PREVENTION OF FOOD WASTAGE USING MOBILE AND WEB APPLICATION

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Abstract -

The goal of the application is to minimise the wastage of food .This application and website will enable the user to search for the food based on their near by location ,also the food owner can denote it to the needy people.The features of the web application are search food, where the donor enable to update the food details,the user can contact the donor and collect the left-over food. The food will be distributed from hotels, functions etc. The food distribution is done:

- 1. Orphanages
- 2. homeless
- 3. poor area in the society
- 4.General hospital

KeyWords: Web application, Mobile app, Food wastage management.

1.INTRODUCTION (Size 11, Times New roman)

Mobile phone applications have seen wide use in recent years . It's known that Android is the most popular platform for mobile, right now android is used on over 190 countries in the world on millions of mobile devices. Android is the most installed platform for mobile, and the number is increasing rapidly since almost 1 million users every day purchase new Android devices and use it immediately to get digital content such as games, application, and many other services. Due to that, we developed an android application "FoodReduction App" using android studio because it will reach a wider range of audience since most people nowadays use android phones. To improve the performance of the image processing algorithms, noise estimation can be used to adapt the detection step .The purpose of this development is to limit the wastage of food. Many restaurants, functions tend to throw the leftover food at the end of the day even though the food is perfectly fine to be eaten, which means that huge amounts of food are wasted. While all that food is being wasted, some families can barely afford proper meals with their limited money. They don't get enough nutrition due to the lack of having three meals in a day. Therefore, we decided to create our application to link with the unfortunate people, so instead of throwing the food, the unfortunate will be able to pick it up from the

restaurant at the end of the day. The application allows the restaurants to log in, and upload an image of the meals they have as leftovers along with a description of that meal, and the location where to pick it up. 11 The users then can log in and choose the meal suitable to their choice and can pick it up once they send a request to the application.

2. LITERATURE SURVEY:

Food waste is a significant issue around the world. Therefore, that less food can be wasted and can be distributed to the needy people. There are various applications, which are developed to control the huge wastage of food, and it provides the opportunity to send that extra food to the people who need it. The most useful food waste application for android and apple are discussed below:

- A. Food waste application of Singapore (11th Hour)
- B. Food waste reduction application from Netherlands (NoFoodWasted)
- C. An application to control food waste by UK and Ireland (FoodCloud)
- D. Food wastage Reduction Application from Africa (Cheetah)
- E. Indian Food Wastage Reduction Application (No Food Waste)
- A. Food waste application of Singapore (11th Hour)
 - Tan Jun Yuan who is a food stall hawker from Singapore.
 - He saw many vendors with leftover foods in a day. He also saw that more than 35 percent of food he made every day was left as extra.
 - Therefore, he created the application named 11Th Hour.
 - This application provides the left and unused foods at the half of their original price.
- B. Food waste reduction application from Netherlands (NoFoodWasted)
 - August de Vocht, a citizen of Netherlands developed this application.
 - This application makes collaboration with the



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supermarket so that people can be aware of the foods that will be expired very soon.

- people who are in need of food can buy them at a reduced price and use them.
- It helps to stop the wastage of excessive foods.
- C. An application to control food waste by UK and Ireland (foodcloud)
 - This application notifies the supermarkets about their surplus food so that the charitable societies can collect them.
 - This application works as an intermediate that provides the type of foods and arranges the pick-up for the charities.

D. Food wastage Reduction Application from Africa (Cheetah)

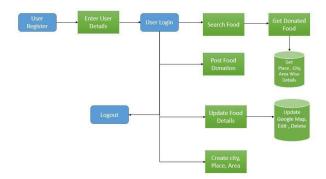
- The researchers from University of Twente have developed this application to reduce the number of food wastages in Africa.
- It is seen that various fruits and vegetables lose their ability to be consumed due to poor road circumstances, less refrigeration in Africa.
- This application is created to gather those food items before they get rotten and distribute it to the needy malnutrition people of Africa.

3.PROPOSED SYSTEM:

Mobile application technology is beneficial for food waste management. The app aims to encourage better food management. Our proposed system should reduce food wastage by facilitating food sharing in the community using mobile and web technology. This app could be enhanced more by adding the following features:

- Extending our app to have many types of donating users either from organizations such as restaurants, or a family or a single user
- Adding the location facility to our apps. The donating user should specify the location of the shared food.
- Adding the time and date of each meal shared by users
- Making the app supports multiple platforms (cross platform app)

4.SYSTEM ARCHITECTURE:



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Fig -1: Figure

5. Modules:

- Users Register & Login
- Donate food
- Search food
- My Cart & place order
- Update Food details





Users Register & Login:

This module is used to create a user registrations form. To register the following details should be given by the user.

- Name
- Email Id
- Password
- Mobile no
- Address
- Security Q&A (it is used when the user forget his/her password)

After the successful registration the user can login.

Donate food:

The donator can fill the required fields such as

- Items
- description of the available food item
- mobile no
- quantity
- Address
- City
- place
- Spot to which he/she has to donate

Search food:

In search food, the user can view the list of food items available with respect to the place.

The user can select the food from the list based on the description, quantity. For more details the user can click on the more info option to view the exact location using map.

Once the user is satisfied with required food the user can add to cart.

My cart & place order:

- In my cart ,the user can add the required food to their cart
- The user can choose any food required for them.
- In this my cart the user can place order and remove the item from the cart.
- In my order, the user can view the list of orders placed before.

Update Food details:

In update food details ,the user can update regarding the food items, place, image or delete the food item. In this module there are four options for the user: • Update map • Image • Update • Delete

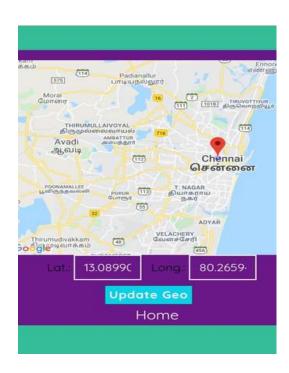
6 CONCLUSION:

Our study has investigated the problem of food waste that has many serious side effects economically and socially. Mobile and web application technology is beneficial for food waste management. The application aims to encourage better food management. Our proposed solution should reduce food wastage by facilitating food sharing in community using mobile and web technology. This work is an initial step towards designing a better system to reduce daily food waste.

7 FUTURE ENHANCEMENT:

In future, this app could be enhanced more by adding the following features:

- Extending our app to have many types of donating users either from organizations such as restaurants, or a family or a single user
- . Adding the location (GPS) facility to our apps. The donating user should specify the location of the shared food.
- Adding the time and date of each meal shared by users
- .• Making the app supports multiple platforms (cross platform app).



8 REFERENCES

- [1] W. Schlee, R. Pryss, T. Probst, J. Schobel, A. Bachmeier, M. Reichert, and B. Langguth, "Measuring the moment-to-moment variability of tinnitus: the TrackyourTinnitus smart phone app," Frontiers in Aging Neuroscience, vol. 8, 2016.
- [2] L. Shu, Y. Chen, Z. Huo, N. Bergmann, and L. Wang, "When Mobile Crowd Sensing Meets Traditional Industry," IEEE Access, 2017
- [3] R. Ganti, F. Ye, and H. Lei, "Mobile crowdsensing: current state and future challenges," IEEE Communications Magazine, vol. 49, no. 11, 2011.
- [4] R. Pryss et al., "Mobile Crowdsensing Services for Tinnitus assessment and Patient Feedback," in Int'l Conf on AI & Mobile Services. IEEE, 2017, pp. 22–29.