

# **FOOD MANAGEMENT SYSTEM**

## **A Mini Project Report**

*Submitted in partial fulfillment of  
the requirements for the award of the degree of*

## **Bachelor of Technology in Computer Science and Engineering**

Submitted by

Ramya K (19SS5A0508)  
Sandhya D (19SS5A0503)  
Anusha C (19SS5A0502)  
Manichandana J (19SS5A0507)

Under the guidance of

**Mrs. K. Neeraja**

Assistant Professor (C)



Department of Computer Science and Engineering

JNTUH College of Engineering Sultanpur

Sultanpur(V), Pulkal(M), Sangareddy district, Telangana-502273

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# **JNTUH COLLEGE OF ENGINEERING SULTANPUR**

Sultanpur(V),Pulkal(M),Sangareddy-502273 ,Telangana



Department of Computer Science and Engineering

## ***Certificate***

This is to certify that the Mini Project report work entitled “FOOD MANAGEMENT” is a bonafide work carried out by a team consisting of K.RAMYA bearing Roll no.19SS5A0508, D.SANDHYA bearing Roll no.19SS5A0503, C.ANUSHA bearing Roll no.19SS5A0502, J.MANICHANDANA bearing Roll no.19SS5A0507, in partial fulfillment of the requirements for the degree of BACHELOR OF TECHNOLOGY in COMPUTER SCIENCE AND ENGINEERING discipline to Jawaharlal Nehru Technological University Hyderabad College of Engineering Sultanpur during the academic year 2021- 2022.

The results embodied in this report have not been submitted to any other University or Institution for the award of any degree or diploma.

### **Guide**

**Smt.K.Neeraja**  
**Assistant Professor(C)**

### **Head of the Department**

**Sri. JOSHI SHRIPAD**  
**Associate Professor**

### **EXTERNAL EXAMINER**

## ***Declaration***

We hereby declare that the Mini Project entitled “**FOOD MANAGEMENT SYSTEM**” is a bonafide work carried out by a team consisting of K.RAMYA bearing Roll no.19SS5A0508, D.SANDHYA bearing Roll no.19SS5A0503, C.ANUSHA bearing Roll no.19SS5A0502, J.MANICHANDANA bearing Roll no. 19SS5A0507, in partial fulfillment of the requirements for the degree of Bachelor of Technology in Computer Science and Engineering discipline to Jawaharlal Nehru Technological University Hyderabad College of Engineering Sultanpur during the academic year 2021- 2022. The results embodied in this report have not been submitted to any other University or Institution for the award of any degree or diploma.

RAMYA KEERTHI	(19SS5A0508)
SANDHYA DASARI	(19SS5A0503)
ANUSHA CHITTEMPALLY	(19SS5A0502)
MANICHANDANA JADI	(19SS5A0507)

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K. RAMYA	(19SS5A0508)
D. SANDHYA	(19SS5A0503)
C. ANUSHA	(19SS5A0502)
J. MANICHANDANA	(19SS5A0507)

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## ***Abstract***

Food Management scheme is a mission to end hunger and no wasting of food, to make a hungry free world. Now-a-days a drastic increase can be seen in food waste in our locality. As per the data given by food organization 1/3 of food is wasted globally. On the other hand, 20 percent of the population face extreme food shortage. Hence there is a need to come up with a solution that can avoid food wastage and can also helps to feed the needy. To minimize the problem which are raised today, we have initiated this food waste management system which can assist in collecting the leftover food from hotels, restaurants and functions to distribute for needy people. NGO's are helping poor communities to battle against starvation and malnutrition can raise a request for food supply from hotels through this application. Once the request is accepted, the NGO's can collect the food from hotels for distribution. In this way our application helps in managing food waste in restaurant or hotels and also helps in feeding the poor or hunger people.

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# **Chapter 1**

## **INTRODUCTION**

### **1.1 Project Overview**

This project assesses students by making an hunger free world. Food waste is recognized as a huge contributor to global waste problem, so target 12.3 aims to, “by 2030, halve per capita global food waste at the retail and consumer levels and reduce food losses along production and supply chains, including post-harvest losses. Diverting food waste from landfills to CHUGG- food waste treatment system captures the methane emission, which can be used as an energy source. ... CHUGG- food waste treatment system diverts a large amount of food waste going to landfills by recycling them at the source. Reduce food waste by improving product development, storage, labeling, and cooking methods. Recover food waste by connecting potential food donors to hunger relief organizations like food banks and pantries.

- Food waste management in India is becoming a critical problem due to the continuous increase of the Indian population.
- people waste the maximum amount of food ,which can fulfill the hungry of needy.
- Most of the food is wasted in weddings, canteens, hotels. Still, food wastage is a horrendous issue, so in order to overcome this issue we have implemented food management scheme.

## **1.2 Existing System**

In the present scenario people have to physically visit the hotels or restaurants for surplus food, and have to collect the food. Everyone enjoys the functions with a lot of food and other products and most of them left waste or unused. We all waste food for various reasons. Typically, it's as a result of there has been an amendment of plans and it's out of our management, however, most of the time we tend to waste identical varieties of food for identical a pair of main reasons. Regardless of the rationale why you throw out food, you got it, and currently, it's cost accounting for you to throw it out. So, after you square measure throwing out food, or recording the food you've got wasted, cash A note the explanations for your scraps and see if their square measure tiny changes that you just will build to cut back this waste and prevent plenty of dollars. In this method time as well as physical work is required, among which time is something that no one has in sample amount. The traditional food management is not efficient enough for collecting surplus food from the hotels and restaurant.

- wastage of food in restuarants and hotels.
- Hungers cannot fulfill their need.
- mass amount of surplus food.
- Human involvement in sevices.
- No details about surplus food.
- Require a external user for providing sevices.
- It is not user friendly.

## **1.3 Proposed System**

The modern food mangement system is developed with the aim to overcome the drawbacks of existing manual system. The proposed system has got many advantages. People from different parts of the world can register very easily. The new system is more personalized. It is made in such a manner that all the new users can understand all the options in it very easily. It is made in a quick and easy referential manner. The user can

login into the website and can provide the food details where the surplus food is available. The user information will be send to near by NGO through email. So that the NGO can collect the food from the donor. As it is easily understandable and user friendly, quick entries can be made in this system.

- Provides complete online management system, including donor and NGO registration, collecting food, helping needy.
- Benefits will be both the restaurant (reducing food wastage), and the needy
- Keep track of wastage food for restaurant
- User can play role in saving food wastage and help the needy
- 100% accuracy in providing services

## **1.4 Scope**

This project would be very useful for needy people and also for the restaurants and hotels. even students gets an idea about food management system and support for an hunger free world. NGo and donor plays a vital role in providing services and to feed needy.

# Chapter 2

## LITERATURE SURVEY

### 2.1 PHP

Originally PHP stood for “Personal Home Page”. PHP is an ”HTML-embedded scripting[1] language” primarily used for dynamic Web applications. The first work was done by Rasmus Lerdorf and dates back to about 1994. Lerdorf originally used it for his personal page – specifically to track visitors. Soon, a lot of additional functions were added. It took a few years, though, for it to become a language and not just a set of tools.

The code was released in the mid-1990s. Israel’s Andi Gutmans and Zeev



Figure 2.1: PHP evolution

Suraski did a major overhaul in 1997 with the goal of using PHP to run an e-Commerce site. Their version, termed PHP 3.0, had more of the features we expect and see today. The same duo later created Version 4.0. 2004 saw another major revision, PHP 5.0. Although there has not yet been a 6.0, there have been significant improvements since 5.0,

including the removal of several things that had caused instability or potential security breaches.

Fig 2.1 shows the evolution of php.

## **What is PHP?**

- PHP is an acronym for "PHP: Hypertext Pre-processor"
- PHP is a widely-used, open source scripting language
- PHP scripts are executed[4] on the server
- PHP is free to download and use

## **What is a PHP File?**

- PHP files can contain text, HTML, CSS, JavaScript, and PHP code
- PHP code is executed on the server, and the result is returned to the browser as plain HTML
- PHP files have extension ".php"

## **What Can PHP Do?**

- PHP can generate dynamic page content
- PHP can create, open, read, write, delete, and close files on the server
- PHP can collect form data
- PHP can send and receive cookies
- PHP can add, delete, modify data in your database
- PHP can be used to control user-access

- PHP can encrypt data

## Why PHP?

- PHP runs on various platforms (Windows, Linux, Unix, Mac OS X, etc.)
- PHP is compatible with almost all servers used today (Apache, IIS, etc.)
- PHP supports a wide range of databases
- PHP is easy to learn and runs efficiently on the server side
- PHP is free.

## 2.2 HTML

HTML stands for “Hyper Text Markup Language” and is the standard language used to produce[2] web pages and applications. HTML was first presented by Tim Berners-Lee, the creator of the World Wide Web, in 1989. HTML 1.0 was the first version of



Figure 2.2: HTML evolution

HTML, used from 1989 to 1994. It was a very limited version and included only 20 elements. It didn't support altering of page background.

HTML 2.0 created in 1995, becomes the first official set of standards for HTML , the base standard by which all browsers were measured until HTML 3.2. It was able to support the changing of a page background, text colour, text face, the use of tables and text boxes etc. In January 1997, HTML 3.2 was endorsed by the W3 Consortium and approved of by many, including significant browsers such as Netscape and Microsoft. HTML 3.2 included tables, applets, text flow around images, subscripts and superscripts. HTML 4.01, created in 1999, included cascading style sheets (css) which allowed aspects such as text, colour, font and backgrounds to be easily altered.

HTML 5 is the current version of HTML and can be used to write web applications that still work when you're not connected to the net to tell websites where you are physically located to handle high definition video and to deliver extraordinary graphics. It continues to evolve and is supported by all of the biggest browsers such as Firefox, Chrome, Safari, Internet Explorer, Opera and Edge.

## 2.3 CSS

Cascading Style Sheets (CSS) developed by Hakon Wium Lie ,is a style sheet language used for describing the presentation of a document written in a markup language like HTML. It is a cornerstone technology of the WWW, alongside HTML and JS. It is designed to enable the separation of presentation and content, including layout, colors, and fonts.

### 2.3.1 Materialize.CSS

Materialize is a UI component library created with CSS, JavaScript, and HTML. Materialize.css include the following:

#### Materialize Color

Materialize provides rich predefined[5] colors. These colors are based on Material Design base colors. Colors in Materialize are defined with a base color class and an optional class which can be used for lighten or darken.

#### Materialize Helpers

Materialize Provides inbuilt classes which fulfills the common and frequent tasks such as alignment, float, formatting, hover etc.

The following Helper Classes are available:

##### 1. Alignment Classes

- **Vertical Align:** If you want to align the things vertically just add the class valign-wrapper to the container and valign class to the element you want to align vertically.
- **ii. Text Align:** There are following three classes which can be used to align text horizontally.
  - **left-align :** This class is used to left align the text.
  - **right-align :** This class is used to right align the text.
  - **center-align :** This class is used to center align the text.

## 2. Float Classes

- Float left
- Float Right

## 3. Hiding Content Classes

Sometimes we need to hide some content for all devices or some specific devices. Materialize provides inbuilt classes to hide content on several devices.

- **hide:** Hide for all Devices
- **hide-on-small-only:** Hide for Mobile Only
- **hide-on-med-only:** Hide for Tablet Only
- **hide-on-med-and-down:** Hide for Tablet and Below
- **hide-on-med-and-up:** Hide for Tablet and Above
- **hide-on-large-only:** Hide for Desktop Only

## 4. Formatting Class

Materialize provides Formatting classes to format content.

There are two formatting classes:

- **Truncation:** This class is used to truncate the long text in an ellipsis.
- **Hover:** Materialize provides the hoverable class that adds the box shadow animation.

## 5. Browser Default Class

Some default styles are overridden in Materialize and sometimes we need default styles instead of overridden, so it provides browser-default class to revert the elements style to their original state.

## **Materialize Media**

Materialize provides classes for displaying media content. Here in this tutorial we are going to explain how you can use media classes in Materialize CSS to manage the media content. Media include Images and Videos. Images include Responsive Images where we add the class responsive-img to the image tag which makes image responsive and Circular Images where we need to add Circle class to the image tag. We can embed the videos in a page using responsive-video and video-container class. In Responsive Embed if, we want to add any youtube videos we can embed videos simply by giving the link which is responsive on all devices. We can make html videos responsive simply adding the class responsive-video.

## **Materialize Shadow**

Materialize Provides Various Shadow classes to add the Shadow effect in the element. The following are the classes available to add Shadows:

- **z-depth-1:** This Adds 1px border and z-depth 1
- **z-depth-2:** This Adds 2px border and z-depth 2
- **z-depth-3:** This Adds 3px border and z-depth 3
- **z-depth-4:** This Adds 4px border and z-depth 4
- **z-depth-5:** This Adds 5px border and z-depth 5
- **z-depth-0:** This is used to remove shadows from the element that have z-depths defaults

## **Materialize Table**

Materialize Provides Utility Classes to create tables, Using these classes we can create beautiful tables.

The following are utility classes to create tables:

- **Borderless Table:** By default tables in materialize framework are borderless.
- **Bordered Table:** To create bordered table add class bordered to the table tag.

- **Striped Table:** To create striped table add class Striped to the table tag.
- **Highlight Table:** To create highlight table add class Highlight to the table tag.
- **Centered table:** To create centered table add class Centered to the table tag.
- **Responsive Table:** To create responsive table add class Responsive table to the table tag.

### **Materialize Typography**

Roboto 2.0 standard font is used in Materialize framework. Sometimes we do not need the default Roboto font so we need to override/remove the default Roboto font.

## **2.4 MySql**

MySQL was created by a Swedish company, MySQL AB, founded by David Axmark, Allan Larsson and Michael "Monty" Widenius. Original development of MySQL by Widenius and Axmark began in 1994. The first version of MySQL appeared on 23 May 1995. It was initially created for[3] personal usage from mSQL based on the low-level language ISAM, which the creators considered too slow and inflexible. They created a new SQL interface, while keeping the same API as mSQL. By keeping the API consistent with the mSQL system, many developers were able to use MySQL instead of the (proprietary licensed) mSQL antecedent.

MySQL is an open-source relational database management system (RDBMS). Its name is a combination of "My", the name of co-founder Michael Widenius's daughter, and "SQL", the abbreviation for Structured Query Language. MySQL is free and open-source software under the terms of the GNU General Public License, and is also available under a variety of proprietary licenses. MySQL was owned and sponsored by the Swedish company MySQL AB, which was bought by Sun Microsystems (now Oracle Corporation). In 2010, when Oracle acquired Sun, Widenius forked the open-source MySQL project to create MariaDB.

## **2.5 Apache Server**

Originally based on the NCSA HTTPd server, development of Apache began in early 1995 after work on the NCSA code stalled. Apache played a key role in the initial growth[6] of the World Wide Web, quickly overtaking NCSA HTTPd as the dominant HTTP server, and has remained most popular since April 1996. In 2009, it became the first web server software to serve more than 100 million websites. As of April 2020, Netcraft estimated that Apache served 29.12% of the million busiest websites, while Nginx served 25.54%; according to W3Techs, Apache served 39.5% of the top 10 million sites and Nginx served 31.7%.

The Apache HTTP Server, colloquially called Apache, is a free and open-source cross-platform web server software, released under the terms of Apache License 2.0. Apache is developed and maintained by an open community of developers under[3] the auspices of the Apache Software Foundation. The vast majority of Apache HTTP Server instances run on a Linux distribution, but current versions also run on Microsoft Windows and a wide variety of Unix-like systems. Past versions also ran on OpenVMS, NetWare, OS/2 and other operating systems, including ports to mainframes.

## **2.6 XAMPP**

XAMPP is a free and open-source cross-platform web server solution stack package developed by Apache Friends, consisting mainly of the Apache HTTP Server, MariaDB database, and interpreters[3] for scripts written in the PHP and Perl programming languages. Since most actual web server deployments use the same components as XAMPP, it makes transitioning from a local test server to a live server possible. XAMPP is regularly updated to the latest releases of Apache, MariaDB, PHP and Perl. It also comes with a number of other modules including OpenSSL, phpMyAdmin, MediaWiki, Joomla, WordPress and more. Self-contained, multiple instances of XAMPP can exist on a single computer, and any given instance can be copied from one computer to another. XAMPP is offered in both a full and a standard version (Smaller version).

# **Chapter 3**

## **ANALYSIS**

### **3.1 Security**

- Administrator has the highest authority to edit/delete/create database
- NGO'S have the authority to accept or reject the food donation based upon the edible criteria.
- Based on Login Credentials Donars data will be available to the NGO'S .
- NGO'S can view all the food donation details of every donar.
- Critical information like password should be transferred in encrypted form
- Passwords should be stored in encrypted form

### **3.2 Reliability**

- Data validation and verification needs to be done at every stage of activity.
- Validating user input
- Use of locking mechanism while updating database.
- After accepting or rejecting the request the data will be removed from the notifications thus everyone cannot commit to single task.

### **3.3 Availability**

The Food Management System being an online system should be available at meal time.

### **3.4 Constraints**

- The system should be available for everyone.
- NGO'S will only collect food at working hours.

### **3.5 Portability**

- The website will be built using PHP which has support to run on any platform provided the required compilers are available.
- For database either PHPMyAdmin or MySQL would be used, that too has extensive support over many popular architectures and operating systems.
- For user interface HTML and CSS would be used, that too has extensive support over many popular designs and interactive look of the website.

### **3.6 Performance**

- The system would be used by multiple users at a time and may grow as time passes
- The system would need to implement multi-threading to achieve acceptable performance. Further a database connection pool may also be required for assigning faster database connection.

## **3.7 System Architecture**

- The NGO and Donar modules include their part of functions to the Food Management System.
- The initialization of the donation is done by the Donar.
- The Donar gives the details to the NGO's By filling the details of the food at Donar Page.
- After Successfull entry of the details by the Donar the notification is sent to all registered NGO's
- The Data will be automatically added for the registered information of the users to the Food Details database and it will reflect in the NGO's page about the Donation.
- The NGO will accept the request if he is near to the donar location and collects the food.
- By accepting the food donation the notification will be removed.

## **3.8 Feasibility Study**

### **1. ECONOMIC FEASIBILITY**

Economic analysis is most frequently used for evaluation of the effectiveness of the system. More commonly known as cost/benefit analysis the procedure is to determine the benefit and saving that are expected from system and compare them with costs, decisions is made to design and implement the system.

This part of feasibility study gives the top management the economic justification for the new system. This is an important input to the management the management because very often the top management does not like to get confounded by the Various technicalities that bound to be associated with a project of this kind. A simple economic analysis that gives the actual comparison of costs and benefits is much more meaningful in such cases.

In the system, the organization is must be satisfied by economic feasibility. Because, if the organization implements this system. it need not require any additional hardware resources as well as it will be saving lot of time.

## **2. TECHNICAL FEASIBILITY**

Technical feasibility centres on the existing manual system of the test management process and to what extent it can support the system. According to feasibility analysis procedure the technical feasibility of the system is analyzed and the technical requirements such as software facilities, procedure, inputs are identified. It is also one of the important phases of the system development activities. The system offers greater levels of user friendliness combined with greater pressing speed. Therefore, the cost of maintenance can be reduced. Since processing speed is very high and the work is reduced in the maintenance point of view management convince that the project is operationally feasible.

## **3. BEHAVIORAL FEASIBILITY**

People are inherently resistant to change and computer has been known to facilitate changes. An estimate should be made of how strong the user is likely to move towards the development of computerized system. These are various levels of users in order to ensure proper authentication and authorization and security of sensitive data of the organization.

### **3.9 Hardware and Software Requirements**

**Front end:** HTML, CSS

**Back end:** PHP, MySQL

### **3.10 Objectives**

Food Management System – Food Donation is complete end to end solution to cover all aspects of Hunger for the needy people.

The basic objective of developing this project is:

- Provides complete web site solution, including member registration, Food Details, storing of Donars details and NGO'S details, Complete web based function.
- The Food Management system can automatically reflect the donation details to the NGO's.
- Using this feature the food can be donated and collected from different hotels and hostels, House functions and restaurants.
- Additional to the already available donation camps in the villages or towns which helps the people who can volunteer as NGO or can also donate. Food management system is better in either way for both donars and NGO's.
- No one can Modify the data of the Donars and NGO's.
- Complete web based system no installation required to run the application in client system.
- In our project NGO's can collect the food from the donars by accessing the donor location.
- Donars details will be saved and can be retrieved later on.
- Donars must and should agree to the terms and conditions for the food quality.
- System must able to access the donars location and display the location quickly to the NGO after filling the donor form.
- System has powerful logical access management in place, each user must be identified by username and password authentication policy is applied to secure the food management system.
- The food management system generates number of donations for the needy people.

## 3.11 System Activities

### 1. Registration

- **Register as NGO's:** Firstly we have to register by providing the information in NGO's Registration form. Everyone can fill the registration form who want work as voluntary. If you fill all the details successfully your registration process is successful otherwise an error message is displayed.
- **Register as Donor:** Firstly we have to register by providing the information in Donor Registration form. Everyone can fill the registration form who want donate food to needy. If you fill all the details successfully your registration process is successful otherwise an error message is displayed.

### 1. Login

- **login as NGO's:** By using already stored Email-ID name and password the individual can log on to the system any time. Logging is successful only if the input detail is matched with the NGO's database, else an error message is displayed.
- **Login as Donor:** By using already stored Email-ID name and password the individual can log on to the system any time. Logging is successful only if the input detail is matched with the database, else an error message is displayed.

### 2. Admin Activities

#### Database Management

- Adding Food-Details: Whenever the Donor fills the food-Details form the data will be added to the database. it contains name of the user, Quantity of food, No.of Items and Location of food.
- Deleting Food-Details: After collecting the food from the Donor's Location the food information is deleted from the food-Details database.

#### NGO's Management

- Registering NGO's: include inserting the information of each NGO's (NGO's name,Phone-Number,email,password,Address) to complete the registration process.

### **Donor Management**

- Registering Donor: include inserting the information of each Donors (Donor, name,User-Name,Phone-Number,email,password,Address) to complete the registration process.

**Food Management:** show all food details to all NGO's.

### **3. Donor Module:**

An enhanced interface for Donor to registration, login,provide the food details.

select examination, and give exam, view the exam results, view answers of the questions following modules pages are available for the student.

**4. NGO's Module:** An enhanced interface for NGO's to registration, login, Collect the food from donor Location.

### **5. NGO's Aspect**

- 1.Register to the Food Management System By Selecting NGO.
- 2.Logging into the system as NGO.
- 3.If any food Donations are available accept or reject the Food Donation based on availability of their Location.
- 4.If accept the Food Donation Collect the food from the given location
5. After Collecting the food from the donor's Location delete the food from the database by clicking Accepted button.
- 6.If the Food Donation is rejected the food Donation order is cancelled. 7. The cancellation notification sent to the registered mail id of Donor.

## **6. Donor Aspect:**

- 1.Register to the Food Management System By Selecting Donor.
- 2.Logging into the system as Donor.
- 3.If the food is available at any known place provide the information of food like Quantity of food, No.of Items and Address of food where it is located.
- 4.After filling the food-details form Accept the terms and conditions of food Quality.
- 5.Submit the form. 6.After submitting the form the food data is reflected to NGO's page and a notification is send to all Registered NGO's.

## **7. Analysis:**

1. Authenticating users based on user-id and password
2. Keeping session track of Donor and NGO's activity
3. Storing all responses of Donors and NGO's.
4. Checking whether the given Details are correct or not

# Chapter 4

## DESIGN

Design is the abstraction of a solution it is a general description of the solution to a problem without the details. Design is view patterns seen in the analysis phase to be a pattern in a design phase. After design phase we can reduce the time required to create the implementation.

A UML diagram is a diagram based on the UML (Unified Modeling Language) with the purpose of visually representing a system along with its main actors, roles, actions, artifacts or classes, in order to better understand, alter, maintain, or document information about the system.

### What is UML?

UML is an acronym that stands for Unified Modelling Language. Simply put, UML is[7] a modern approach to modelling and documenting software. In fact, it's one of the most popular business process modelling techniques.

It is based on diagrammatic representations of software components. As the old proverb says: “a picture is worth a thousand words”. By using visual representations, we are able to better understand possible flaws or errors in software or business processes.

**Building Blocks of the UML:** The vocabulary of the UML encompasses three kinds of building blocks.

- **Things:** Things are the abstractions that are first-class citizens in a model
- **Relationships:** ; relationships tie these things together

- **Diagrams:** diagrams group interesting collections of things

## 4.1 Use Case Diagram

Use case diagrams are a set of use cases, actors, and their relationships. They represent the use case view of a system.

A use case represents a particular functionality of a system. Hence, use case diagram is used to describe the relationships among the functionalities and their internal/external controllers. These controllers are known as actors. In this project, faculty and student are the actors.

Fig 4.1 shows the Use Case diagram of Food management system

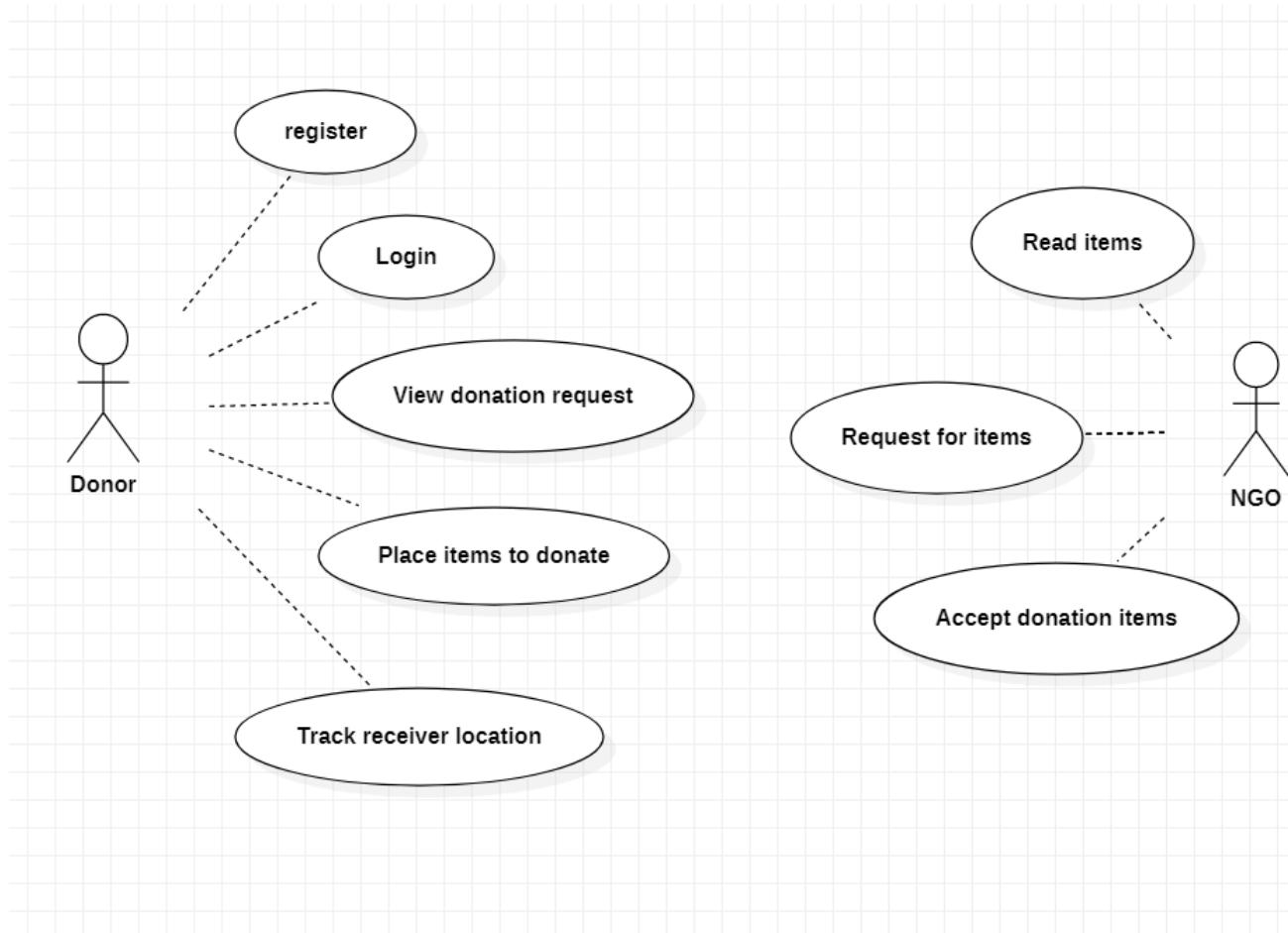


Figure 4.1: Use Case diagram of Food management system

## 4.2 Activity Diagram

Activity diagrams are used to document workflows in a system, from the business level down to the operational level. The general purpose of Activity diagrams is to focus on flows driven by internal processing vs. external events.

Activities are nothing but the functions of a system. Numbers of activity diagrams are prepared to capture the entire flow in a system.

Fig 4.2 shows the Activity diagram of Food management system

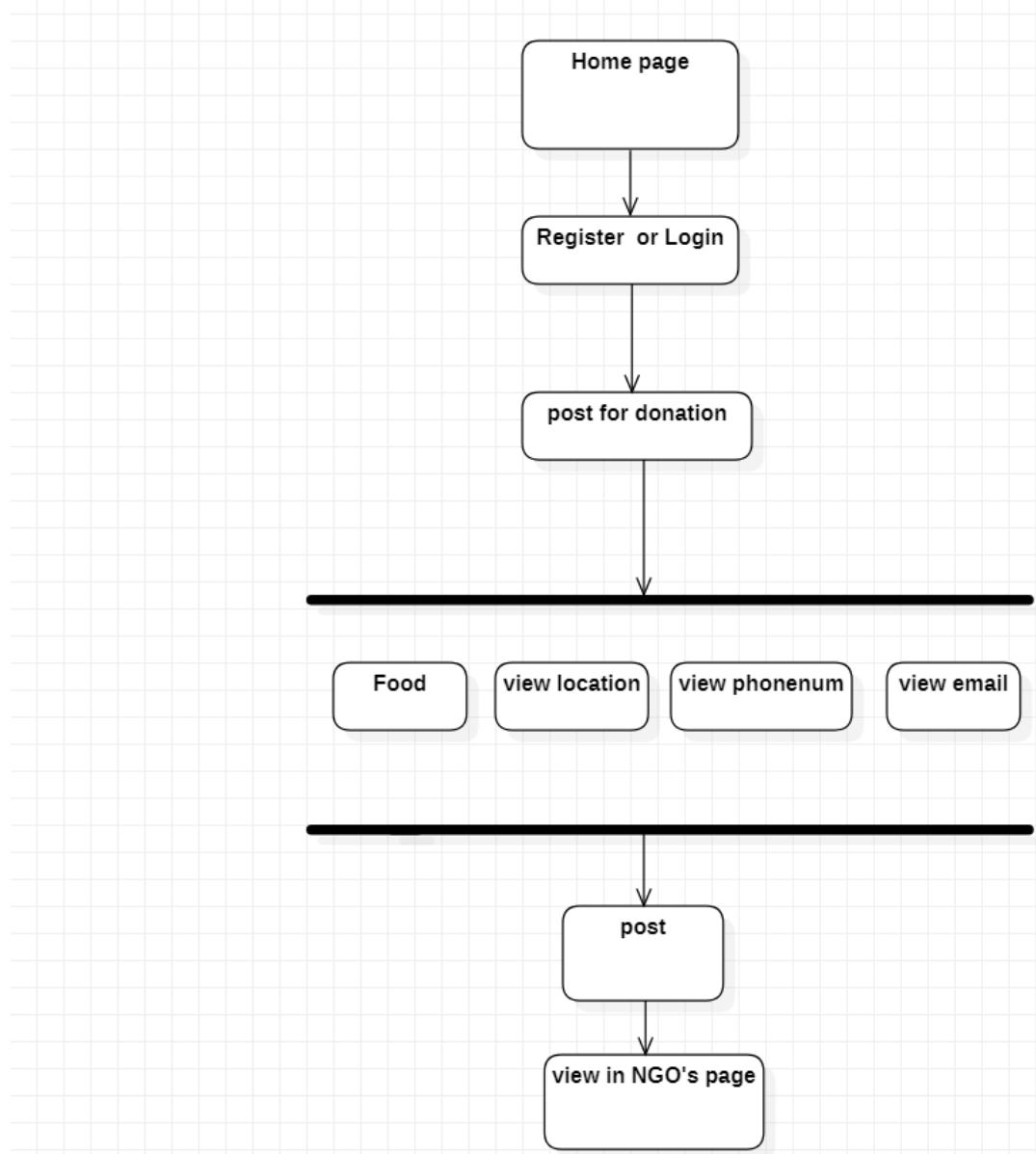


Figure 4.2: Activity diagram of Food management system

## 4.3 Class Diagram

Class diagram is a static diagram. It represents the static view of an application. Class diagram is not only used for visualizing, describing, and documenting different aspects of a system but also for constructing executable code of the software application.

Class diagram describes the attributes and operations of a class and also the constraints imposed on the system. The class diagrams are widely used in the modelling of object-oriented systems because they are the only UML diagrams, which can be mapped directly with object-oriented languages. Class diagram shows a collection of classes, interfaces, associations, collaborations, and constraints. It is also known as a structural diagram.

Fig 4.3 shows the Class diagram of Food management system

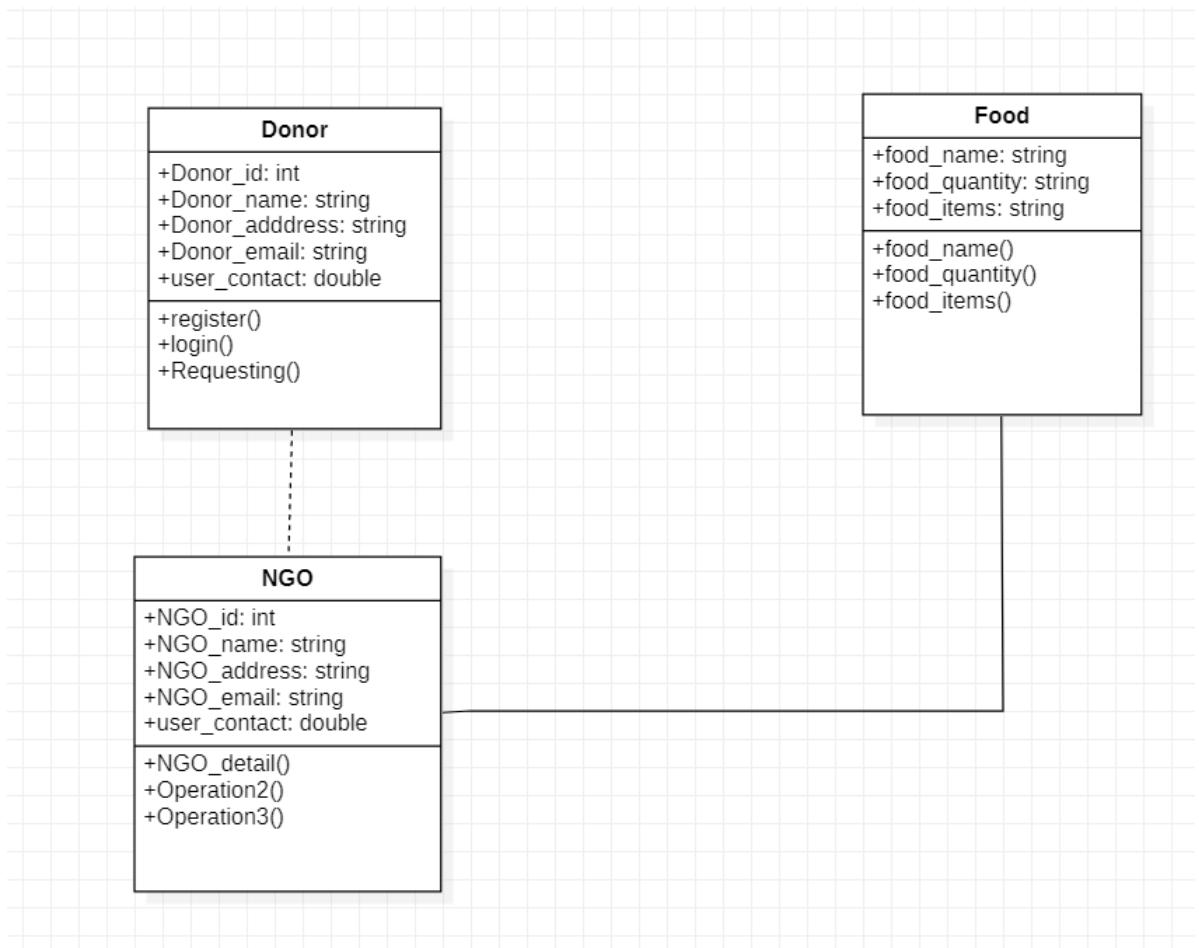


Figure 4.3: Class diagram of Food management system

## 4.4 Flow Chart Diagram

A flowchart is a type of diagram that represents a workflow or process. A flowchart can also be defined as a diagrammatic representation of an algorithm, a step-by-step approach to solving a task.

The flowchart shows[3] the steps as boxes of various kinds, and their order by connecting the boxes with arrows. This diagrammatic representation illustrates a solution model to a given problem. Flowcharts are used in analyzing, designing, documenting or managing a process or program in various fields.

Fig 4.3 shows the Flow chart diagram of Food management system

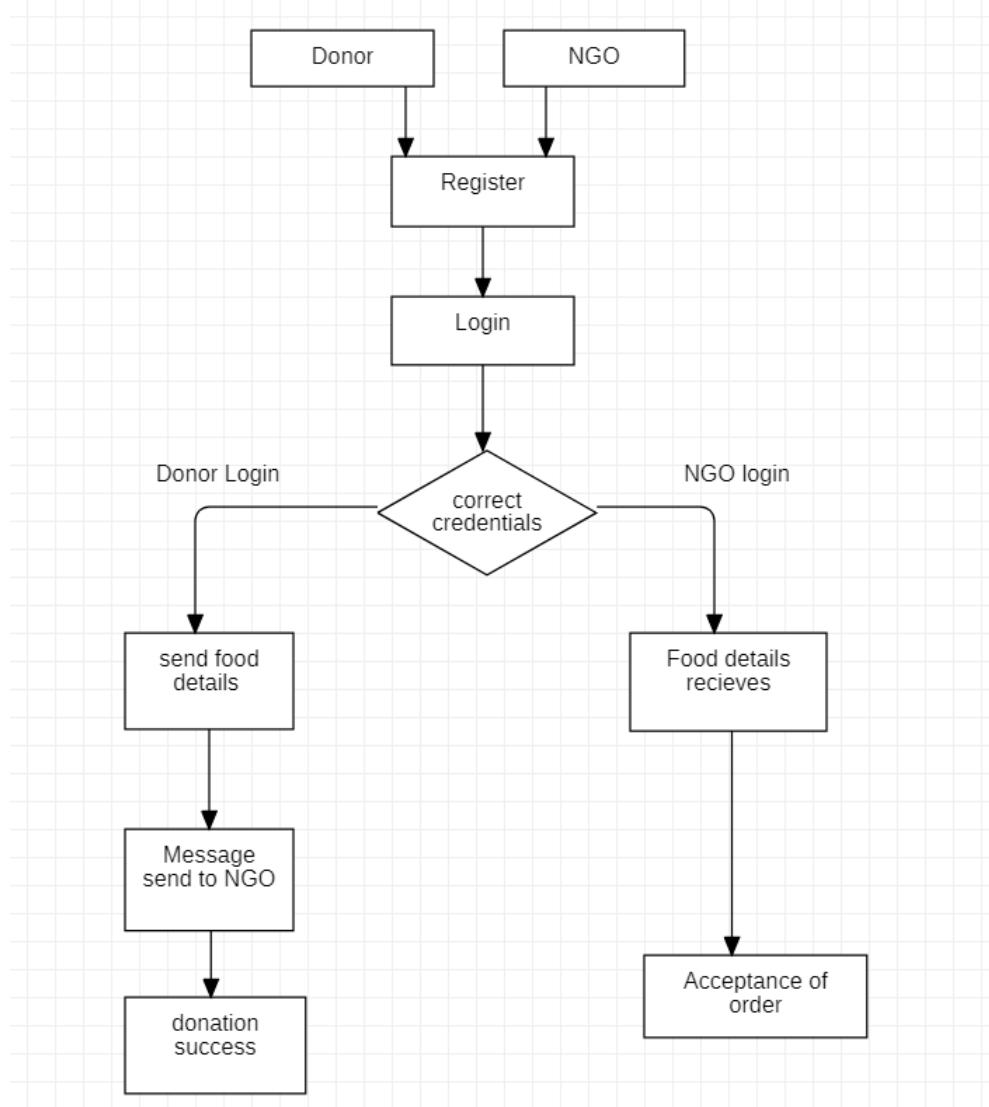


Figure 4.4: Flow Chart diagram of Food management system

# **Chapter 5**

## **IMPLEMENTATION**

This website helps to conduct examinations to students. It stores all the questions in the database in separate modules divided according to the subject, topic and difficulty of questions i.e. easy, medium, hard. Input for number of questions and topics must be given. Question paper will be generated according to the input. It picks questions randomly from the database by including the combination of all levels of difficulty. Questions once generated in one question paper will not be repeated in the other. Results will be evaluated.

Admin handles the database and faculty.

### **5.1 Code**

#### **5.1.1 Index.php**

```
<!DOCTYPE html >
<html lang="en" >
<head >

<title >Food Management System </title >
```

```

<meta charset="UTF-8" >
<meta http-equiv="X-UA-Compatible" content="IE=Edge" >
<meta name="description" content="" >
<meta name="keywords" content="" >
<meta name="author" content="" >
<meta name="viewport" content="width=device-width, initial-scale=1, maximum-scale=1"
>

<link rel="stylesheet" href="css/bootstrap.min.css" >
<link rel="stylesheet" href="css/font-awesome.min.css" >
<link rel="stylesheet" href="css/aos.css" >

<!-- MAIN CSS -->
<link rel="stylesheet" href="css/tooplate-gymso-style.css" >

</head >
<body data-spy="scroll" data-target="navbarNav" data-offset="50" >

<!-- MENU BAR -->
<nav class="navbar navbar-expand-lg fixed-top" >
<div class="container" >

<a class="navbar-brand" href="index.html" >FMS <a >

<button class="navbar-toggler" type="button" data-toggle="collapse" data-target="#navbarNav" aria-controls="navbarNav" aria-expanded="false" aria-label="Toggle navigation">
<span class="navbar-toggler-icon" ><span >
</button>

<div class="collapse navbar-collapse" id="navbarNav" >

```

```

<ul class="navbar-nav ml-lg-auto" >

    <li class="nav-item" >
        <a href="home" class="nav-link smoothScroll" ><Home</a >
    </li >

    <li class="nav-item" >
        <a href="about" class="nav-link smoothScroll" >
            About Us <a >
        </li >

    <li class="nav-item" >
        <a href="afterlogin.html" class="nav-link smoothScroll" >Login <a >
    </li >
    <li class="nav-item" ><a href="afterreg.html" class="nav-link smoothScroll" ><Reg-
        ister >
    </a >

    </li >

<!-- FOOTER -->
<footer class="site-footer">
    <div class="container">
        <div class="row">

            <div class="ml-auto col-lg-4 col-md-5" ><p class="copyright-text" >
                Copyright copy; FMS
            <div>

```

```

    class="d-flex justify-content-center mx-auto col-lg-5 col-md-7 col-12">
<class="mr-4"><i class="fa fa-envelope-o mr-1"></i>
<a href="mailto:feedhungerfms@gmail.com" "feedhungerfms@gmail.com/a></p>

<p ><i class="fa fa-phone mr-1"></i>
<a href="tel:+919390718509" >9390718509 </a ></p>
textless div >

</div >
</div >
</footer >

<!-- Modal -->
<div class="modal fade" id="membershipForm" tabindex="-1" role="dialog" aria-labelledby="memb
aria-hidden="true">
<div class="modal-dialog" role="document">

    <div class="modal-content">
    <div class="modal-header">

        <h2 class="modal-title" id="membershipFormLabel">
Membership Form</h2>

        <button type="button" class="close" data-dismiss="modal" aria-label="Close">
<span aria-hidden="true">times;<span >
</button>
</div>

    <div class="modal-body">
class="membership-form webform" role="form">

```

```
<input type="text" class="form-control" name="cf-name" placeholder="John Doe" >

<input type="email" class="form-control" name="cf-email" placeholder="Johndoe@gmail.com" >

<input type="tel" class="form-control" name="cf-phone" placeholder="123-456-7890" pattern="[0-9]3-[0-9]3-[0-9]4" required >

class="form-control" rows="3" name="cf-message" placeholder="Additional Message" ><textarea>

<button type="submit" class="form-control" id="submit-button" name="submit" >
Submit Button </button >

<div class="custom-control custom-checkbox" >
  <input type="checkbox" class="custom-control-input" id="signup-agree" ><
  <label class="custom-control-label text-small text-muted" for="signup-agree" >I agree
  to the <a href="">Terms amp;Conditions </a>
</label >
</div >
</form >
</div >

<div class="modal-footer" ></div >

</div >
</div >
</div >
```

```
<!-- SCRIPTS -->
<script src="js/jquery.min.js"></script>
<script src="js/bootstrap.min.js"></script>
<script src="js/aos.js"></script>
<script src="js/smoothscroll.js"></script>
<script src="js/custom.js"></script >

</body >
</html >
```

## **5.2 Testing**

We all have to agree that in today's ever-changing and competitive world, the internet has become an integral part of our lives. Most of us make our decisions by searching the information on the internet these days, hence hosting a website is no[9] longer optional but mandatory for all kind of businesses. It is the first step in becoming and staying relevant in the market.

Just having a website is not enough. An organization is needed to develop a website that is informative, accessible and user-friendly. To maintain all these qualities, the website should be well tested, and this process of testing a website is known as web testing.

### **What Is Web Testing?**

Web testing is a software testing practice to test websites or web applications for potential bugs. It's a complete testing of web-based applications before making live. A web-based system needs to be checked completely from end-to-end before it goes live for end users. By performing website testing, an organization can make sure that the web-based system is functioning properly and can be accepted by real-time users. The UI design and functionality are the captains of website testing.

### **Web Testing Checklists**

- 1) Functionality testing
- 2) Usability testing
- 3) Interface testing
- 4) Security testing

#### **5.2.1 Functionality Testing**

Test for – all the links in web pages, database connection, forms used for submitting or getting information from the user in the web pages.

##### **Check all the links:**

- Test the outgoing links from all the pages to the specific domain under test.
- Test all internal links.

- Test links jumping on the same pages.
- Test links used to send email to admin or other users from web pages.
- Test to check if there are any orphan pages.
- Finally, link checking includes, check for broken links in all the above-mentioned links.

### **Test forms on all pages:**

Forms are an integral part of any website. Forms are used for receiving information from users and to interact with them. So what should be checked in these forms?

- First, check all the validations on each field.
- Check for default values of the fields.
- Wrong inputs in the forms to the fields in the forms.
- Options to create forms if any, form delete, view or modify the forms.

### **Validate your HTML/CSS:**

If you are optimizing your site for Search engines then HTML/CSS validation is the most important one. Mainly validate the site for HTML syntax errors.

### **Database Testing:**

Data consistency is also very important in a web application. Check for data integrity and errors while you edit, delete, modify the forms or do any DB related functionality. Check if all the database queries are executing correctly, data is retrieved and also updated correctly.

## **5.2.2 Usability Testing**

Usability testing is the process by which the human-computer interaction characteristics of a system are measured, and weaknesses are identified for correction. Usability

Testing includes the following:

- The website should be easy to use.
- The instructions provided should be very clear.
- Check if the instructions provided are perfect to satisfy its purpose.
- The main menu should be provided on each page.
- It should be consistent enough.

### **5.2.3 Interface Testing**

In web testing, the server-side interface should be tested. This is done by verifying that communication is done properly. Compatibility of the server with software, hardware, network, and the database should be tested.

The main interfaces are:

- Web server and application server interface
- Application server and Database server interface.

Check if all the interactions between these servers are executed and errors are handled properly. If the database or web server returns an error message for any query by application server then the application server should catch and display these error messages appropriately to the users.

### **5.2.4 Security Testing**

The primary reason for testing the security of a web is to identify potential vulnerabilities and subsequently repair them.

Following are some of the test cases for web security testing:

- Test by pasting the internal URL directly into the browser address bar without login. Internal pages should not open.
- Try some invalid inputs in input fields like login username, password, input text boxes, etc. Check the system's reaction to all invalid inputs.

# Chapter 6

## SCREENSHOTS

### 6.1 Admin Module



Figure 6.1: Homepage

**FMS**

HOME    **ABOUT US**    LOGIN    REGISTER    CONTACT      

**About**

A healthy diet throughout life promotes healthy outcomes, supports normal growth, development and ageing, helps to maintain a healthy body weight, and reduces the risk of chronic disease leading to overall health and well-being.


## We're hungry for donations

Figure 6.2: About FMS

**FMS**

HOME    **ABOUT US**    LOGIN    REGISTER    CONTACT      

**We're hungry for donations**


**Feel free to ask anything**

**Where you can find us**

Figure 6.3: Hungry for donations

**FMS**

HOME ABOUT US LOGIN REGISTER CONTACT   

**Feel free to ask anything**

Name

Email

Message

**Send Message**

**Where you can find us**

  
JNTUH College of Engineering ...  
View larger map  
Water Aeration Plant  
JNTUH College of Engineering Sultanpur  
Use ctrl + scroll to zoom the map  
Keyboard shortcuts | Map Data | Terms of Use | Report a map error

Copyright © FMS  feedhungerfms@gmail.com  9390718509

Figure 6.4: Food management system

## 6.2 NGO or Donor module



Figure 6.5: NGO and Donor page

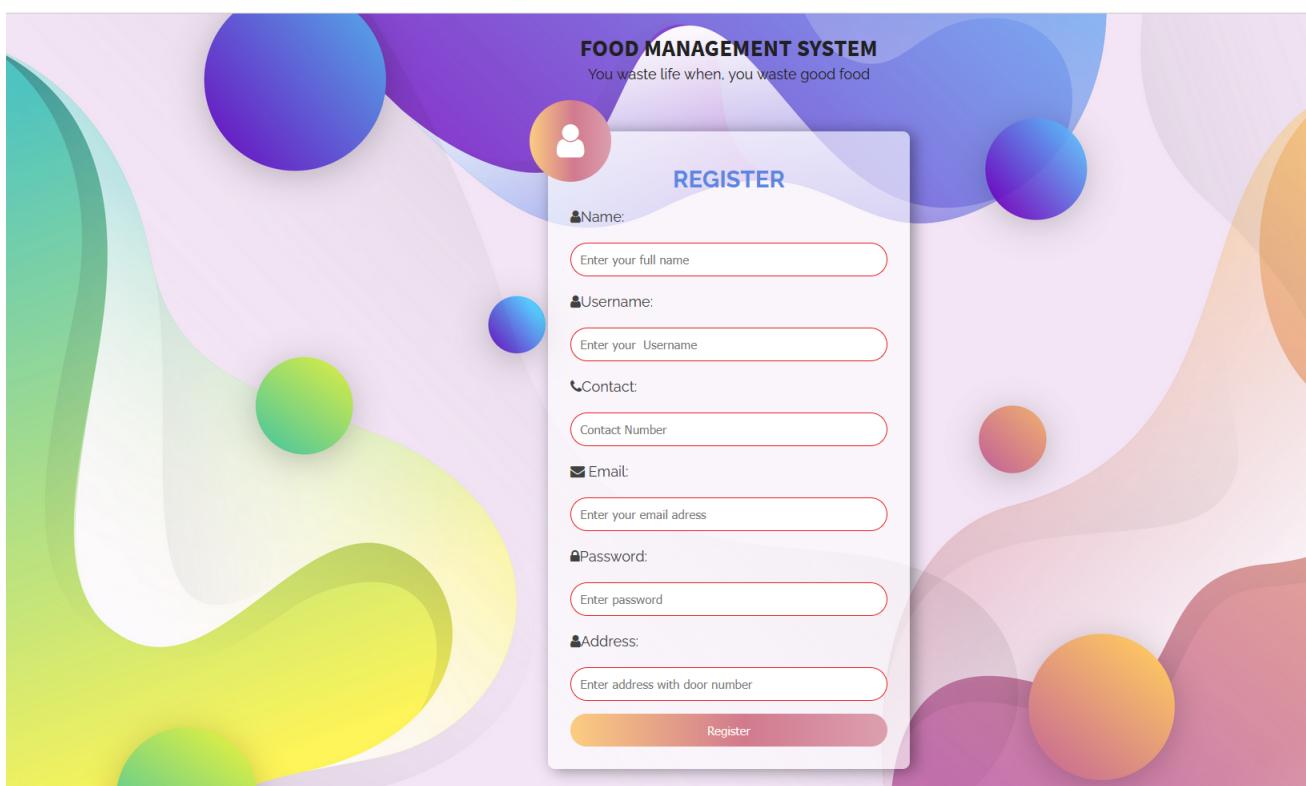


Figure 6.6: Registration page

### 6.3 Registration and Login Module

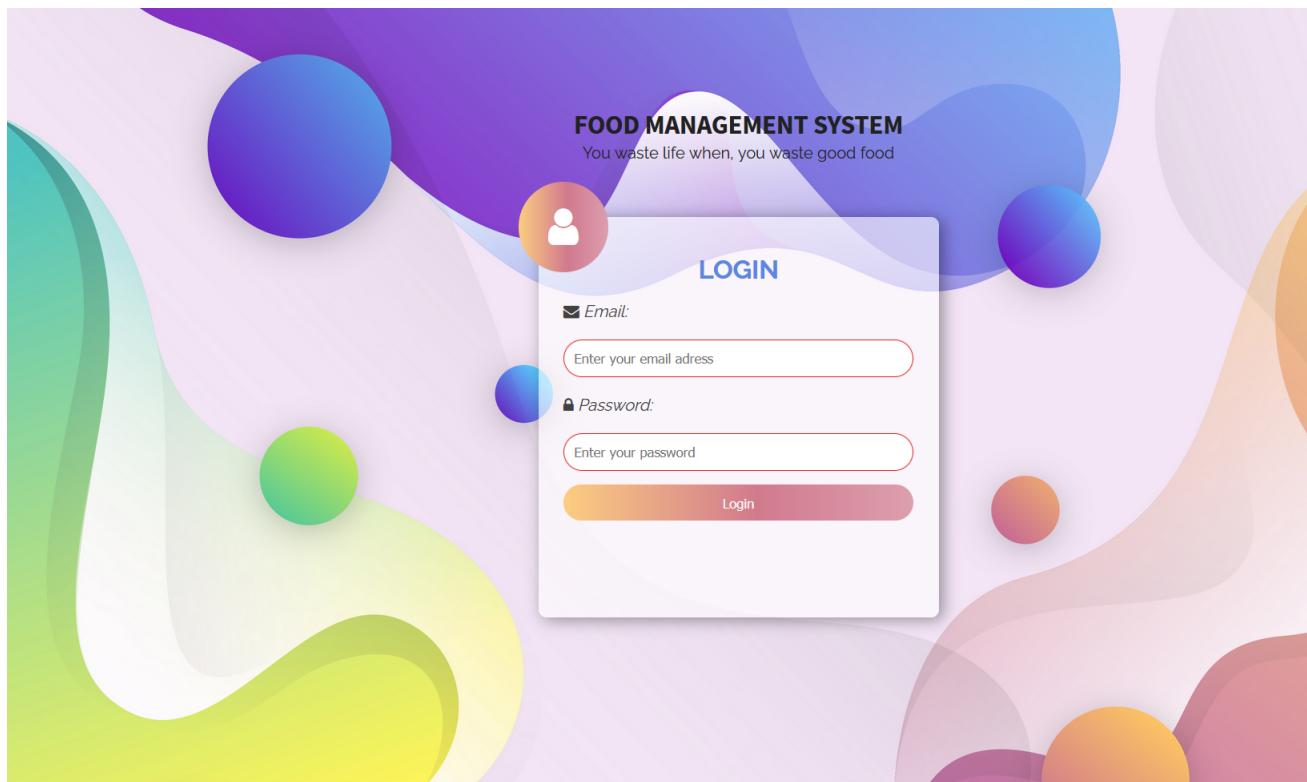


Figure 6.7: Login page

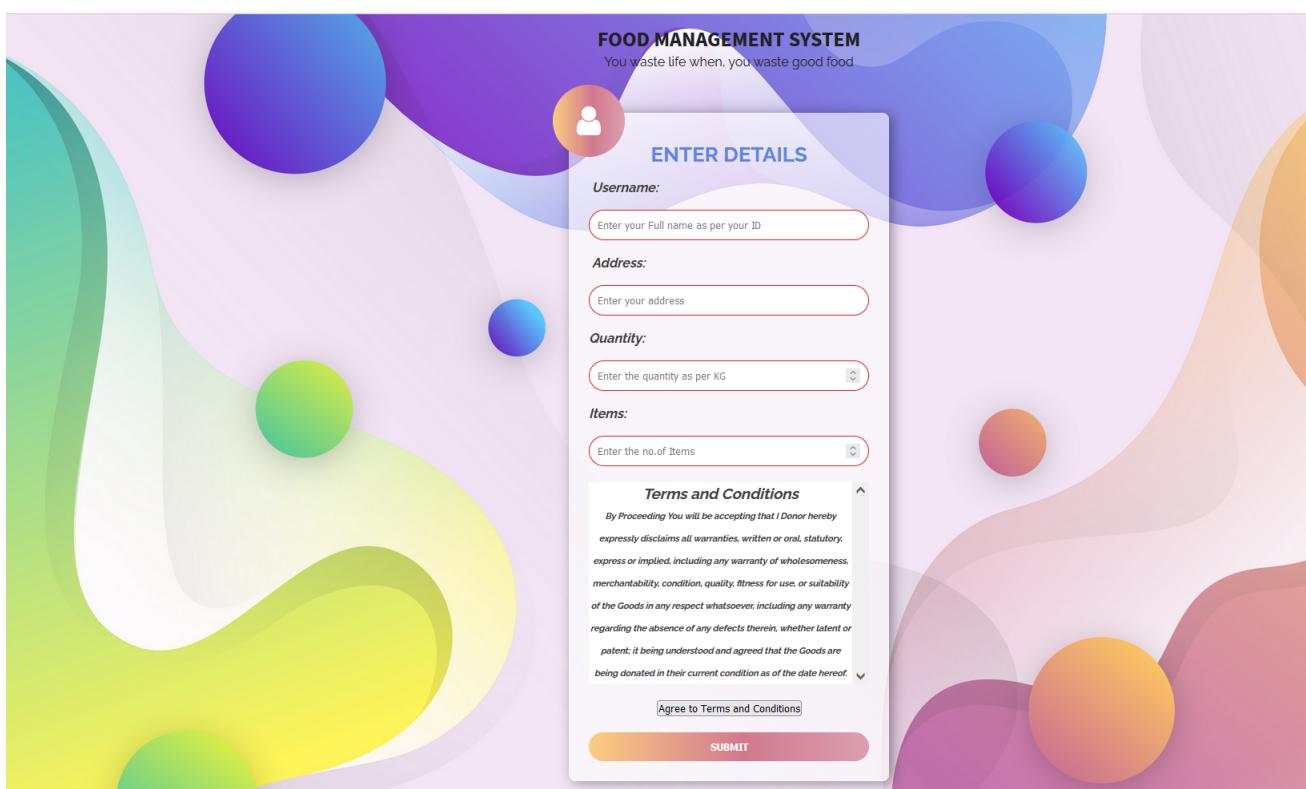


Figure 6.8: Food details page

## 6.4 Database

**Table structure**

#	Name	Type	Collation	Attributes	Null	Default	Comments	Extra	Action
1	SNo	int(11)			No	None		AUTO_INCREMENT	<a href="#">Change</a> <a href="#">Drop</a> <a href="#">More</a>
2	Name	char(50)	utf8mb4_general_ci		No	None			<a href="#">Change</a> <a href="#">Drop</a> <a href="#">More</a>
3	Username	varchar(50)	utf8mb4_general_ci		Yes	NULL			<a href="#">Change</a> <a href="#">Drop</a> <a href="#">More</a>
4	Email	varchar(50)	utf8mb4_general_ci		No	None			<a href="#">Change</a> <a href="#">Drop</a> <a href="#">More</a>
5	Phone_no	bigint(12)			No	None			<a href="#">Change</a> <a href="#">Drop</a> <a href="#">More</a>
6	Password	varchar(11)	utf8mb4_general_ci		No	None			<a href="#">Change</a> <a href="#">Drop</a> <a href="#">More</a>
7	Address	varchar(80)	utf8mb4_general_ci		No	None			<a href="#">Change</a> <a href="#">Drop</a> <a href="#">More</a>

**Indexes**

Action	Keyname	Type	Unique	Packed	Column	Cardinality	Collation	Null	Comment
<a href="#">Edit</a> <a href="#">Rename</a> <a href="#">Drop</a>	SNo	BTREE	Yes	No	SNo	2	A	No	
<a href="#">Edit</a> <a href="#">Rename</a> <a href="#">Drop</a>	email	BTREE	Yes	No	Email	2	A	No	
<a href="#">Edit</a> <a href="#">Rename</a> <a href="#">Drop</a>	mobile	BTREE	Yes	No	Phone_no	2	A	No	
<a href="#">Edit</a> <a href="#">Rename</a> <a href="#">Drop</a>	Username	BTREE	Yes	No	Username	2	A	Yes	

Figure 6.9: Registration database

**Table structure**

#	Name	Type	Collation	Attributes	Null	Default	Comments	Extra	Action
1	SNO	int(11)			No	None		AUTO_INCREMENT	<a href="#">Change</a> <a href="#">Drop</a> <a href="#">More</a>
2	Username	varchar(50)	utf8mb4_general_ci		Yes	NULL			<a href="#">Change</a> <a href="#">Drop</a> <a href="#">More</a>
3	Address	varchar(1000)	utf8mb4_general_ci		No	None			<a href="#">Change</a> <a href="#">Drop</a> <a href="#">More</a>
4	Quantity	int(10)			No	None			<a href="#">Change</a> <a href="#">Drop</a> <a href="#">More</a>
5	Items	int(10)			No	None			<a href="#">Change</a> <a href="#">Drop</a> <a href="#">More</a>

**Indexes**

Action	Keyname	Type	Unique	Packed	Column	Cardinality	Collation	Null	Comment
<a href="#">Edit</a> <a href="#">Rename</a> <a href="#">Drop</a>	SNO	PRIMARY	BTREE	Yes	No	SNO	1	A	No

**Partitions**

No partitioning defined!

Figure 6.10: Donor details table

The screenshot shows the phpMyAdmin interface for a MySQL database named 'project'. The left sidebar lists databases: 'New', 'information\_schema', 'mysql', 'performance\_schema', 'phpmyadmin', 'project' (selected), and 'test'. The 'Structure' tab is active for the 'fooddetails' table under the 'project' database. The table structure is as follows:

#	Name	Type	Collation	Attributes	Null	Default	Comments	Extra	Action
1	SNo	int(11)	utf8mb4_general_ci		No	None	AUTO_INCREMENT		<a href="#">Change</a> <a href="#">Drop</a> <a href="#">More</a>
2	Name	char(50)	utf8mb4_general_ci		No	None			<a href="#">Change</a> <a href="#">Drop</a> <a href="#">More</a>
3	Phone_no	bigint(12)	utf8mb4_general_ci		No	None			<a href="#">Change</a> <a href="#">Drop</a> <a href="#">More</a>
4	Email	varchar(50)	utf8mb4_general_ci		No	None			<a href="#">Change</a> <a href="#">Drop</a> <a href="#">More</a>
5	Password	varchar(80)	utf8mb4_general_ci		No	None			<a href="#">Change</a> <a href="#">Drop</a> <a href="#">More</a>
6	Address	varchar(100)	utf8mb4_general_ci		No	None			<a href="#">Change</a> <a href="#">Drop</a> <a href="#">More</a>

Below the table structure, there are buttons for 'Print', 'Propose table structure', 'Track table', 'Move columns', 'Normalize', 'Add 1 column(s)', and 'Indexes'.

Figure 6.11: Food details table

# **CONCLUSION**

The website is designed in such a way that future modifications can be done easily. The following conclusions can be deduced from the development of the project. Automation of the entire system improves the efficiency. It provides a friendly graphical user interface which proves to be better when compared to the existing system. Now-a-days large amount of food is being wasted everyday. Hence there is a need to come up with a solution that can avoid food wastage and can also help to feed the needy. To minimize the problem which are raised today, we have initiated this food waste management system which can assist in collecting the leftover food from hotels, restaurants and functions to distribute for needy people. It gives appropriate access to the NGO's and donors depending on their permissions. NGO's provide effective services for the needy people. System security, data security and reliability are the striking features. The System has adequate scope for modification in future if it is necessary.

# REFERENCES

[1]*https://www.php.net*

[2]*https://www.yourhtmlsource.com*

[3]*https://en.wikipedia.org*

[4]*https://www.w3schools.com*

[5]*https://www.materializecss.com*

[6]*http://tomcat.apache.org*

[7]*https://www.uml.org*

[8]*https://ajprofessionals.googlepages.com*

[9]*https://www.softwaretestinghelp.com*