Implementation of Food Wastage Management using Android Application

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Abstract: **According to sources, 25 to 40% of food items are wasted globally. Something we still don't see is food waste by restaurants, stores, or industries. We can also see food that has been thrown away by ourselves. Through the management of catering companies' wasted products, this is the range emphasis of communities. People are becoming more conscious of the importance of food, but there is no platform for sharing information about excess food accessible in a specific restaurant, shop, or even in our homes for nonprofitable organisations to provide food to the needy. We suggest an Android application in which registered users can post extra food available in their community for other users to come and eat.**

Keywords: **Malnutrition, non-profit group, food waste, industries, fresh food enterprise, android real-time application, overabundance, destitution, Nave Bayes algorithm.**

1. Introduction

People understand the importance of food, but there is no platform for sharing information about the abundance of food available in particular eateries, shops, and even in our homes for non-profit organisations to provide sustenance to the poor. People consider the importance of food, yet there is no stage to exchange information about the surplus of food available in specific restaurants, shops, and even in our homes for non-profit organisations to provide food to the poor. The issue's lack of awareness, as well as related problems such as malnutrition, poverty, and food scarcity, is minor, making it a minor contributor to the broader picture of food waste and the aforementioned issues. However, food waste alone costs businesses and humanity millions of dollars. Food waste mainly refers to any type of food, raw or cooked, used or unused-discarded or intended to be discarded. Professional bodies and governments equally broaden the definitions to include additional categories and implications such as the type of food waste, the manner in which it is produced or generated, and the materials and source of waste. Non-profit organisations and other welfare organisations await visitors who bring additional food. We suggest an Android application in which registered users can post extra food available in their community for other users to come and eat.

2. Methodology

A. Initial setup

- Donor food update

- Location based collector feed
- Donor indicate food availability

The user must enter their information during the registration process. This information is used to verify the user during the login process. The user information is then passed to the GCM server and then to the Tomcat server, and once the application is launched, the user information is queried and inserted into the Mysql database server in the user application installed device.

B. Donor Food Update

This module consists of sharing the location of the user along with the details of the accessible extra food with the user. This information is then updated to the GCM server and then to the local Mysql server database.

C. Location Based Collector Feed

By querying the updated feeds in the local Mysql server database, the feeds accessible in the last 12 hours are returned to the user application window. The information entered into the Before updating the feed of food supply to the user, the Tomcat server is updated to the local Mysql server database. The available food feed is based on the user's location, i.e., available food posts close the user's location.

D. Donor Indicate Food Availability

After the collector contacts the donor, the donor updates the food availability so that other users are aware of the availability of the food with the donor.

Fig. 1. Architecture

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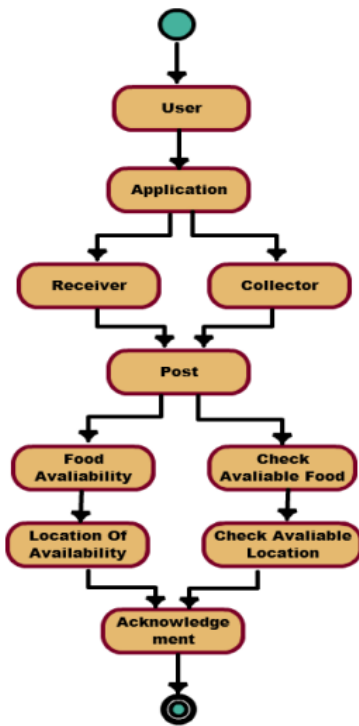
Fig. 2.

Fig. 3. Login page

Fig. 4. Donor login page

Fig. 5. Output

3. Conclusion

This paper presented the implementation of the food management system using android application.

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