

An Android Application for Donating Food and Sharing Items: Share and Help

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Abstract: *Food wastage and the improper disposal of electronic waste (E-Waste) have become significant issues in highly populated countries like India. This research project addresses these problems through an Android-based mobile application that promotes the smart utilization of food and the responsible handling of household items. The application facilitates collaboration between donors and recipients, allowing donors to upload detailed information about food and items available for donation, while recipients receive notifications about their availability. Additionally, the system establishes a partnership portal between hotels/restaurants and charities, enabling direct communication and generating reports on donated food quantities from each establishment, along with providing reward points. The research focuses on the basic architecture and application framework of the Android operating system, providing a comprehensive understanding of Android application development. The app aims to reduce food waste, minimize the environmental impact of E-Waste, and raise awareness among consumers about their food consumption habits. Features such as expiration date alerts, grocery tracking, and food storage tips are incorporated into the application to encourage responsible consumption practices. The project emphasizes the importance of addressing food wastage and its repercussions, as it profoundly impacts the lives of many individuals and the well-being of future generations. By providing a practical solution, this project highlights the significance of making conscious efforts to combat food and E-Waste issues, benefiting both marginalized communities and the sustainability of our planet.*

Keywords: *Food wastage*

I. INTRODUCTION

These days, in highly populated countries 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. 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, NGOs, etc. participants to ensure the food delivery. This is an internet based mobile application, this system creates a common collaboration between a donor and a volunteer from the NGO where the donor uploads all the food details at the same time volunteer receives a notification of availability of the food once the donor uploads its successfully. This system will create a common collaboration portal for hotels/restaurants and charities, charity can directly contact restaurants who have food remaining and report generation which will show how much food is donated by which restaurant and providing reward points for them. This paper introduces the basic architecture and application framework of Android operating system, gives a detailed description of main structure of Android applications and the methods of developing applications based on Android application framework. This research project aims to create an app that the encourages smart use of food in the consumer's household, reducing food waste and its effects on budget, energy & bringing attentions to consumer's food. This is achieved through alerts on expiration dates, allowing input of groceries, & providing tips on food storage. It has become a habit to waste food exceeded from the large amount of preparation in hotels and similar areas without giving a second thought. It sounds normal just because it happens everywhere, so it's no longer a problem. But the truth is that it has a huge impact on many lives. Food wastage happens because there is no alternative to save them at ease. We people must pay attention to this issue and bring possible improvement over it cause it greatly concerns today unprivileged people and also our

successors on this planet. That is where our project shows up and solves the major problem. Thus, this application is not only useful for avoiding wastage of foods but also to feed those people in need.

II. LITERATURE REVIEW

Food is the using up for resource for both animals and humans, but if we did not eat which is said to be food waste. The main cause of food waste is over production, over purchasing and rotten of foods. Some food waste occurs due to lack of transparency and inadequate supply facilities. More than 40% of food is manufactured which is expended carelessly with no purpose said by “The United Nations Food and Agriculture Organization (FAO)”. 18.7 Kilograms of food is wasted daily in India. One third of the food produced in the world for human consumption every year — approximately 1.3 billion tones gets lost or wasted. Food losses and waste amounts to roughly US\$ 680 billion in industrialized countries and US\$ 310 billion in developing countries. Of the processed/eatable food that gets thrown out 80% is simply because it’s not sold at the end of the day and charities have challenges in redistributing due to: small quantities, nature of food, logistical challenges etc.

III. PROBLEM STATEMENT

The product aims at satisfying in reduction of wastage of food, unused items and donates 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 or item details to donate. Similarly the volunteer can register/login into the system and view the item donation list donated by the donor. The volunteer decides whether to accept the donation or reject the 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, unused items, which will also inculcate values of sensitivity and sharing among people.

IV. PROPOSE METHODOLOGY

The proposed methodology for this research paper involves the development of an application to facilitate the donation and distribution of items among donors and receivers. The methodology consists of three main components: Donor, Receiver, and Food Donor.

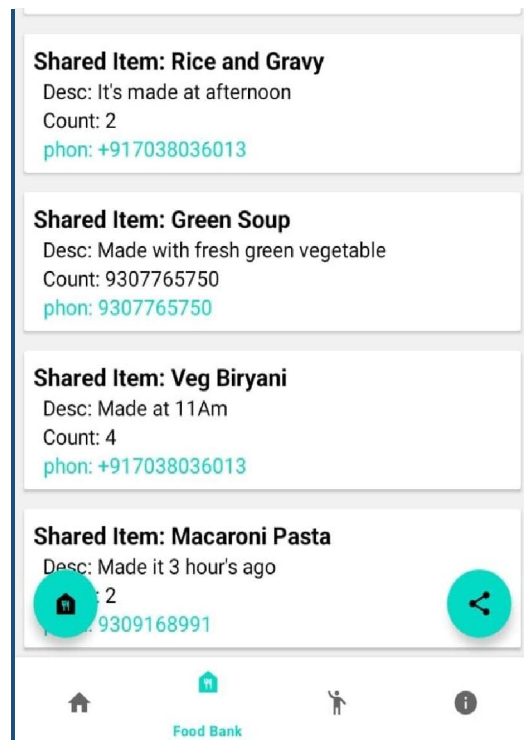
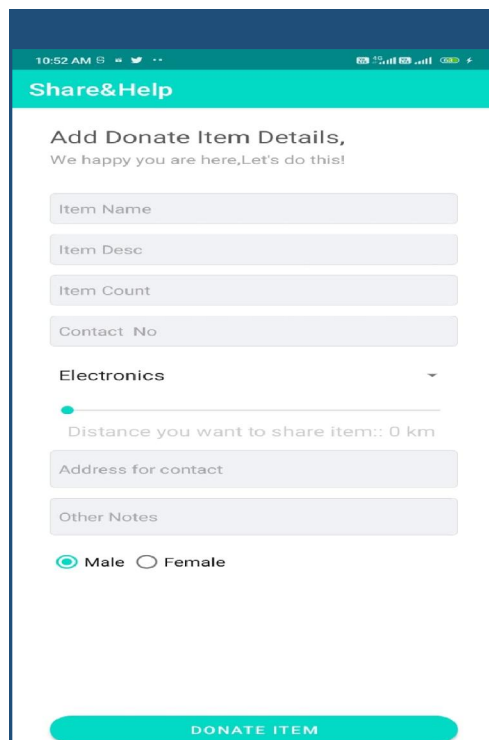
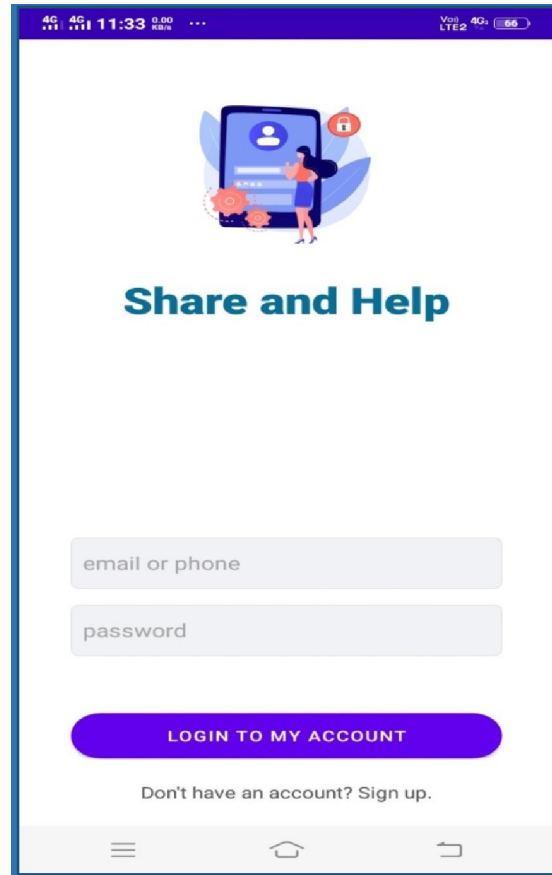
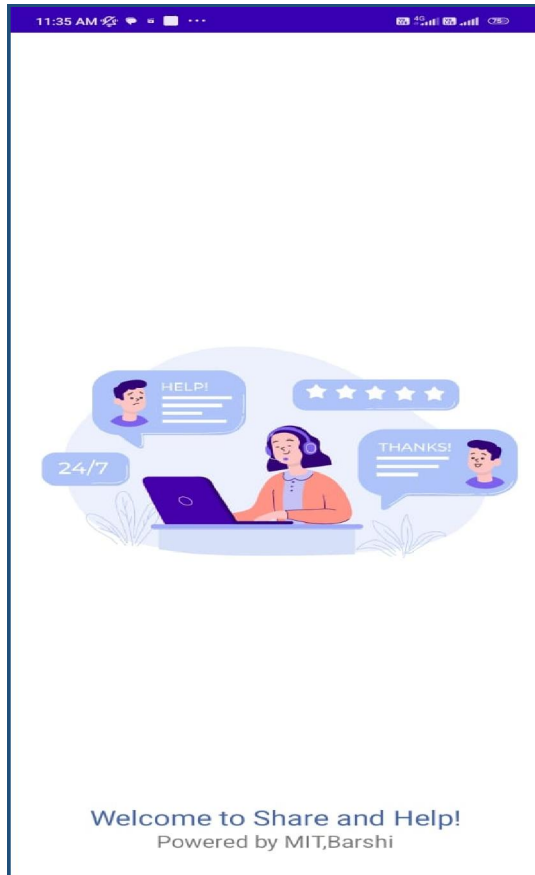
4.1 Donor Login: Donors can access the application by logging in with their email ID. Upload Item: Donors can upload an image of the item they wish to donate. Share Information: Donors provide all the necessary details about the item, including its location, contact information, description, and quantity. Update and Manage Items: Donors have the option to update their shared item list and modify item descriptions at any time. Removal of Shared Item: When a receiver obtains the shared item, it is automatically removed from the donor's shared list.

4.2 Receiver Login: Receivers must authenticate their identity by logging in with their email ID and uploading a government-issued ID. Use Filters: Receivers can utilize filters to search for specific items they desire. View Item Details: Once the receiver finds a desired item, they can view all the details provided by the donor. Contact the Donor: The receiver can then contact the owner of the item for further arrangements.

4.3 Food Donor Login: Food donors, such as restaurant and function hall owners, log in to the application. Report on Dashboard: These donors report on the dashboard regarding the quantity of remaining food and various food dishes. Fill Food Details: The restaurant owners provide detailed information about the remaining food, including quantity and dishes. This proposed methodology outlines the steps involved in the application for donors, receivers, and food donors, enabling a streamlined process for item donation and distribution. Please note that the methodology provided is a summary based on the information you provided. It may be necessary to expand on certain aspects and provide more details in your actual research paper.

V. IMPLEMENTATION

There are some of the screenshots of our developed project



VI. CONCLUSION

This was our project of System Design about “**SHARE AND HELP**” developed in Android based on Java language. The Development of this system takes a lot of efforts from us. We think this system gave a lot of satisfaction to all of us. Though every task is never said to be perfect in this development field even more improvement may be possible in this application. We learned so many things and gained a lot of knowledge about development field. We hope this will prove fruitful to us.

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