"Wastage Reductions"

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ABSTRACT:

"Helping Hand" is an Android-based application designed to streamline donations of food, clothing, and other essentials. It connects donors with NGOs and beneficiaries through a mobile-friendly platform that tracks donations, manages inventory, and ensures efficient distribution. The app features real-time tracking, AI- powered donation recommendations, and automated reporting to optimize the donation process.

Keywords: Mobile Donation App, Food & Clothing Donation, Smart Inventory, Real-Time Tracking, AI- Powered Charity

INTRODUCTION

Manual donation systems often lead to inefficiencies, surplus waste, and poor distribution. The Helping Hand App automates donation tracking, matches donors with NGOs and beneficiaries, and ensures equitable distribution. With an easy-to-use interface, real-time updates, and AI-based recommendations, the app enhances the donation process for individuals, businesses, and charitable organizations.

This paper aims to identify the primary causes of food wastage and introduce methods and systems that can reduce wastage effectively. Emphasis is given to technological innovations, public participation, and community initiatives to achieve sustainable food management.

MODULE IDENTIFICATION

- **User Management**

Donors: Register and list donations. NGOs: Accept and distribute donations.

Beneficiaries: Request and receive donations.

- **Donation Logging**

Users enter details of donated items (food, clothing, etc.). Upload images and descriptions for better contact details.

- **Smart Inventory Management**

quantity, food type, and expiration dates (for food). Sends alerts for expiring items to minimize waste.

- **AI-Powered Matching System**

Connects donations to NGOs and beneficiaries based on demand. Suggests donation trends and needed items.

SCOPE

The app benefits:

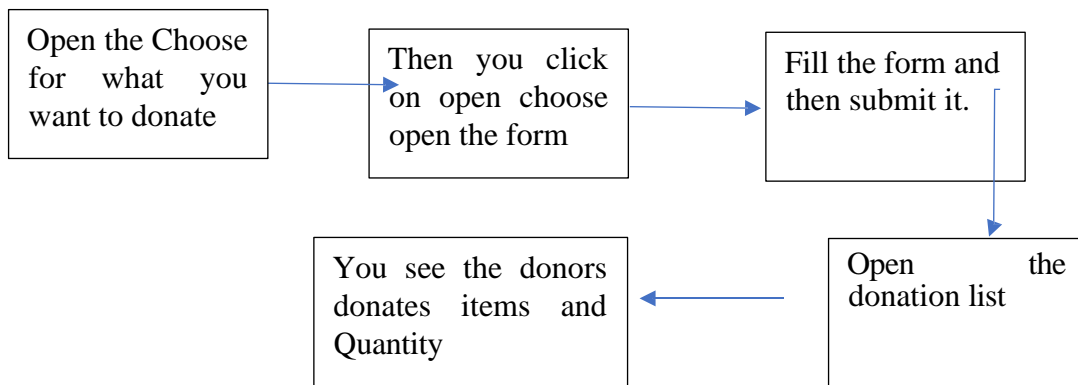Individuals who want to donate easily via mobile. NGOs looking for an efficient way to manage donations.

Restaurants & Supermarkets needing surplus food tracking. Beneficiaries needing quick access to donations.

EXISTING SYSTEM

Sr.No.	Title of Paper	Year	Author	Gap identified	Key Points
1.	Food Donation Websites	2020	Various NGO Websites	No mobil	Existing platforms focus only on food donation, without real-time tracking or donor- recipient

				e tracking	connection.
2.	Clothing Drive Apps	2019	Independent App Developers	No integration with food or essentials donation	Apps only focus on clothes donation; lack of integration with other donation types like food or essentials.
3.	General Charity Platforms	2021	Crowdfunding & NGO Platforms	Limited automation	No specific feature for physical goods donation, limited status updates and donor feedback mechanism.

4.	Social media-Based Donation Appeals	2018	Facebook, WhatsApp, Instagram	No verification and high chances of fake requests	No centralized platform, donation appeals scattered across social media with no proper tracking or security.
5.	Manual NGO Donation Collection	2019	Local NGOs & Organizations	No transparency or acknowledgment to donors.	Traditional method, no proper records, no tracking of donations, lacks transparency and verification.

ARCHITECTURE DIAGRAM:

Open the Choose for what you want to donate → Then you click on open choose open the form → Fill the form and then submit it. → Open the donation list → You see the donors donates items and Quantity
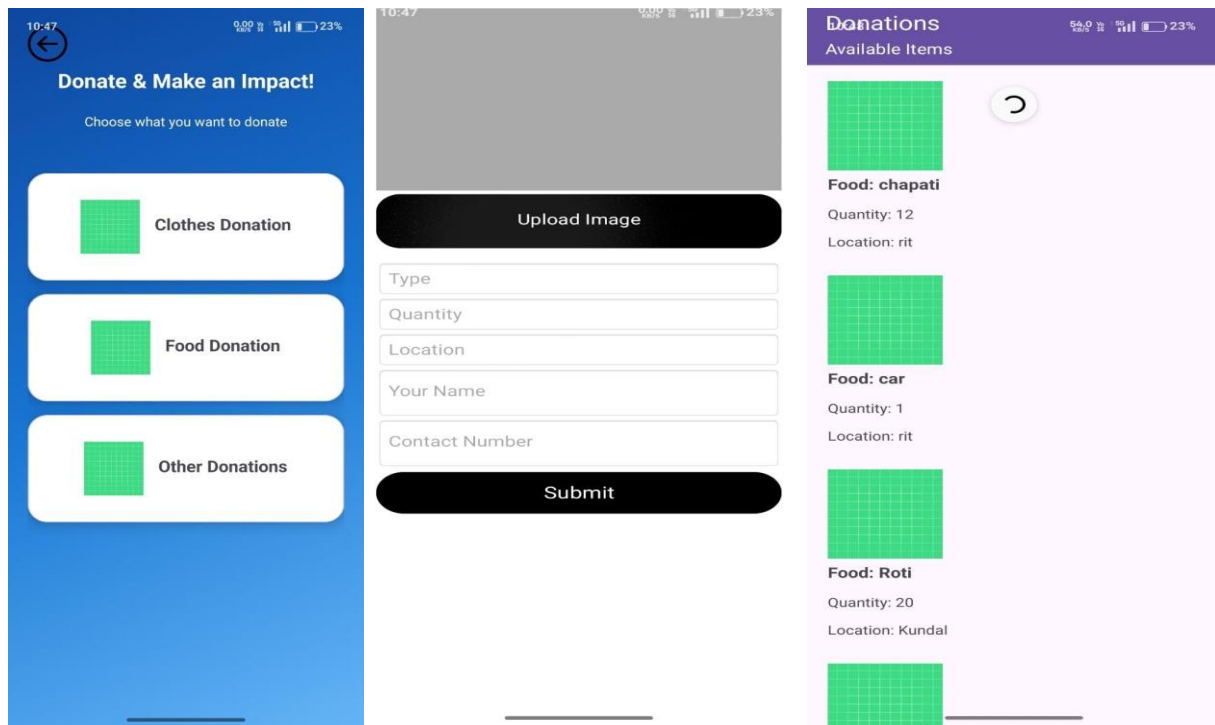
PROPOSED SYSTEM:

The proposed system is a comprehensive waste management platform that leverages technology to monitor generation, analyse patterns, and provide actionable insights for reduction.

Key Objectives:

- **Efficiency:** Streamline waste management processes to minimize waste generation.
- **Sustainability:** Promote environmentally friendly practices and reduce carbon footprint.
- **User Engagement:** Encourage individuals and businesses to actively participate in waste reduction efforts.

RESULT

CONCLUSION

A Waste Reduction Application plays a crucial role in promoting sustainable practices by minimizing waste generation, encouraging recycling, and fostering responsible consumption habits. By leveraging technology, the app can educate users, provide real-time waste tracking, suggest eco-friendly alternatives, and connect individuals with recycling centres or donation hubs. Overall, a well-designed Waste Reduction Application can drive positive behavioural change, support global sustainability efforts, and create a cleaner, greener future.

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