AAHAR- Food Donation App

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Abstract: *Food waste is a growing issue with serious consequences for the environment and human society. The amount of food waste generated every day has increased dramatically as the population and urbanization have increased. This research focuses on the creation of a waste food management app with the goal of reducing the amount of food waste produced by households and restaurants. The app would monitor users' food waste and suggest ways to reduce it. Furthermore, the app would connect users with local food banks so that they could donate excess food, thereby addressing food insecurity in the community. This paper examines the need for a waste food management app, its features, and the potential societal benefits it could provide.*

Keywords: Food Donator, Food Wastage Problems, NGOs, Donation, Food App

I. INTRODUCTION

Food waste is a significant problem in present era, with one-third of all consumed food worldwide being wasted each and every year. This has a significant environmental impact, as well as a significant waste of resources like water, land, and energy. Households are a significant cause of food waste. Many people overbuy food, which frequently results in waste, particularly of perishable items. Restaurants contribute to food waste as well because they frequently discard excess food at the end of the day. To address this issue, there is a growing demand for innovative solutions that can aid in the management of food waste while minimizing its environmental impact.

To address this issue, a waste food management app could be a valuable tool. This app aims to help households, restaurants, and other food-related businesses to better manage their food waste and reduce the amount of food that ends up in landfills. By providing a platform for tracking food waste, the app can help users to make informed decisions about what to do with excess food, whether that is donating it to local food banks, composting it, or finding alternative uses for it. Additionally, the app would connect users with local food banks to donate excess food, which would help address food insecurity in the community.

II. RELATED WORK OR LITERATURE REVIEW

The 'Food Donation App,' An Android mobile application that provides a platform for donating food via the Internet, according to a paper published in June-2021. In addition to food, this application has resulted in the donation of clothing, books, utensils, and other items. It is split into three sections: the User Module, the NGO Module, and the Admin Module. After successfully logging in, users could perhaps make donations by offering information such as type of food, site, cooking time and date, and donor availability. They then submit the request, and those specific Donation details will be highlighted in the NGO's module, and the NGO's will collect the food by selecting a pickup time and date. They simply reject and logout if they do not want food. All other items, aside from food, are packaged as gifts and donated. This application was created in Android Studio using java and xml.

'Zero Hunger: Smart Food Donation System Using IoT', A paper published in May-2021, is an android mobile application that employs cutting-edge technology, including the use of IOT devices for food quality assurance. It has two Modules here. The first is the User module, and the second is the NGO module. Following a successful login, the user donates food and provides details such as food description, quantity, and address before posting the donation. NGO's can view the donation details and then assign one specific volunteer to receive the food via map connection, and the volunteer will check the food using their IOT devices to ensure that it is safe to distribute in slum areas.

'Food Donation Application: Food Share', The paper, which was published in May-2021, is an android mobile application that developed a lateral ideology. That is, in all other journals, different NGOs are highlighted, and food is donated to those organizations. Whereas here, people in need are directly registered, whether an NGO or a needy person, so when a user wants to donate food, he can choose for whom he wants to donate so that the food is delivered to that specific organization or user.

III. MOTIVATION

When mobile phones first came out, the only features they had been the ability to call, text, and save contacts, and those simple actions made our lives so much easier since we were able to contact and communicate to our family members at any time. It was a tremendous achievement. The internet, cell phones, touch phones, 3G and 4G networks, and other technologies followed.

They gave technology and mobile phones a completely new look and push. We are unable to fathom how much simpler our lives become as a result of it. All of these traits result in a wide range of answers to the enormous problems that the entire world is currently experiencing. Hence, we developed an app that enables people to donate or share their surplus or leftover products that are no longer useful to them but may be valuable to others in order to address the issue of waste management while simultaneously addressing people's fundamental needs. As technology develops in this atomic age, there may be numerous uses that are advantageous to society. People use a smartphone and the internet to complete daily tasks such as shopping, paying bills, managing work, and so on in today's technological world. There is no such platform on a large scale in today's internet environment that can meet the basic essential needs of the underprivileged or those who are unable to meet their needs on their own.

In light of this, we were motivated to develop a platform that makes it easier to donate items like food, clothing, and books. a mobile application for Android that enables users to solicit donations from neighbor's at their leisure. Users are always allowed to donate any essential items they feel they no longer need. Another perspective is that it significantly helps with eating control. The majority of objects that are thrown away can be recycled or reused. As a result, the management of food, clothes, and book waste will be significantly impacted by this application.

3.1 Problem Domain

It is a Food Donation System based on Android.

The current food donation app only acts as a bridge between people attempting to donate & non-governmental organizations. Nobody paid attention to the user's perspective or interest. So, using the proposed system, we can increase user interest in donating food. And can we generate benefits for users by donating food? Can we reduce food waste? Can we reduce hunger deaths? Can we put a beautiful smile on the face of a hungry child?

3.2 Problem Definition

An NGO is a non-profit organization that was established with the purpose of uplifting the underprivileged, poor, oppressed, unprivileged, downtrodden, and needy. NGOs are closer to the target populations and more easily accessible.

Food surplus and shortage usually exist within a few miles of each other.

Increasing in populations led to food crisis, there are many people in NGO's and it became difficult to have food storage for all the time.

3.3 Existing System

Nowadays, anyone who wishes to donate food or other stuff must go in person to the charities. If not, they must look for websites where they can contribute extra food. Large producers, wholesalers, and organized groups typically donate food to food banks or throw away tons of food every day. They must look for a charity that requires meals. Contacting the organization to confirm the requirement takes a long time in this process. The person must get in touch with another organization if they do not require the meals. The donor feels worn out and drained as a result.

### 3.4 Solution Method or Problem Solving

The waste food management app works by allowing users to input information about their food waste, including the type of food, the date it was produced, and the date it is due to expire. The app then uses this information to provide users with suggestions on what to do with the food waste, including recipes, donation opportunities, and composting advice.

One of the key features of the app is its ability to track the food waste generated by households and businesses over time. This data can be used to identify trends and patterns in food waste, and to make more informed decisions about how to reduce it. For example, by tracking the food waste generated by a restaurant, the app can help the restaurant to identify areas where it can make changes to reduce its waste, such as adjusting portion sizes or changing menu offerings.
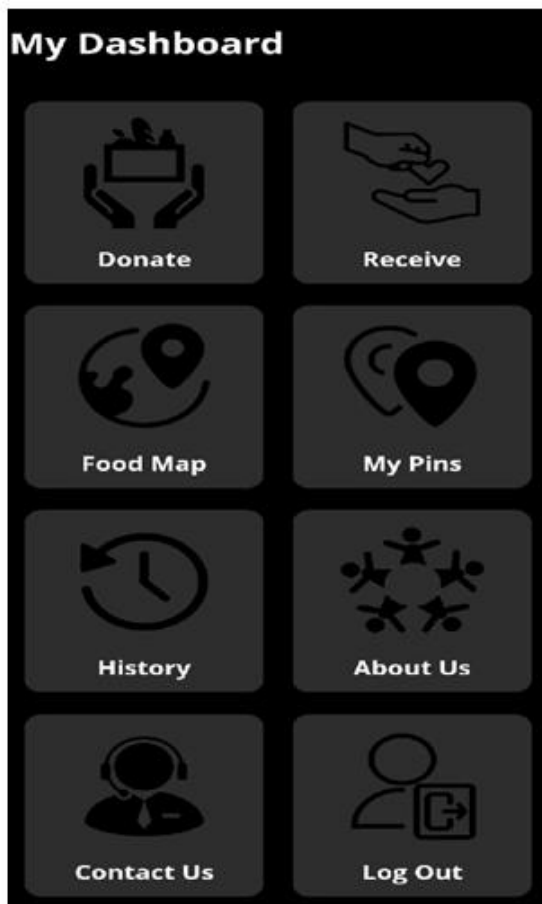
The waste food management app offers a number of benefits, including:

- **Better food waste management:** The app can assist families, cafes, and other food-related enterprises in efficiently managing their food waste and reducing the quantity of food that ends up in landfills by offering a platform for tracking food waste.
- **Increased awareness of food waste:** The app provides users with information about the environmental impact of food waste, helping to raise awareness of the issue and encourage people to take action to reduce their waste.
- **Increased efficiency:** The app can help households and businesses to make more informed decisions about their food waste, leading to increased efficiency and reduced waste.
- **Addressing food insecurity:** The app could help address food insecurity in the community by connecting users with local food banks to donate excess food.
- **Environmental benefits:** Reducing food waste has a positive impact on the environment, reducing greenhouse gas emissions, conserving water, and conserving energy.

3.5 Diagrams

Impact Factor: 7.301
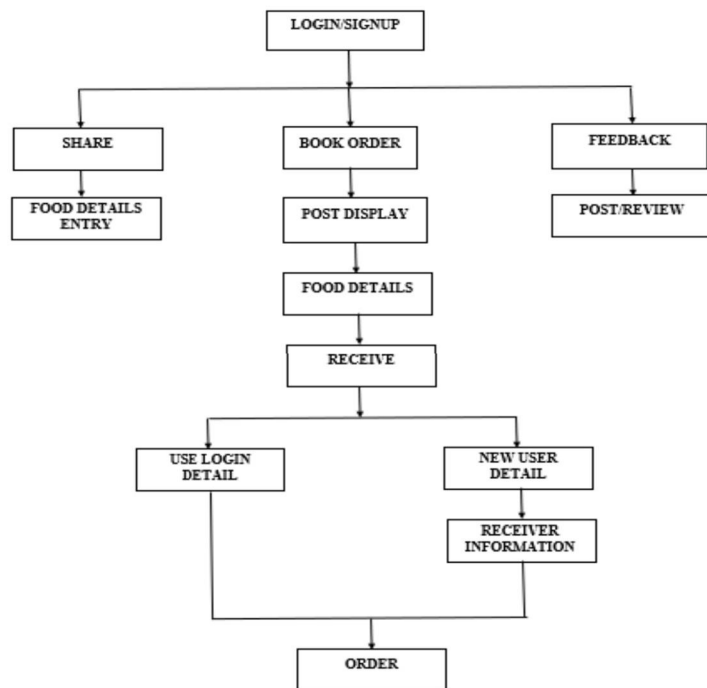
3.6 APP Snippets

IV. CONCLUSION

The waste food management app represents a promising solution for reducing food waste and its impact on the environment. By providing a platform for tracking food waste and offering suggestions on what to do with it, the app can help households and businesses to make more informed decisions about their food waste, leading to reduced waste and a more sustainable future. With its potential to raise awareness about food waste, increase efficiency, and promote community engagement, the waste food management app is an innovative solution that has the potential to raise awareness about reducing food waste and help us understand the significance of food for those who go to bed hungry every night.

V. FUTURE WORK

- We intend to add more donation features to the App in the future.
- We will improve the algorithm to suggest ways for users to reduce food waste.

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