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# Givlo Food Donation

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**ABSTRACT**

The development of a food donation application is a modern approach to address food wastage and connect donors with individuals in need. The application allows donors to provide details and connect with those who do not have enough food. The proposed system comprises two modules: donor and receiver, with features such as food mapping, donor registration, and food details display. The application aims to bring transparency, clarity, and swiftness to the donation process, mitigating prevailing issues. Despite the positive view of food donation, stakeholders recognize the complexity and barriers, including economic, safety, nutritional, and legal considerations. The project report emphasizes the importance of food donation in addressing food insecurity and reducing food waste, highlighting the need to incentivize businesses and support innovative models for food donation.

**Keyword:** Aa To Already Published.

## I. INTRODUCTION

The food donation project aims to address food wastage and food insecurity by developing a modern application that connects donors with those in need. The application, designed to reduce food wastage by donating excess food, comprises two modules: donor and receiver. It allows donors to provide details and display food information, bringing transparency and swiftness to the donation process. Despite the positive view of food donation, stakeholders recognize the complexity and barriers, including economic, safety, nutritional, and legal considerations. The project emphasizes the importance of incentivizing businesses and supporting innovative models for food donation to reduce food waste and address food insecurity.

## II. LITERATURE REVIEW

The literature review for the food donation project reveals the complexity and significance of food donation as a strategy to reduce food waste and address food insecurity. A case study in Uruguay identified economic, safety, nutritional, and legal barriers to food donation, emphasizing the need for enablers to overcome these challenges. Additionally, a proposed application aims to minimize food wastage by allowing donors to provide food details and connect with individuals in need, highlighting the motivations and barriers to reducing food waste. Furthermore, the development of a food donation application in India and the United States demonstrates the potential of modern technology to facilitate food donation and address food waste challenges. Despite the barriers to food donation, there is a growing recognition of the need to incentivize businesses and support innovative models to reduce food

waste and increase food donations. These findings underscore the importance of addressing barriers and leveraging technology to enhance food donation efforts and reduce food waste.

The literature review for the food donation project encompasses a range of sources that underscore the global challenge of food waste within the food supply chain and the potential implications for feeding a growing population. A study published in the Royal Society's journal discusses food waste in the global food supply chain in the context of feeding a population of nine billion by 2050. This review provides a comprehensive overview of the scale of food waste and its impact on future food security.

Furthermore, the "Share Your Food-A food donation application" presents a similar concept, focusing on increasing user engagement through incentives such as coupons for donors and the broader societal benefits of reducing food waste and addressing hunger. These initiatives highlight the growing role of technology in facilitating food donation and engaging individuals and organizations in efforts to minimize food waste and contribute to food security.

Overall, the literature review emphasizes the global scale of food waste within the food supply chain and the potential of mobile applications to streamline the food donation process, enhance transparency, and engage a wider community in addressing the challenges of food waste and food insecurity. These insights provide a valuable foundation for the food donation project, highlighting the need for innovative solutions and the potential for technology to play a pivotal role in addressing these critical issues.

The search results provide insights into various food donation projects that leverage technology to address food waste and food insecurity. One such project is the SeVa mobile application, which provides a platform for users to visualize available food donations and connect with donors. Another project proposes a food donation website that uses machine learning algorithms and data analysis techniques to reduce food waste and promote sustainable food systems. The project builds on previous research and aims to address inefficiencies and delays associated with manual food donation processes.

Additionally, a food donation project report highlights the importance of transparency, clarity, and swiftness in the donation process, aiming to mitigate prevailing issues. The report emphasizes the need for modern approaches to food donation that leverage technology to connect donors with those in need and reduce food waste.

Overall, the search results highlight the potential of technology to streamline the food donation process, enhance transparency, and engage

**EXISTING SYSTEM**

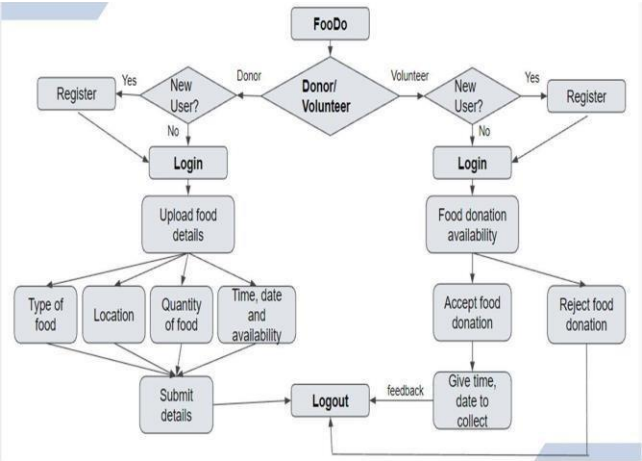
The existing systems for food donation include mobile applications, websites, and traditional methods used by food donation organizations. These systems facilitate the connection between food donors and recipients, aiming to reduce food waste and address food insecurity. Mobile applications, such as the "Food Donation application," enable users to register, provide details about surplus food, and connect with those in need. Web-based platforms also serve as collaboration portals for food businesses and charities, allowing direct communication and donation tracking. While traditional methods involve manual coordination, there is a recognized need for more efficient, technology-based systems to optimize food donations and minimize waste.

**PROPOSED SYSTEM**

The proposed system for food donation involves the development of a modern, technology-based approach to facilitate the donation process and address food waste. One example is the "Food Donation

application," an Android-based application that aims to connect donors with individuals who do not have enough food. The application comprises two modules: donor and receiver, allowing donors to register, authenticate, and provide details about the food they wish to donate. The proposed system also utilizes machine learning technology and algorithms to optimize food inventory, facilitate efficient donation processes, and provide accurate insights to minimize food waste. Additionally, there are web-based systems that establish links between restaurants and charity homes or needy households to enable the donation of excess food, creating a common collaboration portal for food businesses and charities. These proposed systems demonstrate the potential for technology to streamline food donation processes, enhance transparency, and minimize food waste.

## III. METHODOLOGY




### A. Hardware and Software Requirements:

This Application requires a minimum specification of:

| | |
|---|---|
| Version | Android 5.1 or later |
| Processor | Quad-core 1.5GHz |
| RAM | 2 GB or more |
| Hard Disk | 16GBormore Operating System Windows 10 Front End Html css js |
| Back End | Firebase |
| Database | PostgreSQL |

### B. Software:

**The software requirements for a food donation system may include mobile application development tools like Android Studio or Xcode, web development software such as HTML, CSS, and JavaScript, and database management software like MySQL or MongoDB. For systems utilizing machine learning, software tools like Python or R may be necessary. Additionally, real-time data analytics software such as Tableau or Power BI can provide accurate insights and forecasts. The specific software requirements depend on the technology used and the scale of the system, aiming to facilitate food donation processes and minimize waste.**

The software requirements for a food donation system encompass various elements, as identified in the literature. The proposed system integrates machine learning technology and algorithms to optimize food

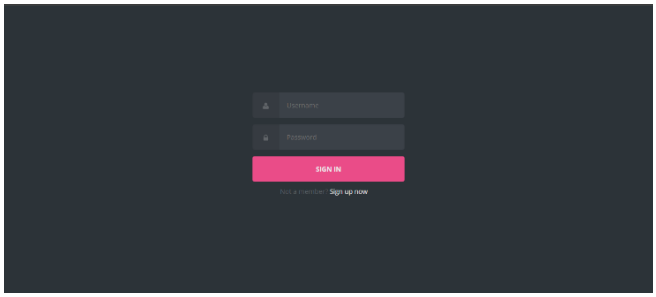
inventory, facilitate efficient donation processes, and provide accurate insights. Additionally, the "Food Donation Application: Food Share" is an Android mobile application that enables users to donate food with details such as description, quantity, and address. This application exemplifies the software requirements for mobile platforms, including user authentication, data input, and real-time interaction. Furthermore, the "Share Your Food-A food donation application" emphasizes the use of technology to increase user engagement through incentives such as coupons for donors, highlighting the potential for software to enhance user participation and impact. Overall, the software requirements for a food donation system include machine learning technology, mobile application development tools, real-time data analytics software, and user engagement features to optimize food donation processes and minimize waste.

## IV. EXPERIMENTAL AND RESULT

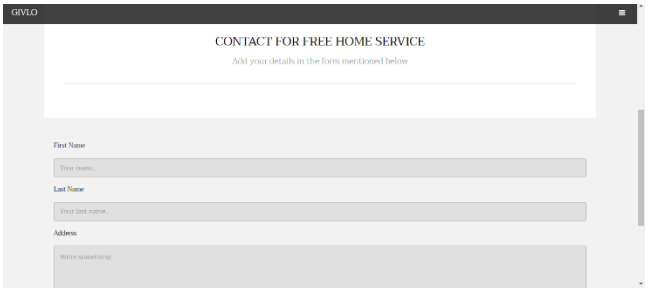
### A) Test Case 1:

The Proposed System was tested by logging in by entering the email and password of the user's. The page communicates with the server and authenticates the user. Finally, the user was move to the Home screen

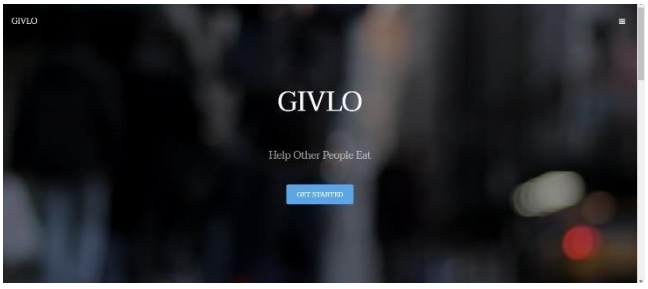
**USER LOGIN PAGE**




### B) Test Case 2:

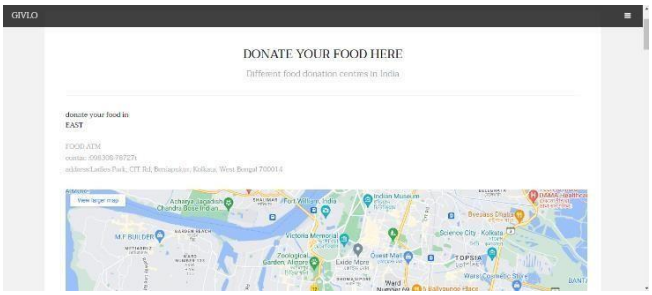



**HOME SCREEN**




The search results provide valuable insights into the importance of food donation in reducing food waste and addressing food insecurity. The literature highlights the potential of technology to streamline the donation process and engage a wider community in minimizing food waste. The proposed systems, such as the "Aahar - Food Donation App" and "Food Donation Application: Food Share," demonstrate the

potential of mobile applications to connect donors with those in need. Additionally, the literature emphasizes the need for innovative solutions and the potential for technology to play a pivotal role in addressing the critical issues of food waste and food insecurity. The existing food donation systems, including mobile applications and web-based platforms, provide valuable examples that can inform the development of effective food donation initiatives. By addressing The Customer can Search the products as their wish and place the order as well. The orders were added to the cart and the data are stored in the database.




**PRODUCT VIEW PAGE**

identified barriers and leveraging technology, the food donation project can contribute to reducing food waste and supporting food- insecure populations. Overall, the search results highlight the importance of food donation and the potential for technology to enhance transparency, efficiency, and impact in food donation processes.

**FUTURE WORK**

The future work for the food donation web page should focus on integrating advanced analytical capabilities, real-time data insights, and machine learning algorithms to optimize food inventory and minimize waste. Additionally, the development of efficient communication channels and user-friendly interfaces will enhance the platform's effectiveness. Furthermore, the incorporation of features such as immediate alerts to nearby NGOs, orphanages, and volunteers, and the establishment of a common collaboration portal for restaurants, charities, and donors will streamline the donation process. Emphasizing user engagement and motivation, along with the provision of detailed reporting and tracking mechanisms, will contribute to the success of the food donation web page in reducing food waste and addressing food insecurity.

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**PAGE**

**PRODUCT ORDER**

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