Daffodil International University

Project Title:

Disaster Relief Management System

Submitted by

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Department of Software Engineering

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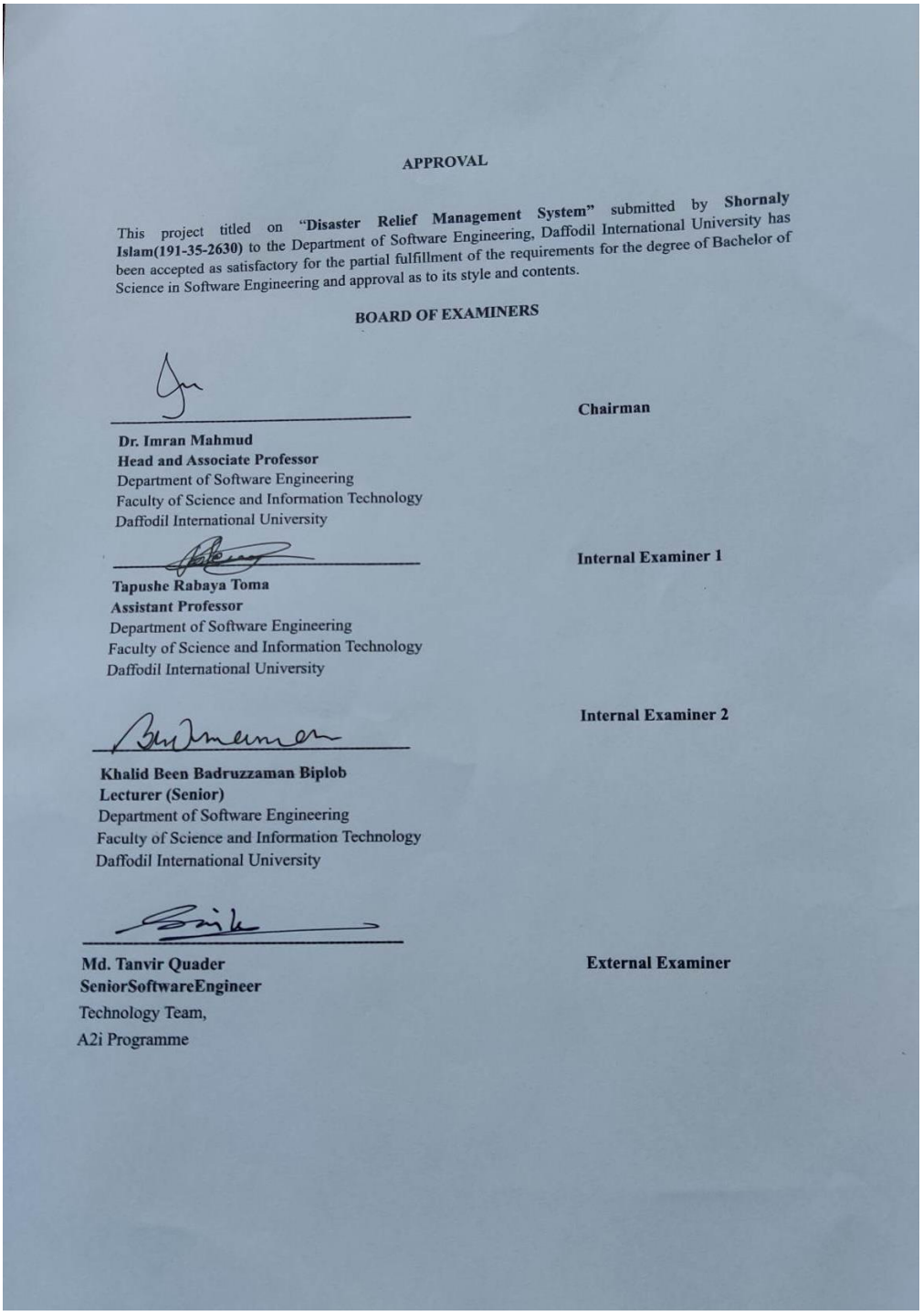
Senior lecturer

Department of Software Engineering

Daffodil International University

The prerequisites for the Bachelor of Science in Software Engineering have been met by the submission of this project report.

Approval



APPROVAL

This project titled on **"Disaster Relief Management System"** submitted by **Shornaly Islam(191-35-2630)** to the Department of Software Engineering, Daffodil International University has been accepted as satisfactory for the partial fulfillment of the requirements for the degree of Bachelor of Science in Software Engineering and approval as to its style and contents.

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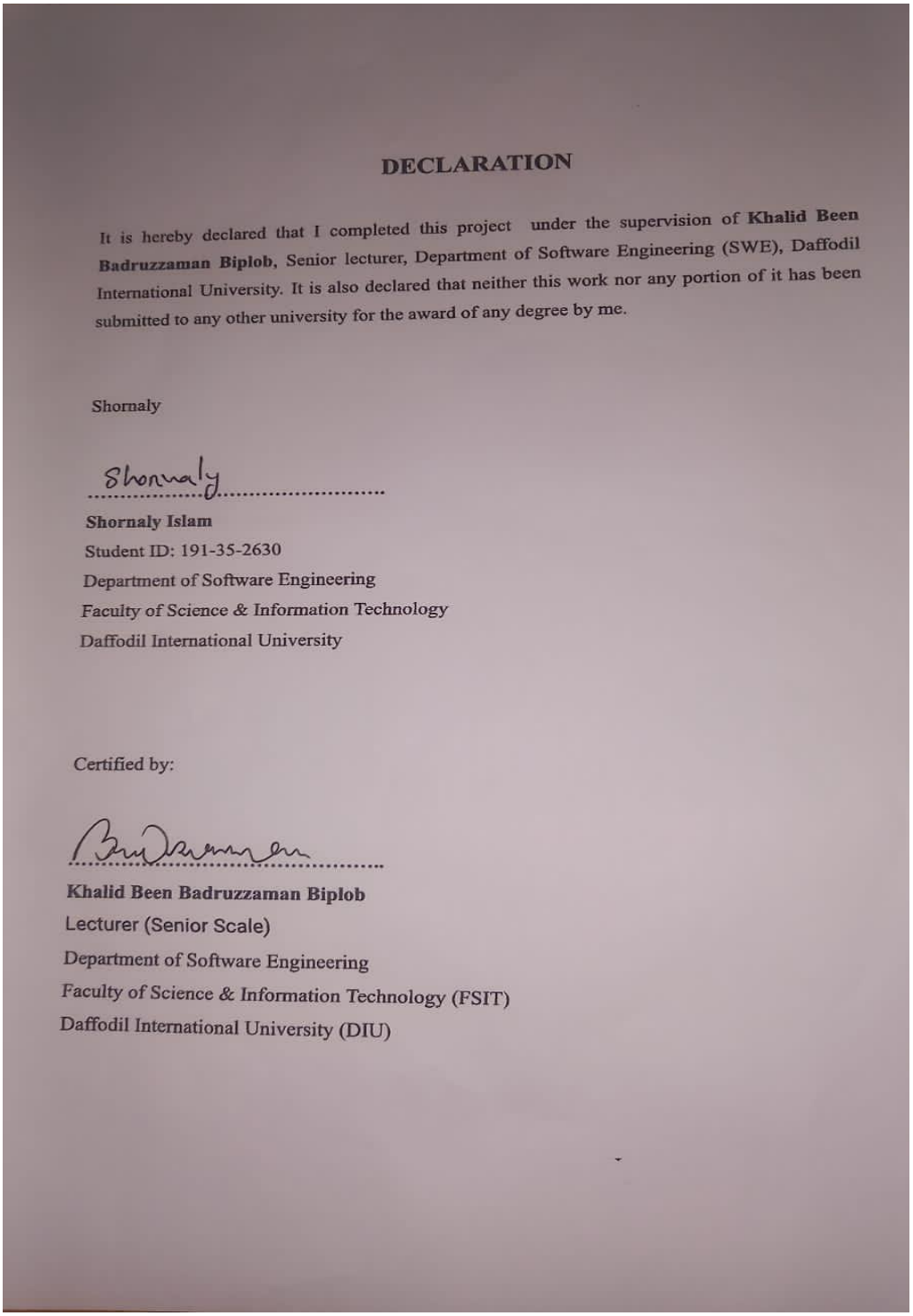
DECLARATION



DECLARATION

It is hereby declared that I completed this project under the supervision of **Khalid Been Badruzzaman Biplob**, Senior lecturer, Department of Software Engineering (SWE), Daffodil International University. It is also declared that neither this work nor any portion of it has been submitted to any other university for the award of any degree by me.

Shornaly

Shornaly

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ACKNOWLEDGEMENT

They must put themselves forward to succeed in the race for survival that exists in today's competitive world. The endeavor serves as a link between academic study and real-world job. This goal is what motivated me to join this unique endeavor. First and foremost, I would want to thank the All-Powerful Allah who has kindly directed me to make the right decisions in life. Without His favor, this endeavor would not have been possible. And my parents, who I owe a great deal to for supporting me and lovingly bringing me to this point.

I feel compelled to discuss the possibility of attending Daffodil International University. The head of the department of software engineering, Prof. Dr. Imran Mahmud, has my deepest gratitude.

I have a special duty to support Daffodil International University, under the constant supervision of Khalid Been Badruzzaman Biplob, by providing the knowledge they need, honoring their initiative, and enlisting their assistance in finishing the project.

Finally, I would want to convey my gratitude to my DIU classmate for their kind assistance and consolation in helping me complete this work.

ABSTRACT

This system will provide services to any natural disaster people in any location. volunteer will provided their service to victim of disaster people. volunteer will share a post where people have been victims of natural disasters. The post will help general people to find disaster area. When general people will want to help victim of natural disaster people to support money, “Disaster Relief Management System” can be used to help support easily.

Table of Contents

CHAPTER 1: INTRODUCTION

1.1 Project overview

The “Disaster Relief Management System” is volunteer service system. This system will provide services to any natural disaster people in any location. volunteer will provided their service to victim of disaster people. In this system common people will help the disaster areas by giving money. Then the volunteer will receive the money. After that they will collect food and booked transport. Using this transport they distribute that food to the unfortunate people in disaster areas.

This system will provide services to the disaster people. Volunteer can share post for their emergency services. General user will see the post and help with money.

1.2 Project Purpose

The purpose of “Disaster Relief Management System” is to help miserable people. Food, money, transport these services are available in this system. The main purpose of this system is volunteer is always active for their services. Those who want to help the people in the disaster area with money can do so through this system.

Functionalities provided by “Disaster Relief Management System”:

- A volunteer service system
- volunteer will provided their service to victim of disaster people.
- General user will help the disaster areas by giving money.

1.3 Background

Based on disaster relief management system I want to create a user friendly system. Where both the volunteer and user have the authority to choose their services. I made an effort to develop a complete system that will be trustworthy, safe, and most importantly, user-friendly.

1.4 Benefits and Beneficiaries

This system will helpful for the persons who are in disaster areas, the volunteer of this system will help miserable people by provide food and money. Through this system, ordinary people can help disaster-prone people by giving money at home.

1.5 Stakeholders

A stakeholder is a person who has the potential to influence or be affected by a project, plan, or organization. They can be senior or junior level, internal or external, and at either level. I have volunteers, suppliers and general users as the stakeholders of this system.

- o Volunteers
- o Suppliers
- o General users

1.6 Proposed System Model

I designed this model to create a user friendly interface in this system. I build this model to visualize and control the system architecture.

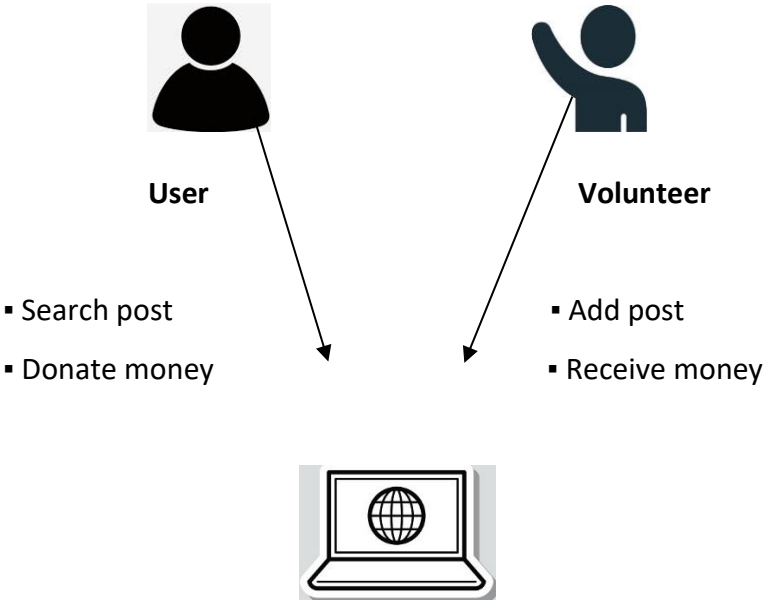


Figure 1.1: Proposed System Model

1.7 Modules of Service Assistant

- Login module: used for user authentication
- Registration module: used for managing users of the system
- Service module: used for service related functions
- Volunteer module: used for managing the information and details of the disaster area.

1.8 Project Schedule

I must prepare a schedule quickly if I want to complete the assignment on time. It also means to communicate about tasks that must be completed quickly.

1.8.1 Gantt Chart

activities	W1	W2	W3	W4	W5	W6	W7	W8	W9	W10	W11	W12
Market Research												
Specifications												
Planning												
Design												
Development												
Testing												
Assessment												
Documentation												

Table 1.1: Gantt Chart

1.8.2 Release plan and Milestone

The release plan and milestones are given below:

Activities	Duration in week	Total week
Research	W1, W2	2
Specifications	W2, W3, W4	3
Planning	W3, W4	2
Design	W4, W5	2
Development	W4, W5, W6, W7	4
Testing	W7, W8	2
Assessment	W9, W10	2
Documentation	W10, W11, W12	3
Software release	W12	1

Table 1.2: Release Plan

1.9 Objective

This project's primary goal is to provide food and cash to those affected by disasters. This is a system of volunteer service.

• Practically speaking, the program needs to be dependable and manageable for users of average intellect.

• Efficiency: This refers to the output's accuracy, timeliness, and thoroughness.

• Cost: As long as the system satisfies all the objectives, it is preferable to aim for a system with a minimal cost.

• Portability: The web application needs to run in all settings.

• Security: This crucial component of design addresses issues with data's physical security. A login feature that allows a username and password for the administrator and user could provide this. Thus, it 100% effectively and simply simplifies administrative work.

CHAPTER 2: REQUIREMENT ENGINEERING

2.1 Functional Requirements

A system or a component is defined by its functional needs. What "should the system do?" is specified. The user determines the necessary functionality. You must comply with these conditions. The use case includes it.

The functional requirements of “Disaster Relief Management System” are:

- Registration
- Log in
- View site
- Food booking
- Add food item
- Food distribution
- Transport booking
- Transport supplying
- Donate

2.2 Non-functional Requirements

Non-functional requirements specify a system's quality attribute. "How should the system fulfill the functional requirements?" is specified. Technical experts or software developers specify non-functional requirements. You must comply with these conditions. It is recorded as a characteristic of quality.

The non-functional requirements of “Disaster Relief Management System” are:

- Compliance
- Documentation
- Privacy
- Quality
- Stability
- Authority
- Response time
- Reliability

CHAPTER 3: SYSTEM ANALYSIS, DESIGN & SPECIFICATION

3.1 Development Model

We used the Iterative Enhancement Model to construct the "Disaster Relief Management System" project. This concept eliminates the flaw in the waterfall model.

When a project consists of numerous distinct components that run independently of one another, these models perform exceptionally well. Iterative enhancement and fast application are the two models included in incremental process models.

With the exception of allowing multiple design iterations, the iterative enhancement methodology is similar to the waterfall model. Each cycle ends with the launching of a new product. The next cycle is influenced by the lessons learned.

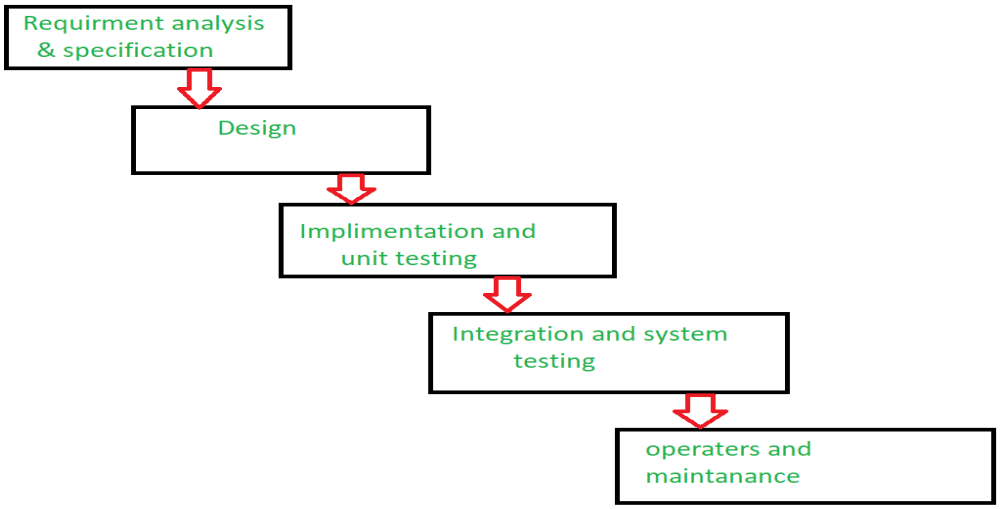


Figure 3.1: Iterative Enhancement Model

3.2 Use Case Diagram

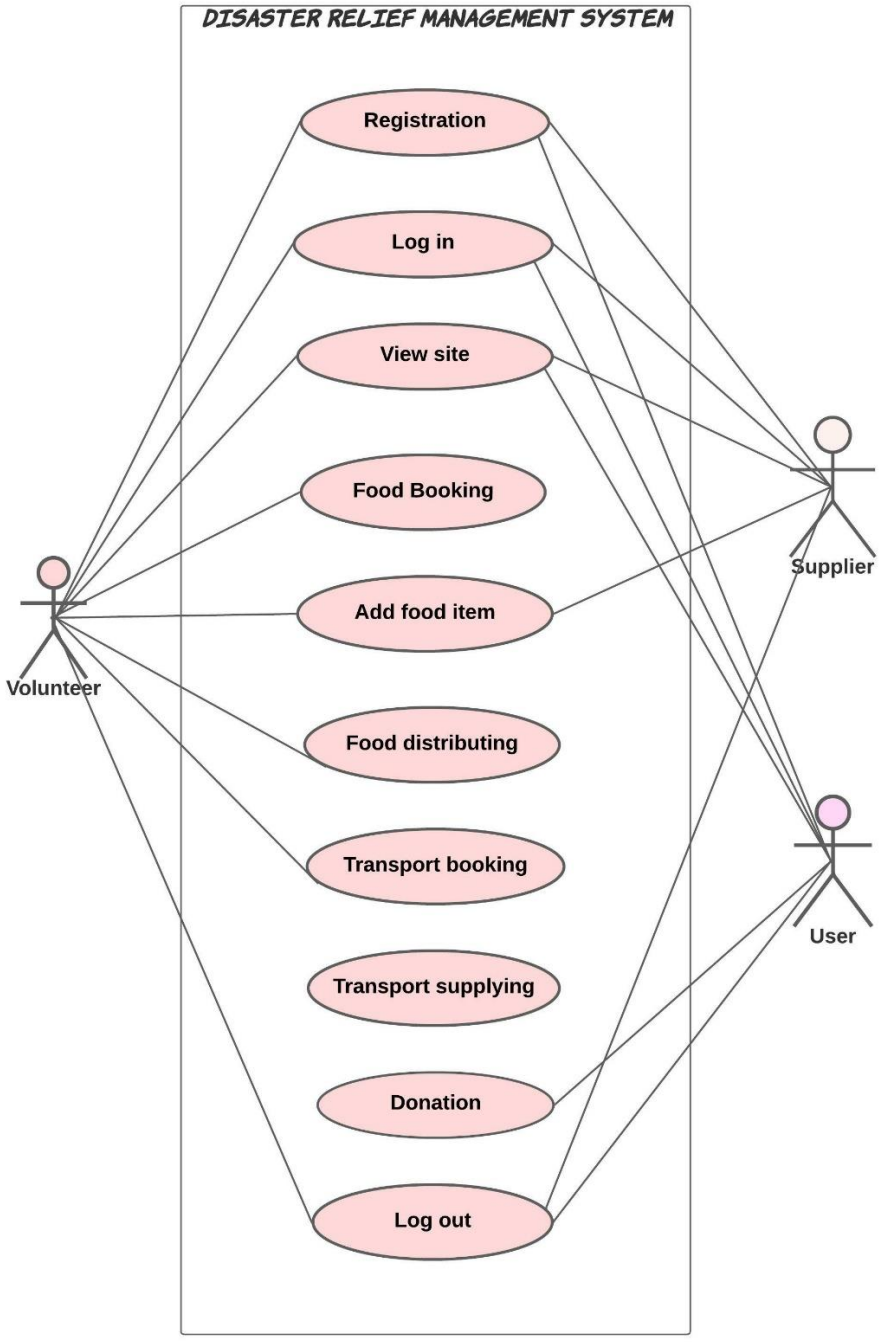


Figure 3.2: Use case diagram for Disaster Relief Management System

Use Case description

3.2.1 Registration

Description	This system offers a registration form so that users, volunteers, and suppliers can sign up.

3.2.2 Login

Description	To sign up or log in to the Disaster Relief Management System, utilize this module.

3.2.3 View Site

Description	To view the disaster post, utilize this module.

3.2.4 Food Booking

Description	This is used for booked food by the volunteer.

3.2.5 Add Food Item

Description	This is used to add more food item for the disaster people.

3.2.6 Food Distributing

Description	This module is used to distribute the food in disaster area.

3.2.7 Transport Booking

Description	This is used to booked transport by the volunteer to visit disaster area.

3.2.8 Transport Supply

Description	This module is to supply transport.

3.2.9 Donation

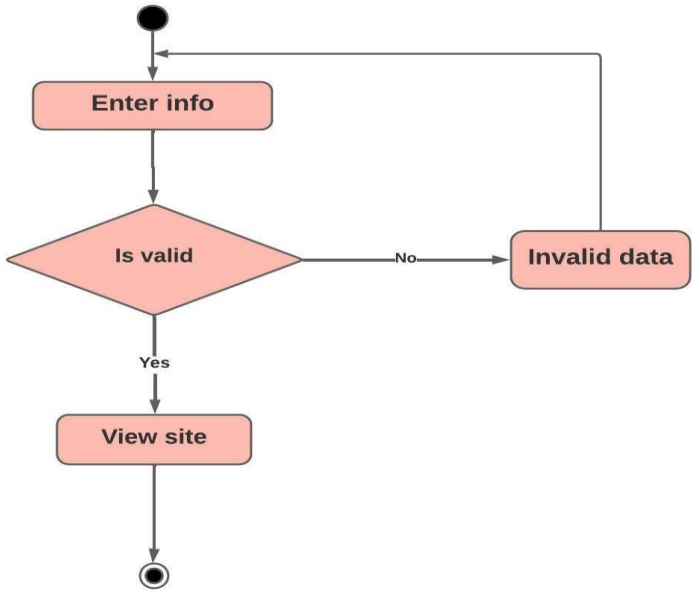
Description	This module is used to donate money to miserable people.

3.2.9 Log Out

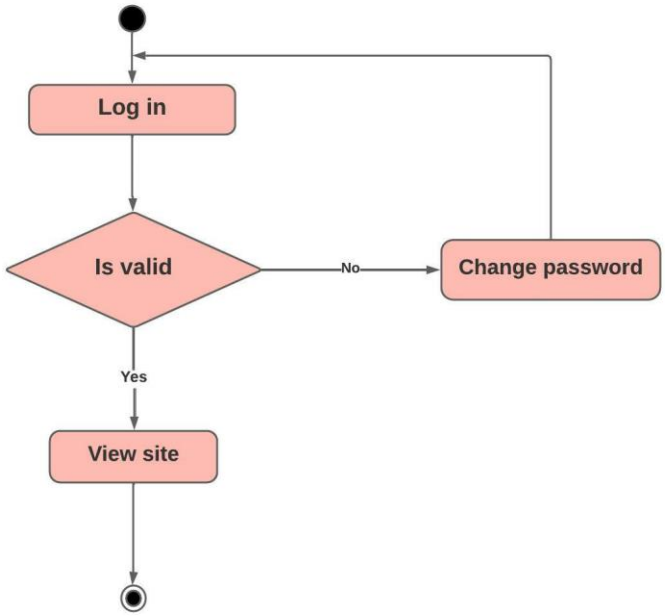
Description	This module is used to logout and exit the application.

3.3 Activity Diagram

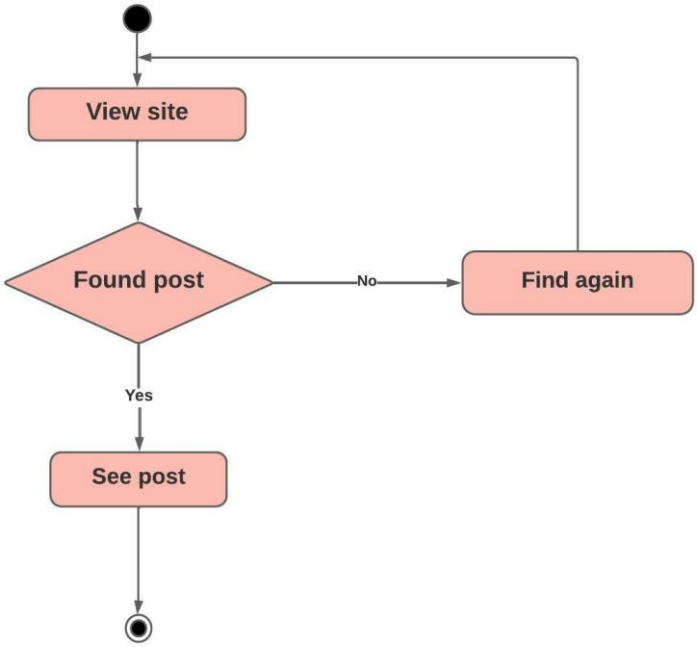
Registration



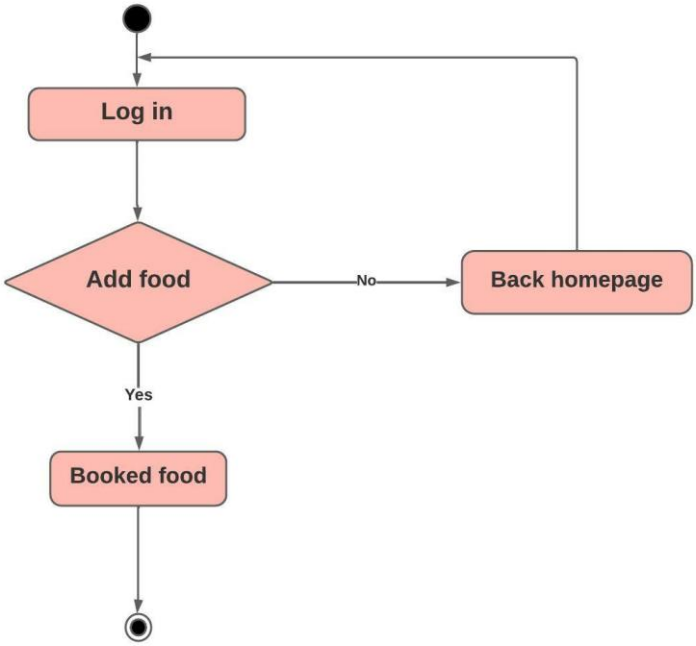
Login



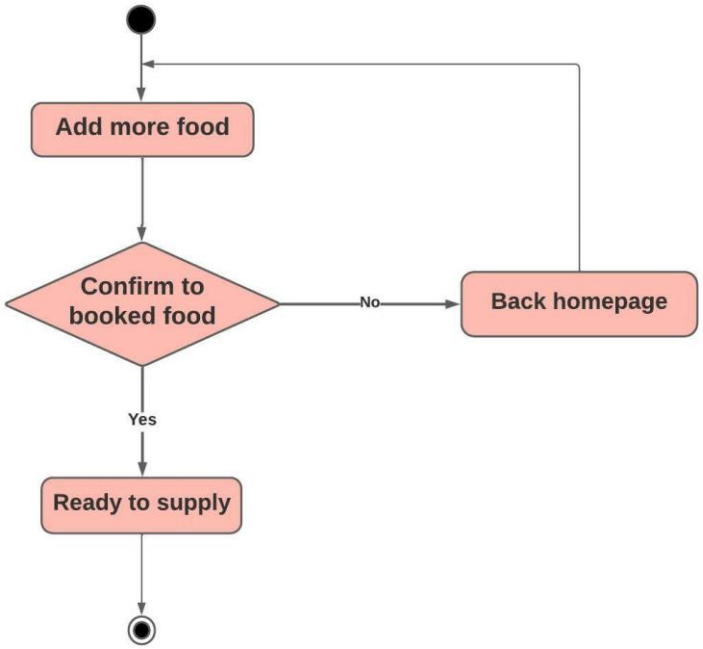
View site



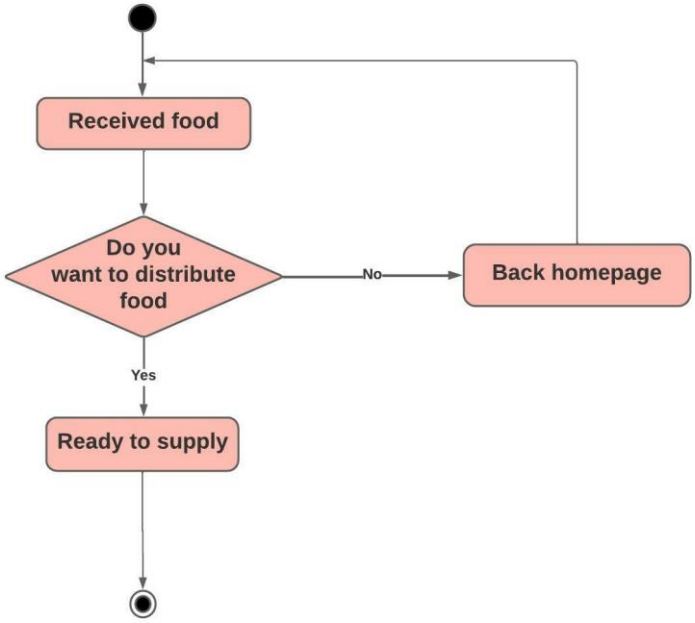
Food Booking



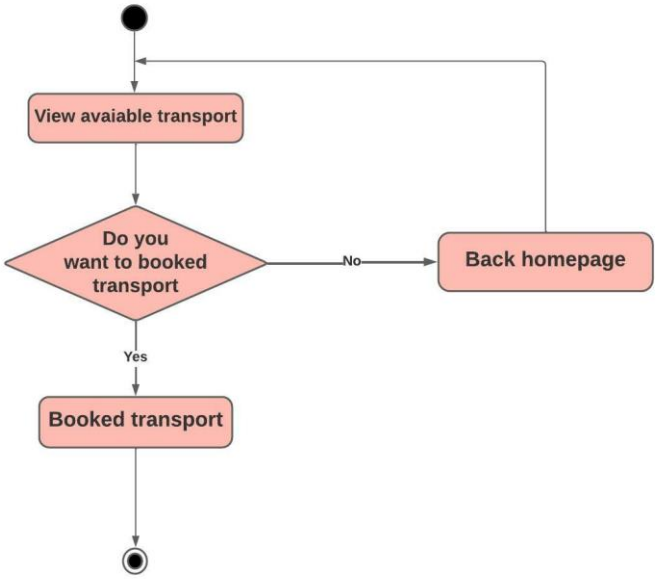
Add food item



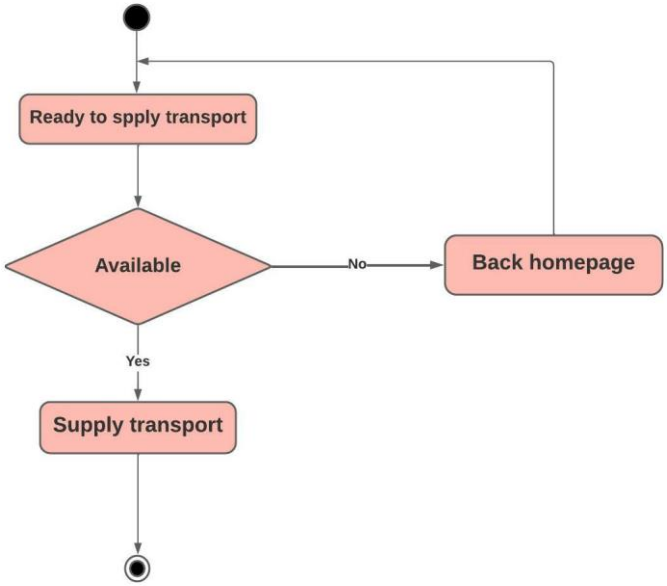
Food distribution



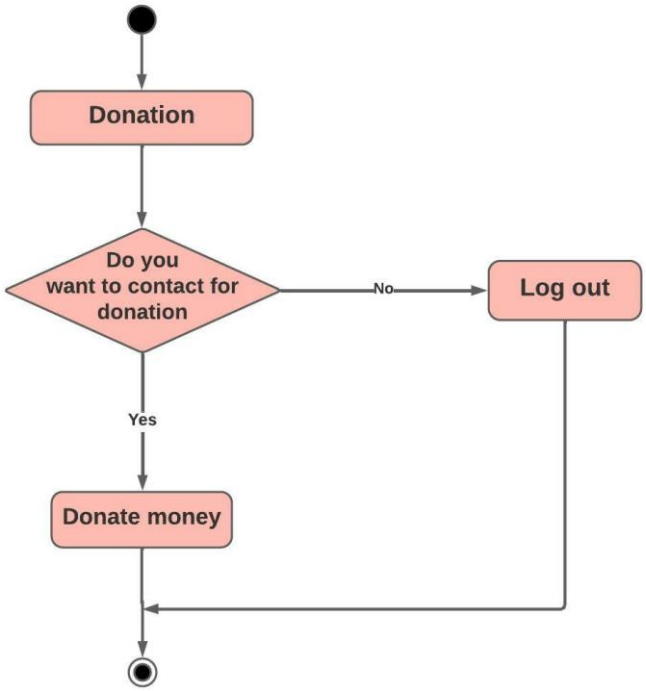
Transport booking



Transport supply

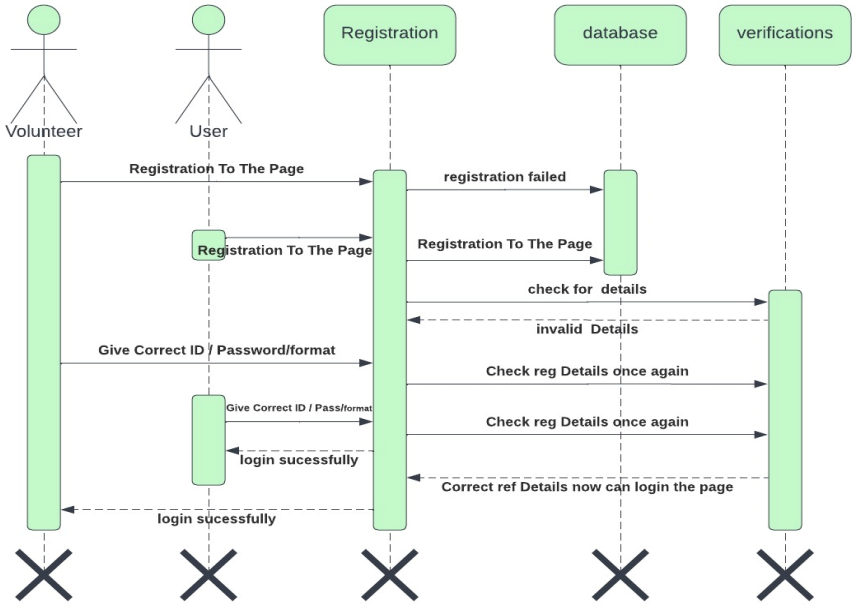


Donation

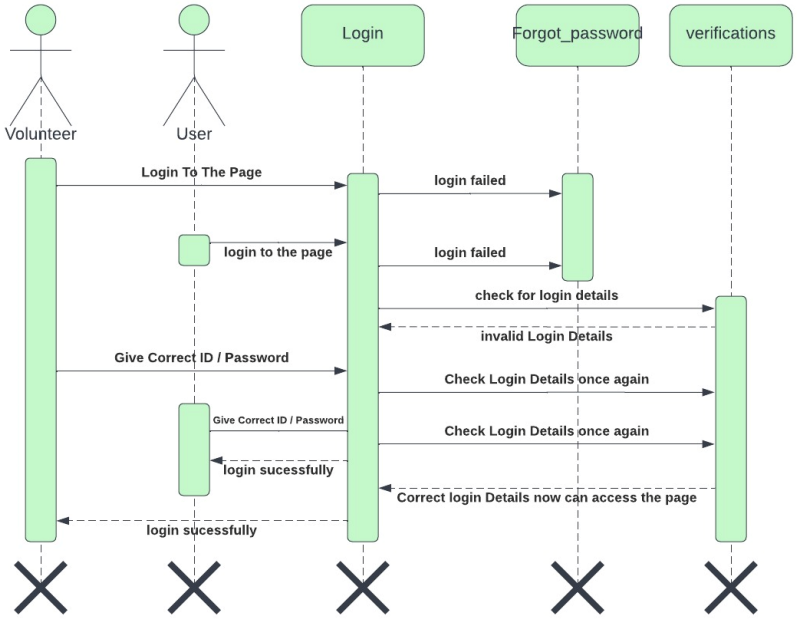

Donation
Do you want to contact for donation
No
Log out
Yes
Donate money

3.4 Sequence Diagram

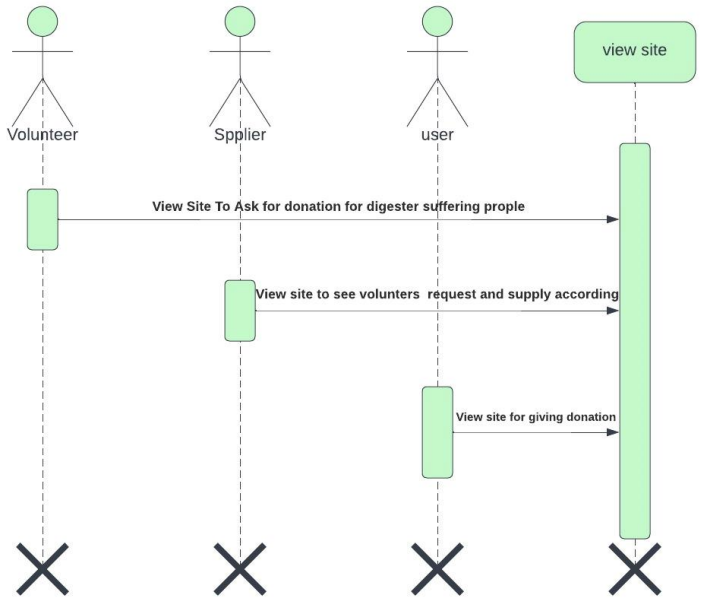
Registration



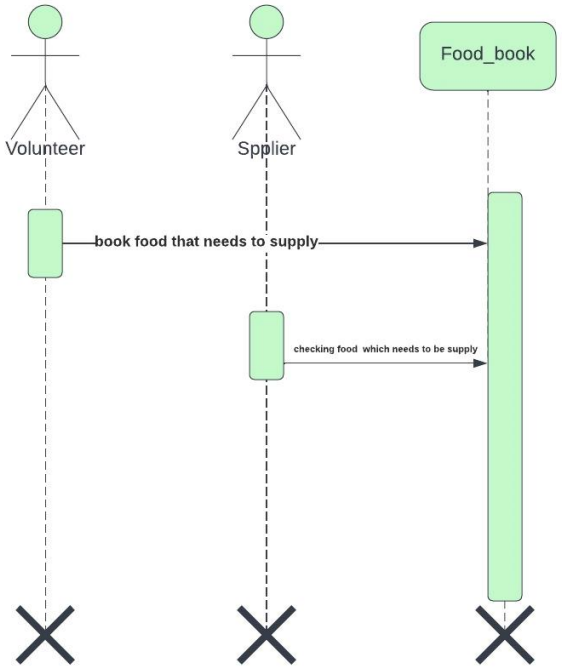
Login



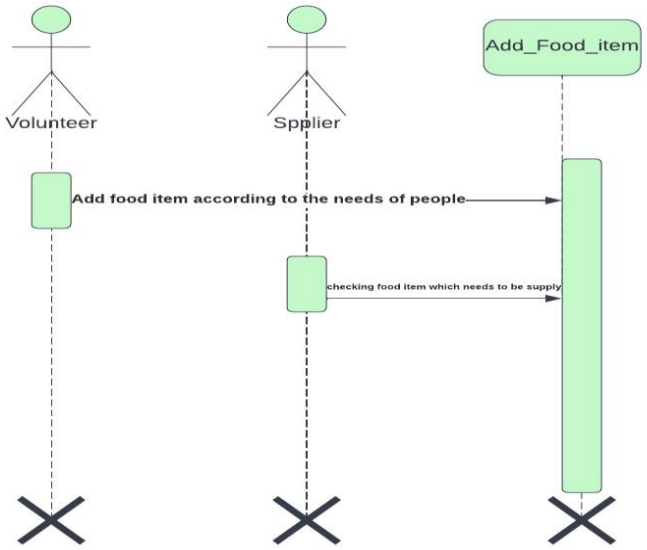
View site



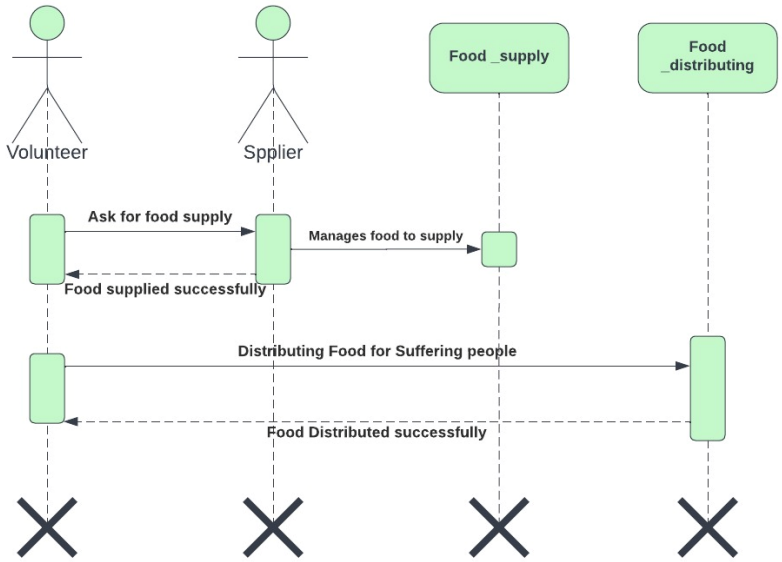
Food booking



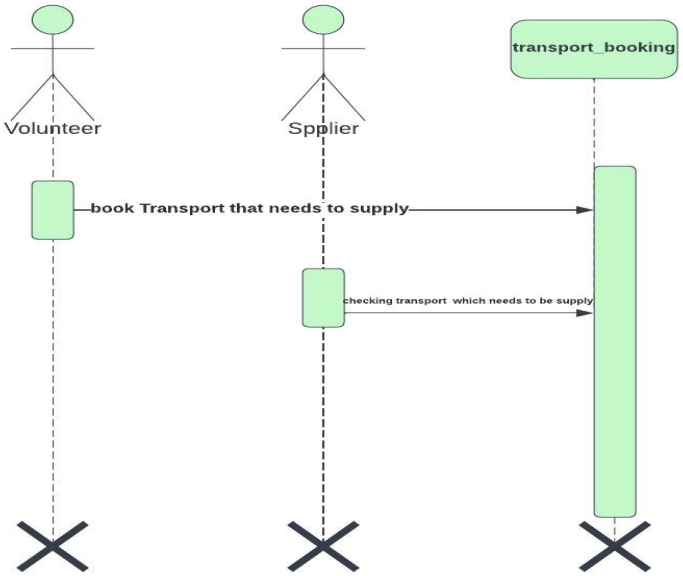
Add food item



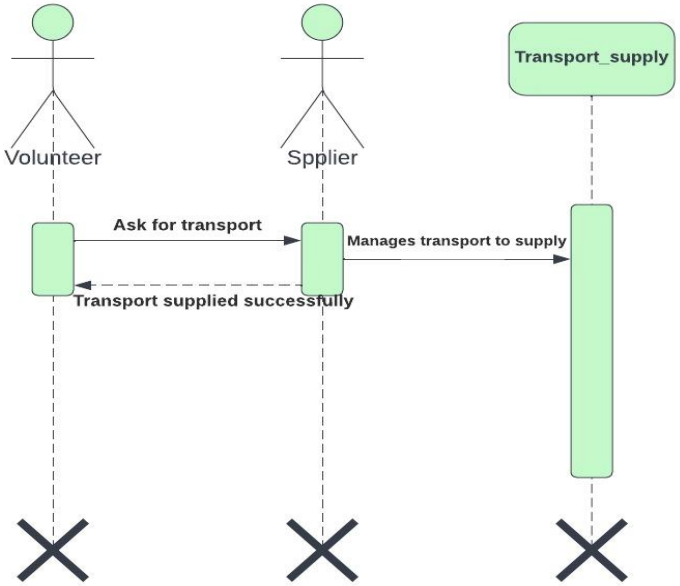
Food distribution



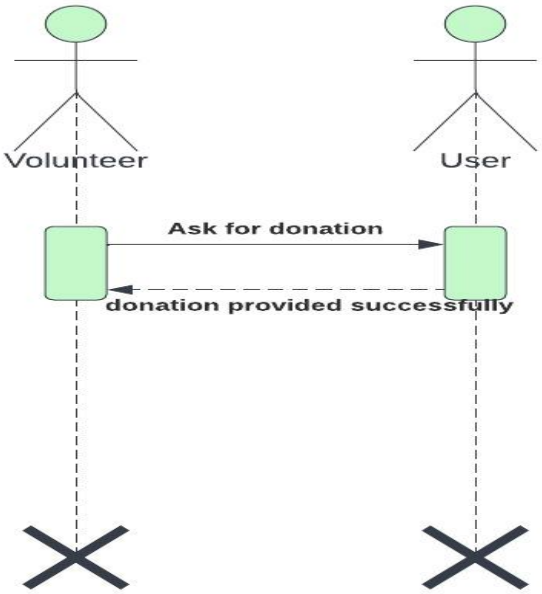
Transport booking



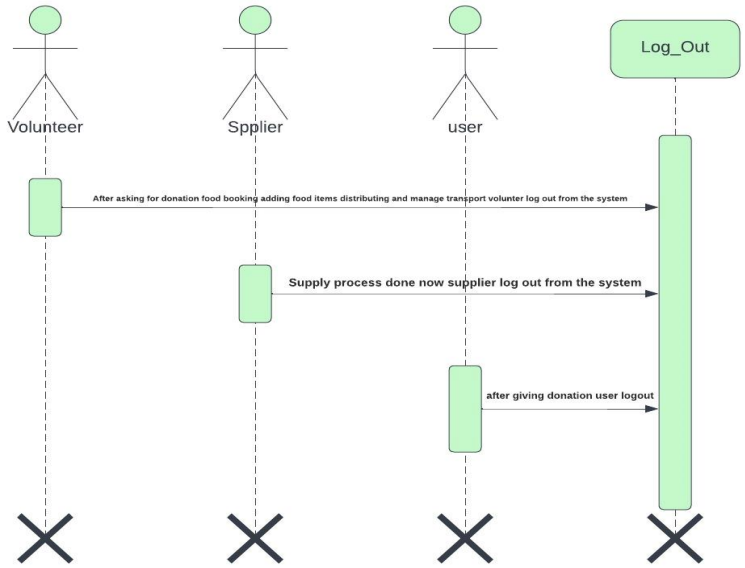
Transport supply



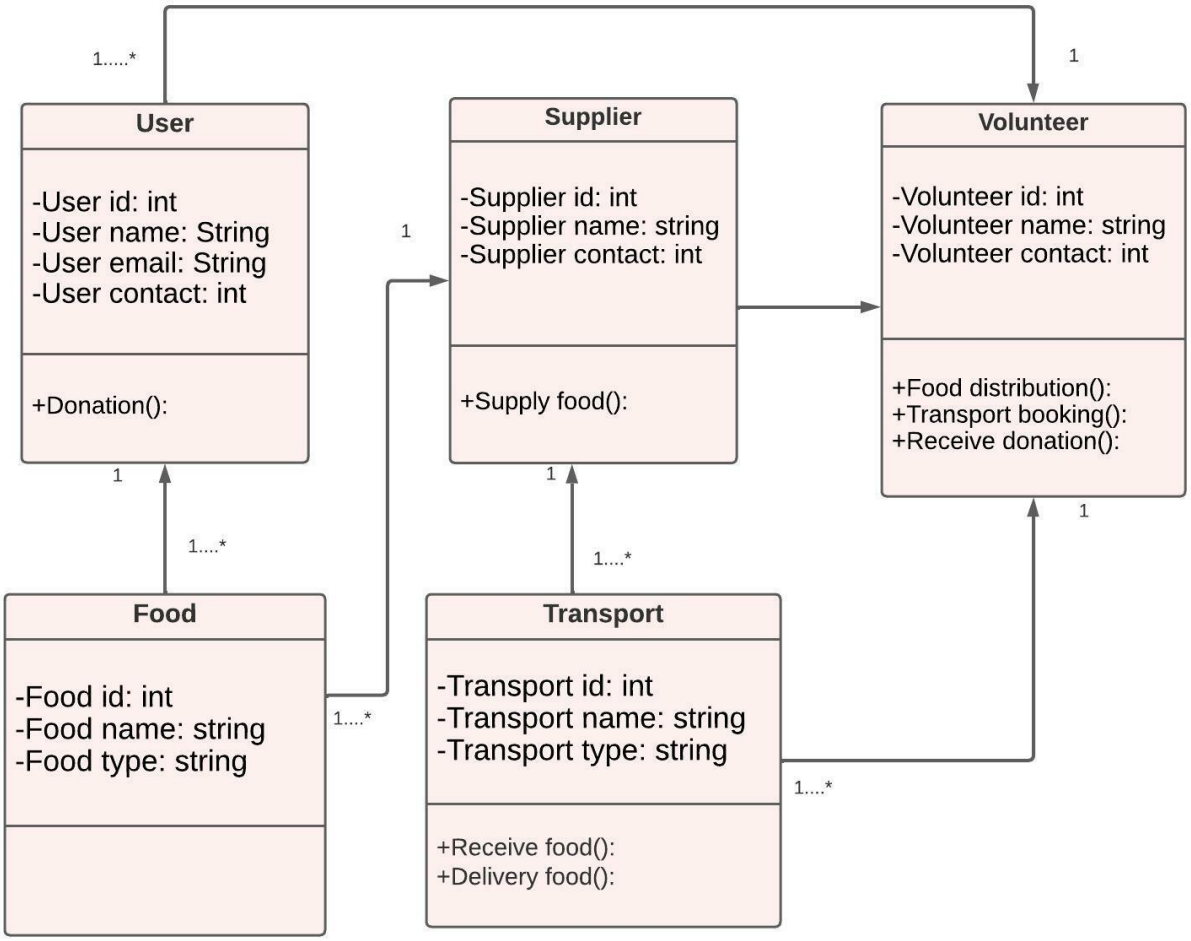
Donation



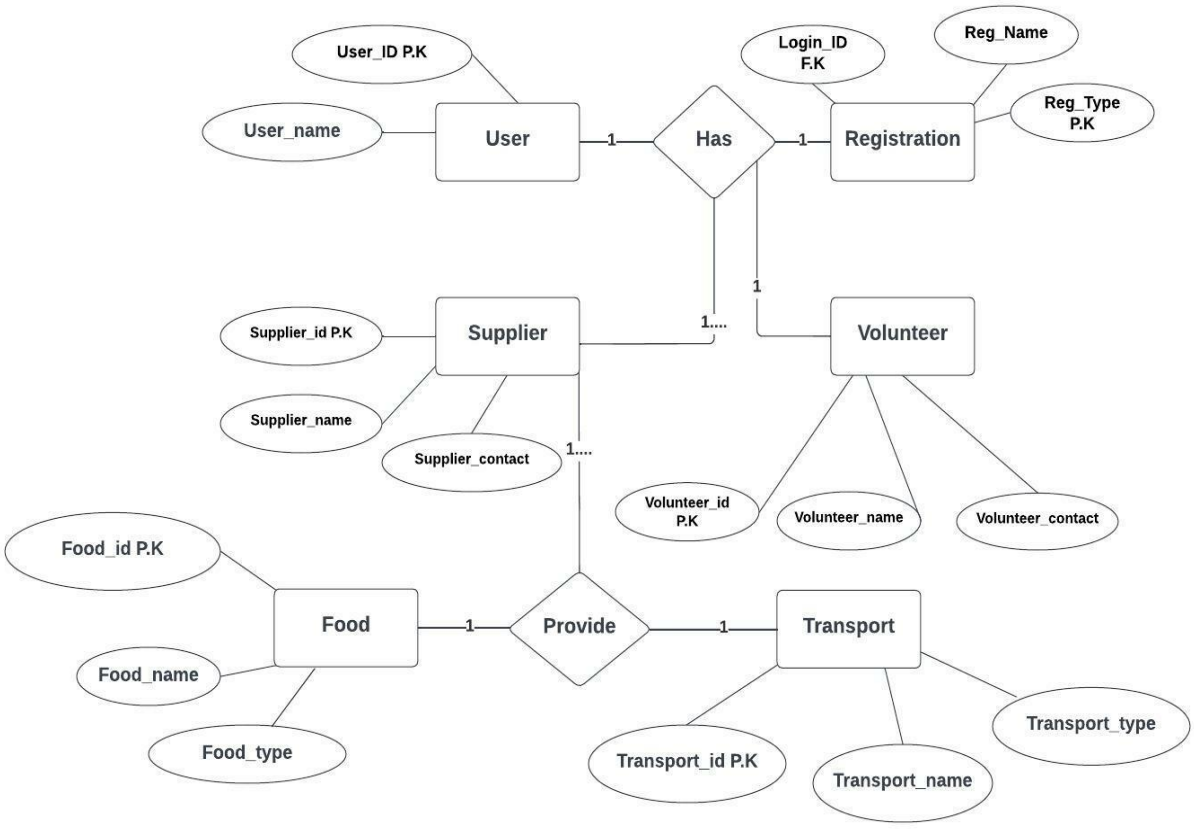
Logout



3.5 Class Diagram



3.6 Entity Relationship Diagram



CHAPTER 4: SYSTEM TESTING

4.1 Feature Testing

Testing new features is thought of as adding to and changing the existing feature system. The most recent system will bring new system features here. These are intended to increase the web application's effectiveness, reliability, efficiency, and security.

4.1.1 Features to be tested

Features	**Priority**	**Description**
Log in	1	The administrator must verify the user's identity.
Log out	3	After logging out, the session needs to be ended.
Registration	2	User data must be appropriately stored.
Change Password	2	When necessary, users can update their passwords.

Figure 4.1: Features priority table

4.2 Test Strategies

4.2.1 Test approach

To make sure that my system is of high quality, I employed two different kinds of testing. I mainly concentrated on structural and functional testing.

Black box testing, also known as functional testing, is testing that ignores a system's or component's underlying workings and instead focuses entirely on the outputs produced in response to chosen inputs and execution circumstances.

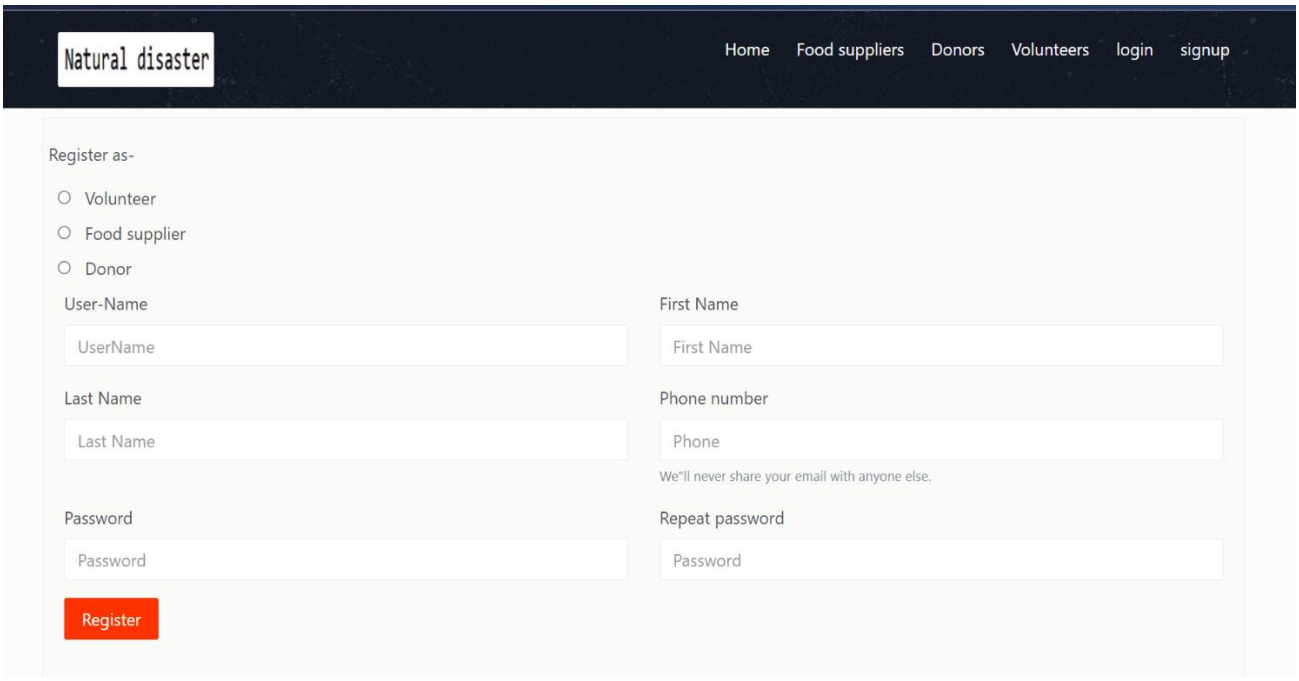
Testing that takes into account a system or component's internal workings is known as "white-box testing," also referred to as "structural testing" and "glass box testing."

4.2.2 Testing Schedule

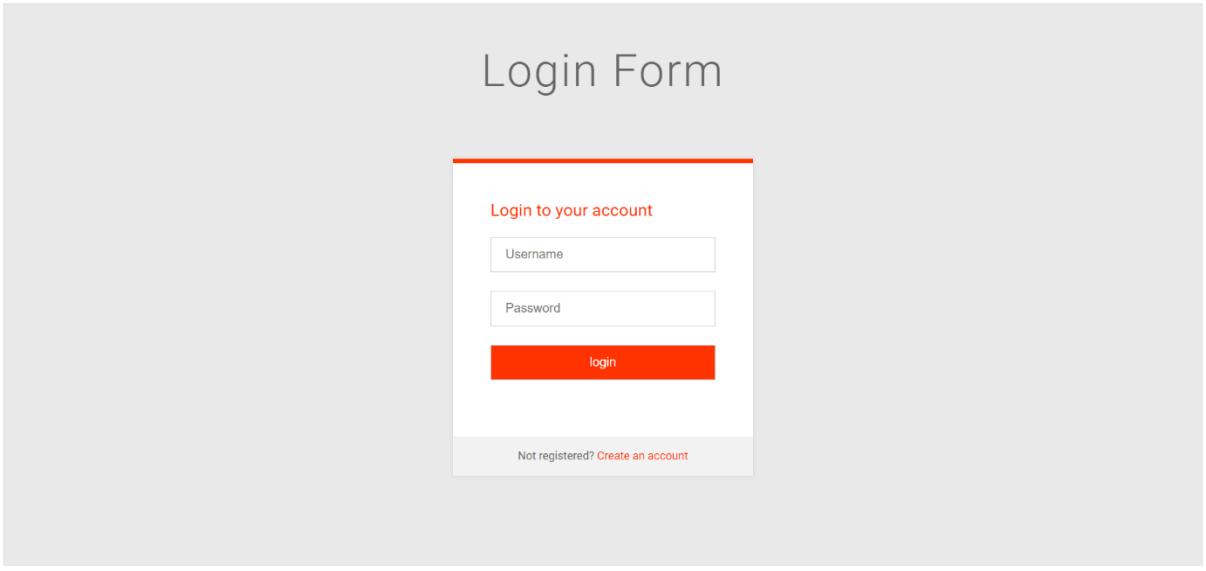
Test Phase	Time
Testing plan create	1 Week
Unit testing	During development time
Component test	During development time
Testing user interfaces	1 Week
Performance testing	1 Week
Accessibility testing	1 Week

CHAPTER 5: USER MANUAL

5.1 Registration

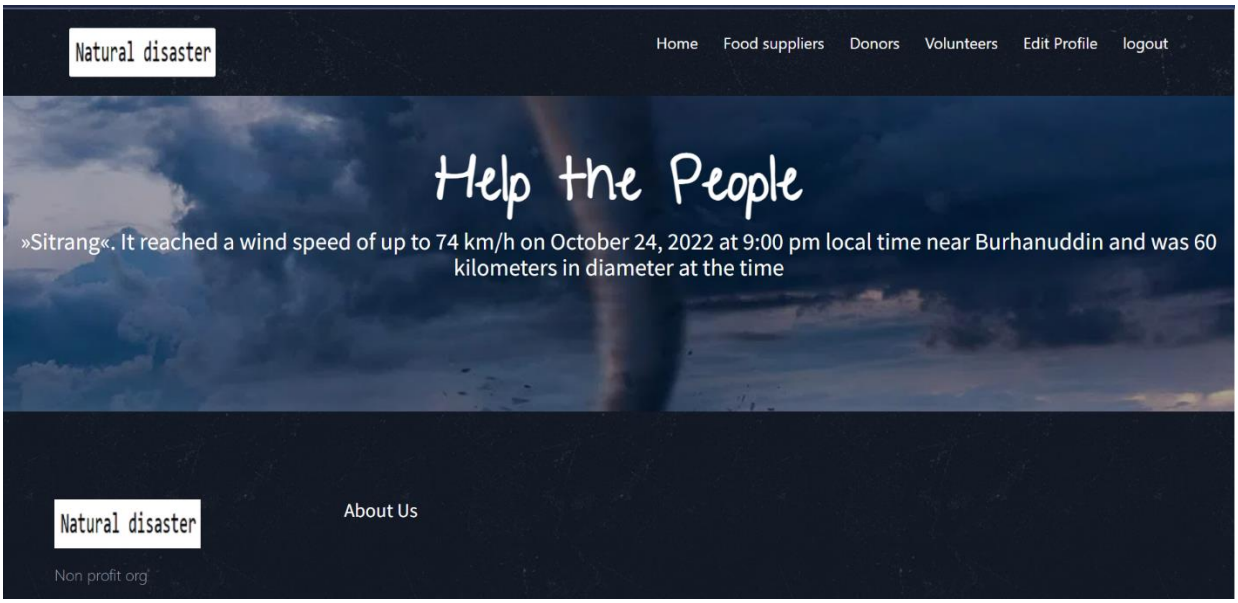


5.2 Login

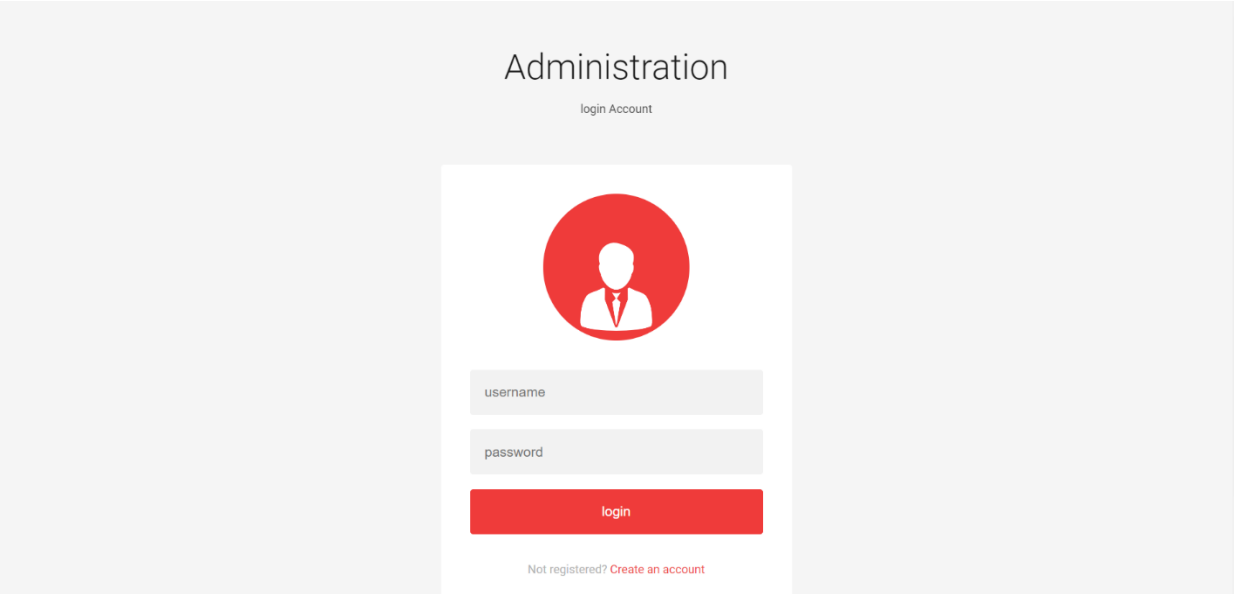


5.3 Home page1

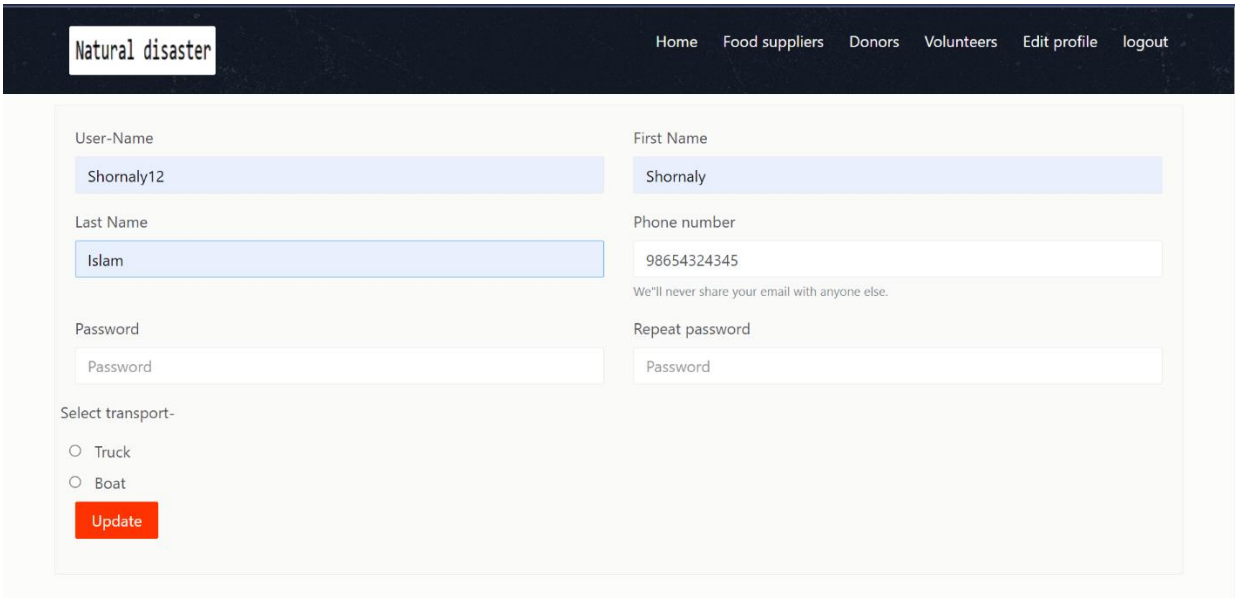
5.4 Homepage2



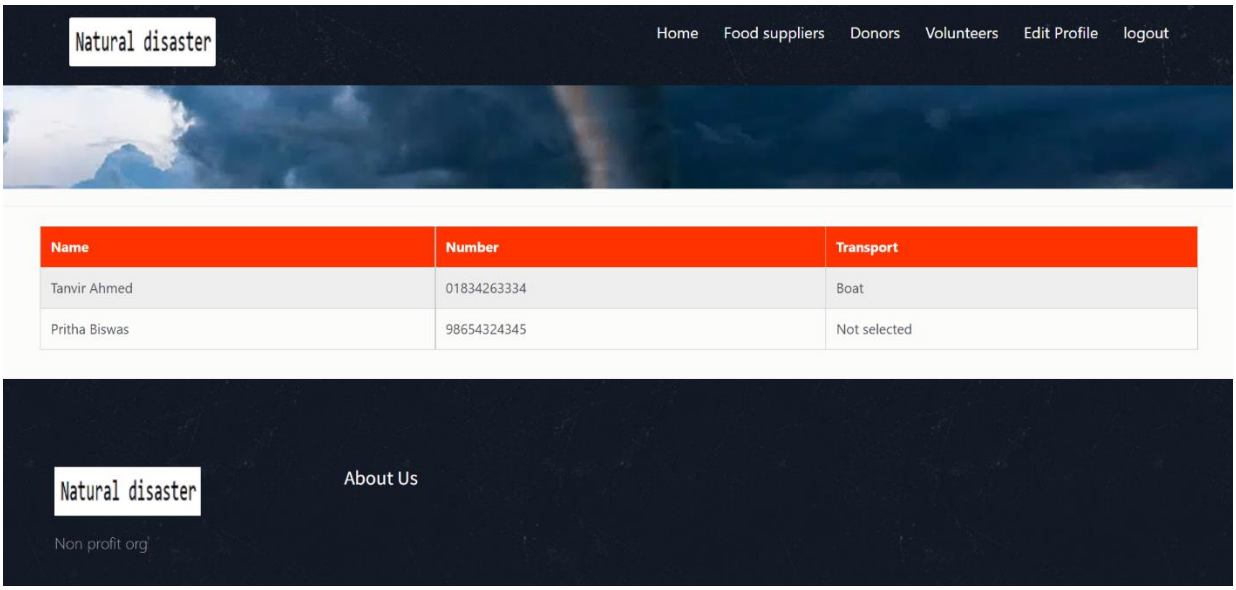
5.5 Admin



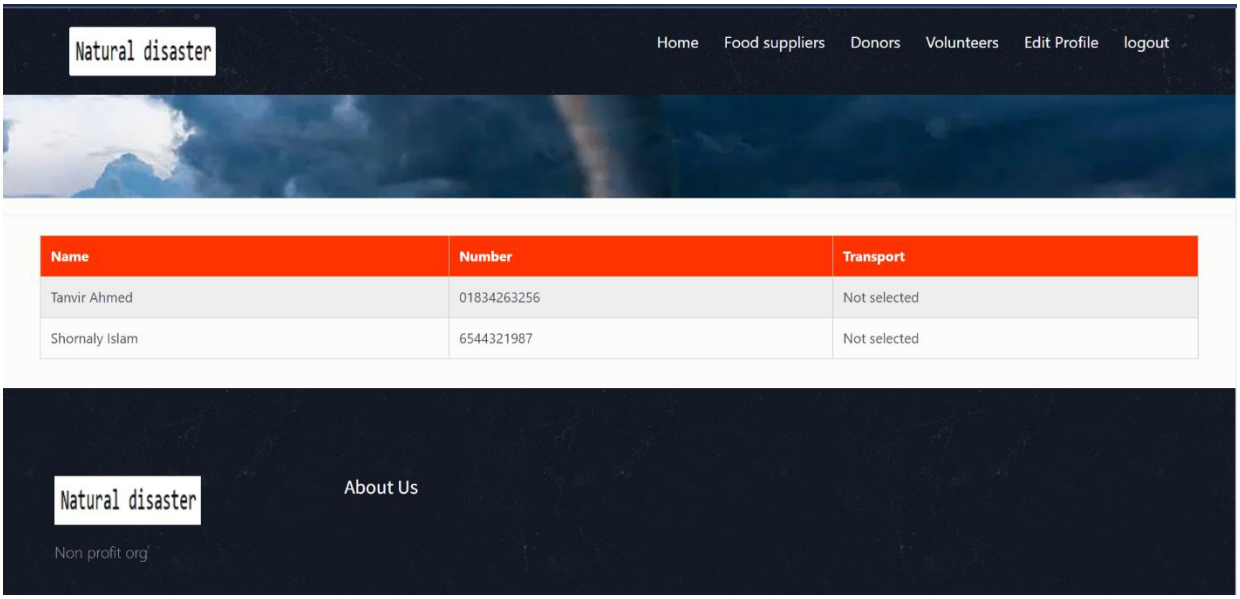
5.6 Edit profile



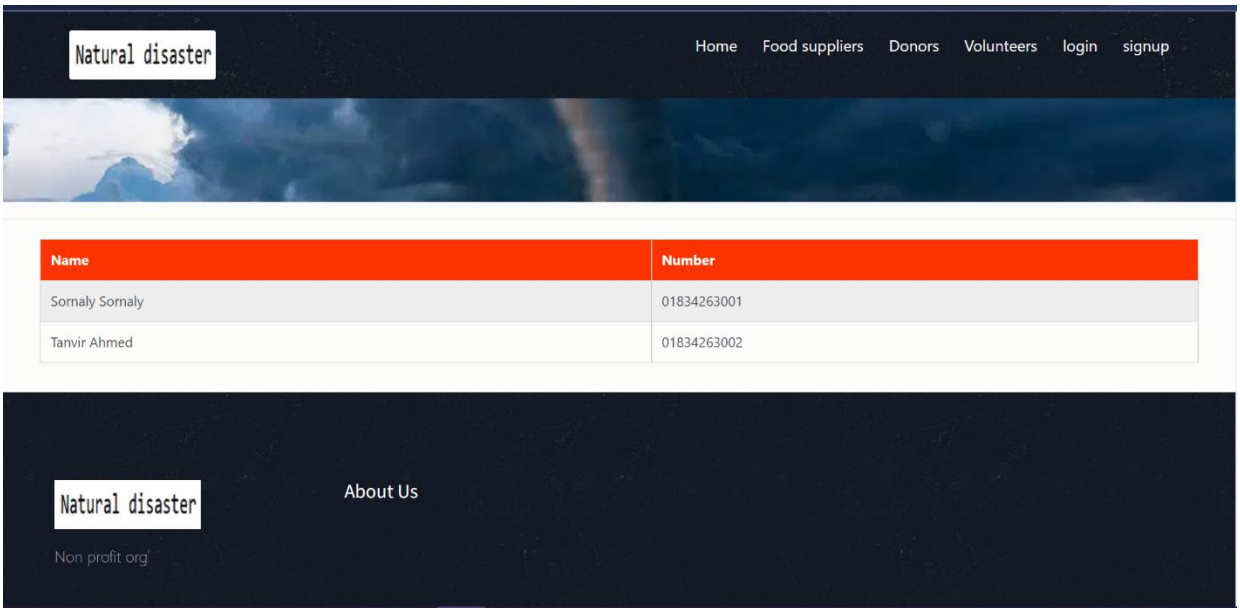
5.7 Volunteer



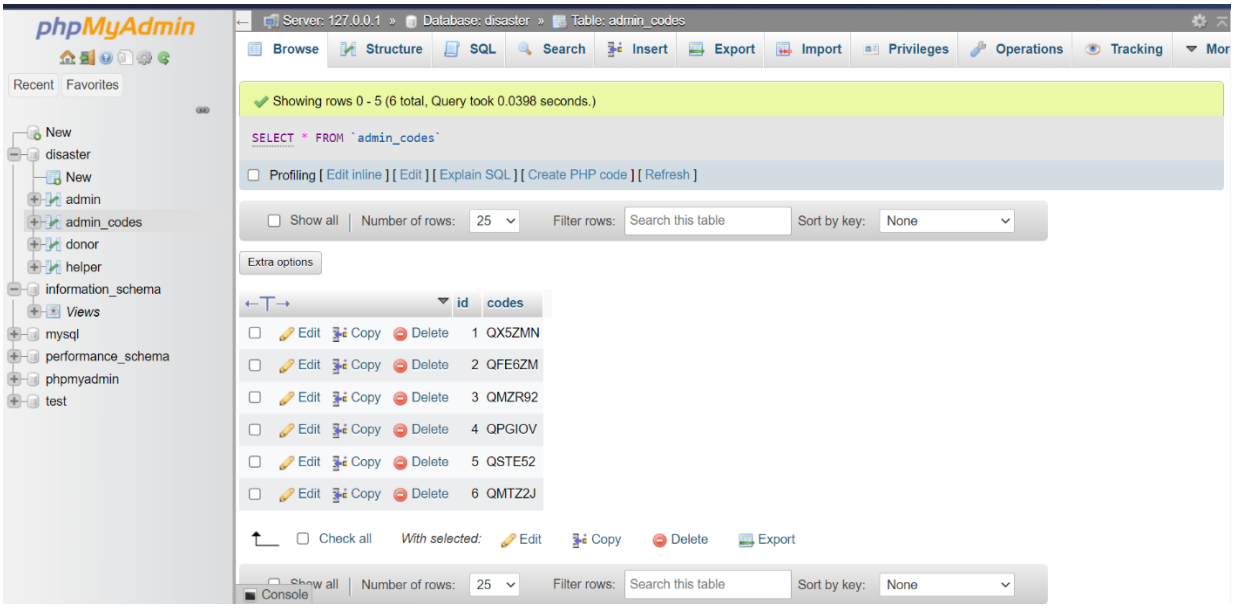
5.8 Supplier

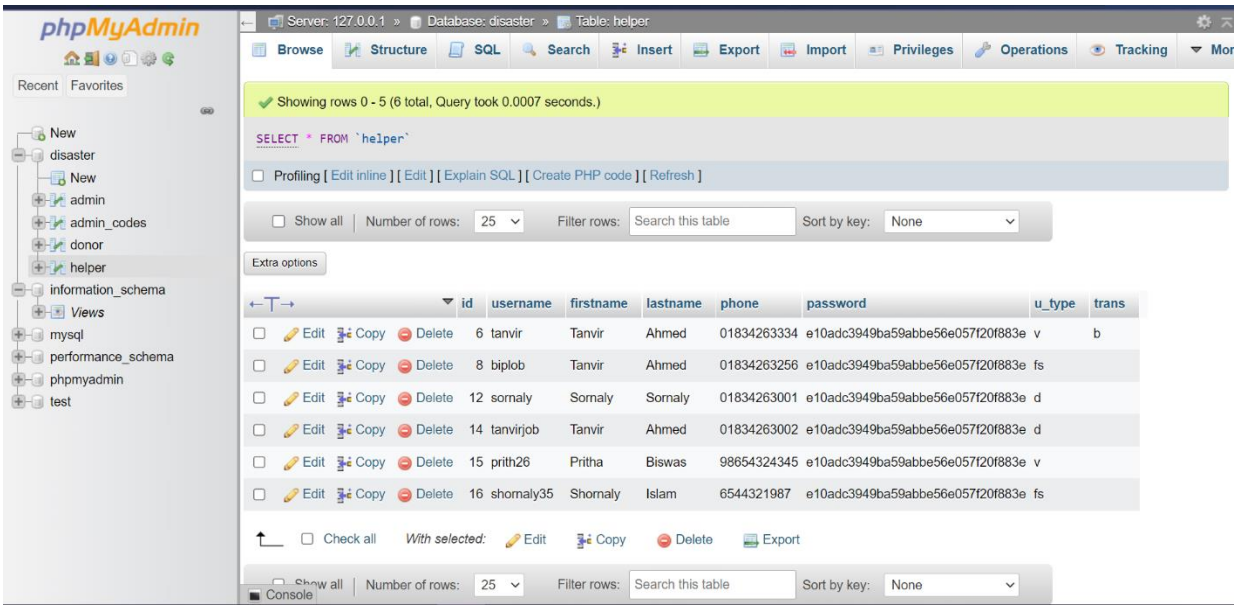


5.9 Donars



5.10 Database

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Server: 127.0.0.1 » Database: disaster » Table: helper
Browse Structure SQL Search Insert Export Import Privileges Operations Tracking
Showing rows 0 - 5 (6 total, Query took 0.0007 seconds.)
SELECT * FROM `helper`
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Show all | Number of rows: 25 Filter rows: Search this table Sort by key: None
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id username firstname lastname phone password u_type trans
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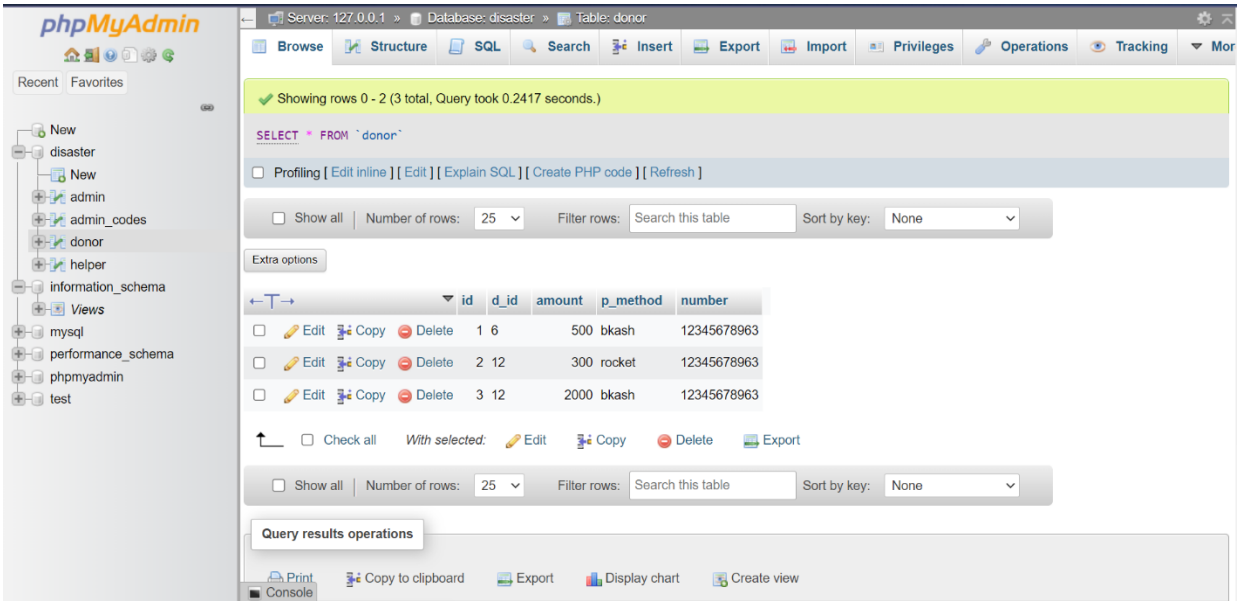
Show all | Number of rows: 25 Filter rows: Search this table Sort by key: None
Console


phpMyAdmin
Recent Favorites
New
disaster
New
admin
admin_codes
donor
helper
information_schema
Views
mysql
performance_schema
phpmyadmin
test
Server: 127.0.0.1 » Database: disaster » Table: donor
Browse Structure SQL Search Insert Export Import Privileges Operations Tracking
Showing rows 0 - 2 (3 total, Query took 0.2417 seconds.)
SELECT * FROM `donor`
Profiling [Edit inline] [Edit] [Explain SQL] [Create PHP code] [Refresh]
Show all | Number of rows: 25 Filter rows: Search this table Sort by key: None
Extra options
id d_id amount p_method number
Edit Copy Delete 1 6 500 bkash 12345678963
Edit Copy Delete 2 12 300 rocket 12345678963
Edit Copy Delete 3 12 2000 bkash 12345678963
Check all With selected: Edit Copy Delete Export
Show all | Number of rows: 25 Filter rows: Search this table Sort by key: None
Query results operations
Print Copy to clipboard Export Display chart Create view
Console

CHAPTER 6: CONCLUSION

6.1 Project Summary

“Disaster Relief Management System” is a volunteer service system. When a volunteer register in this system they can contact supplier for food and transport. When a general user register in this system they can only see the disaster post and donate money.

I have completed this project from planning to development within a tight period and completed the system ready to use. This system should be updated regularly as the project progress.

6.2 Tool and platform

Hardware specification:

processor	1.6 GHz or faster process
RAM	1.5 GB
Disk space	4GB of available hard disk

Software specification:

Operating system	Windows 10
Front End	HTML, CSS, JS
Frameworks	Bootstrap
Back End	PHP
Text Editor	Visual studio code
Database	MySQL
Web browser	Google chrome
Web server	apache

6.3 Limitations

• There is no SMS alert capability.

• Email verification for registration is unavailable.

• Run the risk of illegal access.

6.4 Future Scope

There are many ways to make things easy and accessible. Since part of the coding can be increased, its functionality can be enhanced. It is feasible to improve the system and make it fit to the intended environment as technology advances. Emerging technologies can be used to increase security based on the future security issued. Realize the project's goal while adhering to the restrictions. Be proactive to reduce risk before it arises. Organize expectations of stakeholders. Maximize your influence. Boost output and effectiveness. achieving the project's goal while adhering to the restrictions.

Plagiarism Report

Account Clearance