CHAPTER 1

1.1 INTRODUCTION

The only thing which remains constant in this world is “Change” this saying applies to all the fields especially to the field of Computer and software technology which has seen many revolutions in the last decades. The advancements in these fields have changed the life style and way of managing the things. Software is also known as Artificial intelligence is being used in all the areas starting from maintaining the school to launching the satellites. Which in turn reduces manual power, reliable, accurate and working speed is too good.

As mother Theresa said “Helping Hand are better than praying Lips”, in our society we have the people who are living with difficulties the reason may be physically disability, mental disorder or may be other such peoples are get served by NGO’s or small local organizations who believe in social service.

Providing treatment, food accommodation to such people is a challenging one and it needs support from the people, there are many people in our society who would wish to help the people who are in trouble by means of donation but they don’t have proper idea on how to serve and fail to identify the deserved candidates similarly many people wish to donate on the occasions of birthdays, marriage anniversaries but they too have the same problem. Our project called “Helping Hand” rectifies this problem by acting as bridge between donors and the people who needs support and help from others to lead their valuable life.

Our project provides the details of centers, NGO’s and organizations who are active in the area of service, it provides proper guidelines to people who wish to donate and help the challenged people.

Our project is web application software which is being developed using JSP and Mysql Technology.

1.2 Purpose

Purpose of our project is to develop a website and app which provides complete information to the people who would wish to help the people such as mentally challenged, physically challenged or orphans.

1.3 Scope

This web application software is useful to the organizations such as NGO who do social services in various fields.

It provides useful information to people who believes in humanity and allows them to donate.

1.4 Objectives

A website increases the legitimacy of your organization and solidifies your professionalism when soliciting support.

It helps convey the role your NGO plays so that potential members and partners better understand your cause, which is especially important when you're seeking grants, tenders, or donations.

At the *very* least, an NGO website can provide users with updated contact details and an address for your organization.

A well-designed NGO website is also great for improving communications and spreading your reach beyond local advocates

Whenever anyone asks about your mission, you'll be able to simply direct them to your NGO website, helping you efficiently build new relationships. Just make sure to provide content targeted at both current *and* potential supporters, including reports, program updates, and any other important information.

CHAPTER 2

2.1 EXISTING SYSTEM

LITERATURE SURVEY

In the existing system there is facility to provide the details of various canters and their activity, peoples to get help of donors they need to post their problem to newspapers which is displayed in an inner page column which many not reach all audiences. There is no electronic platform to address these issues.

Limitations

- Does not support remote access
- There is no guarantee of quality service
- Peoples find hard to get help from donors
- No facility to monitor activities of centers

2.2 Proposed System

The proposed system is web application software which is being managed by the admin; it provides all required information over the site, so that donors could donate to respective centers or help the peoples who have posted their problems at the site.

Advantages of proposed system

- Supports remote access
- Working speed is high
- More reliable
- Peoples could post their problems instantly

2.3 Feasibility Study

Feasibility study is a study of project where it will check whether the proposed project is technically and economically feasible or not. In feasibility study we analyses the project to determine the ability to complete the project successfully with all the feasible cost and technical services.

Feasibility study main goal is analyzing the entire feasible test for economical and operational and function feasibility so that the proposed project cost will be not much expensive. Feasibility study is a decision making of project documentation where it will provide idea to perform the task by using this feasibility report.

It also provides the economical and all the technical cost and resources we needed to perform our task to propose our project. Feasibility study also used for identifying the scope of our project.

Feasibility study is over all examination of project strength and weakness of project and required cost to develop our project and also it will provide the problems available in the existing system and what features we need to include in the existing system to overcome from the problem of existing system.

Well-designed feasibility study is that which provides the required resources and all the documentation details and cost estimation and detailed history of our project is a feasibility study.

2.4 Operational feasibility

The proposed system is an effort to make use of web applications and internet services to design a well generalized web site which act as communication media between users and the order system and law.

Since users have rights to make complaint against the crime after being verified as a authenticated users only the register users can make a complaint over online regarding crime and miss guidance and even for providing illegal information on web sites which may create problems to the accessed users.

One more benefits of using web sites is that any complaint regarding crime and illegal work complaints should be made online only by using provided facilities on web sites which avoids the waste of time . There is no need to visit particular stations frequently to complaint against crime. Complaints given by users will be handled by the authorized officials and they provide solution to their problems.

Operational feasibility monitors all these progress to provide good service to the public/users so they can access the useful information through web sites and design their own applications and users are allowed to download the useful information they can upload their works and ideas on web sites they can also give feedback to the accessed websites.

2.5 Technical Feasibility

The technology feasibility to the proposed system could be summarized as below.

➢ Data storage

All information is available in the MySQL database which is excellent for distributed application. It does not require any extra drivers/features to make transactions with database which is an advantage for the proposed system.

This system depends on the rules of client server model it do not require any extra applications/software to users/client to make system functioning properly. All the truncations are done using only MySQL database no additional software used for transaction between user and system.

➢ Web server

Web server provides service to clients by accepting client request and those request will be served by the server and server will examine the requested client request and perform the operation by using Apache web server which also provide service at 8080 available port, web server has to perform operation to provide service to client instantly, it provides excellent service on Linux platform which provides a multiple user operating system.

Web server is a communication between the client and server where client request to server to provide the service requested by client server accept the http request from client and process it and fetch the required information and send back to the client. Web server provides excellent service to the PHP programs.

- **Messaging**

In developed system SMS are sent through GMS modem, and to communicate with this modem Attention Commands (AT) are used and each and every commands are alphanumeric code with previously defined meaning and parameters will be taken by the command.

- **Server Scripting**

In the proposed system java language used to make server side scripting and java language supports object oriented language as well as procedural language and it is compatible language and also it supports various data types and also it supports to for each loop concept which is very useful to provide navigation through arrays of various types.

2.6 Feasibility in Economic Terms:

This type of feasibility study is used to know by economical terms that the organization has on the project developed. Newly developed system finds that the needed application is capable of creating profits in the organization. The profit here includes the cost of software development, cost in hardware products used and required software cost. It also deals with the maintenance cost profits in the organization. Its main aspects are to know the development of project within the user budget. The newly build system has assumed set of views about the development price and maintenance price of this system is very less.

2.7 THE HARDWARE AND SOFTWARE REQUIREMENTS

Hardware Specification

- Processor : Intel Core i3
- RAM : 4GB or Higher
- Hard disk : 500 GB

Software Specification

- Front end : Bootstrap Framework
- Back end : My SQL
- Web frame work : Spring
- Web Server : Apache Tomcat
- Operating System : Windows 11
- IDE : Dreamweaver

CHAPTER 3

Language and Implementation

3.1 Tools and Technologies Used

Java introduction

Java is a **programming language** and a **platform**. Java is a high level, robust, object-oriented and secure programming language.

Java was developed by Sun Microsystems (which is now the subsidiary of Oracle) in the year 1995. James Gosling is known as the father of Java. Before Java, its name was Oak.

Since Oak was already a registered company, so James Gosling and his team changed the name from Oak to Java.

Java upholds different programming design, including object-situated, basic, and utilitarian or procedure oriented styles of program

Java is a disentangled, object-planned, basic level programming language with the semantics that are dynamical. Its conspicuous level principal information structures, gotten along with amazing making and dynamic keeping, which make it exceptionally captivating for Quick Application Advancement, comparatively concerning use as a planning or paste language to interface existing parts together.

Java's reasonable, simple to learn complement underlines clearness and hence decreases the programing support that are very expensive. Java keeps up packages and modules, that will supports reuse of coding and program personality. The Java's mediator and the far reaching open sourced standard libraries or joined development without charge for each colossal stage, and can be wholeheartedly flowed.

The highlighted features of Java:

- Java is very easy to learn, and its syntax is simple, clean and easy to understand. According to Sun Microsystem, Java language is a simple programming language because.
- Java is an object-oriented programming language. Everything in Java is an object. Object-oriented means we organize our software as a combination of different types of objects that incorporate both data and behavior.
- Java is portable because it facilitates you to carry the Java bytecode to any platform.

- It doesn't require any implementation. Java provides automatic garbage collection which runs on the Java Virtual Machine to get rid of objects which are not being used by a Java application anymore.
- There are exception handling and the type checking mechanism in Java. All these points make Java robust.
- java is faster than other traditional interpreted programming languages because Java bytecode is "close" to native code. It is still a little bit slower than a compiled language (e.g., C++). Java is an interpreted language that is why it is slower than compiled languages, e.g., C, C++, etc..

Spring Framework:

Spring is a *lightweight* framework. It can be thought of as a *framework of frameworks* because it provides support to various frameworks such as Struts, Hibernate, Tapestry, EJB, JSF, etc. The framework, in broader sense, can be defined as a structure where we find solution of the various technical problems.

The Spring framework comprises several modules such as IOC, AOP, DAO, Context, ORM, WEB MVC etc. We will learn these modules in next page. Let's understand the IOC and Dependency Injection first.

Introduction to MySQL:

MySQL is not difficult to learn, free, efficient, solid, most utilized data set framework that carries out SQL. MySQL is completely free and it is called as open-source RDBMS that can be runs on a variety of platforms. It is supported by oracle and the access of multi-user is also been supported for the multiple engine storages.

It is presently very famous data set administration framework programming utilized for dealing with the social data set. It is quick, adaptable, and simple to utilize information base administration framework in correlation with server and databases. The php scripts are also been related to it for the ordinarily utilized for making dynamic and incredible web applications.

Server database will store as directories and this database will store at the default location /user/local/mysql/var/. Inside the database tables are stored as files. And for each table it has three files they are table.FRM which contains details about table structure, table.MYD that contains about row data and at last table.MYI that includes indexes belonging with this table.

Apache Tomcat Server

The Apache Tomcat software is an open source implementation of the jakartaservlet, and specifications. These specifications are part of the .

The Jakarta EE platform is the evolution of the Java EE platform. Tomcat 10 and later implement specifications developed as part of Jakarta EE. Tomcat 9 and earlier implement specifications developed as part of Java EE.

The Apache Tomcat software is developed in an open and participatory environment and released under The Apache Tomcat project is intended to be a collaboration of the best-of-breed developers from around the world. We invite you to participate in this open development project. To learn more about getting involved,

Apache Tomcat software powers numerous large-scale, mission-critical web applications across a diverse range of industries and organizations. Some of these users and their stories are listed on the Powered By wiki page.

Introduction to HTML:

HTML is used by browsers to alter text, photographs, and other data in order to show it in the desired format. Here web pages are to be formatted by this HTML language. HTML has a set of common tags such as <HTML>, <HEAD>, <BODY>, and <INPUT>.In this web pages we can also insert particular images by using <IMG> tag.

In this web page we can also provide links from one web page to another web page by using anchor (<A>) tag. And also HTML forms are begins with the tag called <FORM>, followed by the number of input tags. Here all tags must close with the closing tags, for example form tag must be close with </FORM> tag.

HTTP:

HTTP is a language that referred as Hyper Text Transfer Protocol. This language is used to describe how the web pages are sent by the internet. Here the server receives the request from the well-known port number. The default port number is 80. And also it is a good port number. Server can also receive other port number.

Bootstrap:

It is the widely used CSS Tool for building a mobile friendly sites with a reactive way. It will uses the languages and styles such as HTML, CSS and JavaScript.

The (Twitter) Bootstrap is a rich, simple to utilize and saw intense portable first frontend instrument for speedier and simpler web application advancement. We utilize

Bootstrap in light of the fact that it be composed of versatile first it will style through the library rather than isolated records furthermore it bolstered by all famous programmer. The Bootstrap can be get controlled by the giving data of HTML and CSS. Bootstrap's CSS change in accordance with mobiles, tablets furthermore desktops.

CHAPTER 4

SYSTEM REQUIREMENT SPECIFICATION

4.1 Users

The user of this project are classified in to following types

Anonymous users

These are the users who visit the site for information they just browse the details present in the site, if they are interested they could become donors or if they need any help they could make use of Post your problem section and post the details.

Donors

These are the users who browse the details of NGO's being displayed in the website and could make donations for their welfare.

Admin

Admin is the main user who has more privileges, admin has rights to manage the details such as NGO's , donors and their donations, could process the posts made by the users seeking help.

4.2Functional Requirements

Centers module

In this module the details of NGO's are managed, Admin has privileges to manage all the details, admin could add , delete and edit the details, each centers will have unique ID, a name address etc, all details entered here will be displayed for donors and end users who browse the site.

Posts Module

In this module the details of Posts being posted by the help seekers will be managed, they will have given all the details, once admin has to verify all the details being posted, if they found to be genuine it will be approved, soon after approving the

information would be displayed in the front page for the notice of publics who browse the site. Admin has rights to modify and delete the posts after certain interval of time.

4.3 Non-Functional Requirements

Correctness

Since the purpose of this project is to offer accurate and up-to-date information on the details of a certain project completed by students. The database administrator will have additional rights, the system should always respond correctly, and the data in all databases should be continually updated with the most up-to-date information.

Reliability

In each circumstance, the system should offer the correct information. If there is an error in input or operation, the system should reflect the relevant message or provide appropriate assistance information.

Robustness

It is critical that the system be fault tolerant in terms of unauthorised user input. To prevent system failure, error checking must be integrated into the system.

Maintainability

Because the project will be utilised for a long time, it must be simple to maintain and adapt to future changes. The system should be designed in modules, and changing the design of one module should not influence the correct operation of the other module.

Portability

The system should be portable, meaning it should be able to run in any web browser with little or no modification.

Security

To make the product more trustworthy, all security steps are done; only valid, i.e. registered users, may access it.

CHAPTER 5

SYSTEM DESIGN AND ANALYSIS

5.1 System Perspective

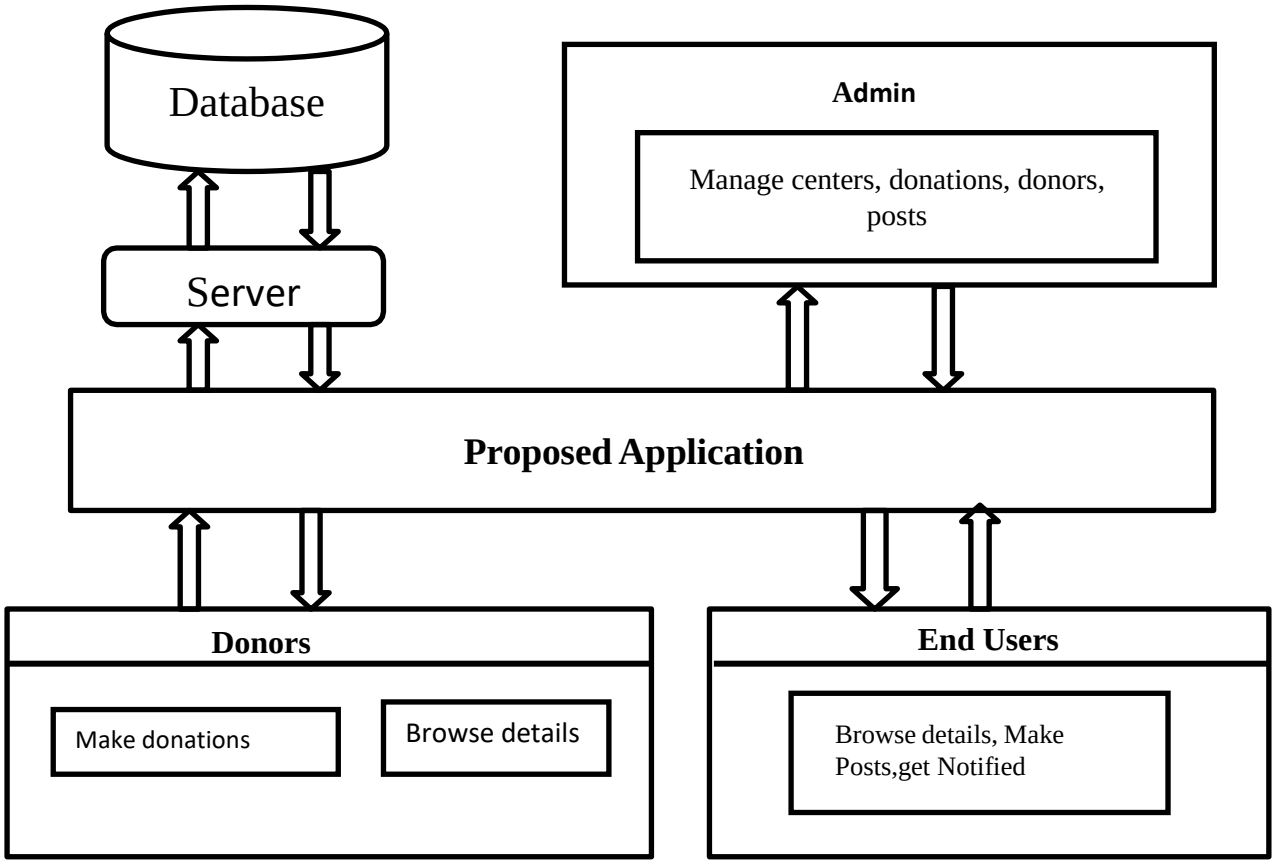


Figure 5.1 System Architecture

5.2 Context Diagram

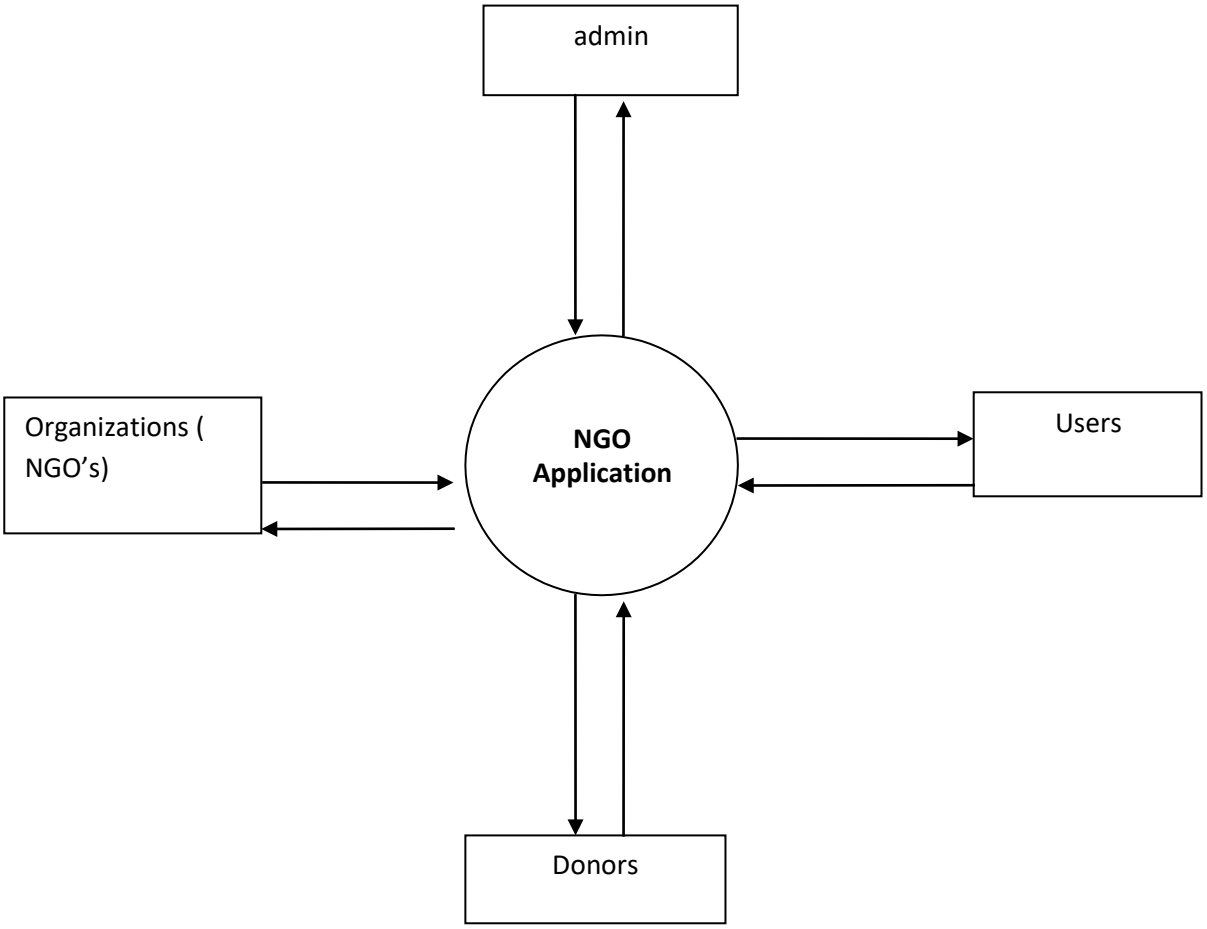


Figure 5.2 Context diagram

CHAPTER 6

DETAILED DESIGN

6.1 Use case diagram of admin

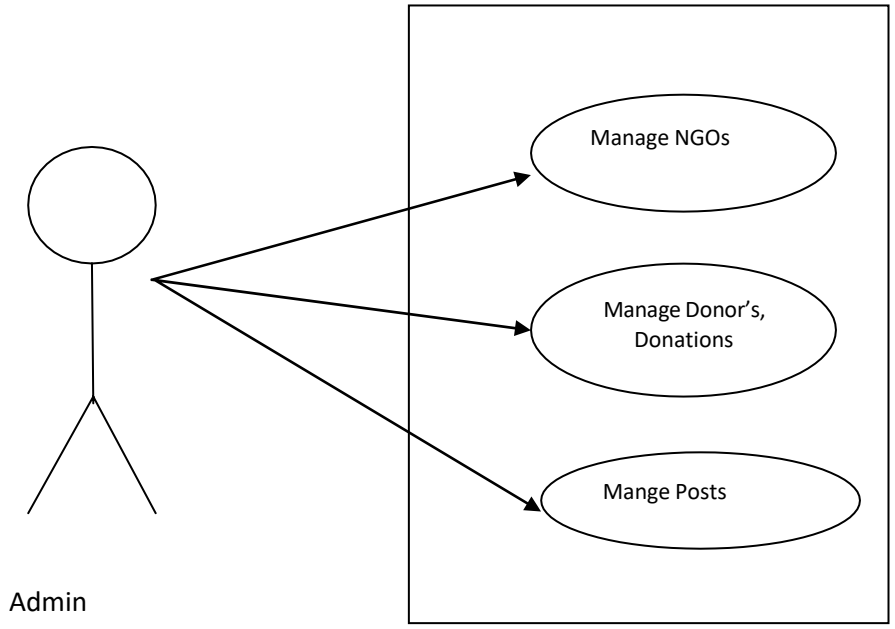


Fig 6.1: Use case diagram for admin

Above figure depicts the use case diagram for admin, where admin has to manage the user posts, manages the categories and he has to overall details of plans.

6.2 Use case of Donor

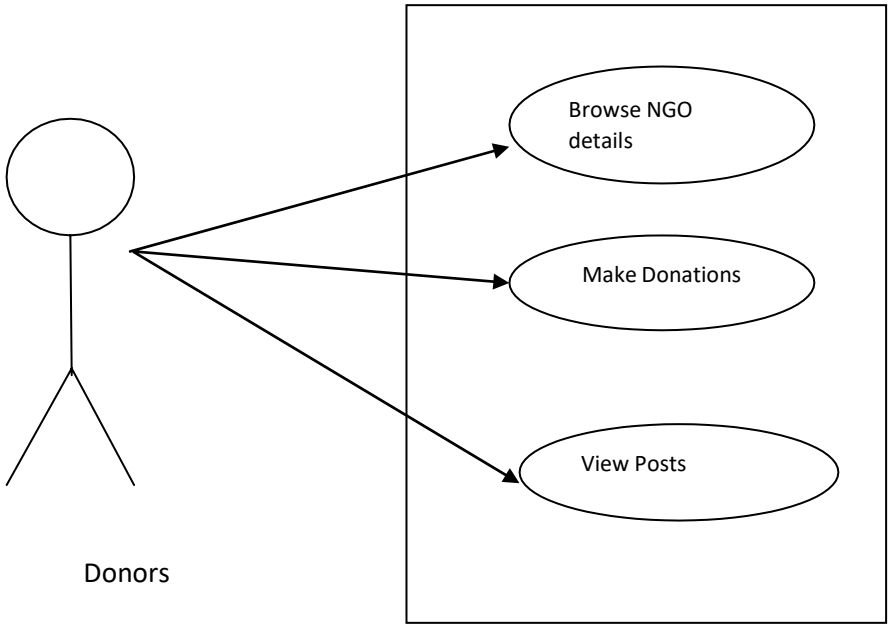


Fig 6.2: Use case diagram for users who having organizations.

The web site is followed by the two main users, the first most one is who search for desired information of the city and another one is who wants to put their ads in the website.

6.3 Dataflow diagram of admin

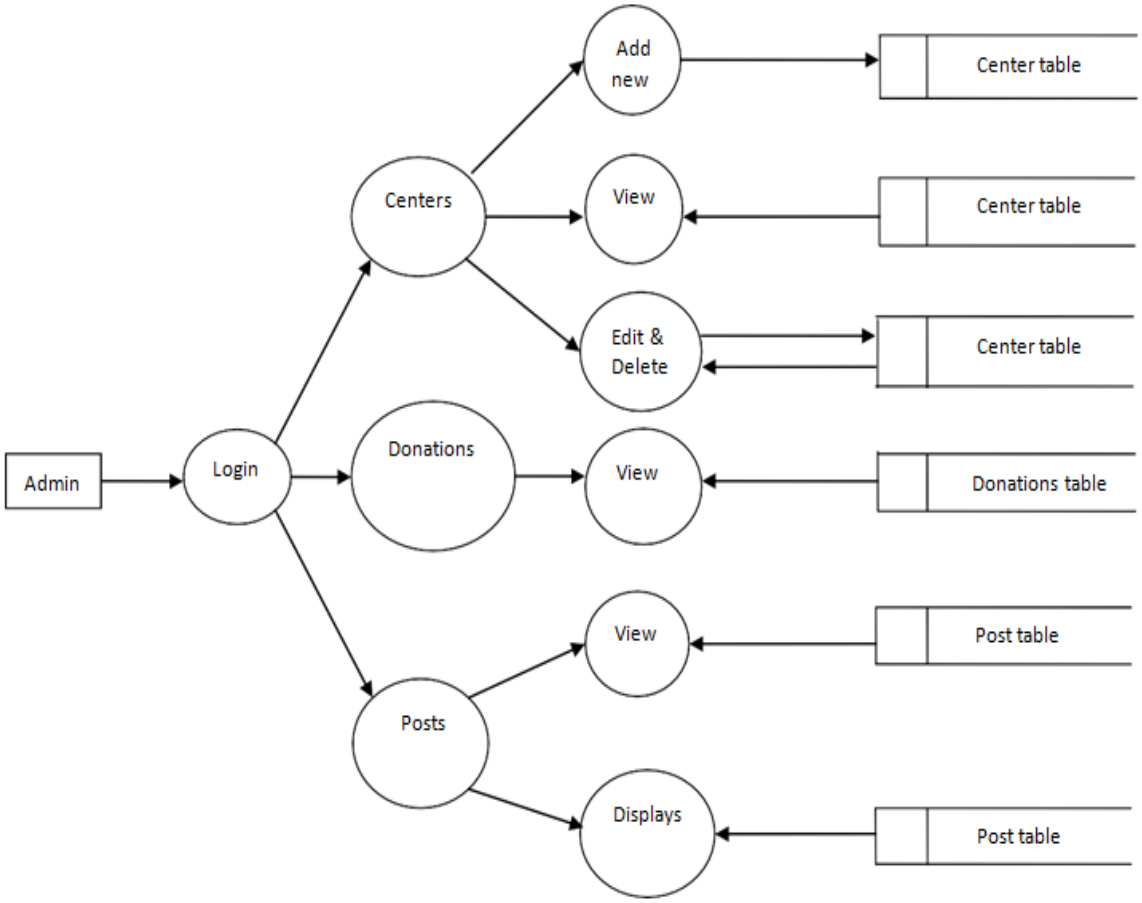


Figure 6.3 dataflow diagram of admin

6.4 Dataflow diagram of users

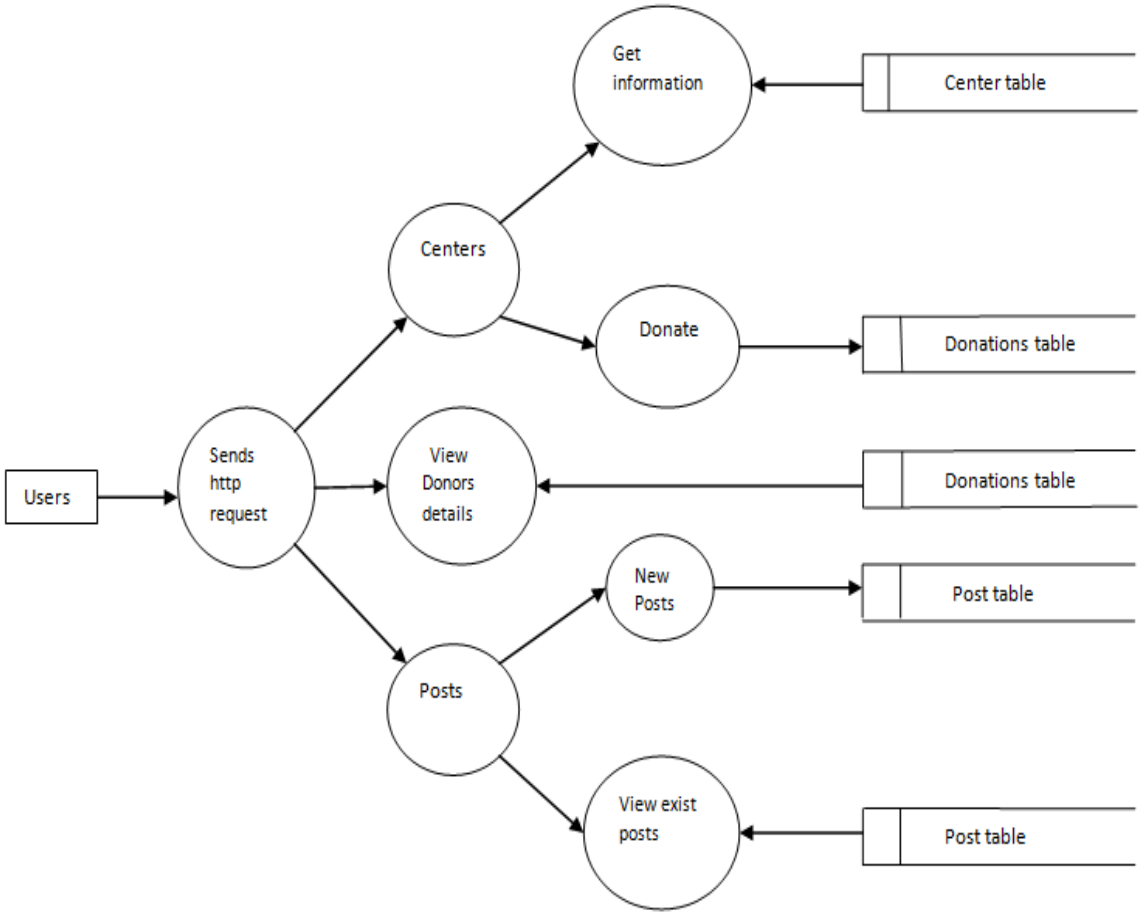
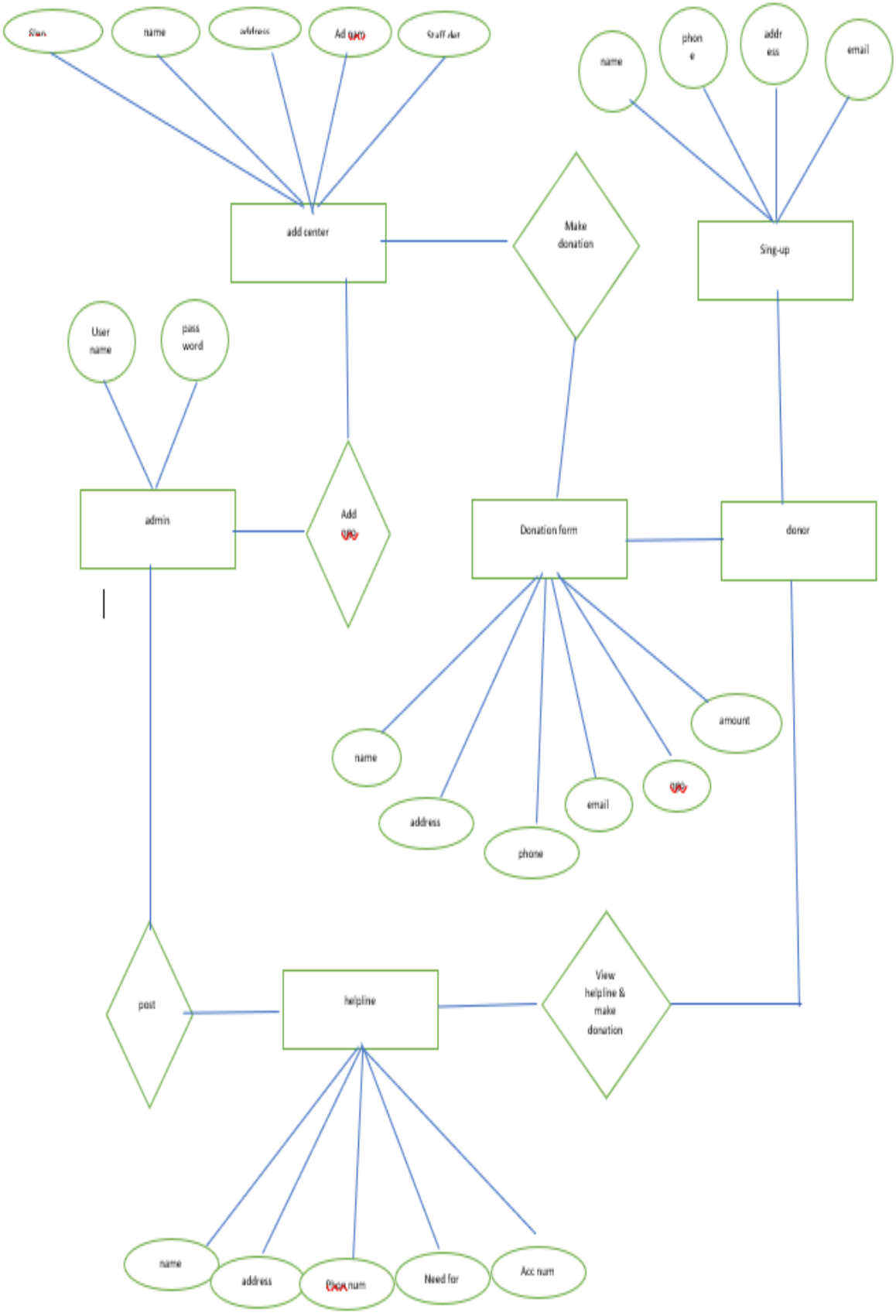


Figure 6.4 data flow diagram of users

6. 5 Entity Relationship diagram



6.6 Database Design

Center table

Field	Type	Null ?	Constraints
slno	int(15)	No	Primary key
cname	varchar(100)	No	Not null
caddr	varchar(150)	No	Not null
cont	varchar(20)	No	Not null
descr	varchar(200)	No	Not null

Centers table: This table is used to store the details of centers

Donations table

Field	Type	Null	Constraints
slno	int(11)	No	Unique
cid	int(11)	No	Foreign key
dname	varchar(50)	No	Not null
daddr	varchar(50)	No	Not null
contno	varchar(20)	No	Not null
damt	bigint(20)	No	Not null
ddate	Date	No	Not null

Donations table: This table is used to store the details of donations issued bythe donors to centers

Posts details

Column	Type	Null	Constraints
Slno	int(15)	Yes	Unique
Msg	varchar(100)	No	Not null

Posts details table: This table is used to assign a caption to the posts displayedat home page

Posts

Field	Type	Null	Constraints
slno	int(11)	No	Unique
name	varchar(100)	No	Not null
addr	varchar(200)	No	Not null
contno	varchar(100)	No	Not null
det	Text	No	Not null

Posts table: This table is used to store the details posted by the end usersregarding their problems

CHAPTER 7

USER INTERFACE OR OUTPUT SCREEN.

7.1 Home Screen

Home screen **Home screen with navbar**

Figure : Home screen

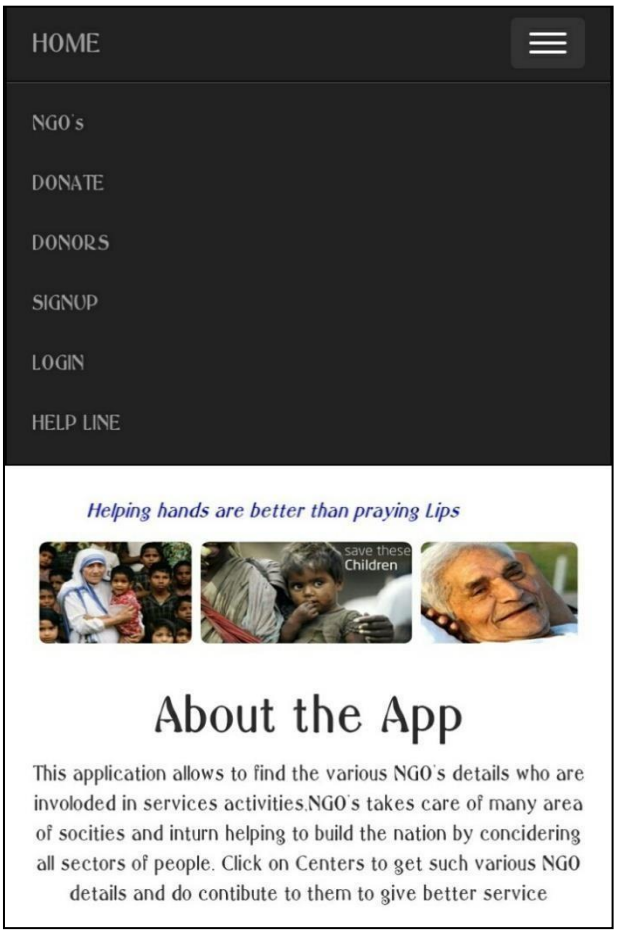


Figure : Home screen with navbar

This is the first screen which get displayed soon after launching the app

Above screen shows the home screen with dropdown navigation bar.

7.2 NGO details form

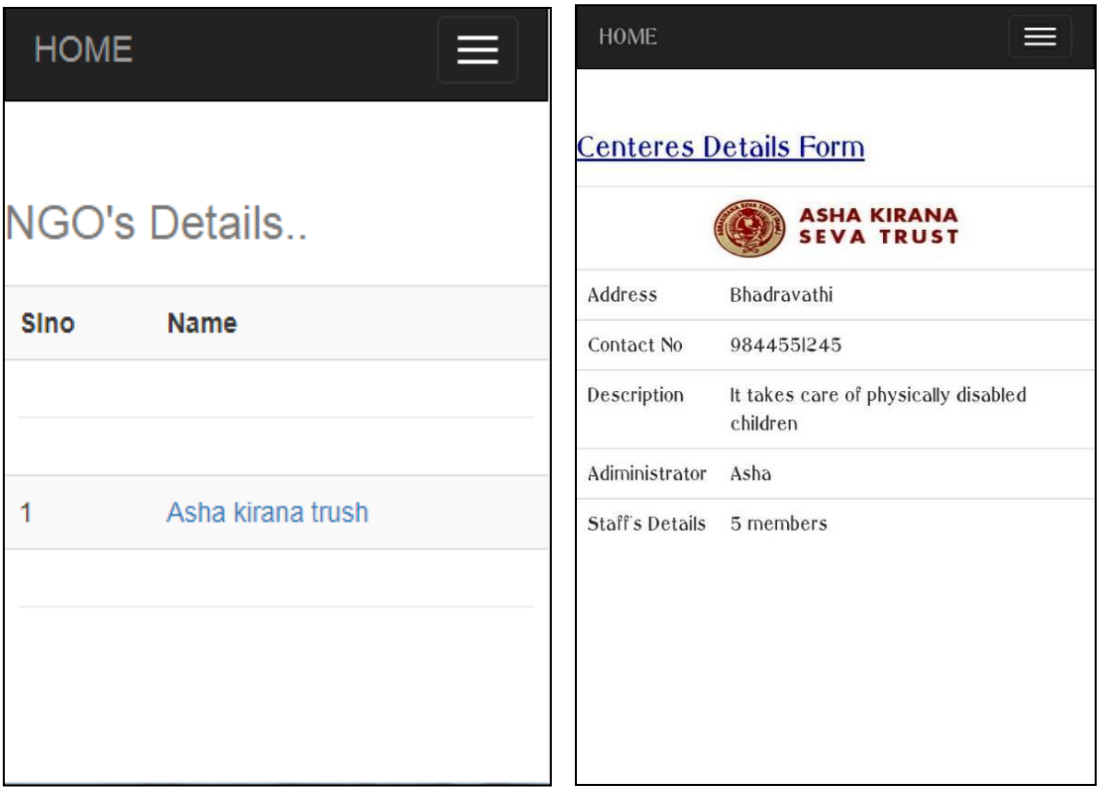


Figure 7.2: NGO details form

Above screens shows how details of NGO's are displayed for end users

7.3 Donation and donor details form

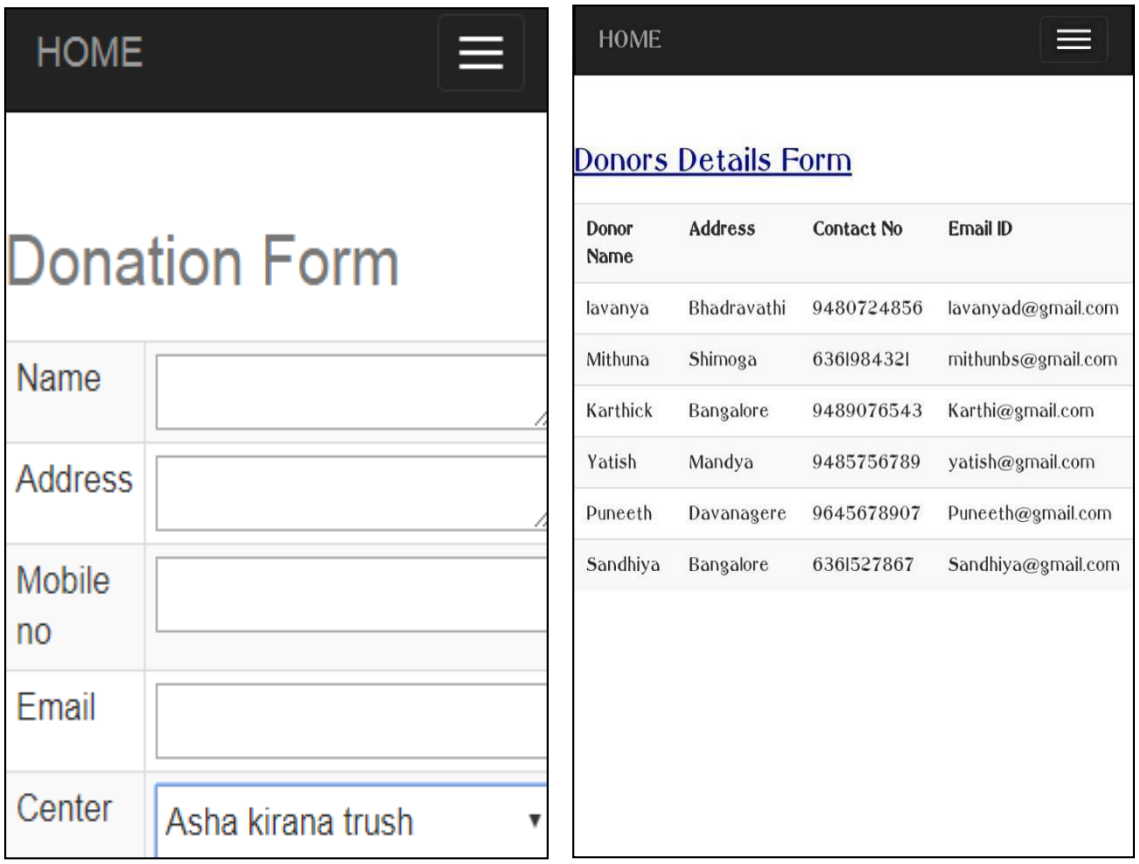


Figure 7.3: Donation and donor details form

Above screens shows the forms used for donating and donors who have already donated for the organization.

7.4 Form used for seeking Help

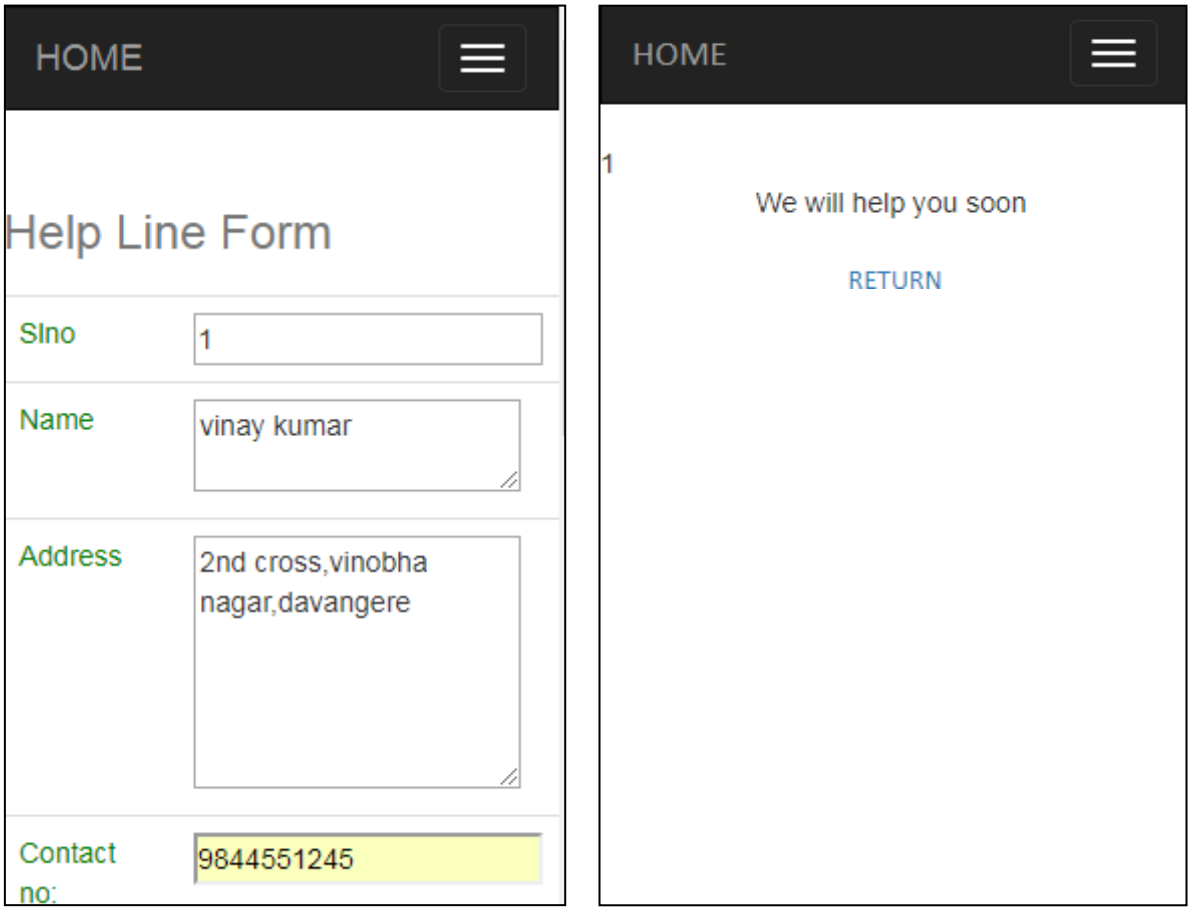


Figure 7.4 Form used for seeking help

Above screens shows the form to be filled by the end users who seeks help for their problem

7.5 Admin login form

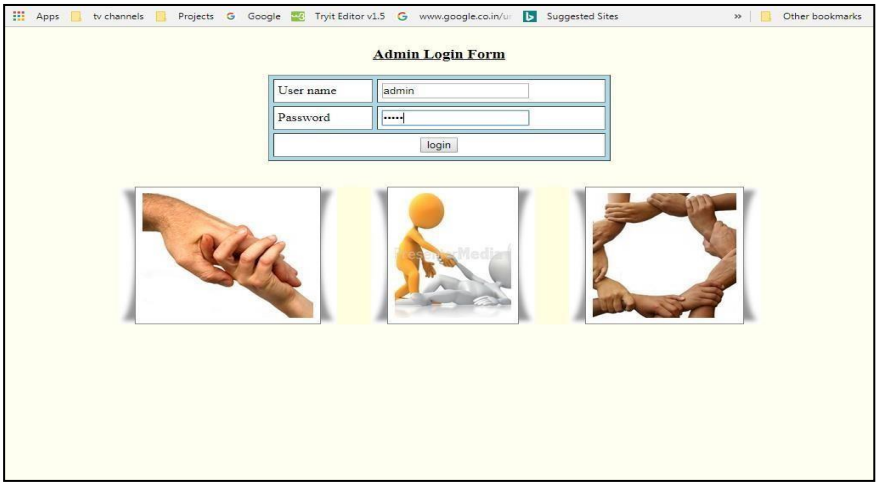


Figure 7.5: Admin login form

Using this form admin could login to the system

7.6Admin home page

Figure 7.6: Admin home page

Above form shows the admin home page it has various links to perform operations such as managing centers details, managing donor's details and managing helpline

7.7 Add new center form

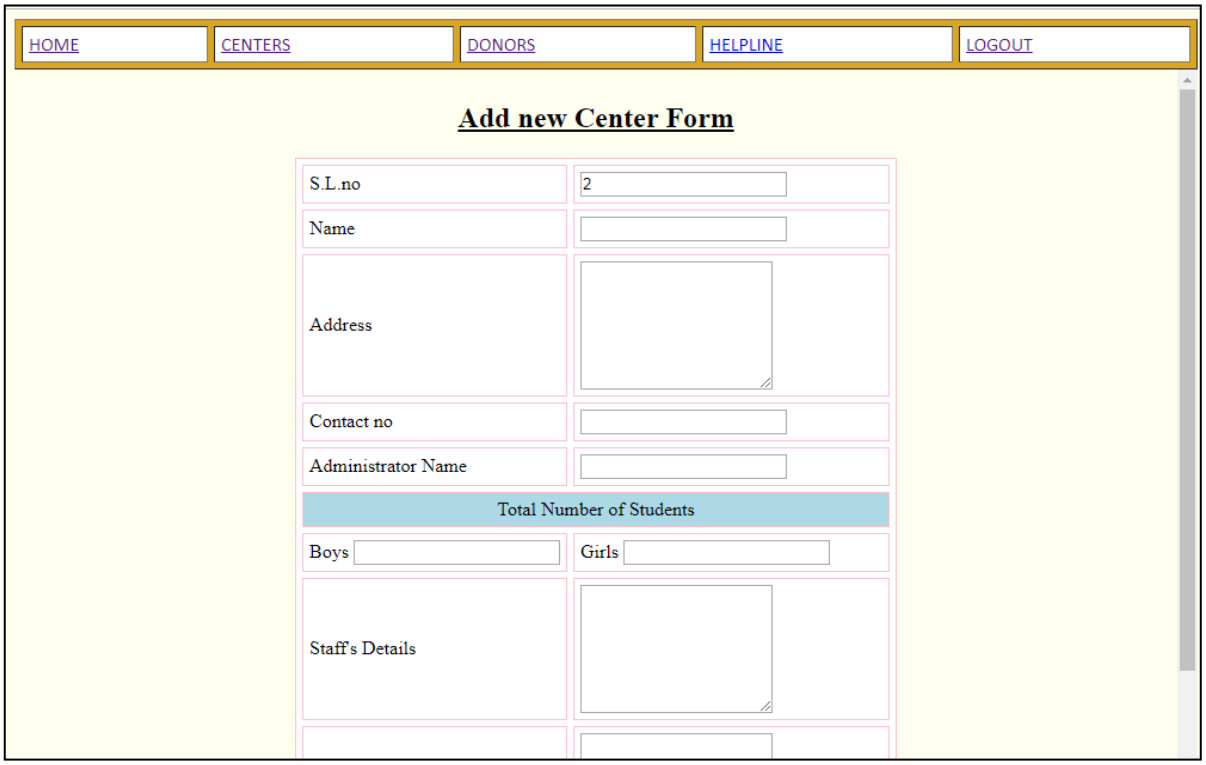


Figure 7.7: Add new Center form

Using this form admin could add new NGO details to database

7.8 NGO details form

Figure 7.8: NGO form details

Above form shows the details of NGO's being saved in the database.

Figure 7.9 Donor's details form

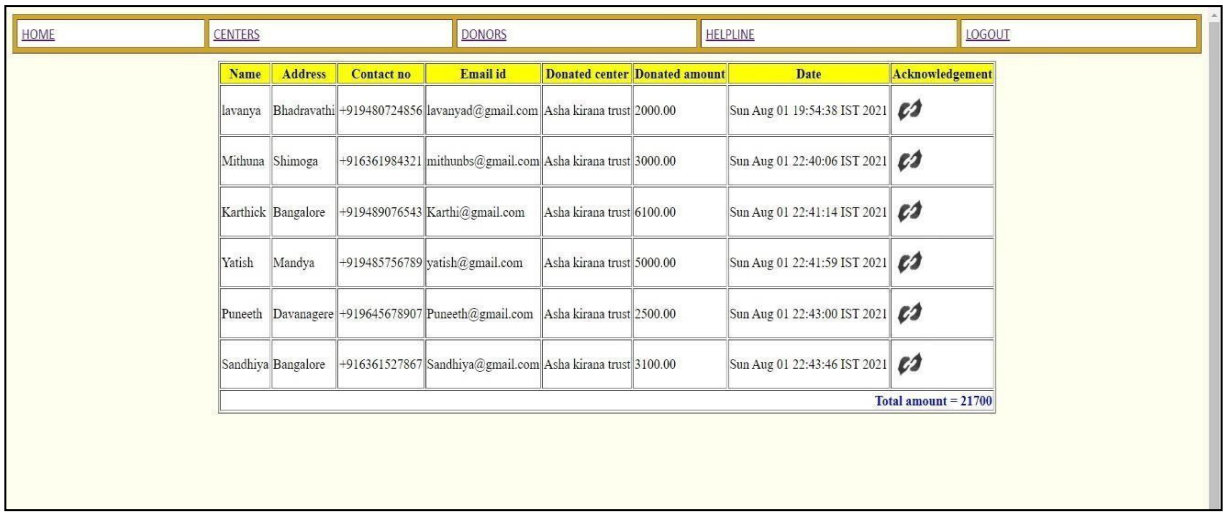


Figure **7.9 Donor's details form**

Above form shows the details donors who have donated for NGO's

7.10 Form used to send SMS

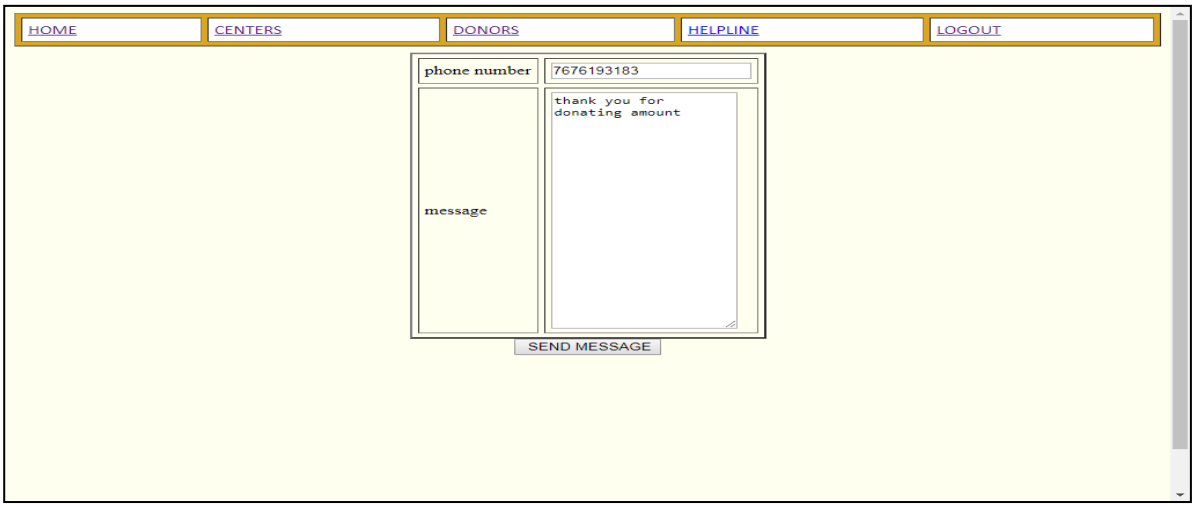


Figure 7.10: Form used to send SMS

Admin could use this form for sending SMS to donors

7.11 Help seekers details form

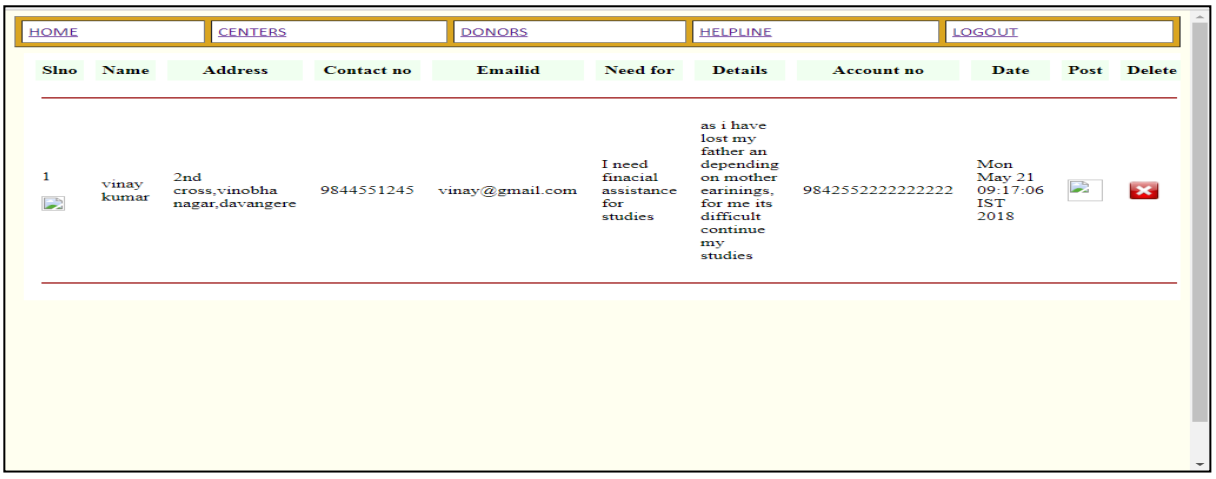


Figure 7.11 Help seekers details form

Above form shows the details of publics who have been posted seeking help

7.12 Form used to Edit the posts

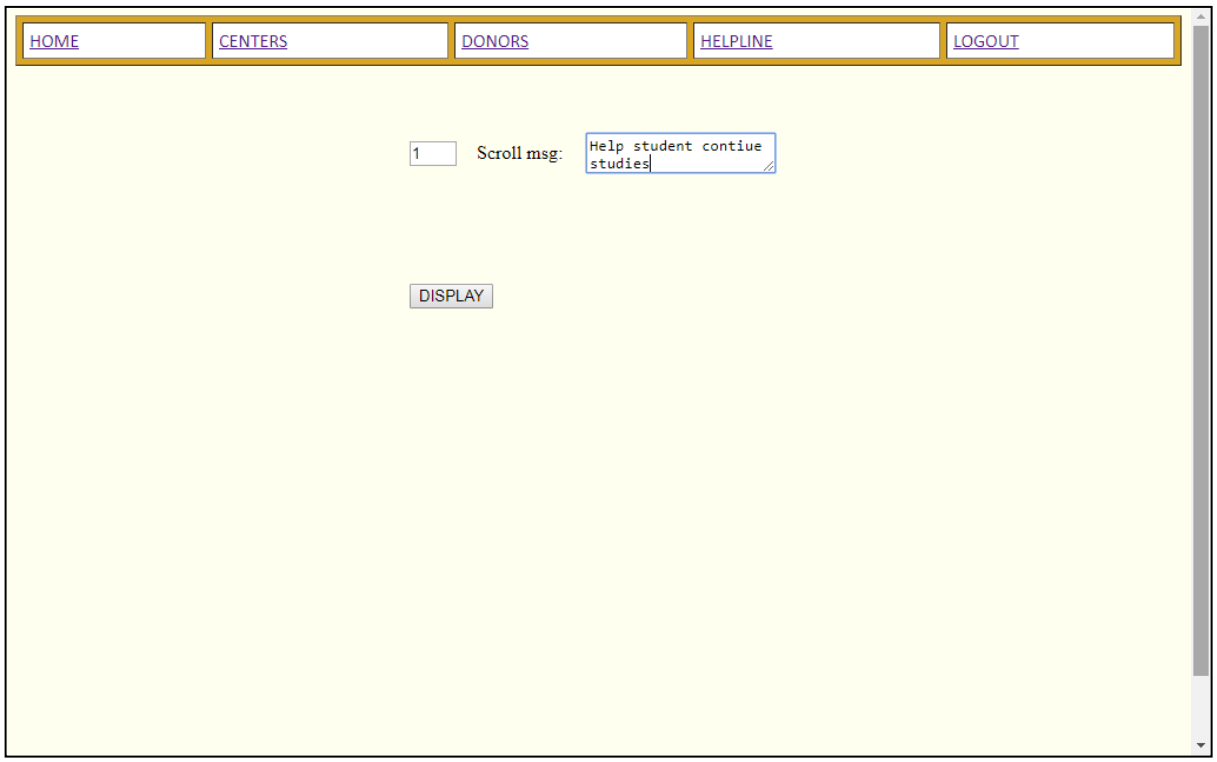


Figure 7 .12 : Form used to Edit the posts

Using this form admin could edit the posts posted by end users, later they are displayed for public notice

7.13 Form showing causes details

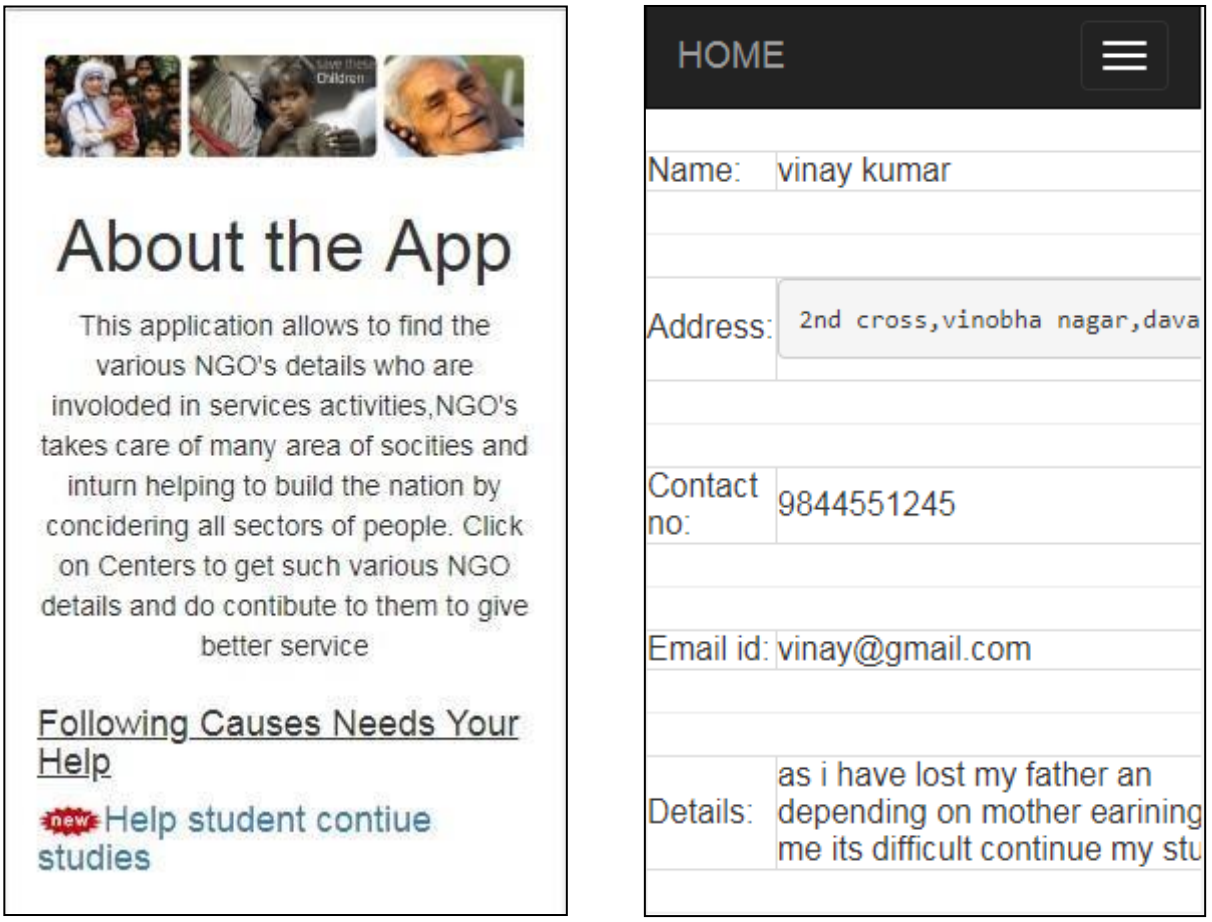


Figure 7.13: Form showing causes details

above form shows the various causes being displayed at home screen for user's notification.

CHAPTER 8
SOFTWARE TESTING

- Unit testing
- Joining testing
- Framework testing
- Tolerating get Testing

- **Unit Testing**: Illustrating to tests that approve discrete, code fragment usefulness towards work level. In an Item arranged climate, usually arranged towards class level. These tests are composed by engineers since work on code to gather sure much certain capacity is tackling position/working as indicated by thought about. Single capacity sturdiness, embrace of numerous tests, to get a handle on other branches in code.

- **Joining testing**: This piece of testing manages the testing methodology. It includes, testing of different combinations of a few units. It checks whether the framework is working effectively when two or then again more units are incorporated together. This piece of testing provides data about request of game plans of different units, coordinating modules, frameworks, sub-frameworks and the whole framework in general.

- **Framework testing**: This testing procedure manages the way toward testing the framework in general. Toward the finish of each venture, all deformities are eliminated and the interface mistakes are uncovered to accomplish the great working of the entire framework. This testing procedure can be called as the last piece of entire testing measure.

- **Tolerating get Testing**: Testing is forced form tolerating get test speedy towards other testing like, starter joining or relapse. Tolerating get testing is support out by the purchaser, frequently at their environmental factors towards own equipment, i.e., alluded as Client Acknowledgment precise testing (UAT). It additionally executed contribute part to hand-off methodology between twice points advancement.

8.1 Test cases

TC#	Description	Expected Result	Actual Result	Status of Execution Pass/Fail
TC01	Login as Admin Login with valid user ID and password	Username and password should be done verification with database. If given Username and password matched, then the person is right user and let him to enter or else intimate the message like “invalidUsername or password”	Its validating the given username and password	Pass
TC02	Login as Admin → Menu-Add center	Record can be view /Update/ Delete	Record is added Successfully	Pass
TC03	Login as Admin → Menu- View donations	Record can be viewed	Record are Successfully displayed	Pass
TC04	Login as Admin ->To view manage posts	Records can be approved, modified.	Record are managed successfully	Pass

CHAPTER 9

9.1 CONCLUSION

This project is a web application software which plays the role of mediator between people who really need support and help form society and donors who believe in service.

It provides proper details and guidelines which in turn keep up the spirit of peoples who need care and Helping Hand.

We hope this project is error free and performs well on all platform, we have taken maximum care with respect to validation rules and database design.

The project could be further improved by interconnecting with social networking sites which intern provides more awareness among the people.

9.2 FUTURE ENHANCEMENT

1. Project could be further improved by integrating with social network sites
2. More security precautions should be taken with respect to online money transfer
3. Database backup and recovery facility could be provided
4. E-mail message communication will be provided
5. A project could be further improved by implementing in android

9.3 BIBLIOGRAPHY

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