

WIM LAB EXP - 8

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AIM:

To make the final report for selected problem statement.

THEORY:

1. Problem statement:

Title: Food Waste Management System

Introduction: Food wastage is a significant global issue, with tons of edible food discarded daily while millions go hungry. The disconnect between surplus food sources (like restaurants, caterers, and households) and the underprivileged who can benefit from it is a key contributor to this problem. A centralized platform to bridge this gap can help reduce food wastage and improve food access for those in need. Moreover, by organizing and efficiently managing donations, such a platform could support NGOs and community organizations in their fight against hunger and malnutrition.

Proposed Solution: The **Food Waste Management System** is a web-based platform designed to connect food donors with individuals or organizations that can manage and use donated food. The system enables registered users (donors) to **list food items available for donation**, specifying details like location, contact information, and pickup instructions. Admins can **manage the donations, approve or reject food requests, and track donations**. The platform also includes a feature for users **to contribute monetarily** to the platform's NGOs or social schemes while receiving email and sms regarding the same.

2. Real Life Users:

- **Admins:** Manage the system, handle user inquiries, oversee donations, and generate reports.
- **Donors:** Register and log in to the system, list food items for donation, specify pickup details, and receive notifications upon donation.
- **Beneficiaries/Requestors:** Can request food items directly from the contacts shown on the site and further communicate their needs to the admin of the platform through the enquiries.

- **Monetary Donors (Charity):** Make monetary contributions to the platform which is directed to NGOs manually enabling the NGOs to support underprivileged communities.

3. Key Features and Functionality for each role:

a) Admin:

- **User Authentication:** Login functionalities for admins.

SIGN IN NOW

Forgot Password?

SIGN IN

Don't Have an Account ? [Create an account](#)

[Home Page](#)

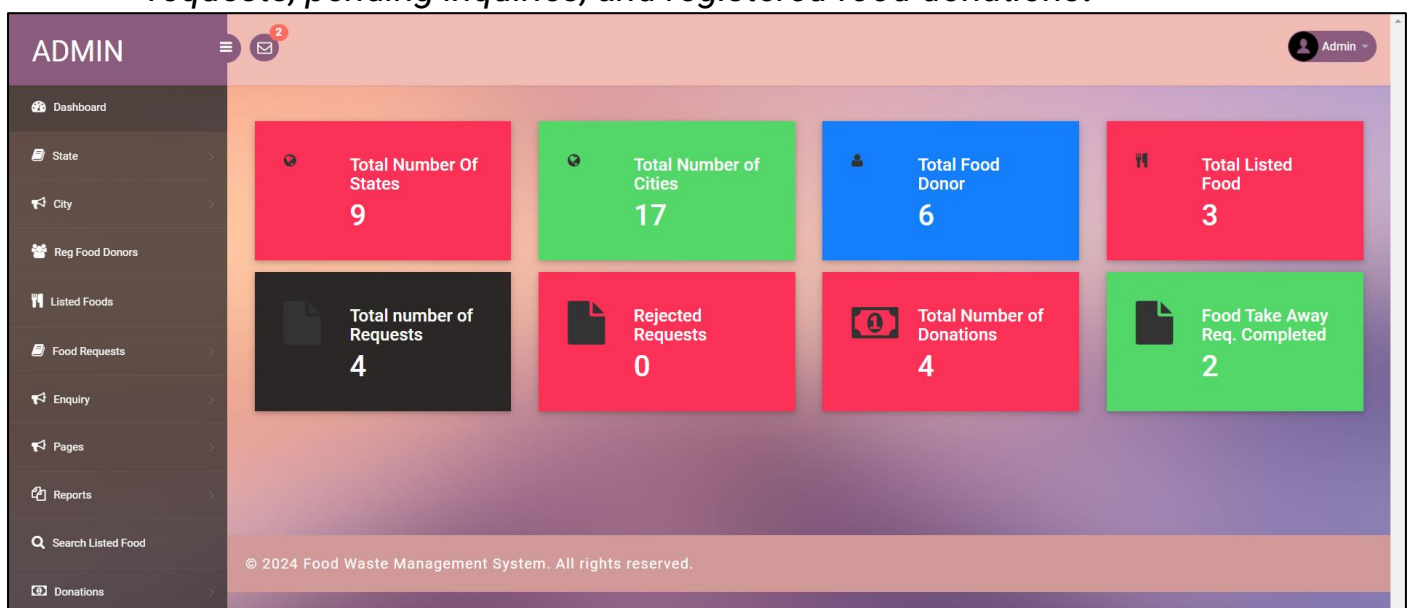
REGISTER NOW

☐ I agree to the Terms of Service and Privacy Policy

SUBMIT

Already Registered. [Login](#)

- **Dashboard for Admins:** Display metrics like the number of active food requests, pending inquiries, and registered food donations.



- **State and City Management:** Add and manage states and cities to categorize donations based on location. (CRUD Operations)

MANAGE STATE

S.NO	State Name	Creation Date	Action
1	Uttar Pradesh	2019-05-07 12:37:21	Edit State Delete
2	Andra Pradesh	2019-05-07 12:37:31	Edit State Delete
3	Delhi/NCR	2019-05-07 12:37:39	Edit State Delete
4	Kerala	2019-05-07 12:37:58	Edit State Delete
5	Arunachal Pradesh	2019-05-07 12:38:12	Edit State Delete

ADD CITY

State

Select Category

City

Add

- **Food Request Management:** Admins can manage food requests by marking them as new, completed, or rejected.

ALL REQUESTS

S.NO	Request Id	Request By	Requester Mobile Number	Food Item	Request Date	Status	Action
1	223505689	Sanjeev	8521479630	Dal,Rice,Roti,Panner	2022-01-22 16:14:28	Not Updated Yet	View Details
2	692624619	Amit Kumar	1122334455	Dal Makhni,Bread,Rice	2022-01-22 16:16:41	Food Take Away/ Request Completed	View Details

Food Requests

New Requests

Picked/Take away /Completed

Rejected

All

- **Enquiry Management:** Admins can view and respond to user enquiries, filtering between read and unread messages.

UNREAD ENQUIRY DETAILS

S.No	Name	Email	Contact No	Enquiry Date	Action
1	Devyansh Rai	dev@gmail.com	7977897978	2021-12-08 17:32:22	View
2	Aditi Chhajed	aditichhajedxia@gmail.com	7021332166	2024-11-26 17:32:36	View

Enquiry

Unread Enquiry

Read Enquiry

- **Reports:** Generate reports on food donations and registered food donors.

B/W DATES REPORT DATE SELECTION

From Dates

dd-mm-yyyy

To Dates

dd-mm-yyyy

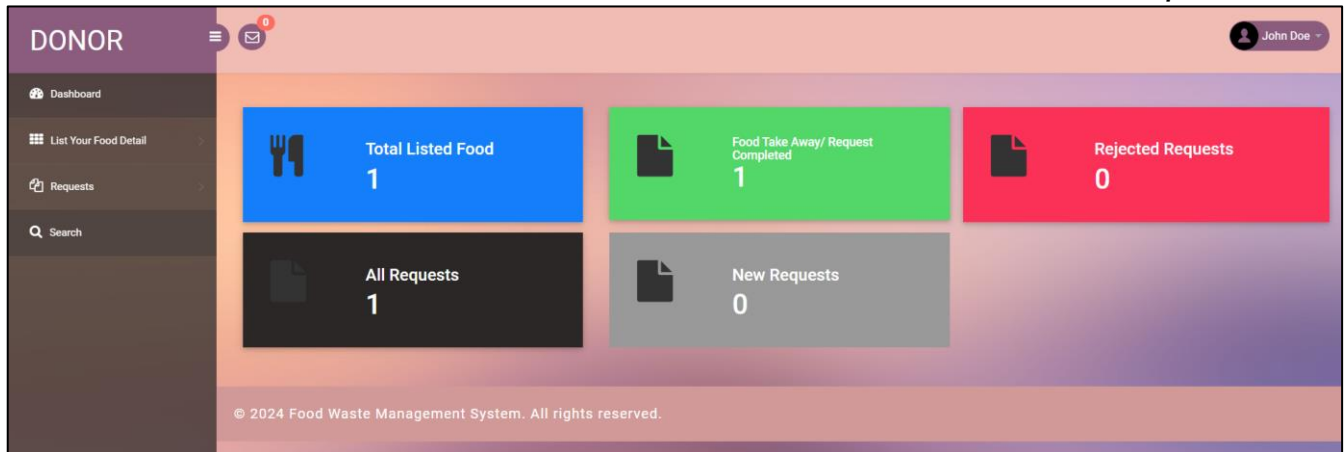
Update

- **Donations:** Admin can manage/add donations

MANAGE DONATIONS				
S.NO	Donor Name	Amount (₹)	Donation Date	Action
1	Priyansh Katariya	99999.00	2024-11-21 23:57:00	Edit Donation Delete
2	Aditi Chhajed	10000.00	2024-11-24 06:09:29	Edit Donation Delete

b) Donor:

- **User Authentication:** Sign-up and login functionalities for donors.
- **Donor Dashboard:** It has various metrics like total listed foods, requests, etc.



- **Food Donation Details:** Donors can specify food items, pickup details, and other relevant information.

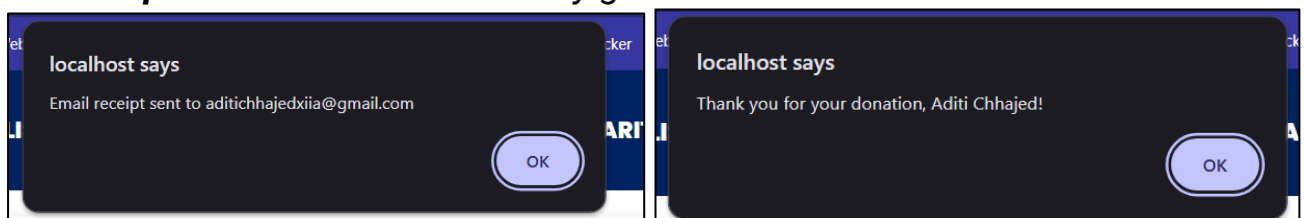
FOOD DETAILS								
S.NO	Food Id	Food Items	Contact Person	Mobile Number	State Name	City Name	Listing Date	Action
1	372165116	Dal Maknhi,Bread,Rice	Rahul Singh	9874563210	Andra Pradesh	Visakhapatnam	2022-01-22 15:50:35	Edit Delete

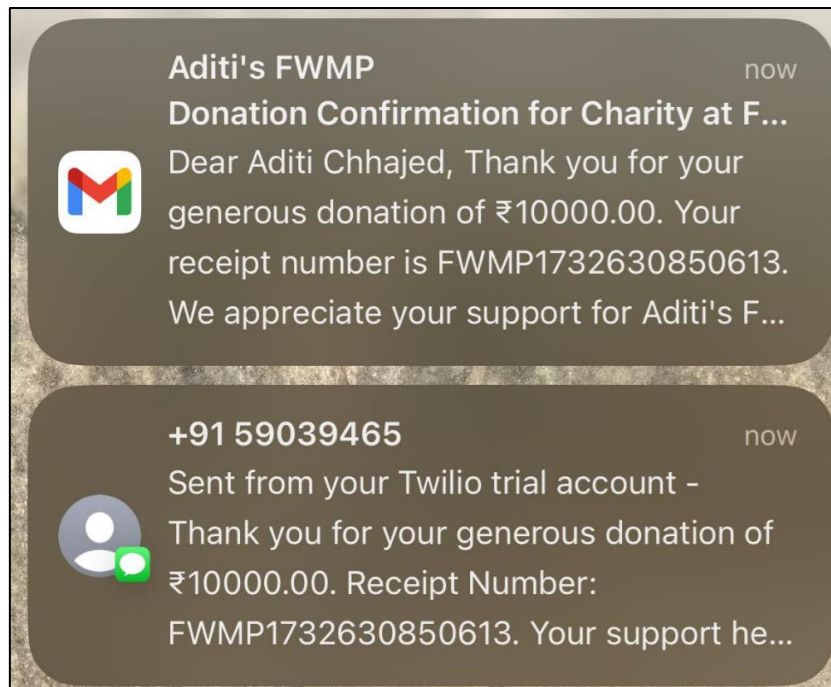
c) Beneficiaries/Requestors:

- **View-Only Site:** For the beneficiaries/requestors.
- It has the contact number, food items, address of where to get the food donations from.
- **Contact Us Page:** For further communication and contributions.

d) Monetary Donors:

- **Notifications:** SMS and email notifications to donors upon donation.
- **Monetary Donations (using payment gateways):** Allows donors to contribute financially to NGOs and social schemes using payment gateways.
- **Receipt Number:** Is automatically generated

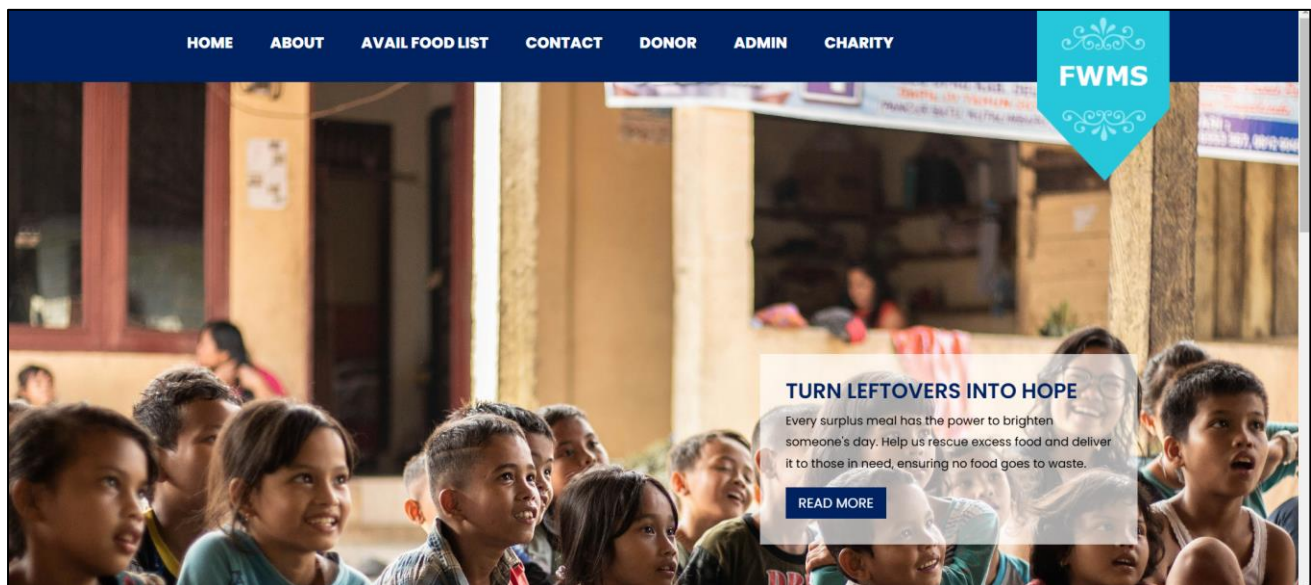




We make use of Twilio and EmailJs to generate these SMSs and Mails.

4. Pages:

1. Home:



2. About:



ABOUT US

WELCOME TO ADITI CHHAJED'S FOOD WASTE MANAGEMENT SYSTEM

Every surplus meal has the power to brighten someone's day.
Help us rescue excess food and deliver it to those in need, ensuring no food goes to waste. 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. 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.

This project was created by Aditi Chhajed, of VJTI - a third year Information Technology student as a part of her course evaluation for WIM Lab.

The course is taught by Prof. Nikhil Handa, under whose guidance this final project was created.

3. Avail Food List:

Available Food List

S.NO	Contact Person	Contact Person Mobile Number	Food Items	Address	State Name	City Name	Creation Date	Action
1	John	1478523699	Dal,Rice,Roti,Panner	H 23423 Sector 10	Utter Pradesh	Allahabad	2022-01-22 14:54:51	View Details
2	Rahul Singh	9874563210	Dal Maknhi,Bread,Rice	J 466 ABC Street	Andra Pradesh	Visakhapatnam	2022-01-22 15:50:35	View Details
3	Amit Kumar	9852364710	Dal,Rice,Mix Veg,Panner	A 347583 XYZ Street	Uttar Pradesh	Aligarh	2022-01-23 11:56:22	View Details

4. Contact Us:

WANT TO WORK WITH US?

First Name

Last Name

Phone

Your Email

Your Message

CONTACT US

Address

Food Waste Management System

Contact Number:+91-96784532145

email: info@gmail.com

Address : XYZ street ABC

5.Charity:

HOMEABOUTAVAIL FOOD LISTCONTACTDONORADMINCHARITY

FWMS

Donate to Aditi's FWMP

Your donation will help reduce food waste and feed the needy. Thank you for your support!

Donor Name:

Choose Payment Type:

Select Payment Type

Phone Number:

Email Address:

Donation Amount (INR):

Donate Now

© 2024 @ Food Wastage Management System

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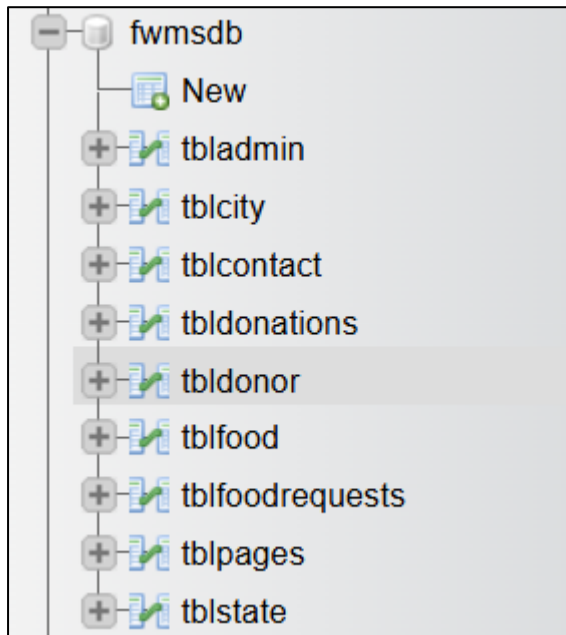
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5. Tech Stack:

- Frontend: HTML, CSS, JavaScript (for working functionalities)
- Backend: PHP.
- Database: MySQL for managing and storing relational data.
- Notifications: Integration with SMS-Twilio and email services-EmailJS for communication with donors.

6. Data Model:

- The data model had 2 new columns – *tbl*donations and *tbl*pages.



Tbl'donations:

#	Name	Type	Collation	Attributes	Null	Default	Comments	Extra	Action
<input type="checkbox"/>	1 ID	int(10)			No	None			Change Drop More
<input type="checkbox"/>	2 DonorName	varchar(255)	latin1_swedish_ci		No	None			Change Drop More
<input type="checkbox"/>	3 PhoneNumber	varchar(20)	latin1_swedish_ci		No	None			Change Drop More
<input type="checkbox"/>	4 Email	varchar(255)	latin1_swedish_ci		No	None			Change Drop More
<input type="checkbox"/>	5 Amount	decimal(10,2)			Yes	NULL			Change Drop More
<input type="checkbox"/>	6 DonationDate	timestamp			Yes	current_timestamp()			Change Drop More
<input type="checkbox"/>	7 ReceiptNo	varchar(50)	latin1_swedish_ci		Yes	NULL			Change Drop More

Tbl'pages:

#	Name	Type	Collation	Attributes	Null	Default	Comments	Extra	Action
<input type="checkbox"/>	1 ID	int(11)			No	None			Change Drop More
<input type="checkbox"/>	2 PageType	varchar(200)	latin1_swedish_ci		Yes	NULL			Change Drop More
<input type="checkbox"/>	3 PageTitle	mediumtext	latin1_swedish_ci		Yes	NULL			Change Drop More
<input type="checkbox"/>	4 PageDescription	mediumtext	latin1_swedish_ci		Yes	NULL			Change Drop More
<input type="checkbox"/>	5 UpdationDate	timestamp			Yes	NULL	ON UPDATE CURRENT_TIMESTAMP()		Change Drop More

CONCLUSION:

*The Food Waste Management System provides an **impactful, centralized platform** to **connect food donors** with **beneficiaries**, thereby addressing the critical issue of food wastage. As it has user login and signup – various data validation protocols are implemented and data is collected beforehand for the database.*

*By facilitating food donations, managing requests, and offering options for **monetary contributions** (by integrating payment gateways) to NGOs, the system ensures efficient and transparent distribution of resources.*

*With features like real-time **SMS and Mail notifications**, location-based donation categorization, and comprehensive **admin and donor dashboards**, it streamlines the process of managing food surplus.*

*The system not only helps reduce food waste but also aids in feeding those in need, ultimately **fostering a sense of community responsibility and contributing to a more sustainable future**.*