

A Review on Food Waste Management and Donation App

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Abstract—A drastic increase can be seen in food waste. as per data given by food and agriculture organization, 1/3rd of food produced for human consumption is wasted globally, which accounts for almost 1.3 billion tons per year. on the other hand, also as per who 20% of the population face extreme food shortages. hence there is a need to come up with a solution that can avoid food waste & can help feed the needy.

The web-based food waste management system can assist in collecting the leftover food from hotels, restaurants, marriage halls to distribute among those in need. ngos that are helping poor communities to battle against starvation & malnutrition can raise a request for food supply from restaurants through this application. once the request is accepted, the ngos and it's volunteers can collect the food from the restaurants for its distribution. in this way this web-based food waste management and donation system will help restaurants to reduce food waste and will help in feeding the poor and needy people.

Index Terms— Donation.

I. INTRODUCTION

The sharp increase in the amount of wastage in terms of food, clothes, books, etc. makes the need for charity in terms of donation. This paper presents 'Helping Hands', a new internet-based application that provides a platform for donating old stuff and leftover food to all needy people/organizations. It provides information about the motivation to come up with such an application, thereby describing the existing donation system and how the proposed product works for the betterment of society.

II. LITERATURE REVIEW

A. Smart Resource Management: Civic Engagement and Food Recovery

In this paper there are four objectives. Firstly feeding the food insecure, increasing civic engagement through service-learning opportunities for helping with logistics around food delivery, reducing related GHG emissions, building a food recovery website. Initially they started competitive analysis, interviews, contextual inquiry, participatory design, usability tests, and online survey and they also employed some technology where they used React.js for our front-end implementation and they used Firebase to provide built-in functionalities.

B. Inventory Control at a University Food Pantry Using an MVC Software Pattern and Data Visualization

This study aims to resolve the inventory management issue at university food pantries using the combination of

the Model-View-Controller (MVC) software pattern and data visualization. The benefits of visualization on decision making through the use of a resourceful inventory system are outlined. This paper emphasizes the concept of food insecurity and what should be inculcated in university pantries to solve this issue. The proposed solution is an MVC inventory tracking application which incorporates data visualization.

C. FoodX, a System to Reduce Food Waste

This App is used to raise funds and one can donate online by using this app. Ollo is also one of the social entrepreneurship app that is used to share food around the world. The FoodX application was created to reduce the development time and to make user easy to involve in System development. There are 2 different way to analyze the problem. One was direct observation, which includes 3 food distribution community in Jakarta and Garda and the other way was literature study. By studying several forms of similar application using literature study we found gifood.id application has the same mission which they were looking.

D. Waste Food Management And Donation App

Today most of the charity trust organisations accept donations through cheque or cash. However, some percent of trusts do not accept donations via their own website. Moreover, donations from the younger generations are growing faster than those from the older generations. As younger generations become more affluent, they will expect to be able to use the donation facilities that they are familiar with such as text, third party websites or directly through a charity's own website.

III. METHODOLOGY

The admin of the application manages the entire web application. His privilege is to add, update, delete the trust and he is also responsible to manage members of the application. Members of the application are those who donate money to respective trusts. Trusts will be located in various places and these are managed by the admin himself. If in case the members are not willing to pay the amount directly then there is a provision to collect the amount from the employee of the application. The employee updates the information with the admin and he is managed (add, update, remove) by the charity trust. Thus the application helps to make online donation possible. The advantages of the above system are,

- Easy process
- Online transactions help in making payments
- Easy interface
- Better performance than manual

Fig 1: Admin type of login

Fig 2: Certificate that is generated after donation.

IV. CONCLUSIONS

This is an Online Charity Web Application which is developed using ASP.NET which is basically a manual process of accepting Charity/donation. This system will track the Status of donation. This Application is very helpful as it provides a sense of security that our donation reaches in safe hands and helps the needy people. Once the member request for donation he receives a conformation message on his/her registered number. He also receives message on every status updation. Employee comes and collects the donation to the registered address. This application is very user friendly and doesn't require much of knowledge and it will save our time and also increase efficiency. We are implementing this project to give easy access to donors and also provide them with manual process as more donors will come forward if it's a manual process as it saves their time and it's more reliable. Admin can manage trust, member, employee and city. This project is working as expected and giving desired results.

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