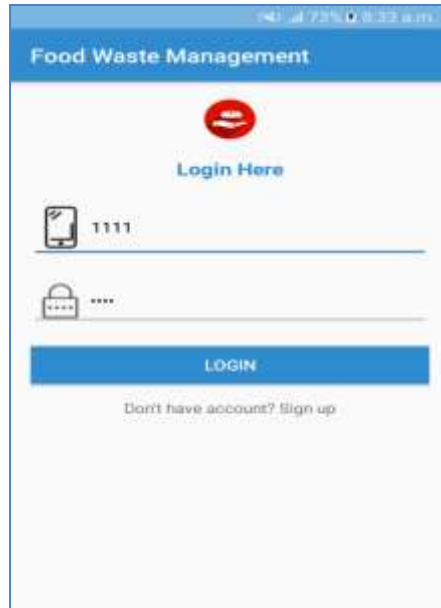


Fig. 4: Login Page

Searching the registered NGOs with the application for donating the food



Fig. 5: Search NGO's

Send food available message to the respected NGOs

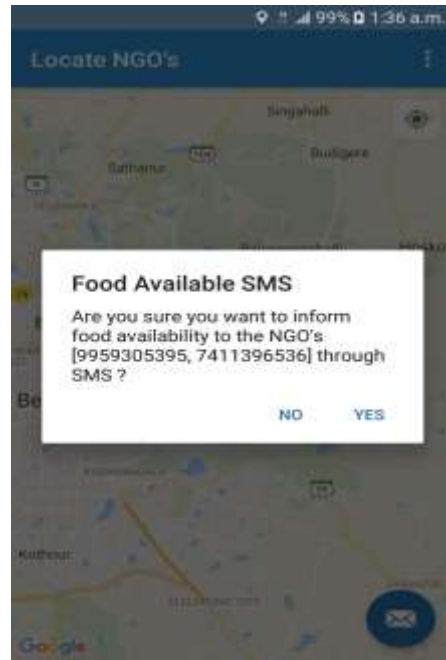


Fig. 6: Send Food Available SMS

Informing food delivered information to the remaining NGOs

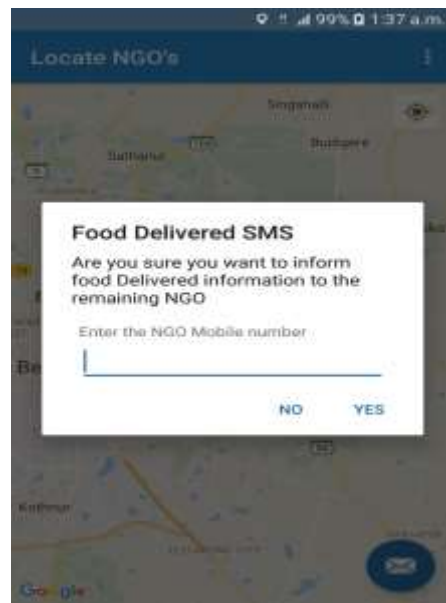


Fig. 7: Send Food Delivered SMS

And, the NGOs are able to see the food available info and food delivery info



Fig. 8: Food Available Information

V. CONCLUSION

This android app provides the interface between User and NGO's. This app provides direct communication between the NGO's and User's via SMS service. This app help to manage the food wastage with simply send sms to NGO's who are available in that area and send sms to the NGO about food availability. Then NGO make call to User and ask to get the food. And using the GPS service to NGO see the User's Exact location. This Android app provides the interface between User and NGO's. This app provides direct communication between the NGO's and User's via SMS service. The complexity and communication cost to sending SMS is slight increased and Usage of Server. These are leads us in future scope.

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