

A  
**Project Report**  
On  
**Food Traceability System for Hunger Eradication**



Submitted to:  
**Department of Computer Engineering**  
**Cusrow Wadia Institute of Technology, Pune-411001.**

Under the Guidance of:

**Prof. R. P. Shete**

Submitted by:

**Palak Pardeshi - 194006**

**Suhani Shinde - 194031**

**Vaibhavi Thakare – 194044**

**This project is sponsored by:**



**Rebert Technologies Pvt. Ltd.**

## SPONSORSHIP CERTIFICATES



**REBERT TECHNOLOGIES PRIVATE LIMITED**  
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REF: RTPL12210112

Date: 31<sup>st</sup> March 2022

### Project Sponsorship Letter

To,

The Principal,

Cusrow Wadia Institute of Technology,  
19, Bundgarden Road, Pune- 411001.

**Subject: Offering Sponsorship to the Students of CWIT Computer Department.**

Dear Sir,

We would like to hereby confirm, that **Ms. Palak Pardeshi, Ms. Suhani Shinde, and Ms. Vaibhavi Thakare** the students of the Third Year Diploma in Computer Programme, from your college have been selected for carrying out the Final Year Project “Food Traceability System for Hunger Eradication” with our industry experts under the domain Android App.

They will work with our organization, Rebert Technologies Pvt. Ltd. From 1<sup>st</sup> April 2022 to 15<sup>th</sup> July 2022 for exactly 4 months. The working schedule of their project will be 2 days a week from 4 pm to 6 pm.

The details and scope of this project will be provided to them from the beginning of their tenure at the company facility. Upon successful completion of the project, they will be issued a certificate. We will be required to submit a copy of the detailed report before completion of the project with a sample model which is required to be submitted at the time of the external examination held at the college.

Thanks & Regards,

A handwritten signature in blue ink, appearing to read "Madhuri Robert".



Mrs. Madhuri Robert,  
Founding Director and Chairperson,  
Rebert Technologies Pvt. Ltd.



**REBERT TECHNOLOGIES PRIVATE LIMITED**  
Address: REBERT Technologies Pvt. Ltd., PICT EDC, Dhankawadi, Pune-411043, Maharashtra,  
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Website: [www.rebert.in](http://www.rebert.in) Email: [rebert.tech@gmail.com](mailto:rebert.tech@gmail.com)

REF: RTPL12210112

Date: 15<sup>th</sup> July 2022

### Certificate of Project Completion

To Whomsoever It May Concern,

This is to certify that the DCP Final Year Project work for the academic year 2021-22 entitled "Food Traceability System for Hunger Eradication" having the industry sponsorship tenure of 4 months starting from 1<sup>st</sup> April 2022 to 15<sup>th</sup> July 2022 carried out by our Research and Development Interns:

**Palak Pardeshi**

**Enrollment No. 194006**

**Suhani Shinde**

**Enrollment No. 194031**

**Vaibhavi Thakare**

**Enrollment No. 194044**

studying in the Third Year, Diploma in Computer Programme, Cusrow Wadia Institute of Technology, Pune has been satisfactorily completed and worthy of acceptance for the Diploma in Computer Engineering.

The project was carried out under the guidance of

**Prof. R. P. Shete**

And industrially guided and supported by us

**Rebert Technologies Pvt. Ltd.**

The project work meets all the requirements and specifications mentioned by us, was completed in a disciplined and timely manner, and is fit for industrial use.

During their tenure we found the students to be hardworking conscientious and responsible. They have always been positive and determined towards the work.

We wish them all the success and a bright future ahead.

A handwritten signature in black ink, appearing to read "Madhuri Robert".

**Mrs. Madhuri Robert,**  
**Founding Director and Chairperson,**  
**Rebert Technologies Pvt. Ltd.**



## **PROJECT CERTIFICATE**



This is to certify that the below-mentioned third-year diploma students have carried out the project work on 'Food Traceability System for Hunger Eradication' in the Department of Computer Engineering, Cusrow Wadia Institute of Technology, Pune- 411001. They have completed this project work under guidance and in a satisfactory manner in June 2022 third-year diploma.

- |                     |        |
|---------------------|--------|
| 1. Palak Pardeshi   | 194006 |
| 2. Suhani Shinde    | 194031 |
| 3. Vaibhavi Thakare | 194044 |

These Computer Engineering students have successfully completed the project on 'Food Traceability System for Hunger Eradication' towards the fulfilment of their Diploma in Computer Engineering in the academic year 2021-2022.

The performance of each of these students during the course was very good.

Date: 16/07/2022

Prof. Rupali Shete  
Guide

Dr. A. S. Chandak  
I/C HOD Comp. Dept.

Prof. V.R. Rao  
Principal

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## **I. ACKNOWLEDGEMENT**

*“No one who achieves success does so without acknowledging the help of others. The wise and confident acknowledge this help with gratitude.”*

We take this opportunity in expressing the fact that this project report is the result of the incredible amount of encouragement and cooperation and moral support that we have received from our beloved teachers, mentors, and colleagues.

We are privileged to present the project report on '**Food Traceability System for Hunger Eradication**'; and to express our deep regards towards those who have offered their valuable time and guidance in our hour of need because when any work is to be completed successfully it should be supported and guided by knowledgeable mentors.

We are highly indebted to **Prof. R. P. Shete** and our project sponsor **Rebert Technologies Pvt Ltd.** for their guidance and constant supervision as well as for providing necessary information regarding the project and also for their support in completing the project.

We would like to express a heartfelt appreciation to **Miss. Veronica Robert** who is the **founder of Rebert Technologies Pvt Ltd**, is the sponsor of this project. We are highly obligated for their attention and their precious time. Her valuable guidance and support made this project work an enlightening educational experience. Her consistent support and cooperation showed the words the successful completion of the project. We would like to express our deep sense of gratitude to all the members, who directly or indirectly helped us during our project work.

Palak Pardeshi  
194006

Suhani Shinde  
194031

Vaibhavi Thakare  
194044

## **2. ABSTRACT**

In recent times, food wastage is increasing at an unprecedented rate and creating a negative effect on the economic growth factors. This in turn creates a major impact on the agricultural processing industries. As food recycling is always remaining a complex task, in this project, we are focusing mainly on food wastage in the office premises, weddings, events, etc. This web application is used to manage the wastage of food in a useful way. Everyday, people are wasting lots of food. So, we must reduce the food wastage problem online. In general, we are automating the process of food waste management.

### **3. KEYWORDS**

Website, System, Database, Database Management, Food Requests, Donor Registration, Admin Panel, User Login, City Management, State Management, Food Details, Available Food, Available Requests, Accepted Requests, Request ID.

## **4. INTRODUCTION**

Food Wastage Management System is a web-based technology that manages foods. This web application provides an interface between food donors and food requirements. In this application, food donors enter their food quantity details and addresses.

The donator can create the account and whenever they are having waste food, they can login and give requests to the admin. The admin collects food from the donors through their nearby agent and then provides it to the nearest orphanages or poor people. After receiving the food from the agent by admin and gives an alert message to that donor. This project is food redistribution is an enormously successful social innovation that tackles food waste and food poverty. The donor details are maintained confidential because it maintains a separate account for each donor.

In this project, we use PHP and MySQL database and it has three modules, i.e., admin, donor, and user.

## **5. REQUIREMENT ANALYSIS**

### **Software & Hardware Requirements**

- ✓ Any Version of browser after Mozilla Firefox 4.0, Internet Explorer 6.0, chrome

#### **Hardware Requirements:**

- ✓ Any processor after Pentium 4.
- ✓ Any version of Windows XP or later.
- ✓ Processor speed: 2.0 GHz
- ✓ RAM: 1GB
- ✓ Hard disk: 40GB to 80 GB
- ✓ SSD: 512 GB M.2 NVME Gen 4

#### **Software Requirements:**

- ✓ Database: MySQL
- ✓ Server: Xampp, Apache
- ✓ Frontend: HTML, CSS
- ✓ Scripting Language: JavaScript
- ✓ IDE: Sublime/VS Code
- ✓ Technology: PHP
- ✓ Version: 8.1.6
- ✓ Browser: Mozilla Firefox, Chrome, Microsoft Edge

## **6. LITERATURE SURVEY**

**2013**

- Establishment of Winnow
- Winnow is a company that works to reduce food waste across the world by providing a way to identify and measure waste in commercial kitchens.
- They provide “Winnow Waste Monitor” –a smart scale that sits under the bin. The scale is connected to the tablet, the tablet is connected to the cloud, and the tablet is loaded with the menu of the restaurants. Every time someone would throw something away, the system would recognize the weight, and then you go onto the tablet and say the names of the food items, for example, pastries, Brussels, etc. The machine assigns a value that goes to the cloud and gets filled in a report that tells you what, when, and how much you are wasting.
- Winnow only develops technology to help chefs achieve greater visibility in their kitchens and make better decisions that lead to dramatically reduced food waste and costs.

**2015**

- Commencement of “Yo No Desperdicio”
- promotes the exchange of raw and cooked food in Spain. On this food-sharing app, users post a picture of the item they offer with information such as quantity, location, and expiry date.
- Both parties arrange the swap of their items and a private message.
- Members also share recipes and tips for preventing food waste.

**2016**

- Establishment of Flashfood
- A mobile marketplace that provides customers with access to discounted food nearing its best-by date. The app allows users to browse through available deals at participating stores near them. Customers can also purchase items directly in the app and then pick up their order from the Flashfood zone in their participating store.

**2017**

- Rise of goMkt.
- Through an iOS app, goMkt enables customers to purchase unsold food items from food retail locations as takeout. Consumers can download the app (currently available in the Apple Store) and use goMkt to purchase food from local retailers.
- One of the drawbacks included here is, regarding the usage of iOS apps wherein, the world consists of 70% of Android users.

**2021**

- ImpactVision was acquired by ApeelSciences.
- Basically an imaging startup, wherein imaging tech will allow suppliers to see ‘inside’ their fresh produce to better understand its ripeness, freshness, nutritional density, and other indicators of quality. This could allow suppliers to know the exact ripening window for each fruit and vegetable, enabling them to sort and ship accordingly.

## **7. FEASIBILITY STUDY**

Whenever we design a new system, normally the management will ask for a feasibility report of the new system. The management wants to know the technicalities and costs involved in the creation of a new system.

- Technical feasibility
- Economic feasibility
- Physical feasibility

### **1. Technical feasibility:**

Technical feasibility involves a study to establish the technical capability of the system being created to accomplish all requirements of the user. The system should be capable of handling the proposed volume of data and provide users with an operating environment to increase their efficiency. For example, the system should be capable of handling the proposed volume of data and providing users.

### **2. Economic feasibility:**

Economic feasibility involves a study to establish a cost-benefit analysis. Money spent on the system must be recorded in the form of benefits from the system. The benefits are of two types:

#### **Tangible benefits:**

- Saving man labor to do tedious tasks saves time.

#### **Intangible benefits:**

- Improves the quality of the organization.

### **3. Physical feasibility:**

It involves study to establish the time responses of the new system are created. E.g., if the new system takes more than one day to prepare a crucial finance statement for the management, wherever it was required in an hour, the system fails to provide the same.

It should be clearly established that the new system requirements in the form of time responses would be completely met. It may call for an increase in cost. If the required cost is sacrificed then the purpose of the new system may not be achieved even if it was found to be technically feasible

## **8. SCOPE OF PROJECT**

In the proposed system we are reducing food wastage using that application. This project is food redistribution is an enormously successful social innovation that tackles food waste and food poverty. The admin collects food from the donor through their nearby agent and then provides it to the nearest orphanages or poor people. After receiving the food from the agent by admin and giving an alert message to that donator through this way we can reduce the food wastage problem.

In this project, there are three modules, i.e., Admin, Donor, and User.

### **Admin:**

1. **Dashboard:** In this section, the admin can view total state, total city, Total Food Donor, Total Listed Food, All Food Request, New Food Requests, Rejected Food Requests, and Completed Food Requests.
2. **State:** In this section, the admin can manage the state (Add/Update/Delete).
3. **City:** In this section, the admin can manage the city (Add/Update/Delete).
4. **Reg Food Donor:** In this section, the admin can view registered donors.
5. **Listed Food:** In this section, the admin can view the listed food by the food donor.
6. **Food Request:** In this section, the admin can view the request for food that is sent by the user.
7. **Enquiry:** In this section, the admin can view and maintain the inquiry.
8. **Pages:** In this section, the admin can manage the About Us and Contact Us pages.
9. **Search Listed Food:** In this section admin, search food requests by request number.
10. **Reports:** In this section admin can view donated food and registered food donors in a particular period

Admin can also update his profile, change the password, and recover the password.

**Donor:**

1. **Dashboard:** In this section, donors can view the total listed food and the total food taken away.
2. **List Your Food Detail:** In this section, the donor can list the donated food detail.
3. **Request:** In this section, the donor can view the request that is sent by the user.
4. **Search:** In this section, the donor can search the food request by request number.
5. **Profile Updating:** The donor can also update his profile, change the password and recover the password.

**User:**

1. **Home:** The user can visit the website and check the details.
2. **About Us:** The user can see the details of the website.
3. **Contact Us:** The user can see the contact detail and contact the website administrator.
4. **Food Available List:** The user can view available donated food and send requests for food.
5. **Request Food:** The user can also request available food.

## **9. SYSTEM DESIGN**

Design is the first step in the development phase for any techniques and principles to define a device, a process, or system in sufficient detail to permit its physical realization.

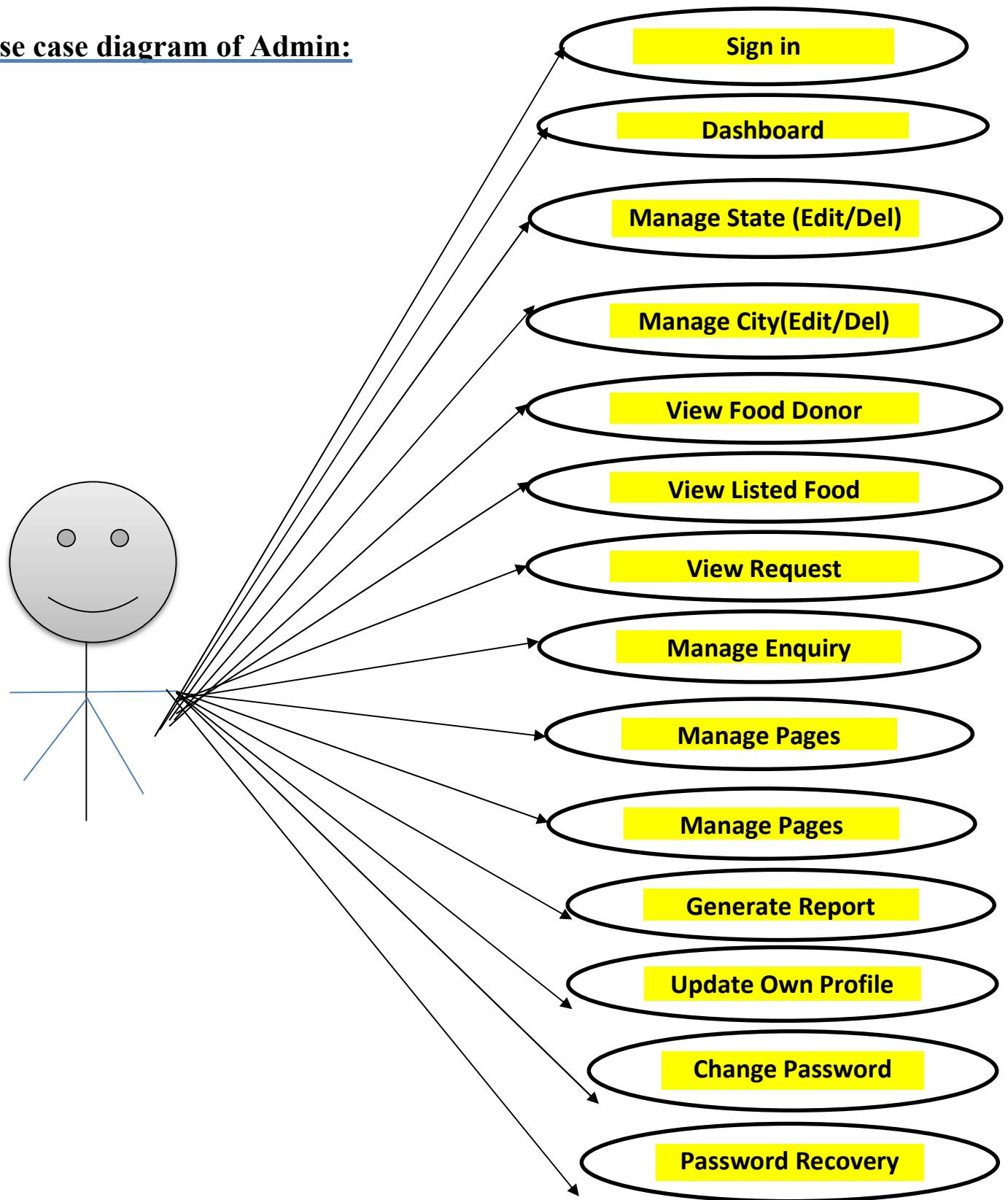
Once the software requirements have been analyzed and specified the software design involves three technical activities - design, coding, implementation, and testing that are required to build and verify the software.

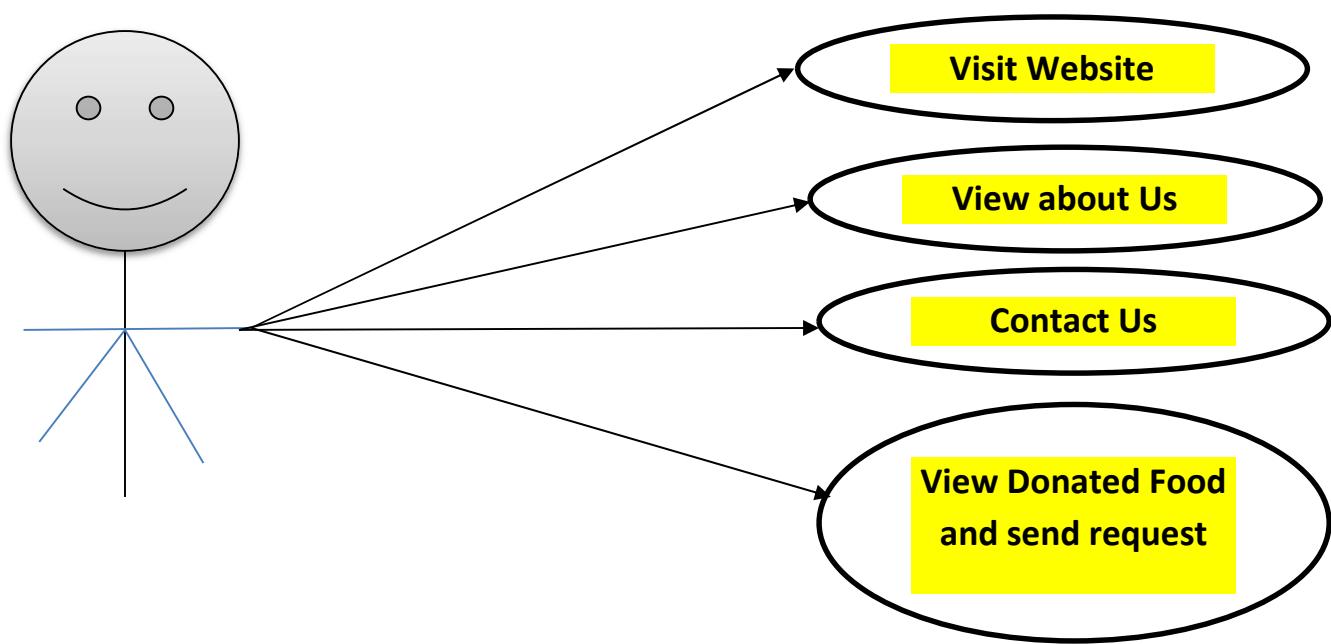
The design activities are of main importance in this phase, because in this activity, decisions ultimately affecting the success of the software implementation and its ease of maintenance are made. These decisions have the final bearing on the reliability and maintainability of the system. Design is the only way to accurately translate the customer's requirements into finished software or a system.

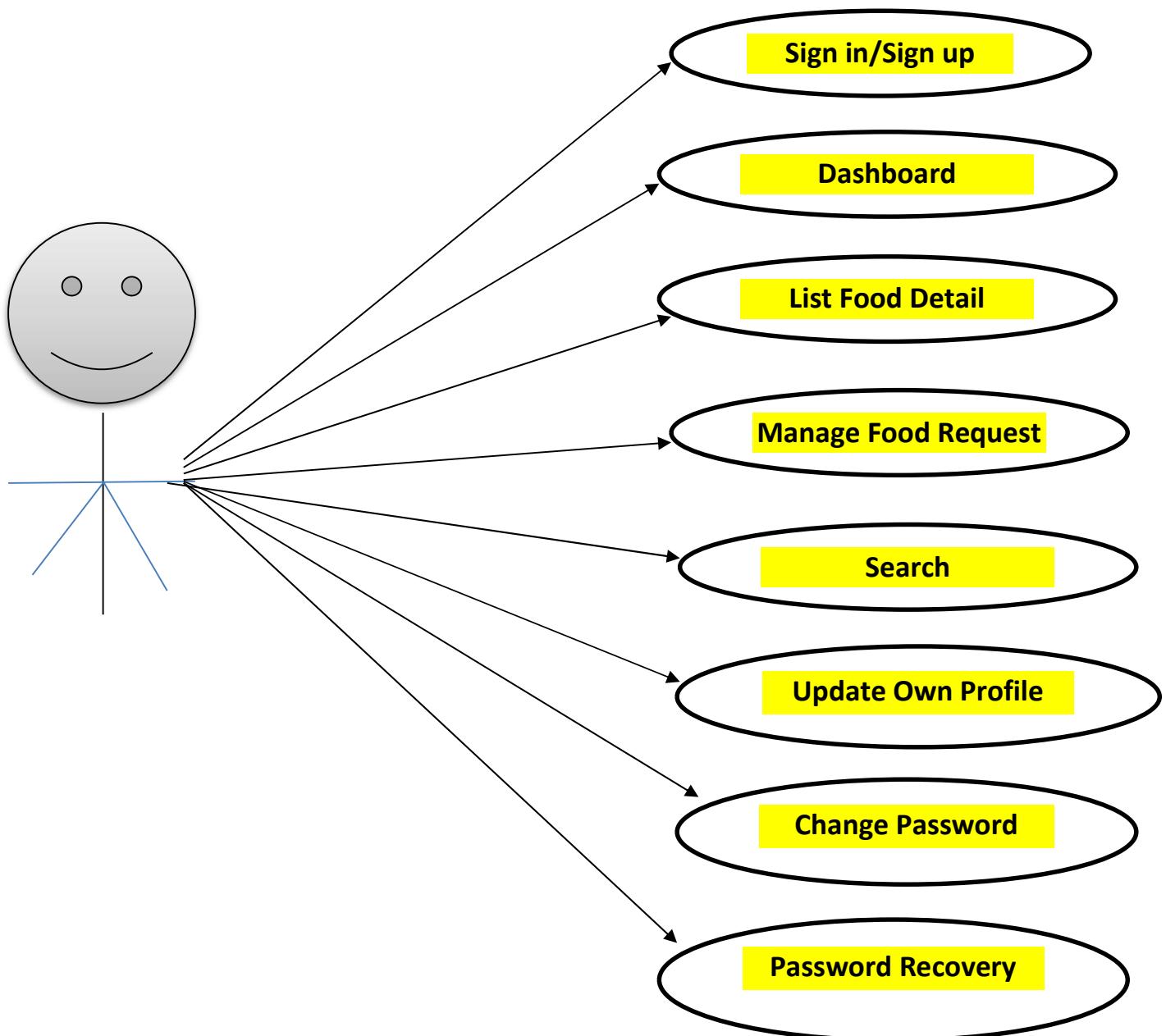
Design is the place where quality is fostered in development. Software design is a process through which requirements are translated into a representation of software. Software design is conducted in two steps. Preliminary design is concerned with the transformation of requirements into data

## 10. USE CASE DIAGRAMS

Use case diagram of Admin:

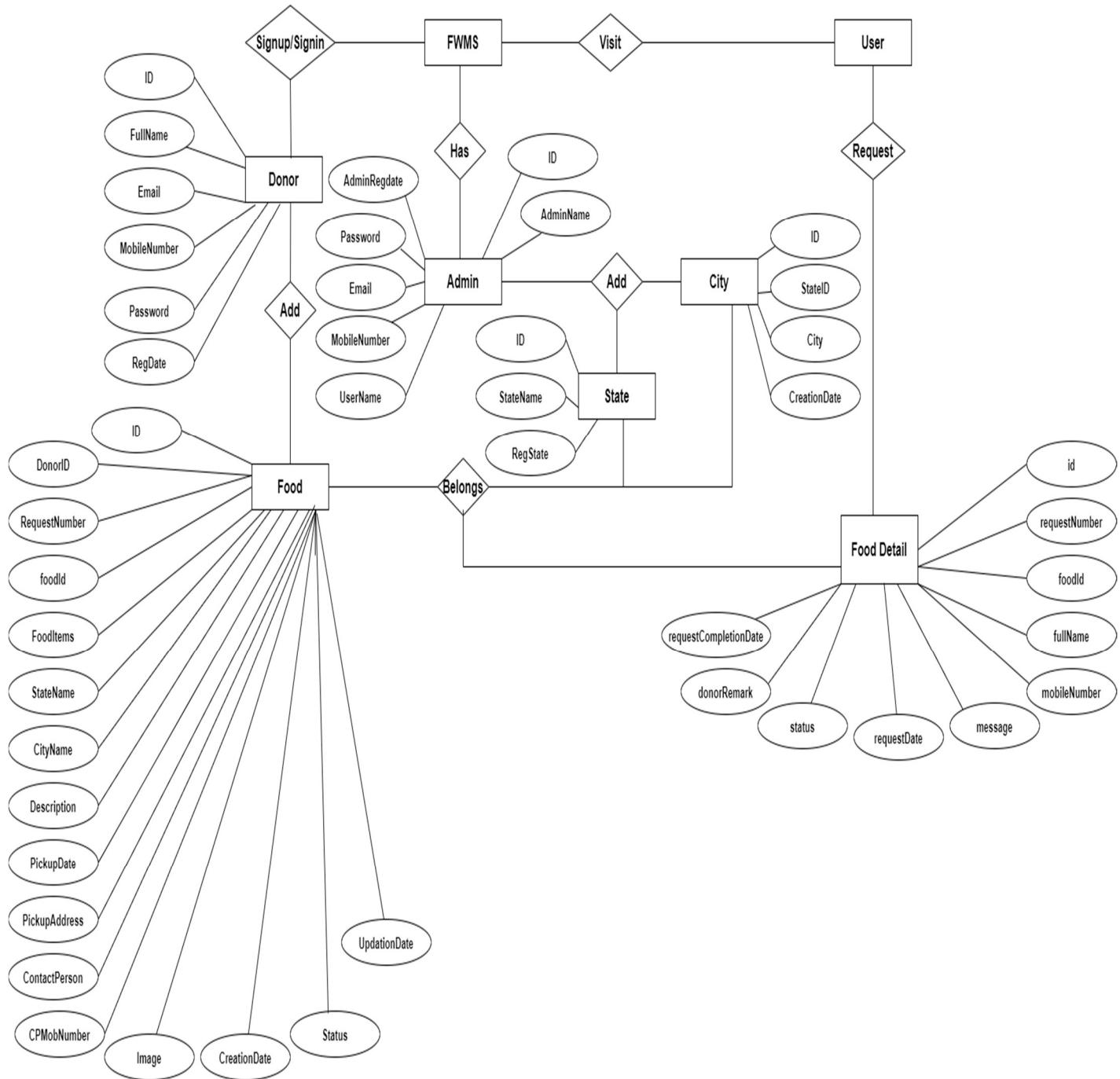


Use case diagram of Users:

Use case diagram of donor:

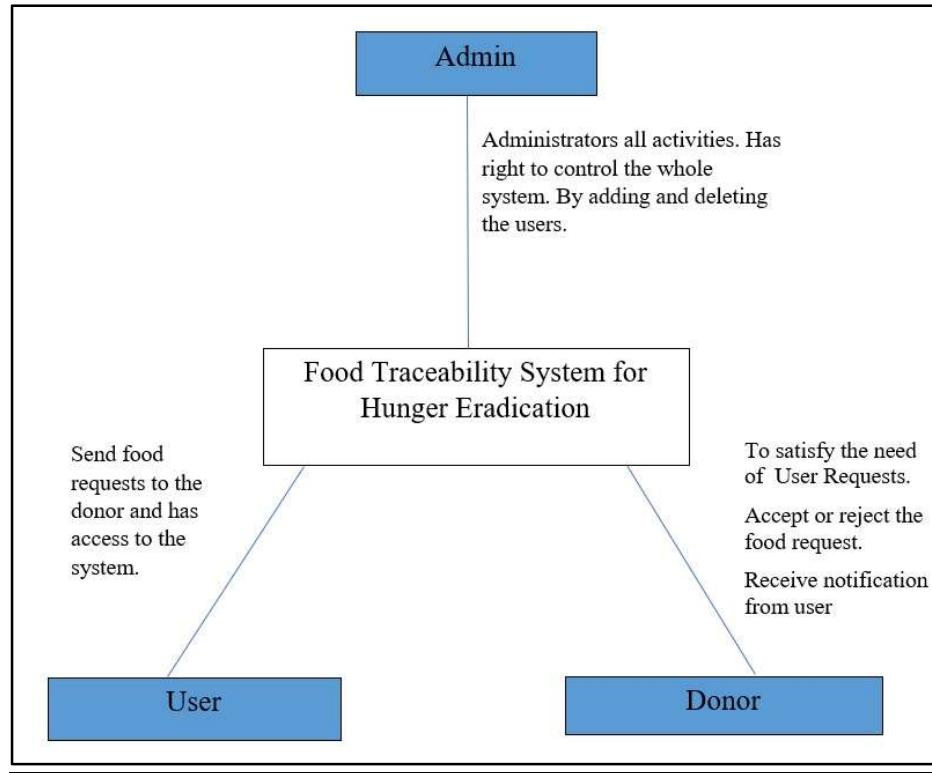
## 11. E-R DIAGRAM

E-R (Entity-Relationship) Diagram is used to represent the relationship between entities in the table.

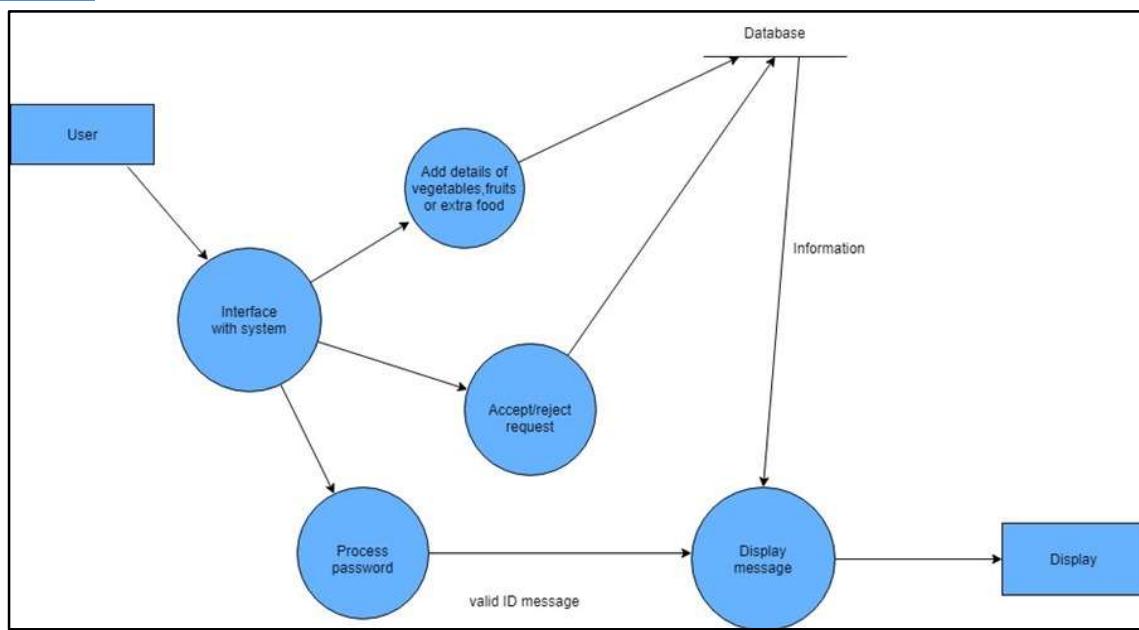


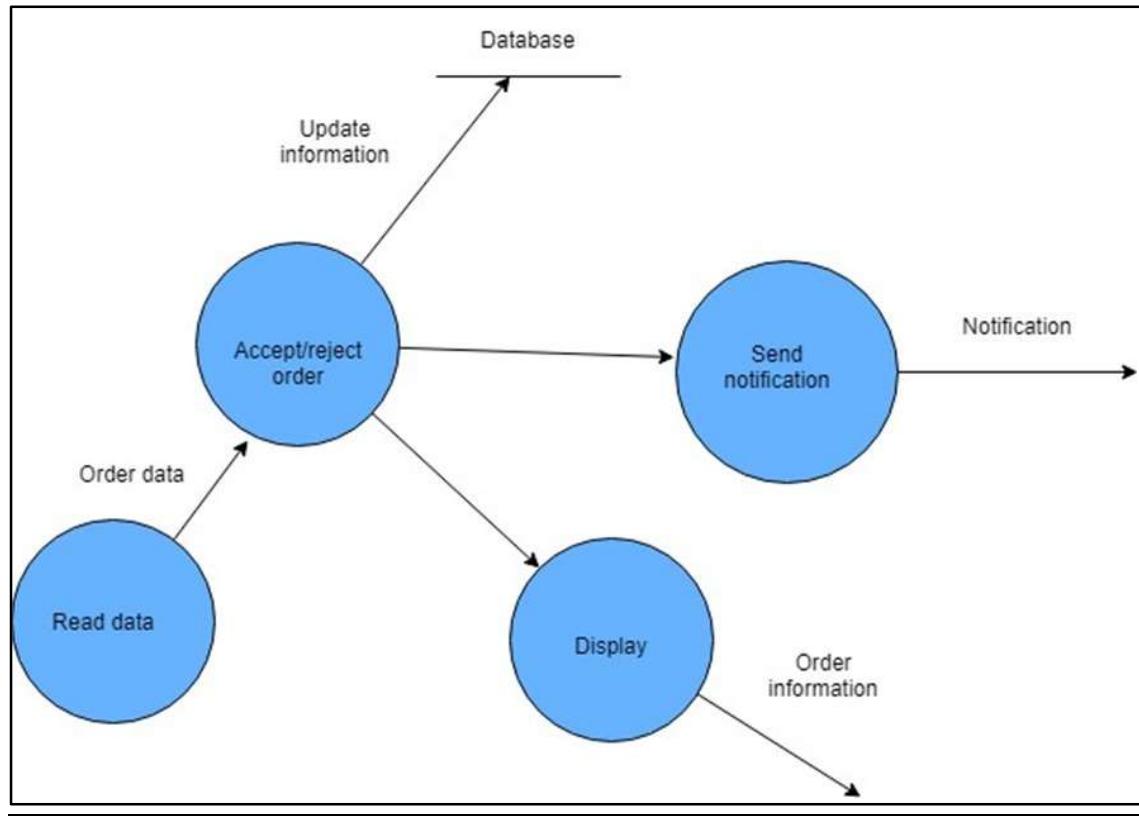
## 12. DATA FLOW DIAGRAMS

### DFD level 0:



### DFD level 1:



**DFD level 2:**

## **13. DATABASE DESIGN**

The data in the system must be stored and retrieved from the database. Designing the database is part of system design. Data elements and data structures to be stored have been identified at the analysis stage. They are structured and put together to design the data storage and retrieval system.

A database is a collection of interrelated data stored with minimum redundancy to serve many users quickly and efficiently. The general objective is to make database access easy, quick, inexpensive, and flexible for the user. Relationships are established between the data items and unnecessary data items are removed. Normalization is done to get an internal consistency of data and to have minimum redundancy and maximum stability. This ensures minimizing data storage required, minimizing chances of data inconsistencies, and optimizing for updates. The MySQL database has been chosen for developing the relevant databases.

### **Food Traceability System for Hunger Eradication contains 7 tables:**

**1.tbladmin table Structure:** This table stores the admin login and personal details.

#	Name	Type	Collation	Attributes	Null	Default	Comments	Extra
1	ID 	int(10)			No	None		AUTO_INCREMENT
2	AdminName	varchar(120)	utf8mb4_general_ci		Yes	NULL		
3	UserName	varchar(120)	utf8mb4_general_ci		Yes	NULL		
4	MobileNumber	bigint(10)			Yes	NULL		
5	Email	varchar(200)	utf8mb4_general_ci		Yes	NULL		
6	Password	varchar(200)	utf8mb4_general_ci		Yes	NULL		
7	AdminRegdate	timestamp			Yes	current_timestamp()		

**2.tblstate table Structure:** This table stores name of the state.

#	Name	Type	Collation	Attributes	Null	Default	Comments	Extra
1	ID 	int(10)			No	None		AUTO_INCREMENT
2	StateName	varchar(120)	latin1_swedish_ci		Yes	NULL		
3	RegState	timestamp			Yes	current_timestamp()		

**3.tblcontact table Structure:** This table stores the detail of contact persons.

#	Name	Type	Collation	Attributes	Null	Default	Comments	Extra
1	<b>ID</b>	int(10)			No	<i>None</i>		AUTO_INCREMENT
2	<b>FirstName</b>	varchar(200)	utf8mb4_general_ci		Yes	<i>NULL</i>		
3	<b>LastName</b>	varchar(200)	utf8mb4_general_ci		Yes	<i>NULL</i>		
4	<b>Email</b>	varchar(200)	utf8mb4_general_ci		Yes	<i>NULL</i>		
5	<b>Phone</b>	bigint(10)			Yes	<i>NULL</i>		
6	<b>Message</b>	mediumtext	utf8mb4_general_ci		Yes	<i>NULL</i>		
7	<b>EnquiryDate</b>	timestamp			No	current_timestamp()		
8	<b>IsRead</b>	int(5)			Yes	<i>NULL</i>		

**4.tbldonor table Structures:** This table stores the detail of the food donor.

#	Name	Type	Collation	Attributes	Null	Default	Comments	Extra
1	<b>ID</b>	int(10)			No	<i>None</i>		AUTO_INCREMENT
2	<b>FullName</b>	varchar(200)	latin1_swedish_ci		Yes	<i>NULL</i>		
3	<b>Email</b>	varchar(200)	latin1_swedish_ci		Yes	<i>NULL</i>		
4	<b>MobileNumber</b>	bigint(10)			Yes	<i>NULL</i>		
5	<b>Password</b>	varchar(120)	latin1_swedish_ci		Yes	<i>NULL</i>		
6	<b>RegDate</b>	timestamp			Yes	current_timestamp()		

**5.tblfood table Structure:** This table stores the details of donated food.

#	Name	Type	Collation	Attributes	Null	Default	Comments	Extra
1	<b>id</b>	int(11)			No	<i>None</i>		AUTO_INCREMENT
2	<b>requestNumber</b>	bigint(12)			Yes	<i>NULL</i>		
3	<b>foodId</b>	int(1)			Yes	<i>NULL</i>		
4	<b>fullName</b>	varchar(150)	utf8mb4_general_ci		Yes	<i>NULL</i>		
5	<b>mobileNumber</b>	bigint(12)			Yes	<i>NULL</i>		
6	<b>message</b>	mediumtext	utf8mb4_general_ci		Yes	<i>NULL</i>		
7	<b>requestDate</b>	timestamp			Yes	current_timestamp()		
8	<b>status</b>	varchar(120)	utf8mb4_general_ci		Yes	<i>NULL</i>		
9	<b>donorRemark</b>	mediumtext	utf8mb4_general_ci		Yes	<i>NULL</i>		
10	<b>requestCompletionDate</b>	timestamp			Yes	<i>NULL</i>		ON UPDATE CURRENT_TIMESTAMP()

**6.tblpages table Structure:** This table stores the details of contact us and about us.

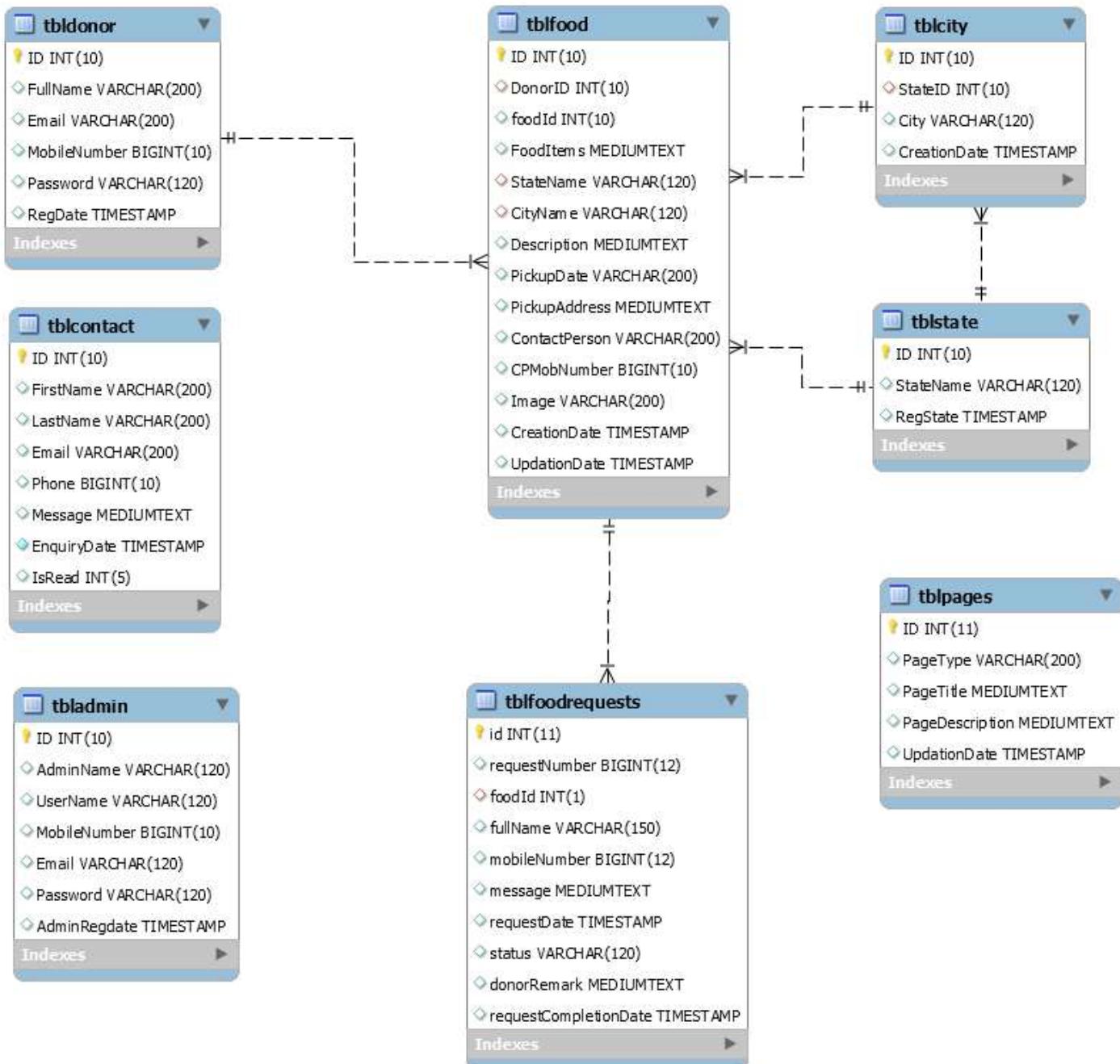
#	Name	Type	Collation	Attributes	Null	Default	Comments	Extra
1	ID	int(11)			No	None		AUTO_INCREMENT
2	PageType	varchar(200)	latin1_swedish_ci		Yes	NULL		
3	PageTitle	mediumtext	latin1_swedish_ci		Yes	NULL		
4	PageDescription	mediumtext	latin1_swedish_ci		Yes	NULL		
5	UpdationDate	timestamp			Yes	NULL		ON UPDATE CURRENT_TIMESTAMP()

**7.tblfoodrequests table Structure:** This table stores the detail of the food request that are sent by the users.

#	Name	Type	Collation	Attributes	Null	Default	Comments	Extra
1	id	int(11)			No	None		AUTO_INCREMENT
2	requestNumber	bigint(12)			Yes	NULL		
3	foodId	int(1)			Yes	NULL		
4	fullName	varchar(150)	utf8mb4_general_ci		Yes	NULL		
5	mobileNumber	bigint(12)			Yes	NULL		
6	message	mediumtext	utf8mb4_general_ci		Yes	NULL		
7	requestDate	timestamp			Yes	current_timestamp()		
8	status	varchar(120)	utf8mb4_general_ci		Yes	NULL		
9	donorRemark	mediumtext	utf8mb4_general_ci		Yes	NULL		
10	requestCompletionDate	timestamp			Yes	NULL		ON UPDATE CURRENT_TIMESTAMP()

## 14. CLASS DIAGRAM

The class diagram shows a set of classes, interfaces, collaborations, and their relationships.



## **15. SALIENT FEATURES**

- ✓ Provides a platform between food donors and food hunger.
- ✓ Reduces time consumption.
- ✓ Reduce error scope.
- ✓ All system management is automated.
- ✓ Centralized database management.
- ✓ Easy operations for the operator of the system.
- ✓ No paperwork required.

## **16. SYSTEM TESTING**

### **Software Testing Techniques:**

Software testing is a critical element of software quality assurance and represents the ultimate review of the specification, designing, and coding.

### **Testing Objectives:**

1. Testing is the process of executing a program with the intent of finding an error.
2. A good test case design is one that can find an as-yet undiscovered error.
3. A successful test is one that uncovers an as-yet undiscovered error.

The above objectives imply a dramatic change in the viewport. Testing cannot show the absence of defects, it can only show that software errors are present.

### **There are three types of testing strategies:**

1. Unit test
2. Integration test
3. Performance test

### **Unit Testing:**

Unit testing focuses verification efforts on the smallest unit of software design module. The unit test is always white box oriented. The tests that occur as part of unit testing are testing the module interface, examining the local data structures, testing the boundary conditions, executing all the independent paths, and testing error-handling paths.

### **Integration Testing:**

Integration testing is a systematic technique or construction of the program structure while at the same time conducting tests to uncover errors associated with interfacing. Scope of testing summarizes the specific functional, performance, and internal design characteristics that are to be tested. It employs top-down testing and bottom-up testing methods for this case.

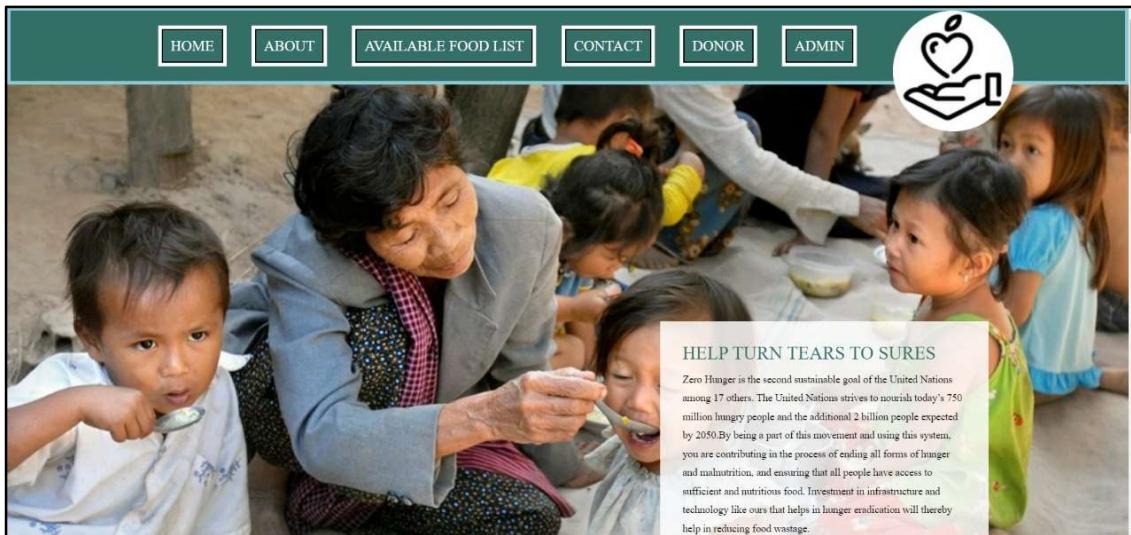
### **Performance Testing:**

Timing for both read and update transactions should be gathered to determine whether system functions are being performed in an acceptable timeframe.

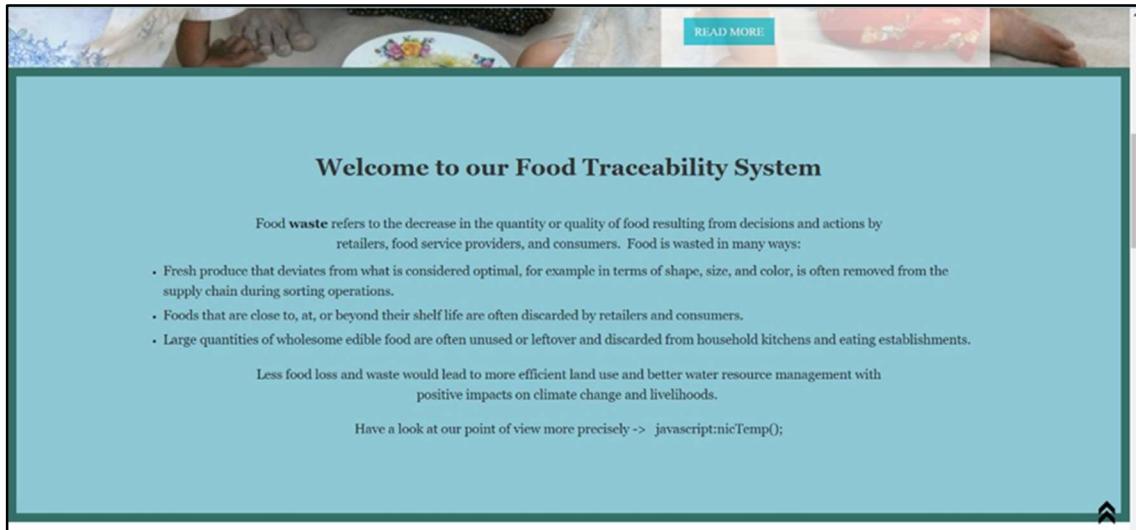
## 17.APPLICATION PREVIEW



*Fig.1: Pre-loader Screen*



*Fig.2: Home Page*



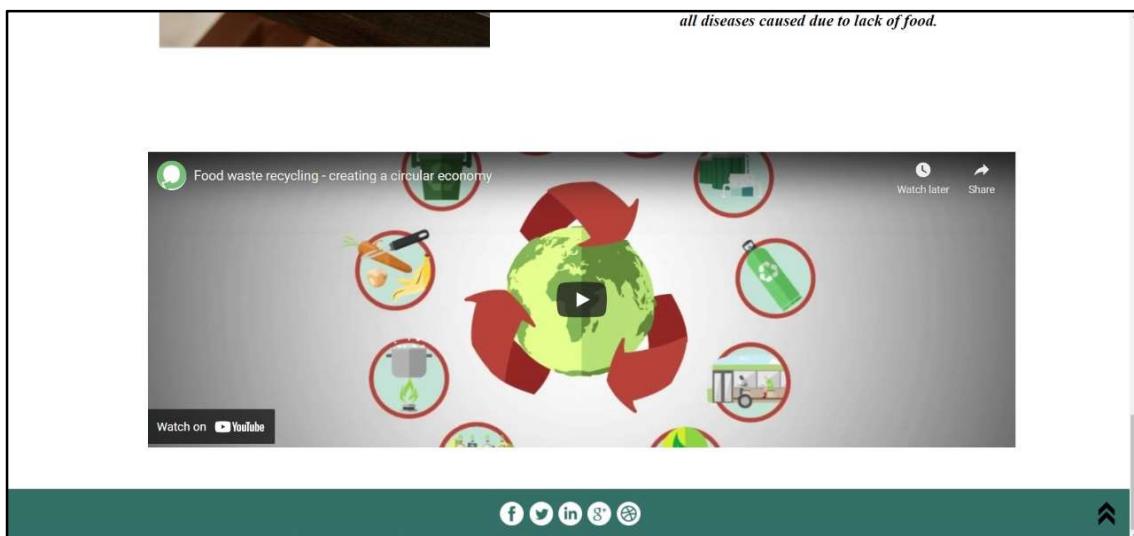
**Fig.2: Home Page**



**Fig.2: Home Page**



**Fig.2: Home Page**



**Fig.2: Home Page**

**About Us!**

**Welcome to our Food Traceability System**

Food **waste** refers to the decrease in the quantity or quality of food resulting from decisions and actions by retailers, food service providers, and consumers.  
Food is wasted in many ways:

**Fig.3: About Us**

**System**

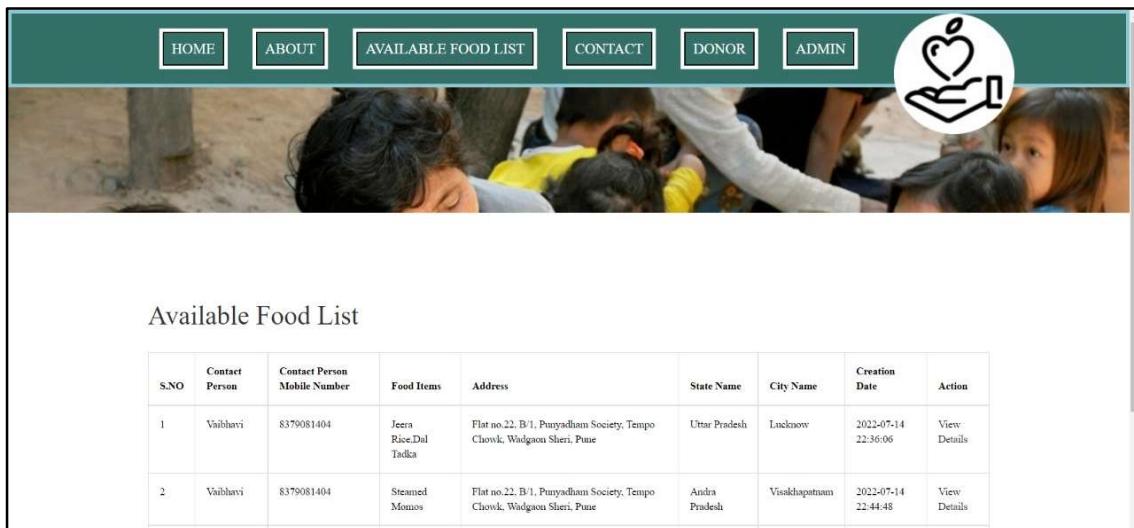
Food **waste** refers to the decrease in the quantity or quality of food resulting from decisions and actions by retailers, food service providers, and consumers.  
Food is wasted in many ways:

- Fresh produce that deviates from what is considered optimal, for example in terms of shape, size, and color, is often removed from the supply chain during sorting operations.
- Foods that are close to, at, or beyond their shelf life are often discarded by retailers and consumers.
- Large quantities of wholesome edible food are often unused or leftover and discarded from household kitchens and eating establishments.

Less food loss and waste would lead to more efficient land use and better water resource management with positive impacts on climate change and livelihoods.

Have a look at our point of view more precisely -> `javascript:nicTemp();`

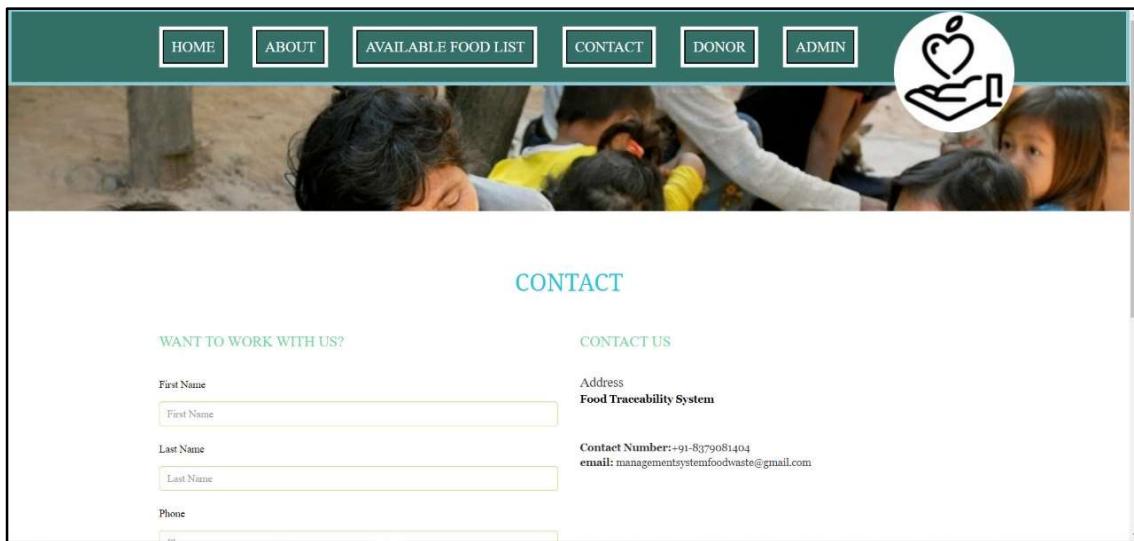
**Fig.3: About Us**



The screenshot shows a web application interface. At the top, there is a navigation bar with buttons for HOME, ABOUT, AVAILABLE FOOD LIST, CONTACT, DONOR, and ADMIN. To the right of these buttons is a circular logo featuring a stylized heart with a leaf on top, resting in a hand. Below the navigation bar is a large image of a group of people, possibly volunteers or donors, gathered together. The main content area is titled "Available Food List". It contains a table with the following data:

S.NO	Contact Person	Contact Person Mobile Number	Food Items	Address	State Name	City Name	Creation Date	Action
1	Vaibhavi	8379081404	Jeera Rice,Dal Tadka	Flat no.22, B/1, Punyadham Society, Tempo Chowk, Wadgaon Sheri, Pune	Uttar Pradesh	Lucknow	2022-07-14 22:36:06	<a href="#">View Details</a>
2	Vaibhavi	8379081404	Steamed Monos	Flat no.22, B/1, Punyadham Society, Tempo Chowk, Wadgaon Sheri, Pune	Andhra Pradesh	Visakhapatnam	2022-07-14 22:44:48	<a href="#">View Details</a>

*Fig.4: Available Food List*



The screenshot shows a web application interface. At the top, there is a navigation bar with buttons for HOME, ABOUT, AVAILABLE FOOD LIST, CONTACT, DONOR, and ADMIN. To the right of these buttons is a circular logo featuring a stylized heart with a leaf on top, resting in a hand. Below the navigation bar is a large image of a group of people, possibly volunteers or donors, gathered together. The main content area is titled "CONTACT". It contains two sections: "WANT TO WORK WITH US?" and "CONTACT US".

**WANT TO WORK WITH US?**

First Name

Last Name

Phone

**CONTACT US**

Address  
**Food Traceability System**

Contact Number: +91-8379081404  
email: managementsystemfoodwaste@gmail.com

*Fig.5: Contact Us*

**Food Traceability System**

First Name

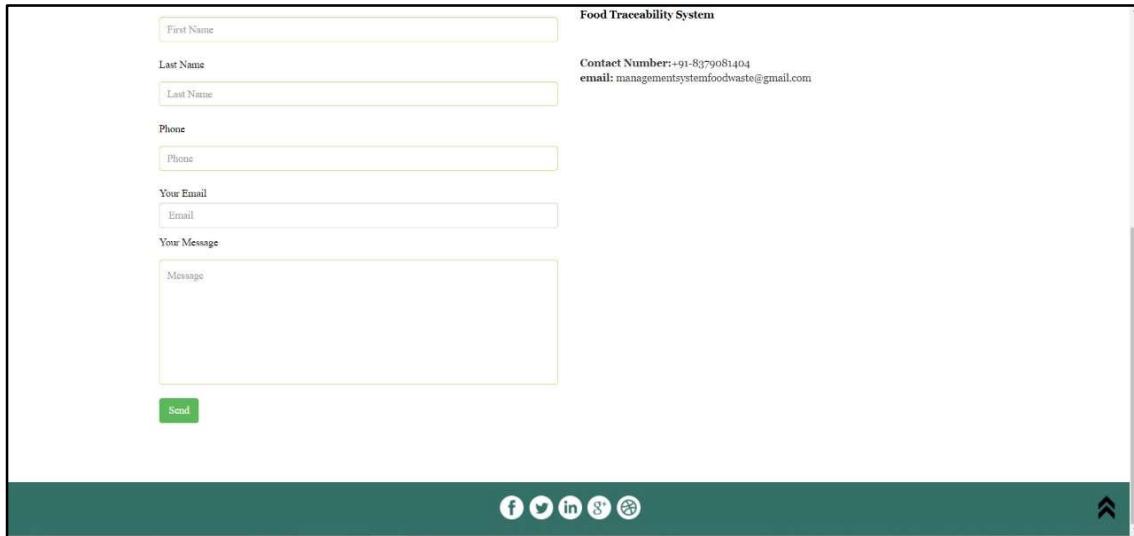
Last Name

Contact Number: +91-8379081404  
email: managementsystemfoodwaste@gmail.com

Phone

Your Email

Your Message



**Fig.5: Contact Us**

**REGISTER NOW**

Name

E-Mail

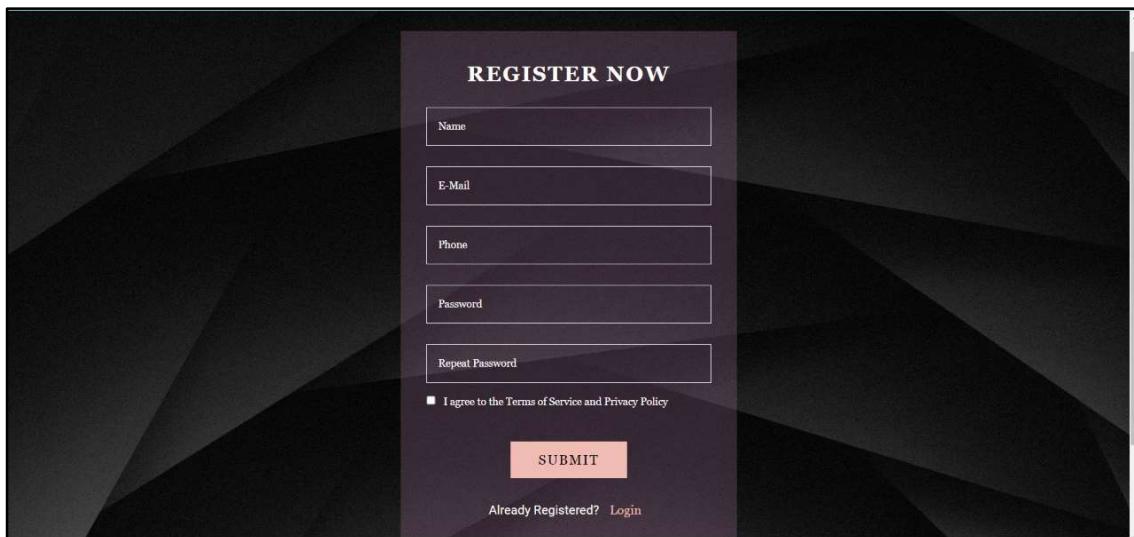
Phone

Password

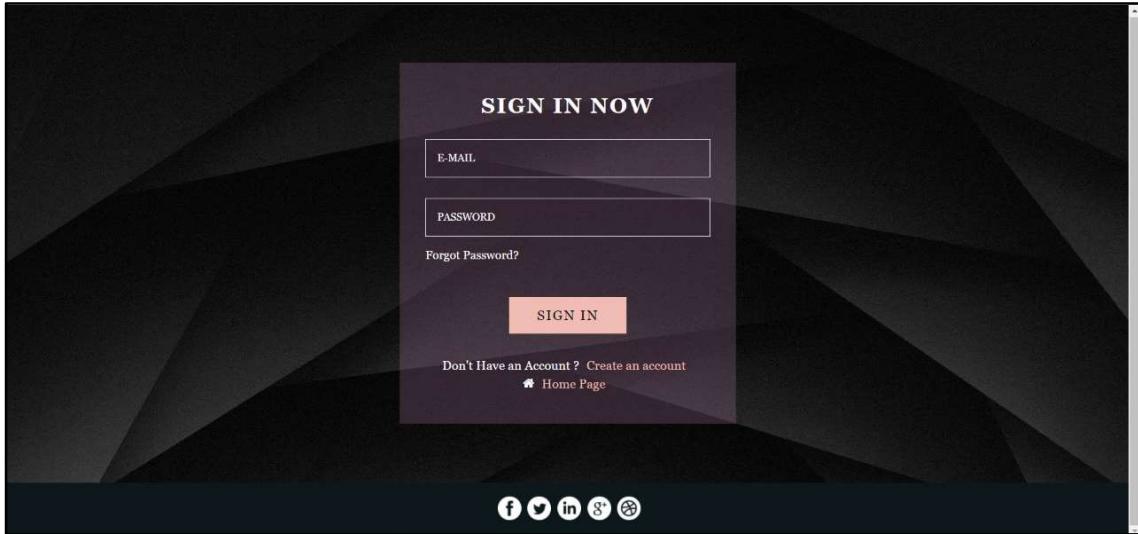
Repeat Password

I agree to the Terms of Service and Privacy Policy

Already Registered? [Login](#)



**Fig.6: Donor Registration**



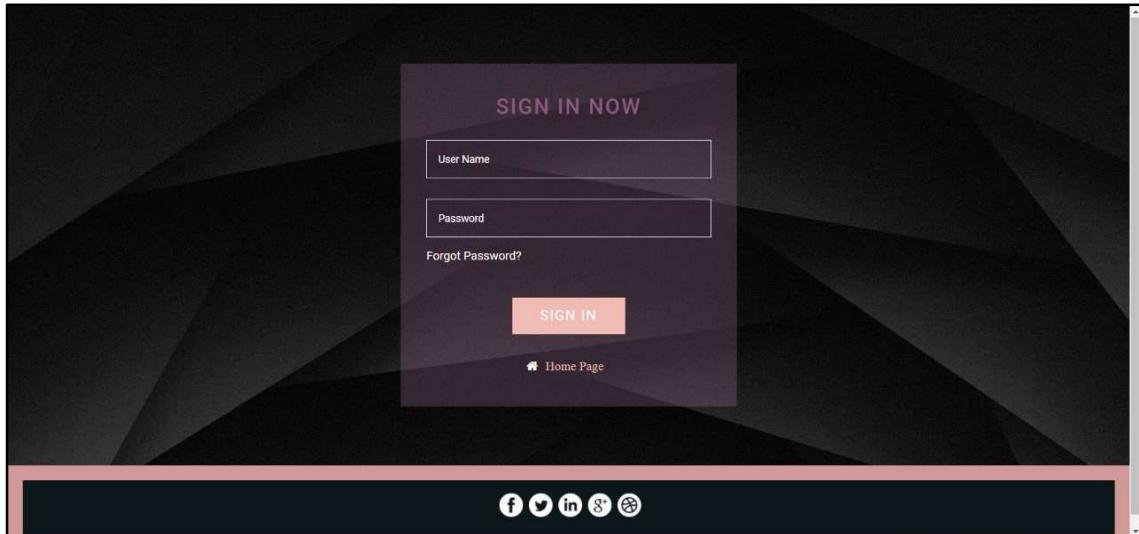
**Fig.7:** Donor Sign-in/Login



**Fig.8:** Donor Forgot Password



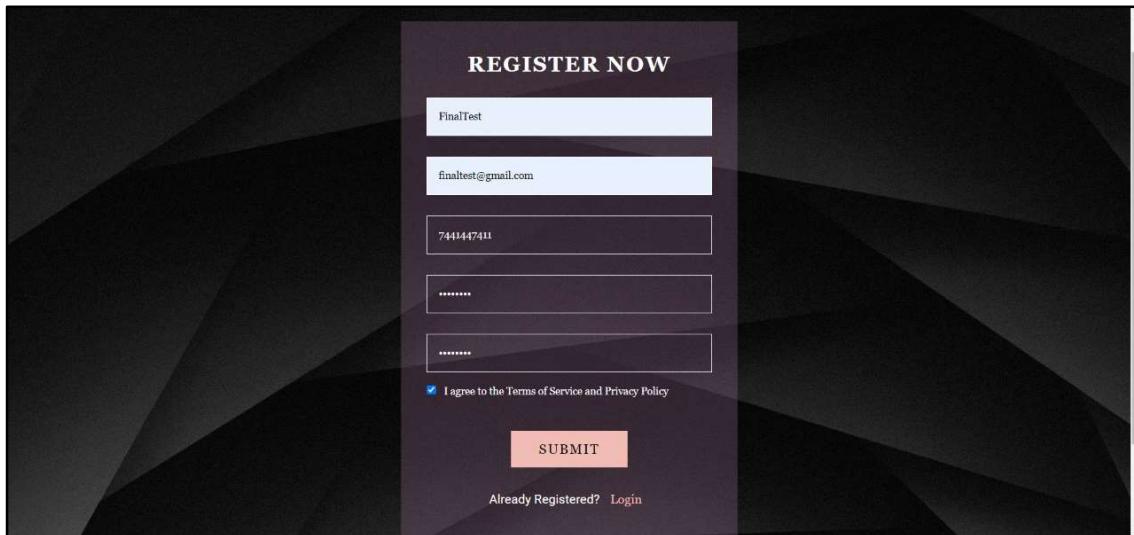
**Fig.9:** Donor Recover Password



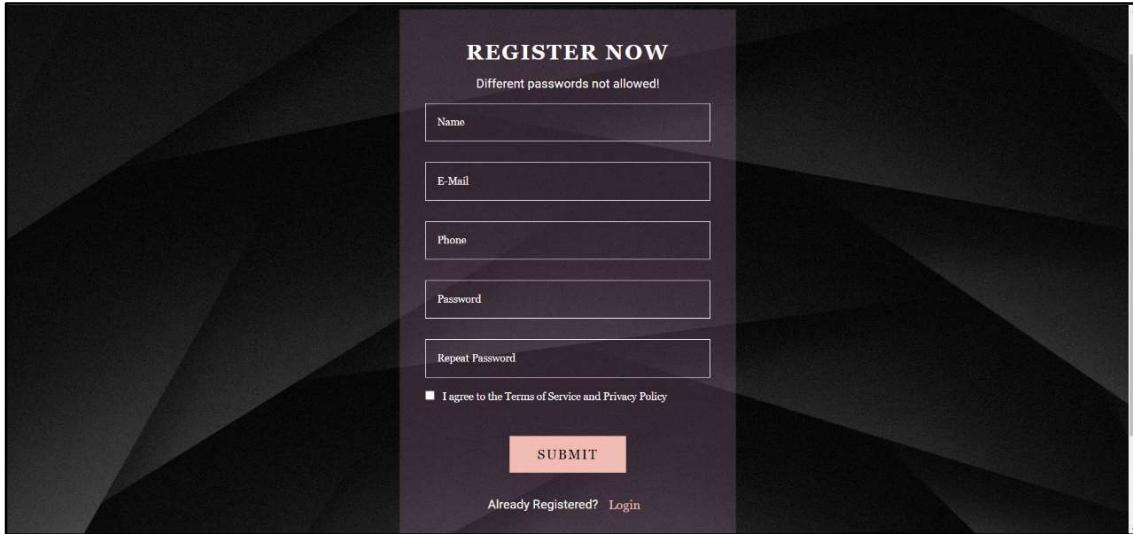
**Fig.10:** Admin Sign-in



**Fig.11:** Admin Forgot Password

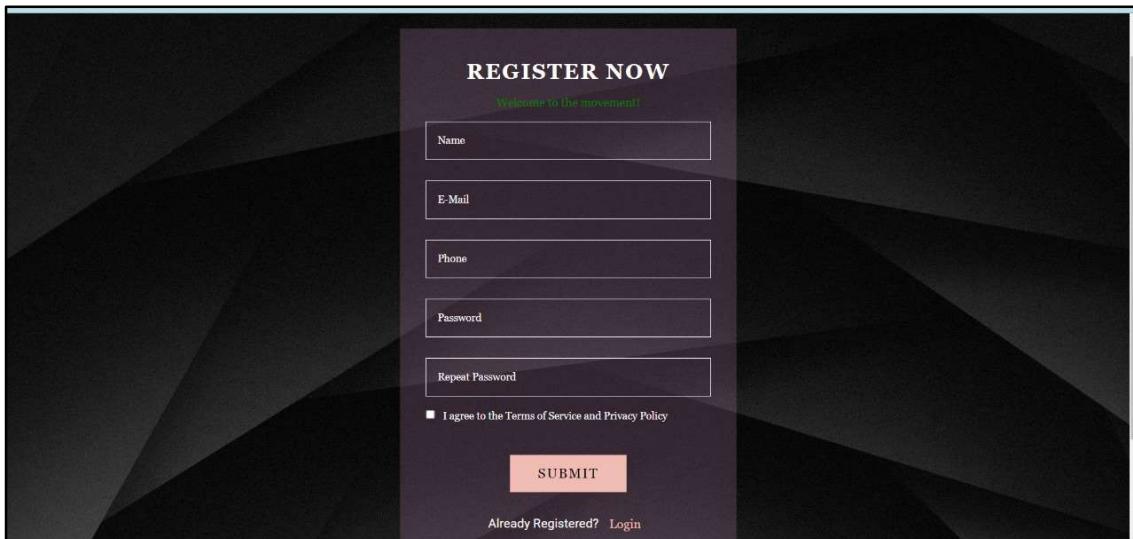


**Fig.12:** Donor Create Account



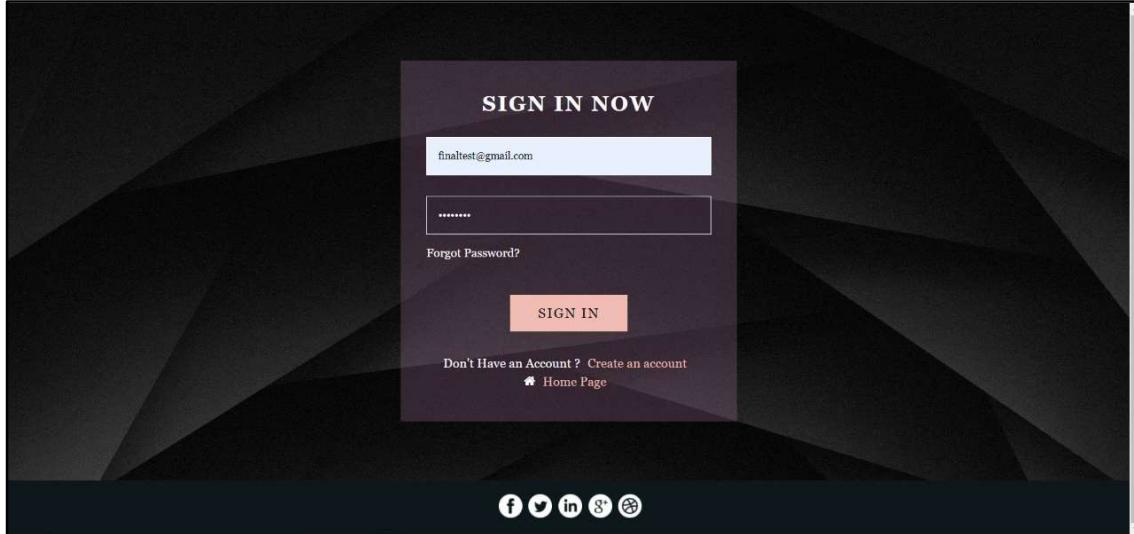
The screenshot shows a registration form titled "REGISTER NOW". At the top, a red error message reads "Different passwords not allowed!". Below it are five input fields: "Name", "E-Mail", "Phone", "Password", and "Repeat Password". A checkbox below the fields indicates agreement to the Terms of Service and Privacy Policy. A large red "SUBMIT" button is at the bottom. At the very bottom, there is a link "Already Registered? Login".

**Fig.13:** Registration With Validation

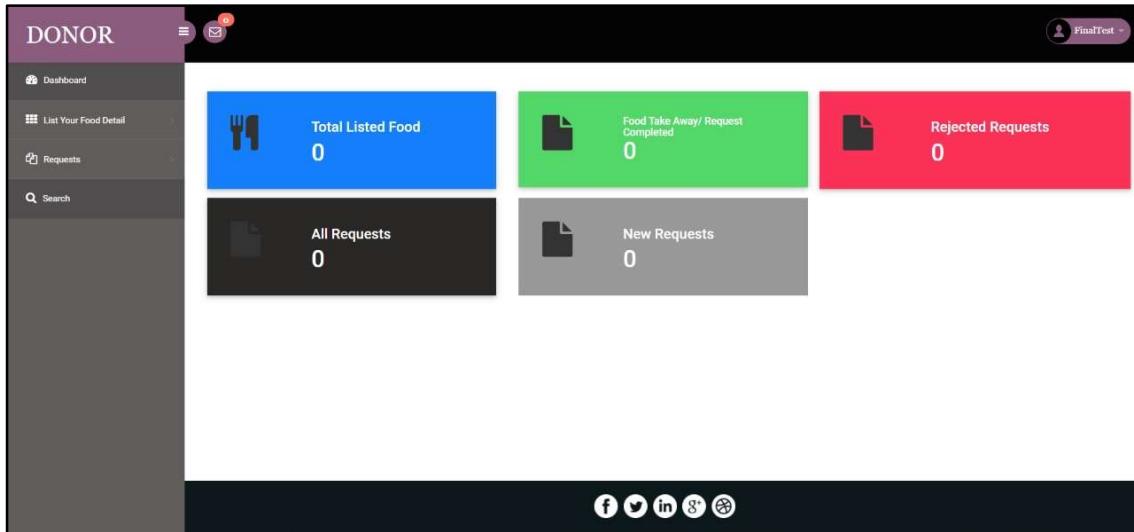


This screenshot is identical to Fig.13, showing the same registration form. However, the red validation error message "Different passwords not allowed!" has been removed, indicating that the registration process has been successful.

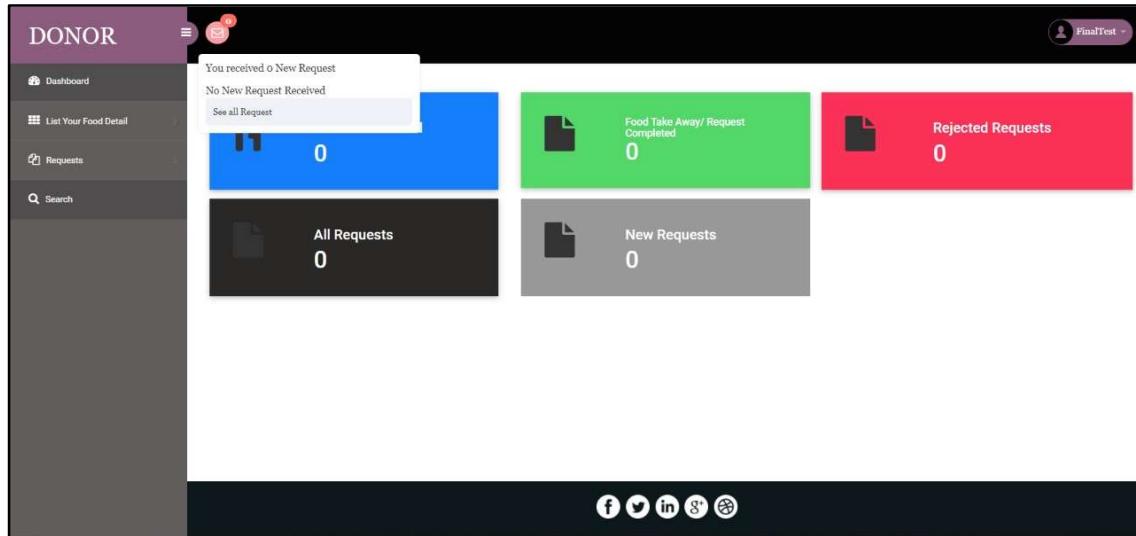
**Fig.14:** Registration Successful



**Fig.15:** Donor Sign-in



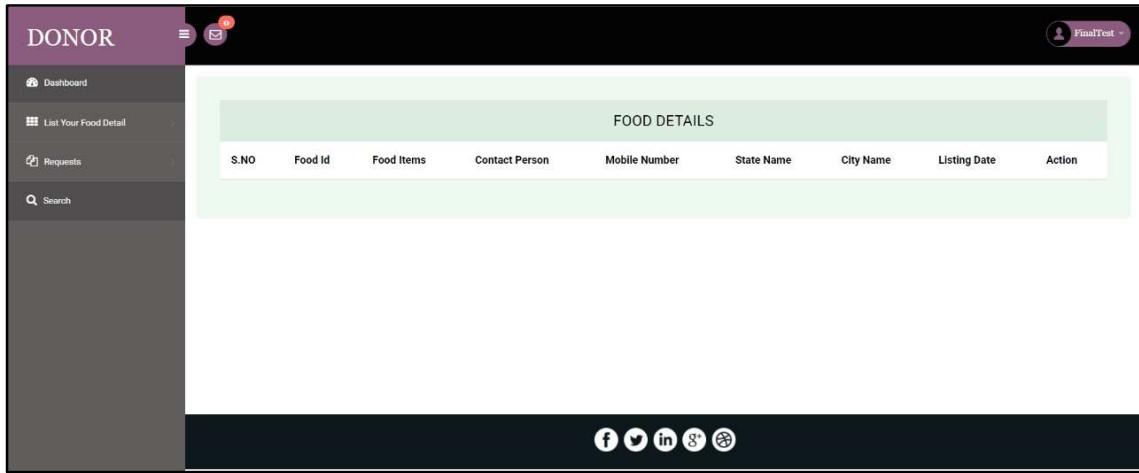
**Fig.16:** Donor Dashboard



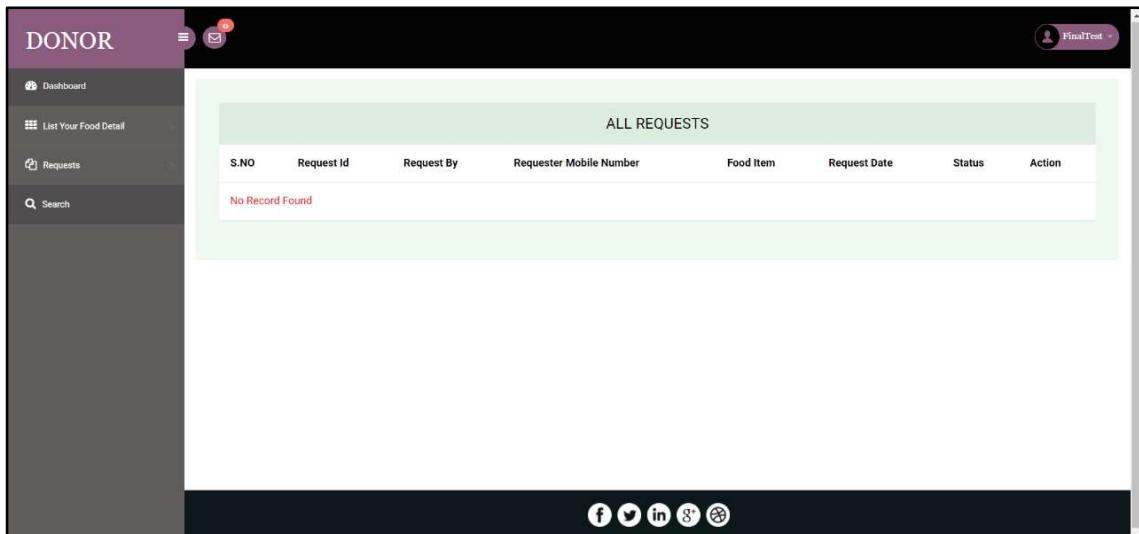
**Fig.17:** Donor Request Notification

A screenshot of a 'List Your Food Details' form. The left sidebar is identical to Fig.17. The main form area has a light green header bar with the title 'LIST YOUR FOOD DETAILS'. The form consists of several input fields: 'Food Item' (text input), 'Add More' (green button), 'Description' (text input), 'Pickup Date' (date input), 'Pickup Address' (text input), 'Choose State' (dropdown menu), 'Choose City' (dropdown menu), 'Contact Person' (text input), 'Contact Person Mobile Number' (text input), and 'Pictures' (file input with placeholder 'Choose file No file chosen'). At the bottom of the form are two buttons: 'Submit' (blue) and 'Generate a PDF' (red).

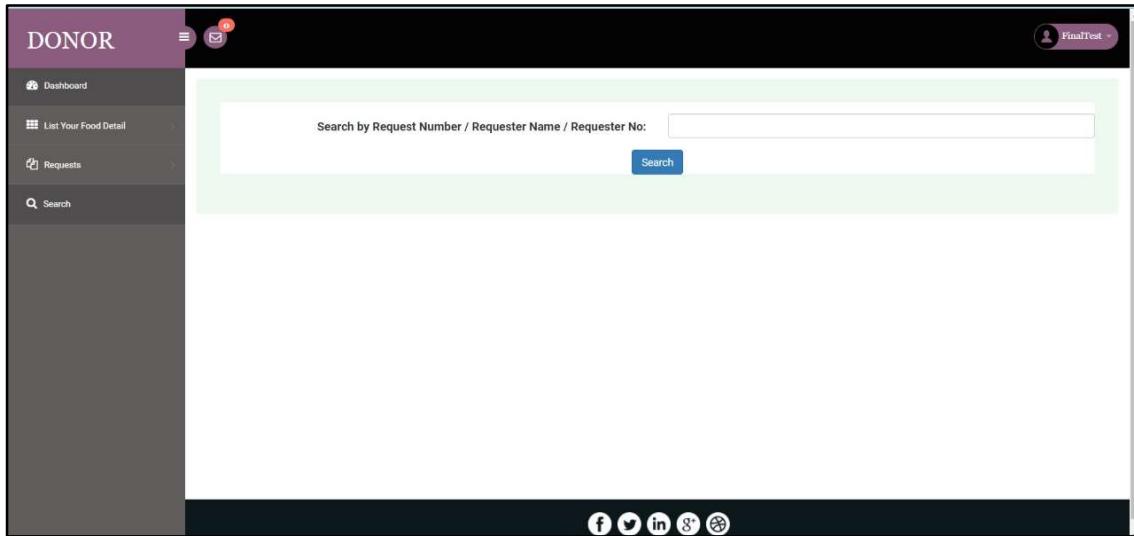
**Fig.18:** Donor Add Food Details



**Fig.19: Donor Manage Food Details**



**Fig.20: Donor All Requests**



**Fig.21: Requester Search By Donor**

A screenshot of a web application interface titled "DONOR". The left sidebar contains navigation links: "Dashboard", "List Your Food Detail", "Requests", and "Search". The main content area is titled "LIST YOUR FOOD DETAILS". It includes fields for "Food Item" (set to "Chicken Biryani"), "Description" (a text area containing a note about meal availability), "Pickup Date" (set to "15-07-2022"), "Pickup Address" (set to "Sector 45, Naik Nagar, Raja Chowk, Main Street, Vishakhapatnam"), "Choose State" (set to "Andhra Pradesh"), "Choose City" (set to "Vishakhapatnam"), "Contact Person" (set to "Finaltest"), "Contact Person Mobile Number" (set to "7889741111"), and "Pictures" (a file input field with "biryani-modified.png" selected). At the bottom are "Submit" and "Generate a PDF" buttons.

**Fig.22: Listing Food By Donor**

Register By	FinalTest	Registered Mobile Number	7441447411
Registered Email	finaltest@gmail.com	Contact Person	Finaltest
Contact Person Mobile Number	7889741111	Pick Up Address	Sector 45, Naik Nagar, Raja Chowk, Main Street, Vishakhapatnam

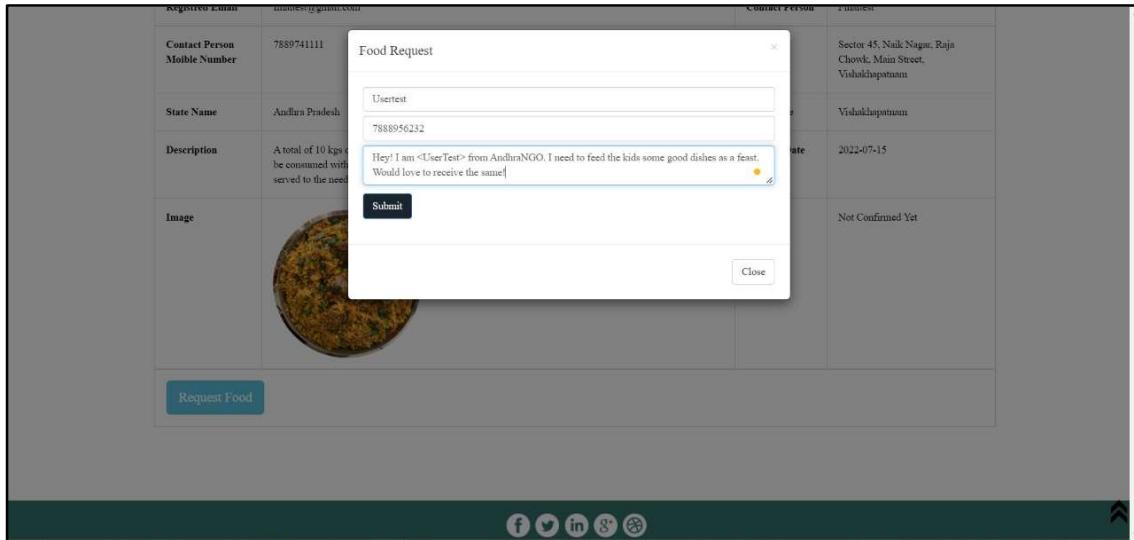
**Fig.23: Viewing The Listed Food Details**

Contact Person Mobile Number	7889741111	Pick Up Address	Sector 45, Naik Nagar, Raja Chowk, Main Street, Vishakhapatnam
State Name	Andhra Pradesh	City Name	Visakhapatnam
Description	A total of 10 kgs of cooked Chicken Biryani is available. On average 50-60 kids can fulfill their meal. It can be consumed within 24 hours. Cooked by experienced chefs We hope to have this huge amount of food served to the needy!	Pick Up Date	2022-07-15
Image		Status	Not Confirmed Yet

[Request Food](#)

f  t  in  g+ 

**Fig.23: Viewing The Listed Food Details**

**Fig.24: Requesting The Food**

**Requested By**

Requested By: UserTest | Requester Mobile No.: 7888956232

**Message**

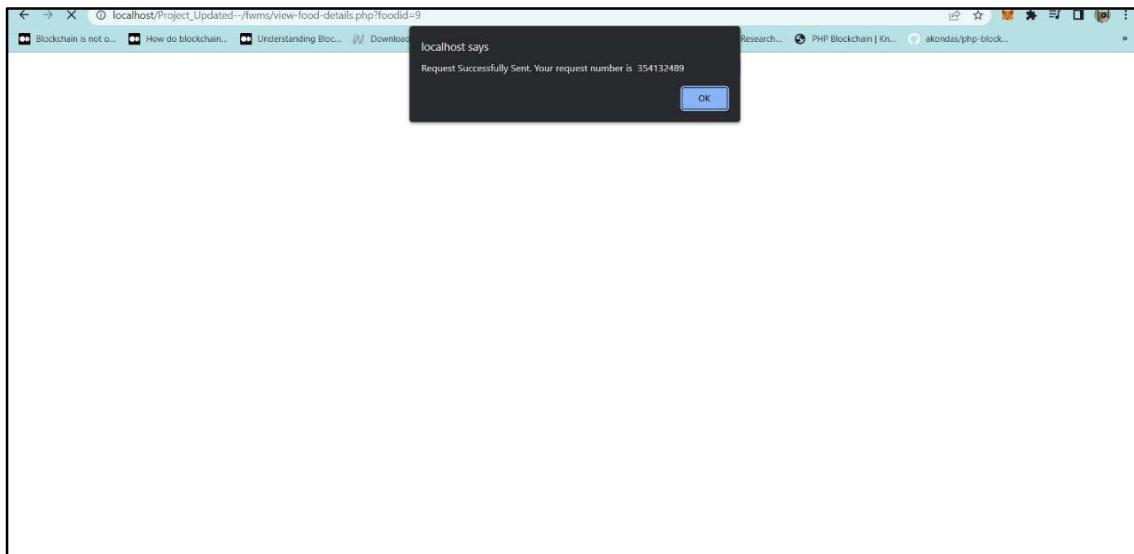
Hey! I am from AndhraNGO. I need to feed the kids some good dishes as a feast. Would love to receive the same!

**Status :** Food Take Away/ Request Completed

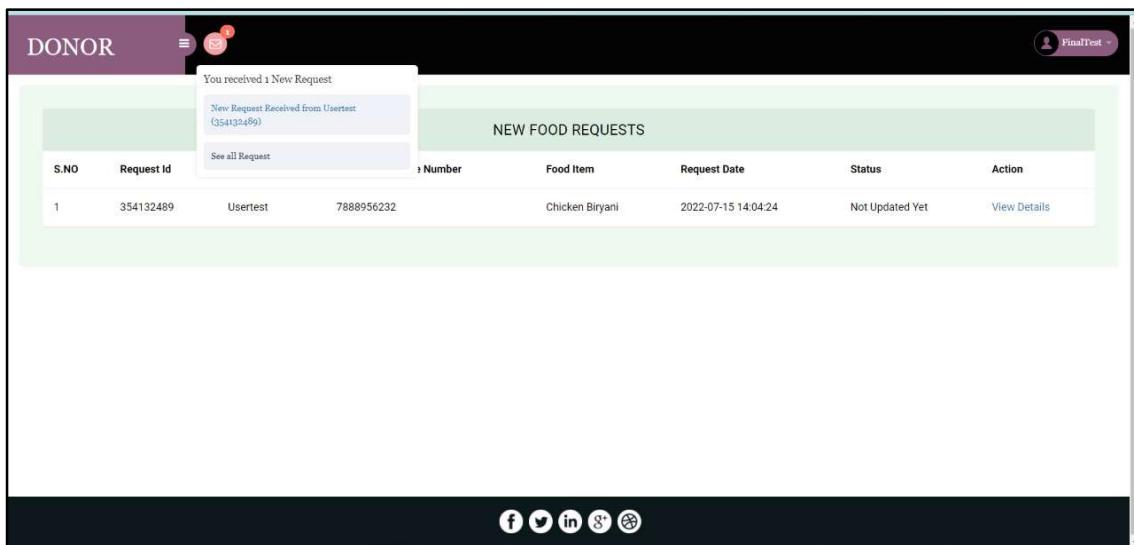
**Remark :** Hey! we hope you enjoy feeding the kids. Enjoy the feast!

Update

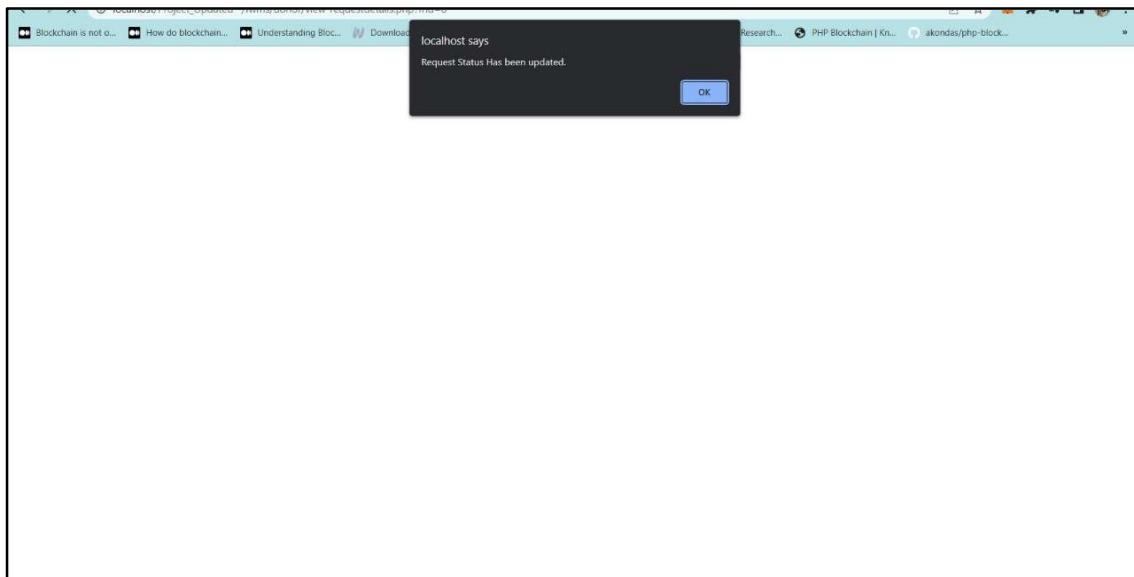
**Fig.26: Receiving The Food Request From User**



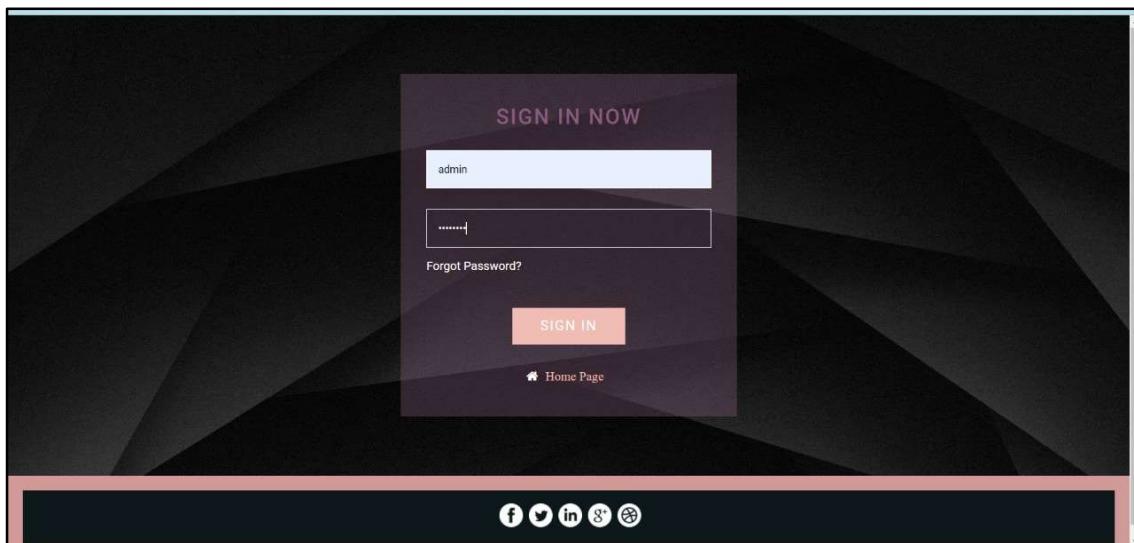
**Fig.25: JavaScript Alert For Request**



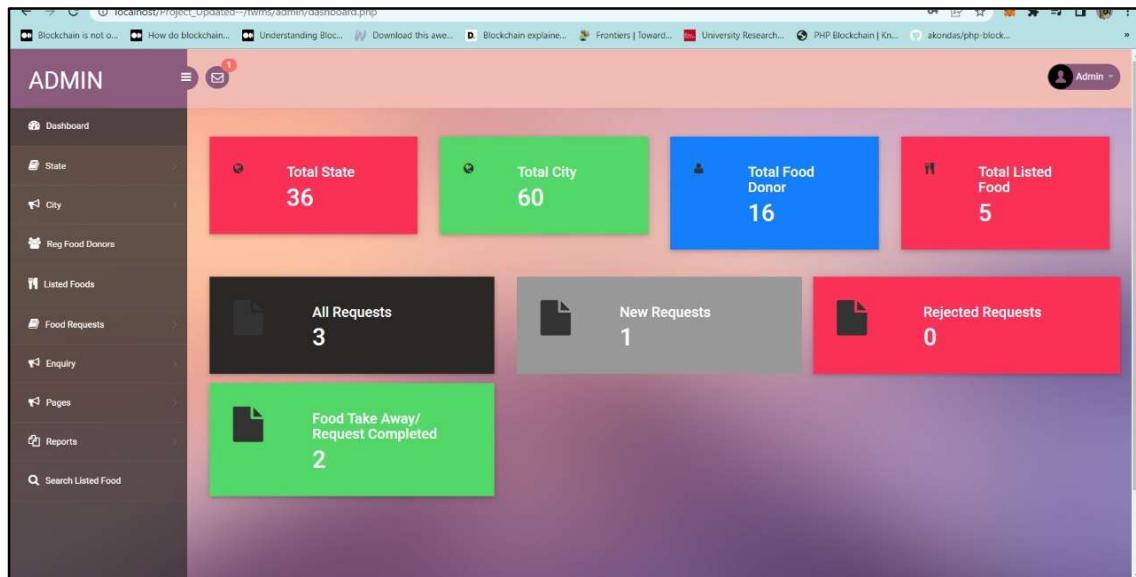
**Fig.25: JavaScript Alert For Request**



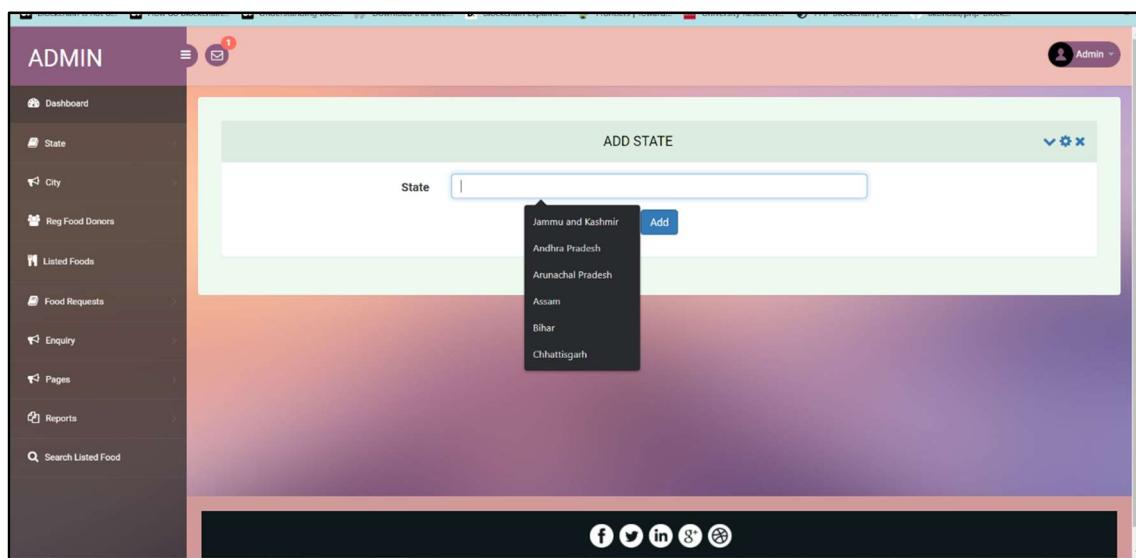
**Fig.28:** Updating The Request Status



**Fig.29:** Admin Sign-in



**Fig.30: Admin Dashboard**



**Fig.31: Adding States**

S.NO	State Name	Creation Date	Action
1	Jammu and Kashmir	2022-07-15 00:00:50	Edit State   Delete
2	Andhra Pradesh	2022-07-15 00:01:52	Edit State   Delete
3	Arunachal Pradesh	2022-07-15 00:03:21	Edit State   Delete
4	Assam	2022-07-15 00:03:27	Edit State   Delete
5	Bihar	2022-07-15 00:04:18	Edit State   Delete
6	Chhattisgarh	2022-07-15 00:04:41	Edit State   Delete
7	Goa	2022-07-15 00:04:46	Edit State   Delete
8	Gujarat	2022-07-15 00:04:51	Edit State   Delete
9	Haryana	2022-07-15 00:04:57	Edit State   Delete

*Fig.32: Managing States*

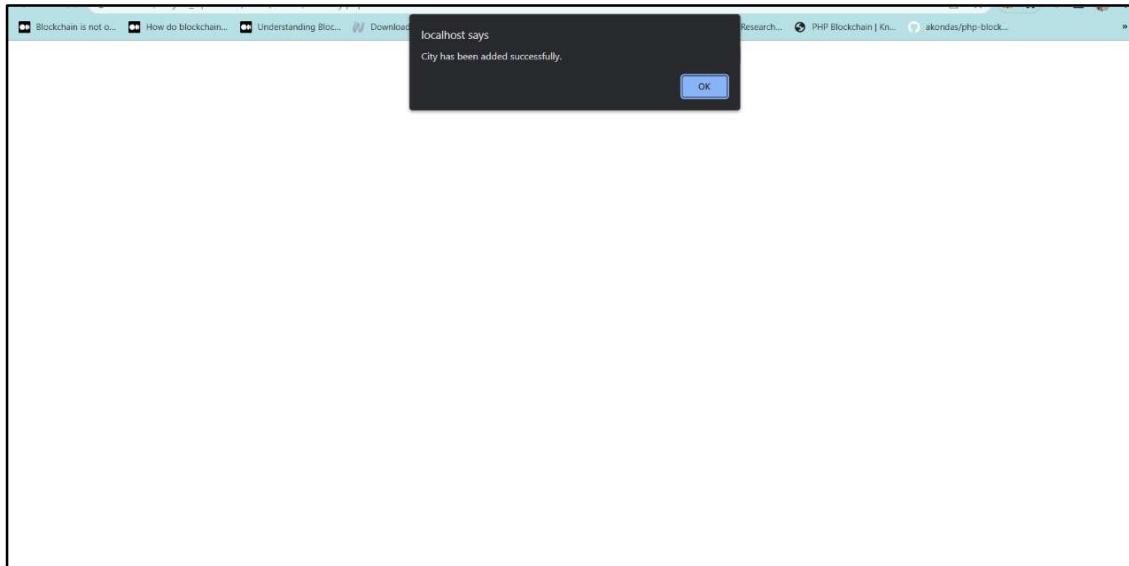
ADD CITY

State: Maharashtra

City: Pune

Add

*Fig.33: Adding Cities*

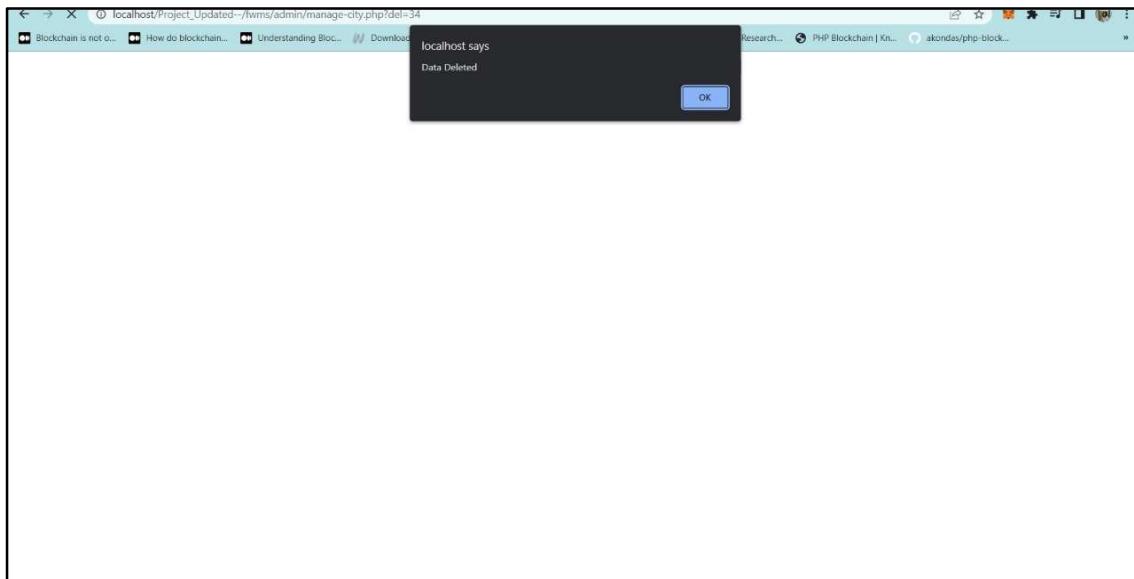


**Fig.33: Adding Cities**

A screenshot of an admin dashboard. On the left, there is a sidebar with a purple header 'ADMIN' and a list of menu items: 'Dashboard', 'State', 'City' (which is currently selected), 'Reg Food Donors', 'Listed Foods', 'Food Requests', 'Enquiry', 'Pages', 'Reports', and 'Search Listed Food'. To the right of the sidebar, the main content area has a pink header bar with a mail icon showing '1' and a user profile 'Admin'. The main content is titled 'MANAGE CITY' and contains a table with the following data:

S.NO	City Name	Creation Date	Action
1	Srinagar	2022-07-15 00:12:11	Edit City   Delete
2	Jammu	2022-07-15 00:12:19	Edit City   Delete
3	Anantnag	2022-07-15 00:13:32	Edit City   Delete
4	Udhampur	2022-07-15 00:13:43	Edit City   Delete
5	Baramula	2022-07-15 00:13:57	Edit City   Delete
6	Sopore	2022-07-15 00:14:15	Edit City   Delete
7	Kathua	2022-07-15 00:14:35	Edit City   Delete
8	Vishakhapatnam	2022-07-15 00:15:20	Edit City   Delete
9	Vijayawada	2022-07-15 00:15:32	Edit City   Delete

**Fig.34: Managing Cities**



**Fig.34: Managing Cities**

A screenshot of an admin dashboard. The left sidebar has a purple header 'ADMIN' and a dark brown menu with items like 'Dashboard', 'State', 'City', 'Reg Food Donors' (which is highlighted in red), 'Listed Foods', 'Food Requests', 'Enquiry', 'Pages', 'Reports', and 'Search Listed Food'. The main content area has a light orange header with three small icons. Below it is a table titled 'FOOD DONOR DETAILS'. The table has columns for S.NO, Full Name, Mobile Number, Email, and Registration Date. It contains 9 rows of data. The data is as follows:

S.NO	Full Name	Mobile Number	Email	Registration Date
1	Test1	298387398	test@123	2022-07-14 16:02:38
2	Test2	5549859526	test2@gmail.com	2022-07-14 16:03:22
3	TanayaTest	7896633369	test@123.com	2022-07-14 18:55:00
4	TanayaTest1	6569589856	test3@gmail.com	2022-07-14 18:57:50
5	Test5	7489085704	test5@123	2022-07-14 18:58:42
6	Lesssgooo	9999999999	lessgo@123	2022-07-14 19:01:46
7	Test7	9633699963	test7@gmail.com	2022-07-14 19:56:26
8	Test8	7894561230	test8@gmail.com	2022-07-14 20:00:09
9	Test9	7411111111	test9@gmail.com	2022-07-14 20:05:44

**Fig.35: Viewing All The Registered Food Donors**

The screenshot shows the Admin dashboard with a sidebar on the left containing links for Dashboard, State, City, Reg Food Donors, Listed Foods, Food Requests, Enquiry, Pages, Reports, and Search Listed Food. The main content area is titled "ALL LISTED FOOD REQUESTS" and displays a table with the following data:

S.NO	Food Id	Register By	Register Mobile Number	Contact Person Number	Contact Person Mobile Number	Food Items	Request Date	Action
1	113136550	Vaibhavi Thakare	8379081404	Vaibhavi	8379081404	Jeera Rice,Dal Tadka	2022-07-14 22:36:06	<a href="#">View Details</a>
2	140187753	Vaibhavi Thakare	8379081404	Vaibhavi	8379081404	Steamed Momos	2022-07-14 22:44:48	<a href="#">View Details</a>
3	237783303	Tanaya	9011061604	Hemant	8379081404	ueio2op	2022-07-15 04:12:26	<a href="#">View Details</a>
4	845072797	FinalTest	7441447411	Finaltest	9696666666	Chicken Biryani	2022-07-15 13:58:15	<a href="#">View Details</a>
5	837495645	FinalTest	7441447411	Finaltest	7889741111	Chicken Biryani	2022-07-15 14:00:41	<a href="#">View Details</a>

*Fig.36: Viewing All Listed Foods*

The screenshot shows the Admin dashboard with a sidebar on the left containing links for Dashboard, State, City, Reg Food Donors, Listed Foods, Food Requests, Enquiry, Pages, Reports, and Search Listed Food. The main content area is titled "ALL REQUESTS" and displays a table with the following data:

S.NO	Request Id	Request By	Requester Mobile Number	Food Item	Request Date	Status	Action
1	192120553	Tanaya	9082738728	Jeera Rice,Dal Tadka	2022-07-15 00:51:41	Food Take Away/ Request Completed	<a href="#">View Details</a>
2	789653239	Girija	7388555605	Steamed Momos	2022-07-15 01:02:59	Not Updated Yet	<a href="#">View Details</a>
3	354132489	Usertest	7888956232	Chicken Biryani	2022-07-15 14:04:24	Food Take Away/ Request Completed	<a href="#">View Details</a>

*Fig.37: Viewing All Requests*

The screenshot shows the Admin dashboard interface. On the left, a sidebar menu lists various administrative functions: Dashboard, State, City, Reg Food Donors, Listed Foods, Food Requests, Enquiry, Pages, Reports, and Search Listed Food. The main content area is titled "FOOD TAKE AWAY/ REQUEST COMPLETED REQUESTS". It displays a table with two rows of data:

S.NO	Request Id	Request By	Requester Mobile Number	Food Item	Request Date	Status	Action
1	192120553	Tanaya	9082738728	Jeera Rice,Dal Tadka	2022-07-15 00:51:41	Food Take Away/ Request Completed	<a href="#">View Details</a>
2	354132489	Usertest	7888956232	Chicken Biryani	2022-07-15 14:04:24	Food Take Away/ Request Completed	<a href="#">View Details</a>

At the bottom of the page are social media sharing icons: Facebook, Twitter, LinkedIn, Google+, and Email.

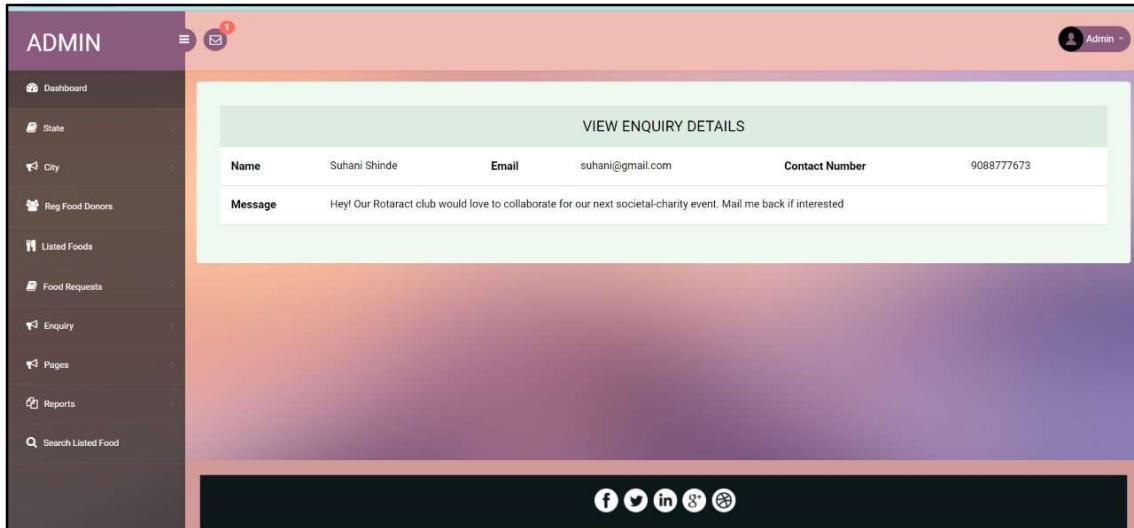
**Fig.38: Viewing Completed Requests**

The screenshot shows the Admin dashboard interface. The sidebar menu is identical to Fig.38. The main content area is titled "READ ENQUIRY DETAILS". It displays a table with two rows of data:

S.No	Name	Email	Contact No	Enquiry Date	Action
1	Palak Pardeshi	palak@gmail.com	7894561233	2022-07-15 00:54:34	<a href="#">View</a>
2	Suhani Shinde	suhani@gmail.com	9088777673	2022-07-15 00:55:49	<a href="#">View</a>

At the bottom of the page are social media sharing icons: Facebook, Twitter, LinkedIn, Google+, and Email.

**Fig.39: Viewing Enquiry From Contact Us Page**

*Fig.40: View Enquiry Details*

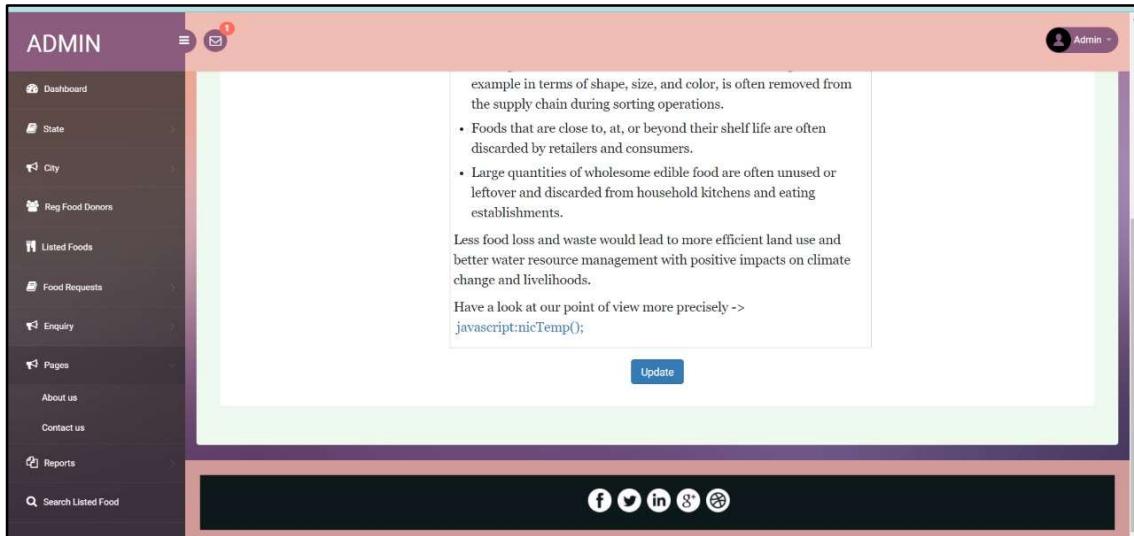
**Page Title:** About Us!

**Page Description:** Welcome to our Food Traceability System

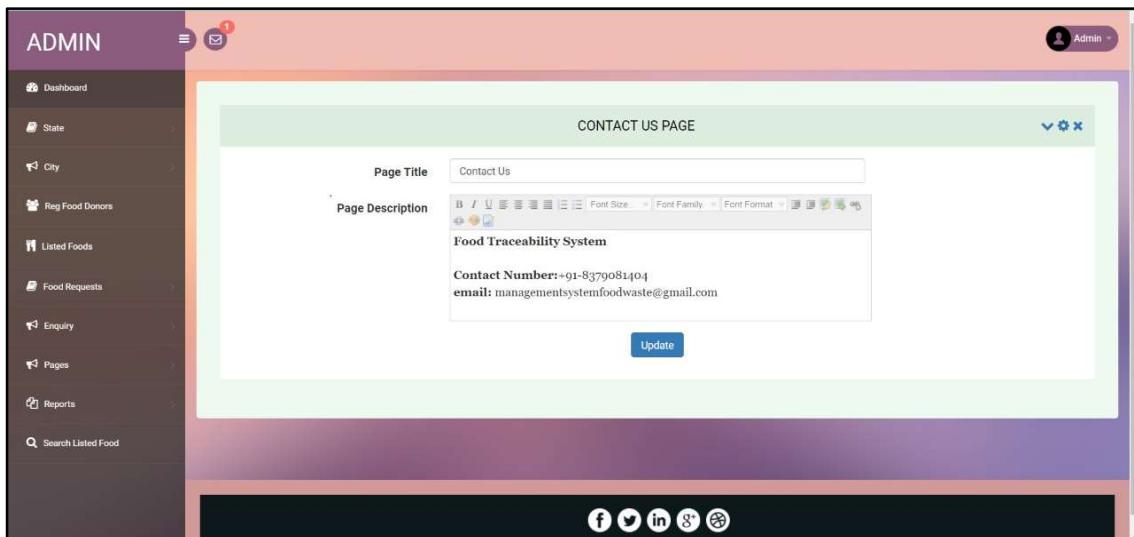
Food **waste** refers to the decrease in the quantity or quality of food resulting from decisions and actions by retailers, food service providers, and consumers. Food is wasted in many ways:

- Fresh produce that deviates from what is considered optimal, for example in terms of shape, size, and color, is often removed from the supply chain during sorting operations.
- Foods that are close to, at, or beyond their shelf life are often discarded by retailers and consumers.
- Large quantities of wholesome edible food are often unused or leftover and discarded from household kitchens and eating establishments.

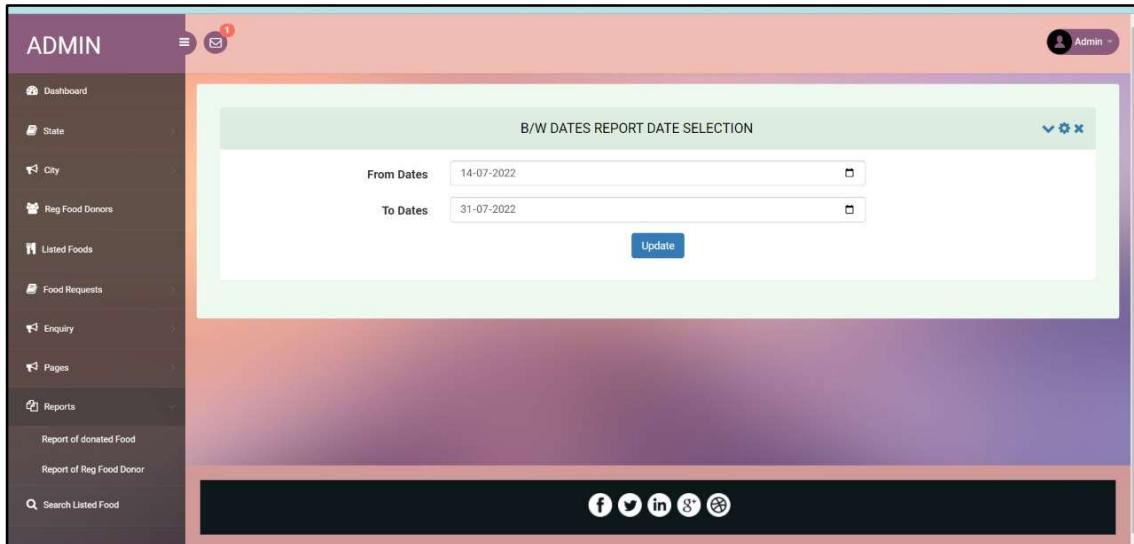
*Fig.41: Updating About Us Page From Admin Panel*



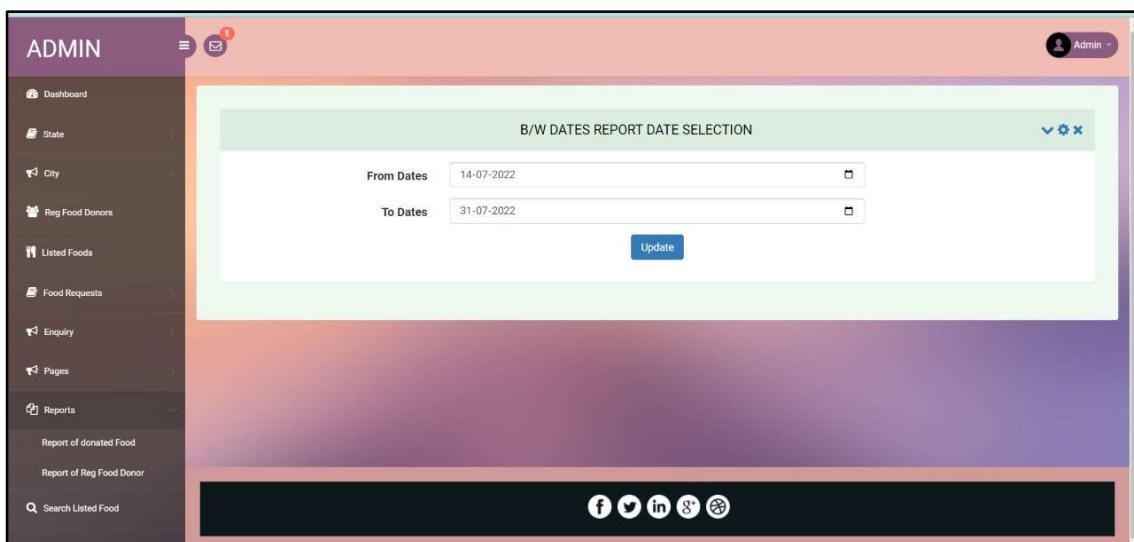
**Fig.41:** Updating About Us Page From Admin Panel



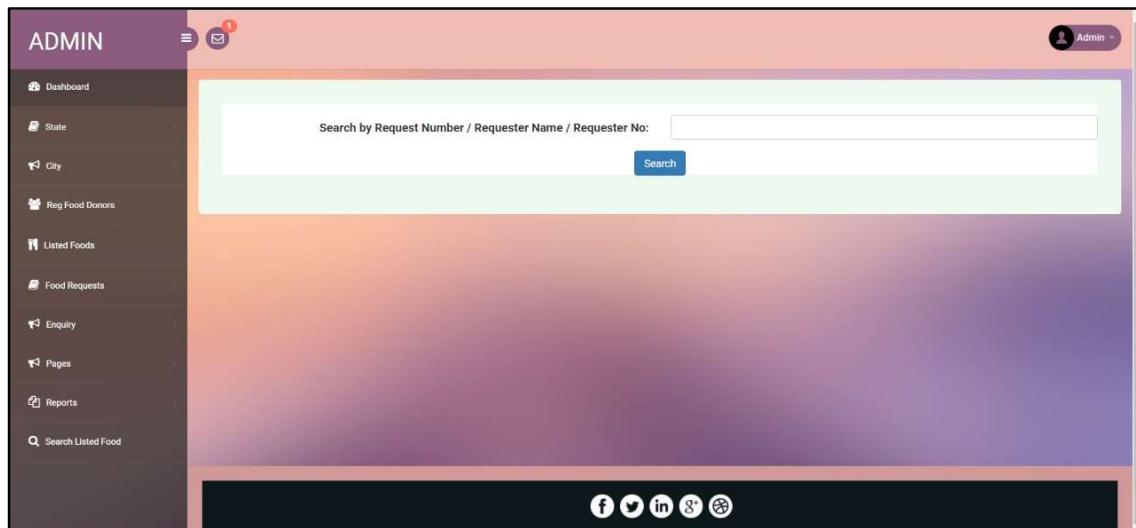
**Fig.42:** Updating Contact Us Page From Admin Panel



**Fig.43:** Between Dates Report Date Selection Of Donated Food



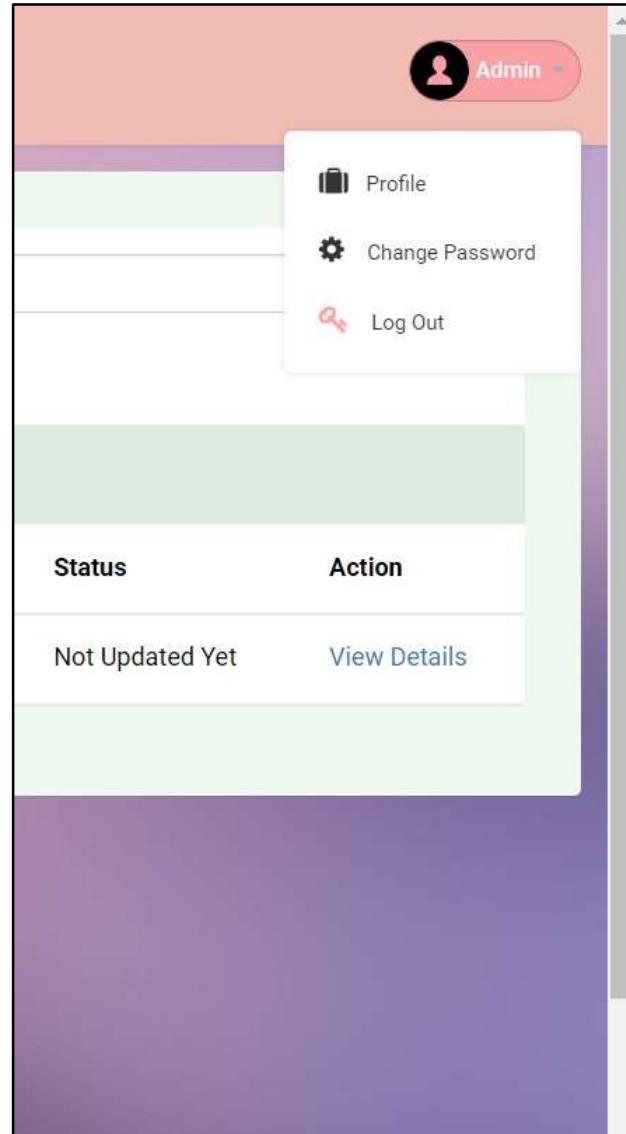
**Fig.44:** Between Dates Report Date Selection Of Registered Food Donor



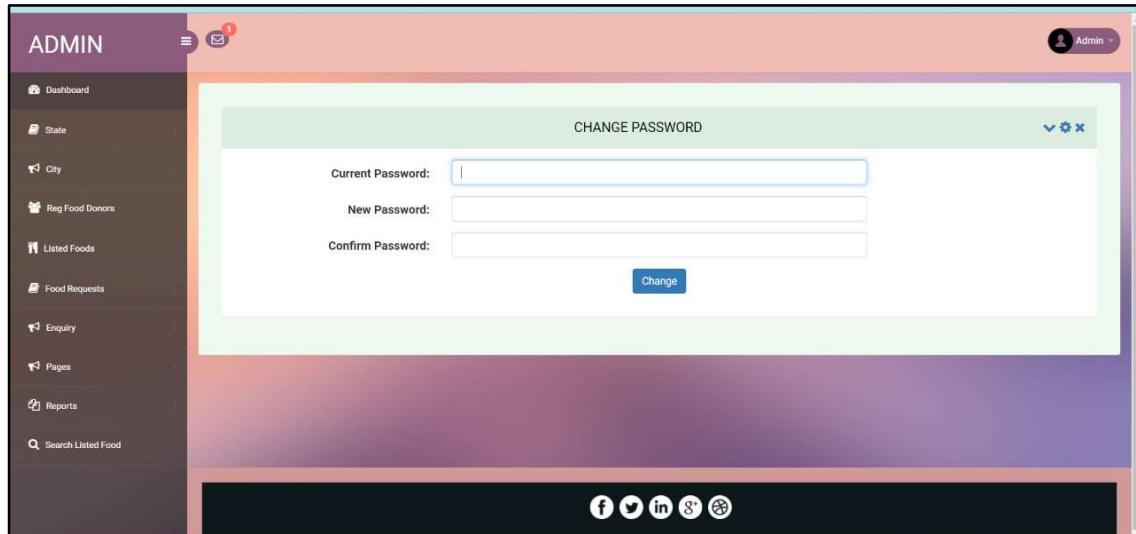
**Fig.45: Searching Requesters**

S.NO	Request Id	Request By	Requester Mobile Number	Food Item	Request Date	Status	Action
1	789653239	Girija	7388555605	Steamed Momos	2022-07-15 01:02:59	Not Updated Yet	<a href="#">View Details</a>

**Fig.45: Searching Requesters**



*Fig.46: Admin Options*



**Fig.47: Admin Change Password**

## **18. FUTURE PROSPECTS**

Food Waste Management System is an application whose functionality can be extended to suit special types of users such as a farmer, a restaurant owner, an NGO owner. These three entities can be connected to each other in a way where the restaurant can buy grains and vegetables from the farmer and donate its leftover food to the NGO. Also, the farmer can donate food to restaurants as well as NGOs. The NGOs would be receiving food from the farmers as well as restaurants. This system would thereby serve as a social and capital model which would eliminate the cost of middlemen and thereby help NGOs receive food at a minimal cost, and the farmers and restaurants can sell their products easily, also, the restaurants can purchase grains and vegetables at a low price. Therefore, this system can be used to generate profit, and also reduce food wastage and help in eradicating hunger.

## **19. CONCLUSION**

The project titled Food Wastage Management System was deeply studied and analyzed to design the code and its implementation was done under the guidance of an experienced project guide. All the current requirements and possibilities have been taken care of during the project time. In our project, we are targeting the person who wants to donate waste food this will create a greater impact on the cost-saving as well as the food wastage management system, and there will be a greater impact on the day-by-day food wastage. In our future work, we will try to integrate with other emerging technology such as blockchain, and it will cover more areas.

## ***20.REFERENCES***

### **For PHP:**

- ✓ <https://www.w3schools.com/php/default.asp>
- ✓ <https://www.sitepoint.com/php/>
- ✓ <https://www.php.net/>

### **For MySQL:**

- ✓ <https://www.mysql.com/>
- ✓ <http://www.mysqltutorial.org>

### **For XAMPP:**

- ✓ <https://www.apachefriends.org/download.html>