Mini Project-A Report

Vcare4u

Submitted in partial fulfillment of the requirements of the degree

BACHELOR OF ENGINEERING IN COMPUTER ENGINEERING

By

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CERTIFICATE

This is to certify that the Mini Project entitled " ***Vcare4u*** " is a bonafide work of

Shruti Nair(18CO08),Asiya Pathan(18CO09), Zarin Khan (18CO05), Ahmed Manikware(18CO36) submitted to the University of Mumbai in partial fulfillment of the requirement for the award of the degree of **"Bachelor of Engineering"** in **"Computer Engineering"** .

(Prof. Abdul Salam Shaikh)
Supervisor

(Prof. Tabrez Khan)
Head of Department,
Computer Engineering

(Prof.Abdul Razzak Honnutagi)
Director

Mini Project Approval

This Mini Project entitled "***No Poverty Goals Title VCARE4U***" by Name **Shruti Nair(18CO08),Asiya Pathan(18CO09),Ahmed Manikware(18CO36),Zarin Khan(18CO05)** are approved for the degree of Bachelor of Engineering in Computer Engineering.

Examiner

Prof Abdul Salam Shaikh

Date: 25-05-2021

Place: Panvel

Table Of Contents

Abstract

Acknowledgements

1) Introduction

1.1 Introduction

1.2 Motivation

1.3 Problem Statement & Objectives

2) Literature Survey

2.1 Survey of Existing System

2.2 Limitations Existing system or research gap

2.3 Mini project Contribution

3) Proposed System

3.1 Introduction

3.2 Architecture/Framework

3.3 Algorithm and Process Design

3.4 Use-case Diagram

3.5 DFD

3.6 Sequence Diagram

3.7 Details of Hardware & Software

3.8 Experiment and Results

3.9 Future works

Abstract

Vcare4u is the name of the website which we have created in order to fulfill no poverty goals. It is a donation website where donors and receivers will come and interact together and meet their needs.It is made by using django framework.Our goal is to create a society for the betterment of every individual. Where no one will have to sleep with an empty stomach.The following report is based on this purpose. The website is aimed to help the society and create a sense of solidarity through modern techniques. The social implications it will have after being launched will certainly aim at closing the gap in terms of quality of life for the less fortunate citizens.

Acknowledgments

We would like to express our gratitude and thankfulness to Prof. Abdul Salam Shaikh for being our guide in this report, and helping us to create this useful piece of information.

Also we would like to thank our co-members for co-operating and co-ordinating in preparation of this report.

Chapter 1

Introduction

‘**Vcare4u**’ is a donation website for helping the poor and benefiting them to meet their essential requirements. It is a small initiative taken by our group to help the society in achieving no poverty goals. Our website will provide a platform for the donors and receivers to communicate with each other.The donor can donate food, clothes, essential day to day products he can also provide financial support to the receiver. This web application allows the users to find the people in need according to the type of help they could provide . On the other hand, it also allows the people to share there information about their needs so that the donor will get the required details. This website will make it easier for anyone even with the less technical resources . Some might ask , if a person is actually in need , they won't have access to modern technologies. My answer to that is anyone can fill in the details providing their location and their contacts . Again this might not be the case for some families, however this project is designed to help those who can't help themselves , also get people to take initiatives either donating or by creating profiles for people they know who might need help.

Motivation

A major motivation for giving is the personal affinity for a cause. Whether this originates from past or present experiences, people develop connections with the missions of nonprofit organizations and become inspired to lend support. In aligning personal interests with the aims of different organizations, donors will more likely give to organizations that hold shared ideals and values. When choosing among charities that work toward a similar cause, donors may decide who to support based on the organization's goals and publicized strategies to achieve these goals.

Problem Statement & Objectives

Our problem statement is to achieve no poverty goals. For this purpose we have created our website named VCARE4U. Our objective is to fulfill all the essential needs of the beneficiary. As poverty is the main issue faced by almost all developing countries especially India and some regions of African Continents. When thinking of that, the most possible solution for this is humanity i.e., sharing and donating. Our Goal is to eliminate poverty from our country. In contribution to it we thought of making a website where a needy and donor both will have its own panel and via login they can access features of their dashboard and recognition of actual needy people will be based on some factors using supervised learning techniques.

Literature Survey

It appears that important factors that make people contribute to projects run by NGOs are small donations (many can afford it) and feeling of being a part (founder) of an important project. Joined contributions of a group focused on solving particular problems is a good example of utilizing so called social capital. It is also worth noting that a good atmosphere (fun, joy, concert) and even day of the week has an influence on the number of participants and their will to contribute to projects presented during an event. Martin and Randal describe an interesting experiment which statistically proved the so-called 'Sunday effect', where donations dropped to a donation box in City Gallery Wellington, New Zealand were larger and more frequent on Sundays than on other days of the week. Observed donors' a reason why many large-scale charity programs implement money collections during concerts and other outdoor events where participants can observe each other while donating. Charity help and money donations become an important and growing part of the world economy. While registered charitable donations, reported in the Giving USA 2007 survey, exceeded US$295 billions in 2006, the total sum collected in 2007 grew to US$ 306 billion in 2007. It is worth noting that the majority of giving came from individuals while only 1.3% of donations was contributed from huge actions supported by the media. An effective way to reach a wide audience at a low price is the Internet. The interactive media provide tools for delivery textual and audiovisual content while visitors (participants) have the possibility to react instantly. The action performed by visitors to a charity collection site may give donations via internet money transfer (e.g. or credit card payment). They may also do some work in distributing information about the charity program by sending a message to their friends. And finally the visitor, who registered on the charity collection web-site, may be informed about new charity programs when

they start. Frequent web-site visitor is also a valuable donator, who may bring some funds to charity programs. The money may come from sold advertising space in the web-site. Such an approach is used in a service run by Polish Humanitarian Action (NGO): pajacyk.pl, where a daily return and click of a user brings a small donation from a sponsor advertised in the site. Reported money donated this way is enough to serve daily ca. 2000 hot meals for children in selected Polish schools. In this research we try to analyze reasons why people decide to help, distinguish the most preferred forms of donations in the Internet space and finally there is a proposal of an approach which assumes that support goes only to those projects which can be fully financed from declared donations. The novelty of the approach is in the fact that declared donations are deducted from accounts only in case when total declared sum is higher or equal to required resources. The project is validated against legal regulations which, in case of Poland, do not allow (with some exceptions) public/internet basking for money by individuals but such a collection may be run by NGOs, foundations etc. The paper is built in 5 sections. After introduction there is a collection of motivations and arguments for participation and International Journal of Information Sciences and Application (IJISA). ISSN 0974-2255, Vol.11, No.1, 2019, (Special Issue) International Research Publication House. http://www.irphouse.com Page 164 of 166 avoiding charity actions found in literature review and on internet forums under articles related to charity issues. Section 3 is a survey of money giving and charity donation websites with discussion.

Survey of Existing System

According to the survey conducted our system is very familiar with the organization's mission in achieving no poverty goals. It has a moderate amount of impact on society. The process of donating is quite easy. Our system explains very well how the donation will be spent.Our system very well recognizes the receivers by taking their identity proof and various proof and then it decides whether the person is eligible or not for the donations.

The above survey is performed by our colleagues :
Aman Kazi
Maseerah Khan
Atruba Momin
Omkar Babrekar

Limitation Existing System or research gap

There are certain limitations in our project:

1.Customer Profile - There is no profile for the receiver so there is no record of the transactions made.

2.Location access- When the transactions are made we cannot trace the location.

3.Delay in getting updates from the receiver and donor.

Mini Project Contribution

Sr.No	Name /Roll No.	Contribution
1.	Shruti Nair /18CO08	Customer Templates, Donor Signin/Signout, Forget Password, Hosting.
2.	Asiya Pathan/18CO09	Admin Signin/Signout, Model, Backend.
3.	Ahmed Manikware/18CO36	Home Page, Feedback Form (Mailtrap.io).
4.	Zarin Khan /18CO05	Donor Templates.

CHAPTER 3

PROPOSED SYSTEM

Introduction

The main objective of the "**VCARE4U**" website is to help the donor to donate the real needy one by deciding whether the person is actually needy or not by using ML. The needy need to fill the details and apply for donation. There are various Government schemes and scholarships available in which the needy can apply for donations like education help, medical help.Our website helps the needy and the donor to connect with each other. In our website we have two logins one for the donor and one for the receiver. To know whether the receiver is eligible or not for getting the donations we check this criteria by checking their identity proofs and income proofs. The donor can donate food items, clothes, books and can also help by monetary means. Process model selected for this problem statement is an Iterative Model. As the Iterative Model allows the accessing earlier phases, in which the variations made respectively in project can be renewed at the end of SDLC process.Considering certain iterations, in first iteration requirement gathering , Analysis, Designing of our website, testing certain things and while testing if we found some changes required we can go for the next iteration where again from designing all the phases will be repeated and so on once all the things are finalized, testings are passed at the last iteration we can go for deployment of our project Further Maintenance of our website and addition of certain features in our website.

Architecture/Framework

Architecture:

Web application architecture defines the interactions between applications, middleware systems and databases to ensure multiple applications can work together. When a user types in a URL and taps “Go,” the browser will find the Internet-facing computer the website lives on and requests that particular page.

Django Framework:

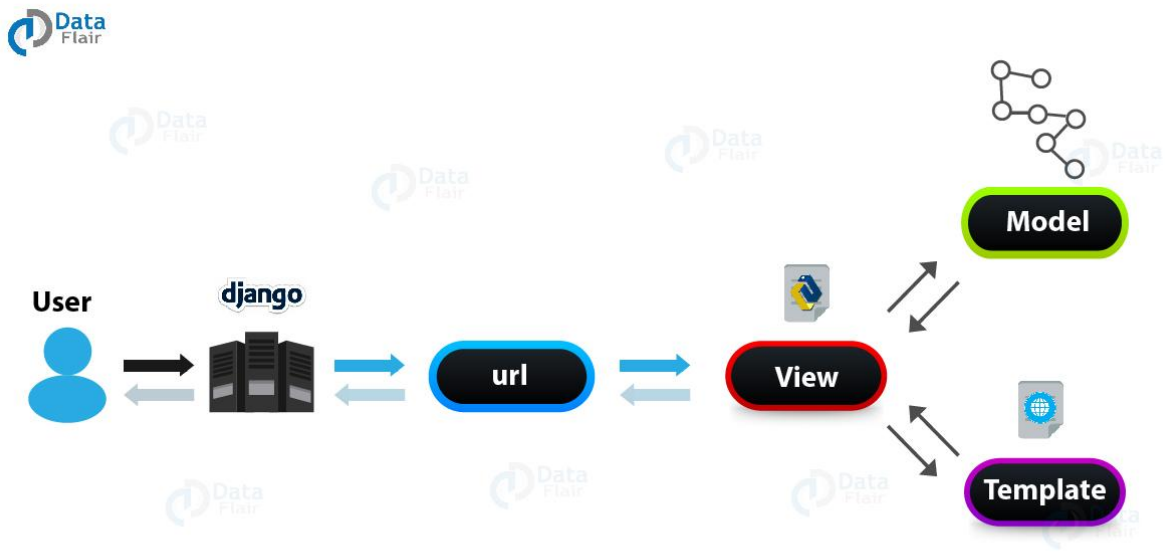
We have used the Django framework for our Website.Django is an open-source framework for backend web applications based on Python — one of the top web development languages. Its main goals are simplicity, flexibility, reliability, and scalability.

Django Architecture:

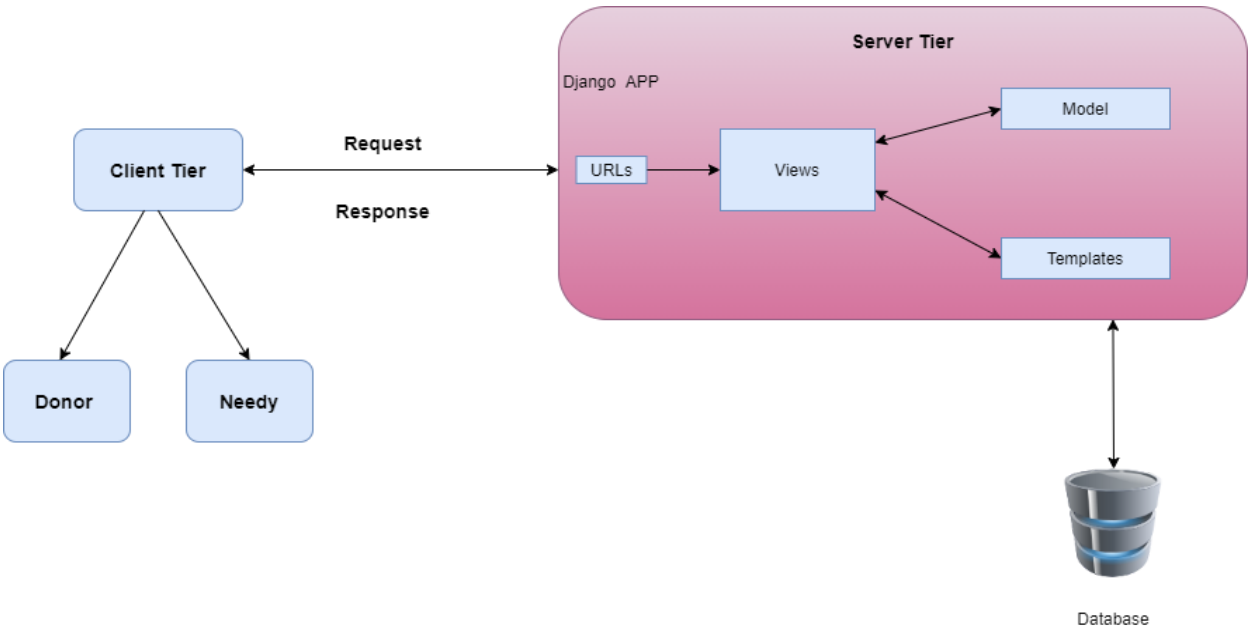
Django follows the MVT framework for architecture.

- M stands for Model
- V stands for View
- T stands for Template

MVT is generally very similar to that of MVC which is a Model, View, and Controller. The difference between MVC and MVT here is that Django itself does the work done by the controller part in the MVC architecture. Django does this work of the controller by using templates. Precisely, the template file is a mixture of HTML part and Django Template Language also known as DTL.



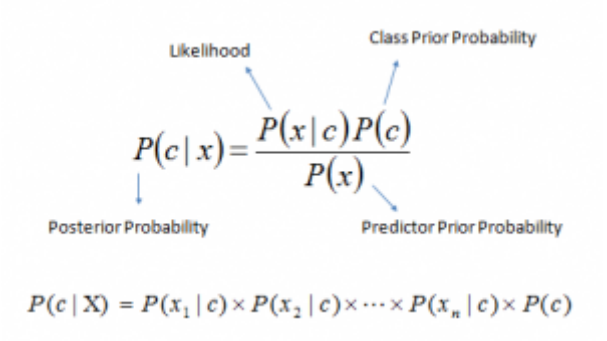
Website Architecture:


Server Tier
Django APP
Model
Client Tier
Request
URLs
Views
Response
Templates
Donor
Needy
Database

Algorithm and Process Design

Naive Bayes :

We have used the Naive Bayes algorithm in our project. It is a classification technique based on **Bayes'** Theorem with an assumption of independence among predictors. In simple terms, a **Naive Bayes classifier** assumes that the presence of a particular feature in a class is unrelated to the presence of any other feature.



Naive Bayes algorithm in our project is used to predict the eligibility criteria of the Customer (needy or not). The parameters for the algorithm are age, gender, workclass, education, marital status, hours of work, income. The algorithm takes the value from the system(website) and uses the model for insertion of customers in need of donation into the database.The Donor can see the Details of the Receiver.

Process Model:

Process model for this problem statement is an Iterative Model. The Iterative Model allows accessing earlier phases, in which the variations made respectively in the project can be renewed at the end of the SDLC process. Considering certain iterations performed in our project, the first iteration involves requirement gathering, analysis, designing of our website, testing, implementation and review by the client. While testing, if found some changes required, like errors or bugs are fixed as an iterative model allows developers to check the previous phases. In the second iteration, according to the review given by the client if certain requirements need to be changed then from designing all the phases will be repeated and so on further iterations are followed. Once all the Clients requirements are satisfied and finalized, testings are passed at the last iteration, feasibility and functionality is checked further we can go for deployment of our project. Further Maintenance of our website and addition of certain features in our website will be handled by the admin.

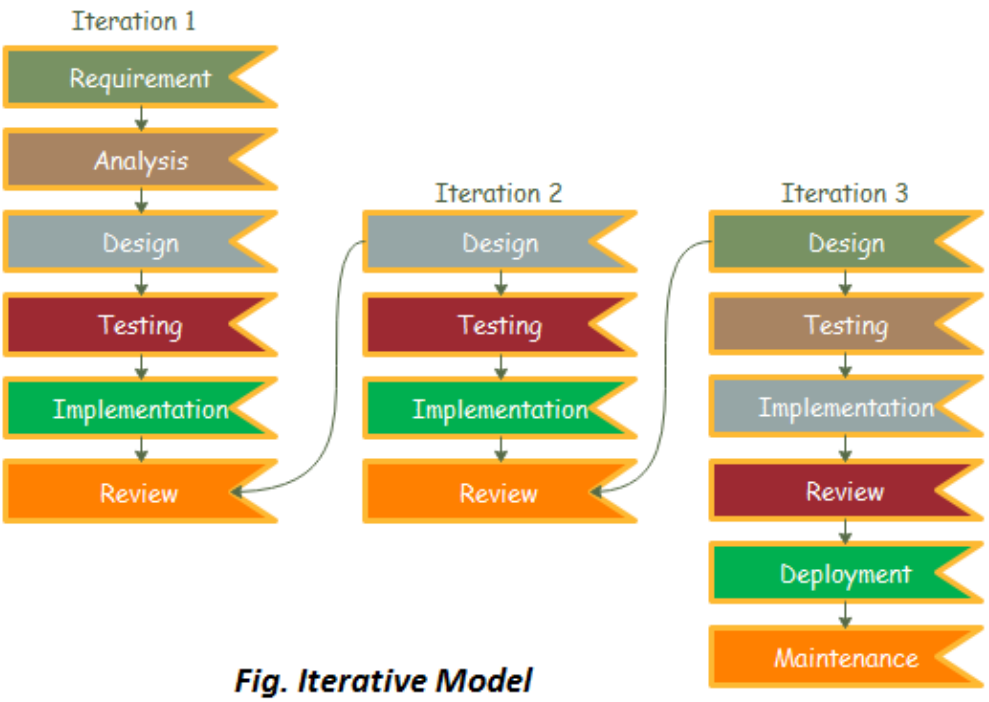
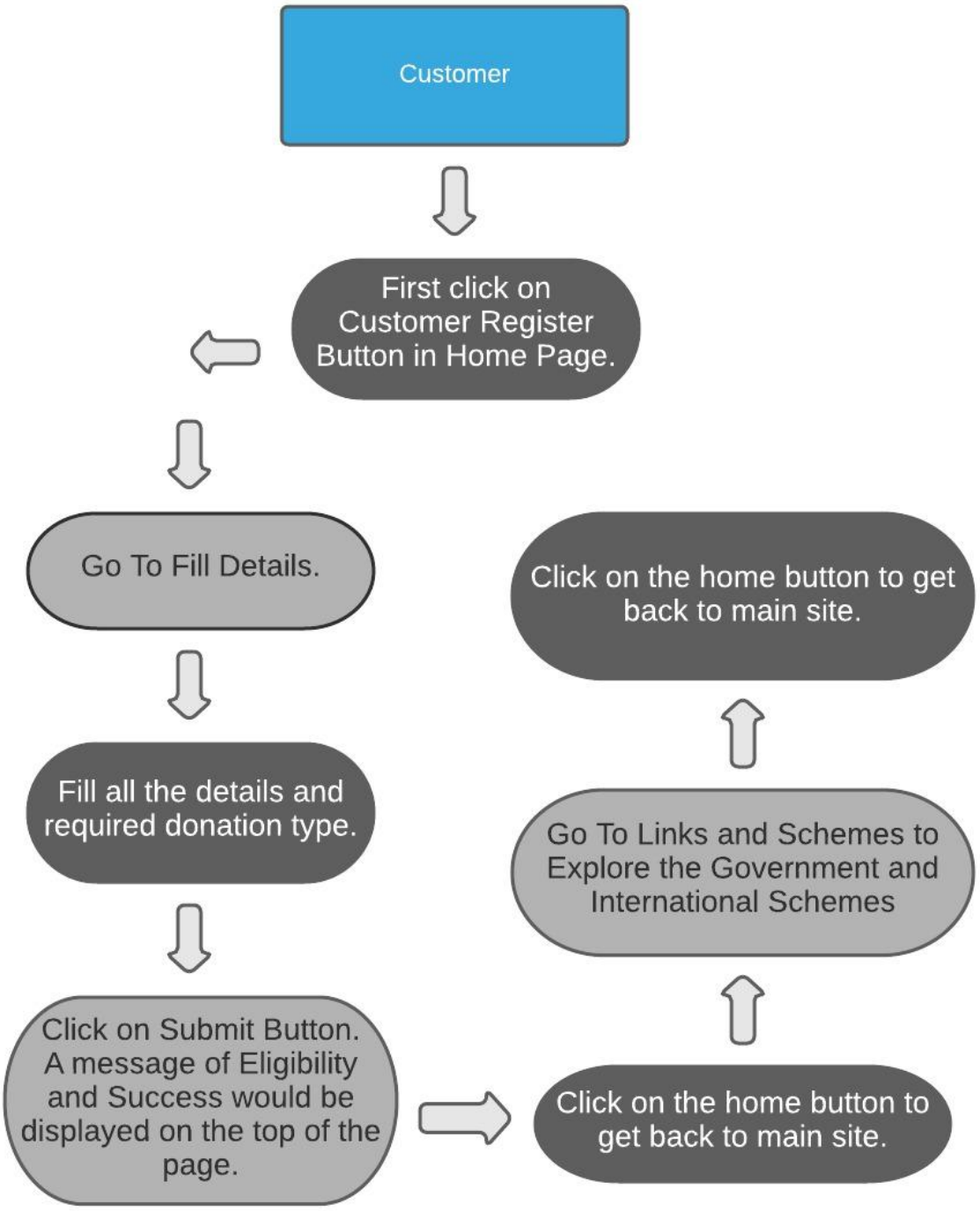
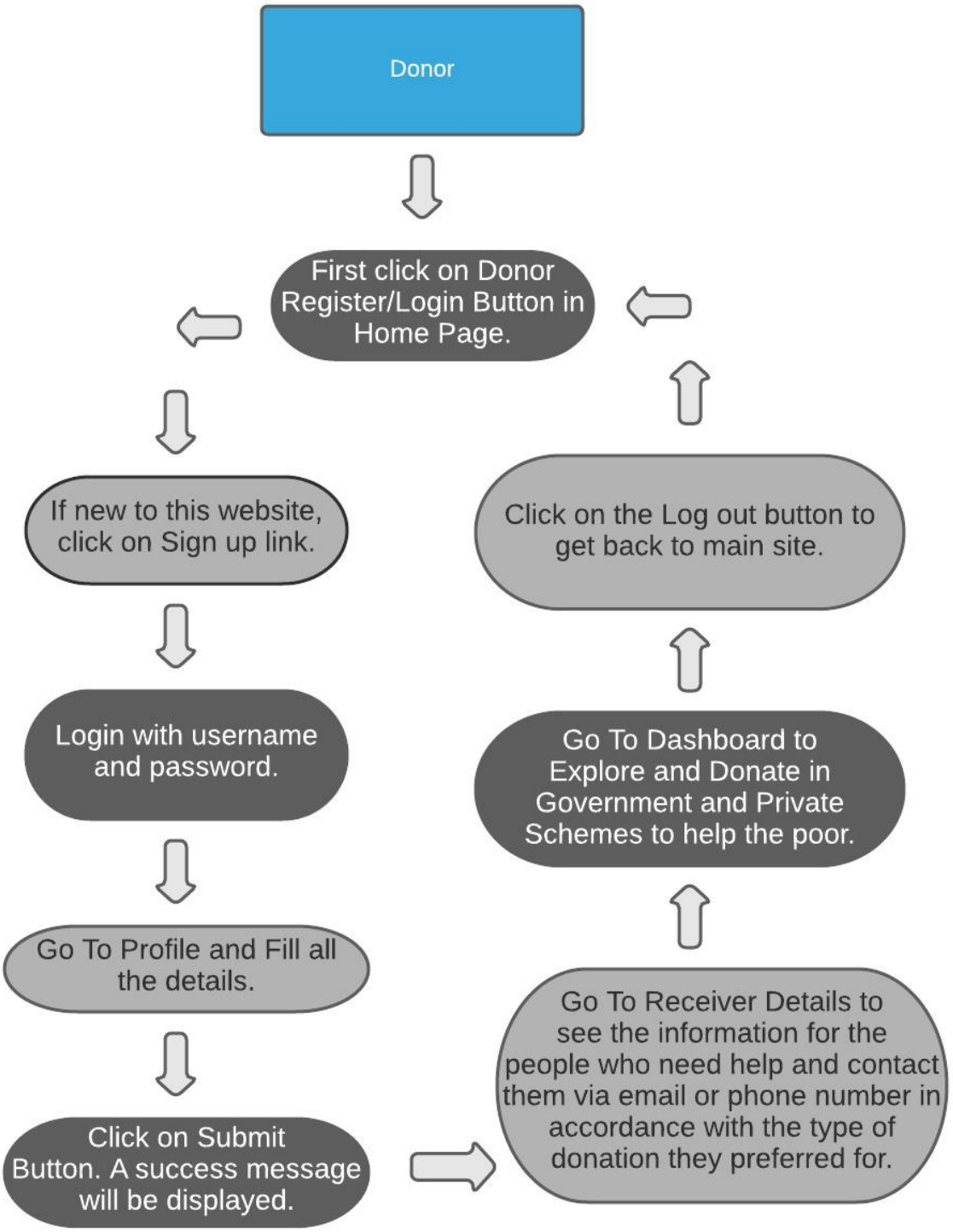


Fig. Iterative Model

Customer:

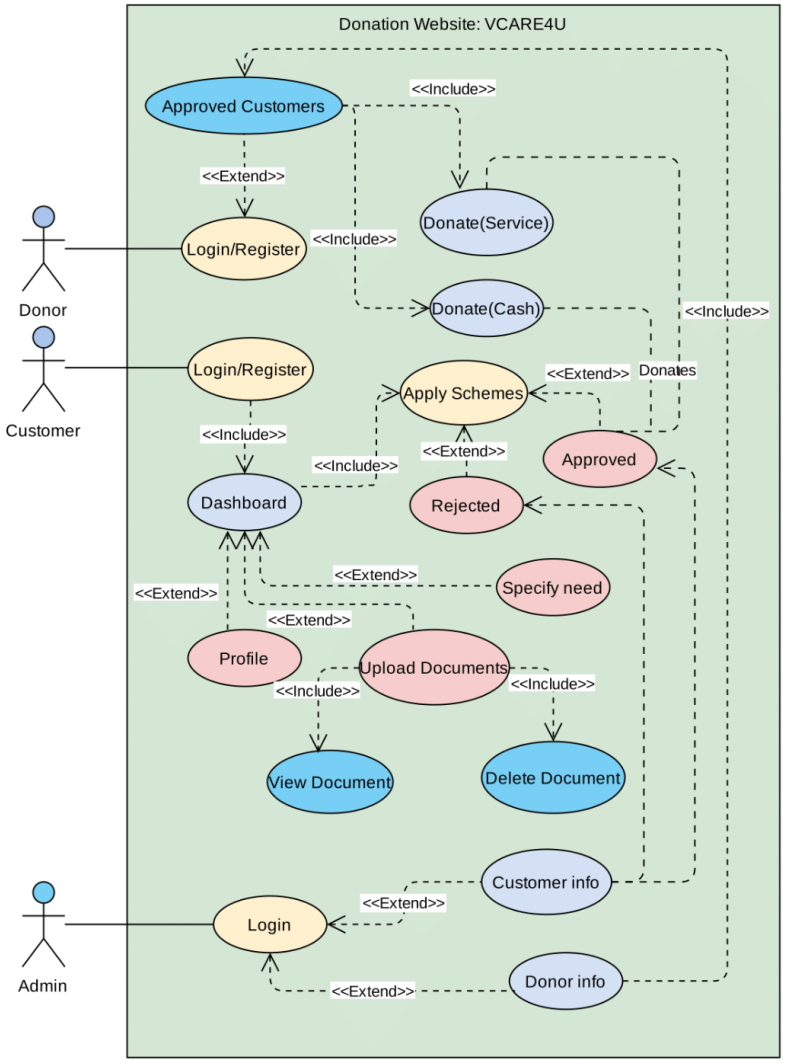

Customer
First click on Customer Register Button in Home Page.
Go To Fill Details.
Fill all the details and required donation type.
Click on Submit Button. A message of Eligibility and Success would be displayed on the top of the page.
Click on the home button to get back to main site.
Go To Links and Schemes to Explore the Government and International Schemes
Click on the home button to get back to main site.

Donor:


Donor
First click on Donor Register/Login Button in Home Page.
If new to this website, click on Sign up link.
Login with username and password.
Go To Profile and Fill all the details.
Click on Submit Button. A success message will be displayed.
Go To Receiver Details to see the information for the people who need help and contact them via email or phone number in accordance with the type of donation they preferred for.
Go To Dashboard to Explore and Donate in Government and Private Schemes to help the poor.
Click on the Log out button to get back to main site.

Use-case Diagram

Visual Paradigm Online Free Edition



Visual Paradigm Online Free Edition

The following table provides the description of each activity in the project.

Activity	Description
Register	The user can register and save his/her information into the system..
Types of Login	There are three types of login i)Admin Login ii)Customer Login iii) Donor Login
Browse Categories	The donors can browse the details of the receiver, view government schemes, check the documents and donate what they want to donate to.
Donor	The donor can see the details of the needy.
Needy	The needy can select the type of donation required
Feedback	Users can give feedback.
Admin	Admin can view customer and donor details.

Functional Requirements:

User account management:

1. **User registration:**

    - The website shall allow users to register and create login credentials.

2. **User authentication**

    - When registering, we shall allow users to authenticate using their username and password.

3. **User Log in**

    - Users shall be able log out

4. User Updation:

- User should be able to update their password
- Customer should be able to update their needs
- Donor should be able to update their schemes

5. FeedBack:

- User should be able to give feedback

Non-Functional Requirements:

Performance:

- The Website performance should be optimised, and response time should be minimized.

Scalability:

- The Website should be highly scalable; since it is meant to be used by people around the world.

Extensibility:

- The Website should be extensible to allow adding other services in the future, such as using profiles from Facebook. Also, allowing integration with other APIs such as Google maps and OpenID.

Integration:

- The system should have the ability to extend its requirements. For example, having the ability to extend with the minimum development and deployment costs.

Security:

- The system should be highly secure since only authenticated users can have access to the server. It should respect the 3 aspects:
  - ü **Confidentiality:**
    - The user shall ensure who gets to see their information
  - ü **Integrity:**

- Editing data shall be authorized only to owners of the accounts

ü **Availability:**

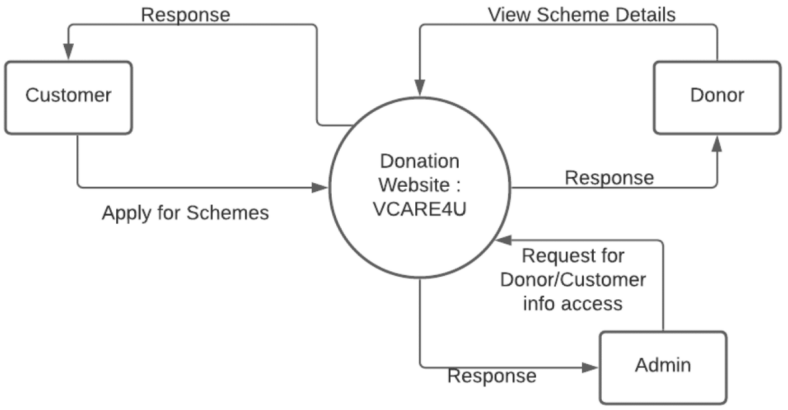
- The Website shall be available at all times.

Maintainability:

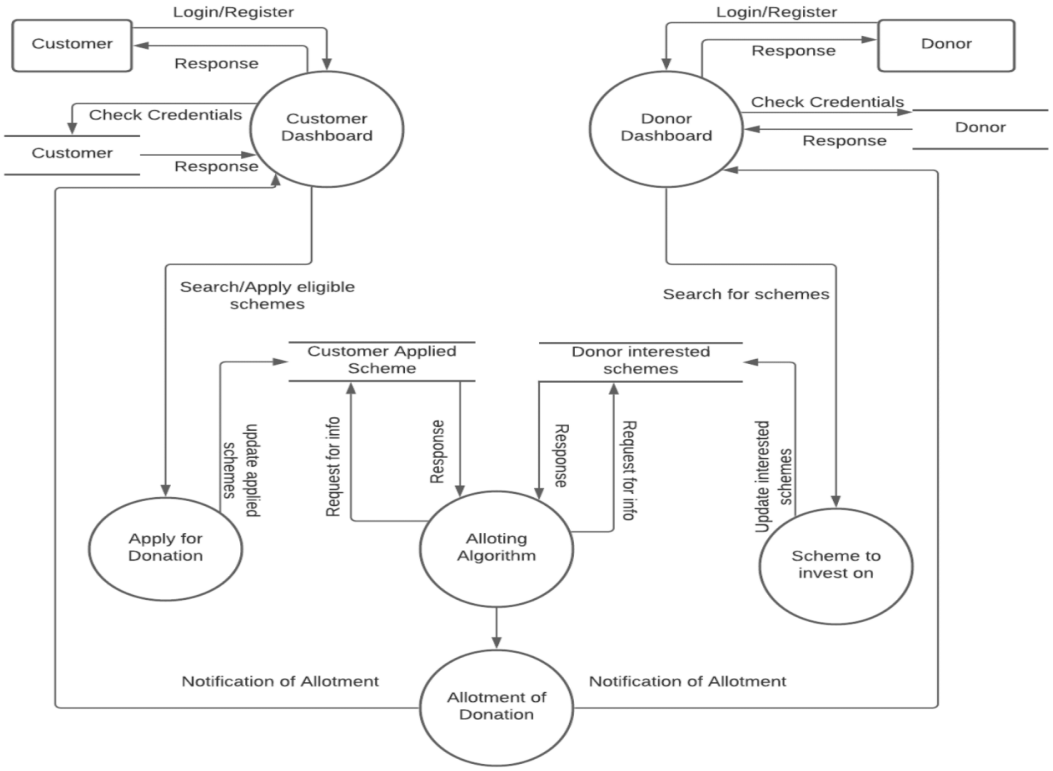
- The system should be easily maintainable to allow for additional upgrades that can be implemented in the future.

DFD

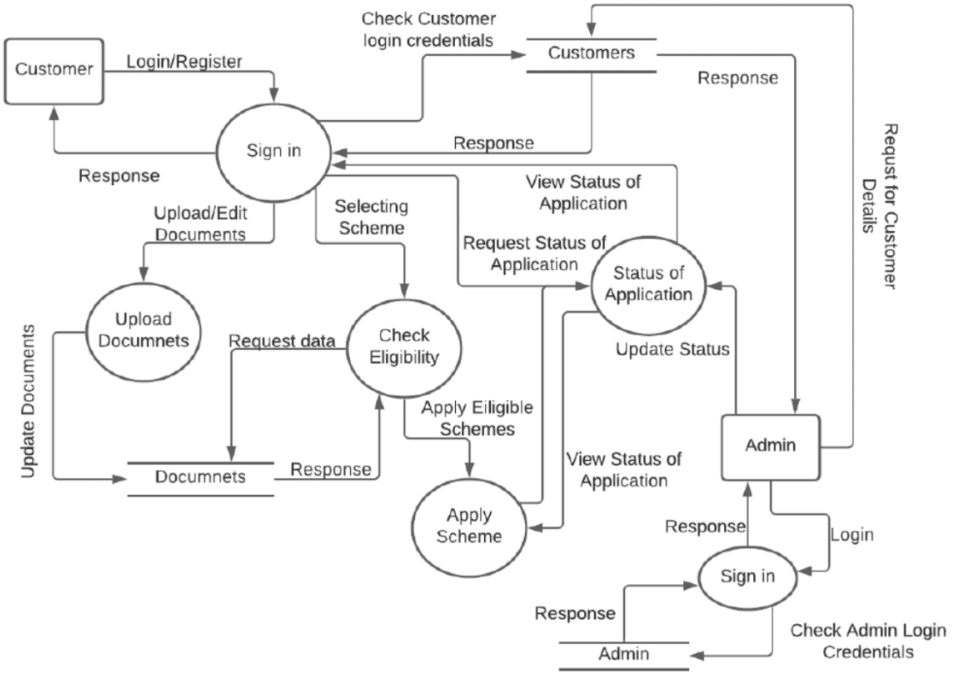
Level 0



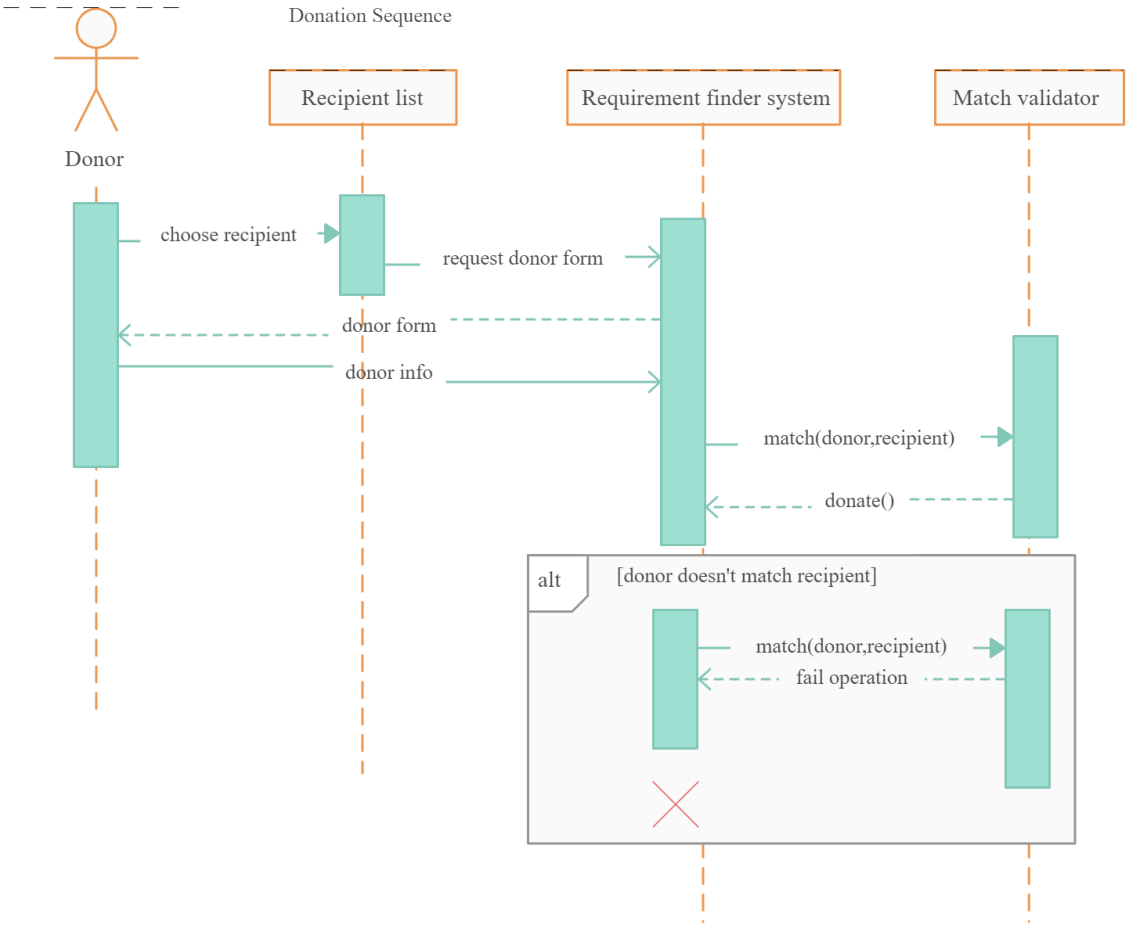
Level 1



Level 2


Customer
Login/Register
Check Customer login credentials
Customers
Response
Sign in
Response
Response
Request for Customer Details
View Status of Application
Selecting Scheme
Upload/Edit Documents
Request Status of Application
Status of Application
Upload Documnets
Request data
Check Eligibility
Update Status
Update Documents
Apply Eiligible Schemes
Admin
View Status of Application
Documnets
Response
Apply Scheme
Response
Login
Sign in
Response
Check Admin Login Credentials
Admin

Sequence Diagram



Details of Hardware & Software:

Software Requirement:

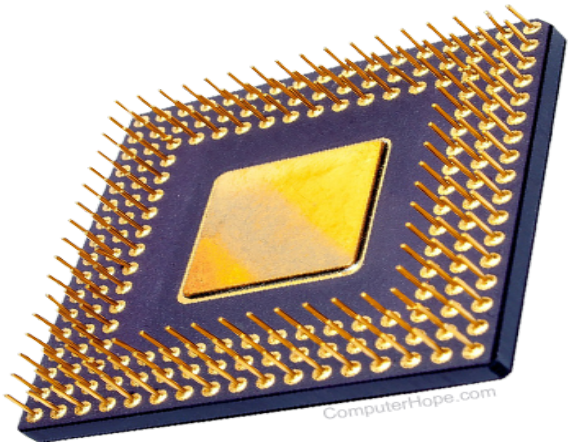
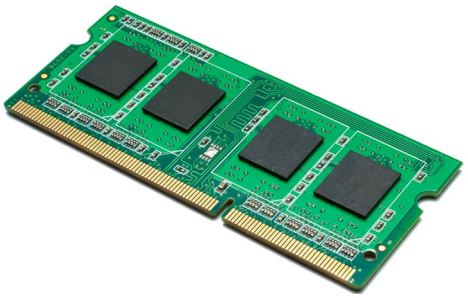
(i) Server Side:

python™	Python is a Programming Language.Python is used on server side to create Web Applications
django	Django is a high-level Python Web framework that encourages rapid development and clean, pragmatic design.
SQLite	SQLite is a C-language library that implements a small, fast, self-contained, high-reliability, full-featured, SQL database engine. SQLite is the most used database engine in the world.

(ii)Client Side:

	Google Chrome is a cross-platform web browser developed by Google.It is used to display Website and Web application

Hardware Requirements :

	Any processor capable of running any sort of operating System
	Minimum 512gb of RAM at workstation
	Minimum 40 GB hard disk space

	Monitor for Workstation

Experiment and Results

i) Test Case 1:

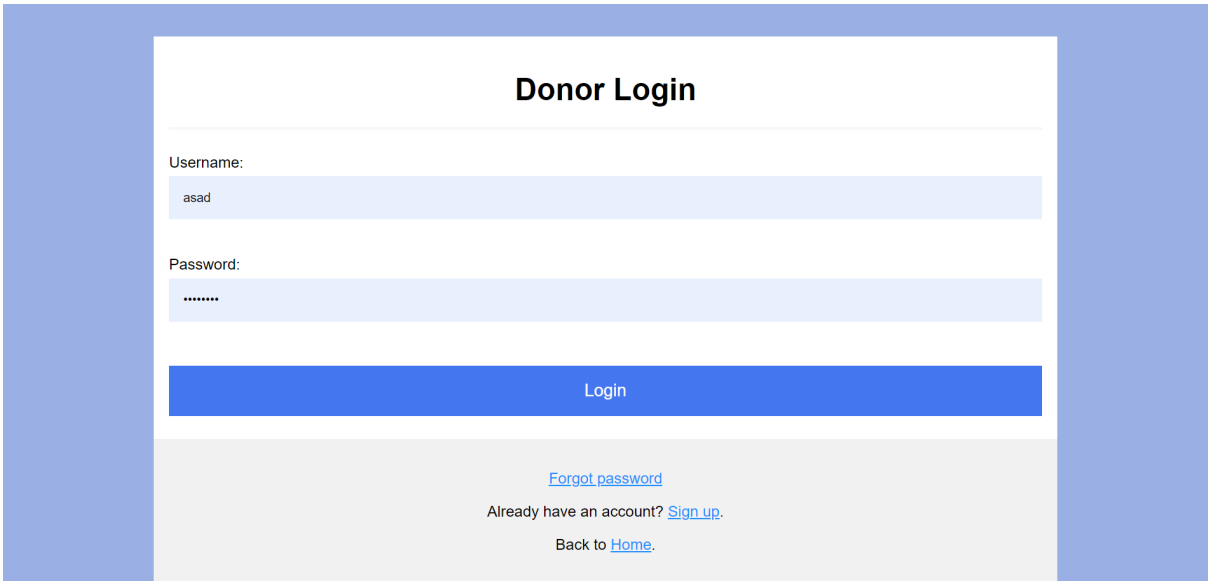
Test Case ID	1	**Test Case Description**	Test the Login Functionality in Donor Login		
Created By	Shruti	**Reviewed By**	Shreyas	**Version**	1
QA Tester's Log	Create Donor Profile				
Tester's Name	Shreyas	**Date Tested**	14-05-2021	**Test Case (Pass/Fail/Not**	Pass

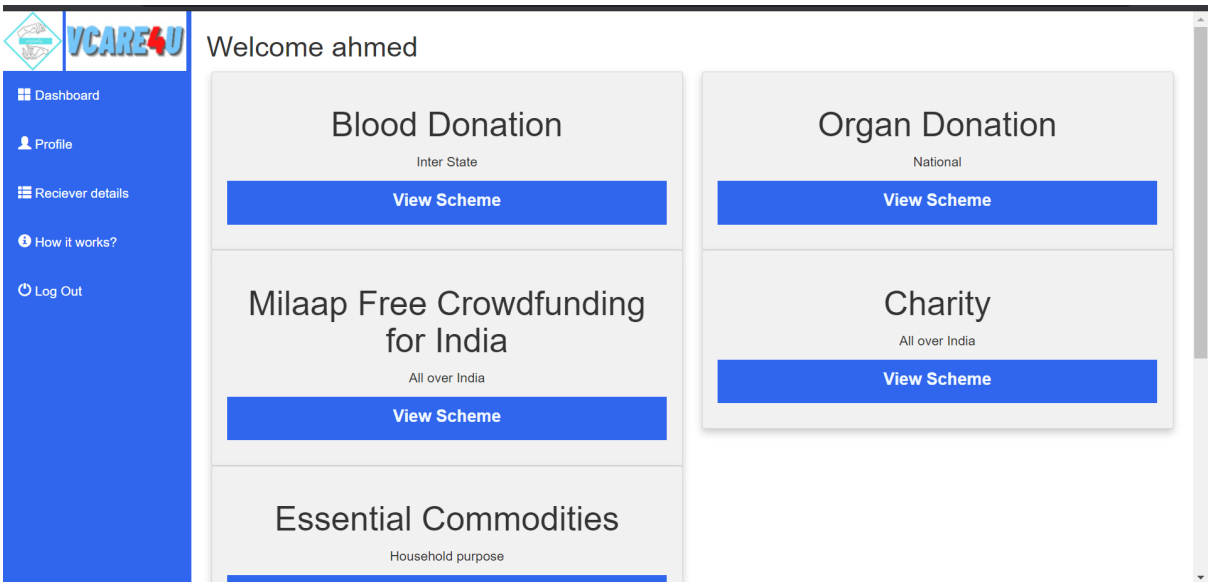
S #	Prerequisites:	S #	Test Data
1	Access to Chrome Browser	1	Userid = shreyas
2		2	Pass = Puk@2004
3		3	
4		4	

Test Scenario Verify on entering valid userid and password, the donor can login

Step #	Step Details	Expected Results	Actual Results	Pass / Fail / Not executed /
1	Navigate to	Site should open	As Expected	Pass
2	Enter Userid & Password	Credential can be entered	As Expected	Pass
3	Click Submit	Donor is logged in	As Expected	Pass

Output:





ii)Test Case 2:

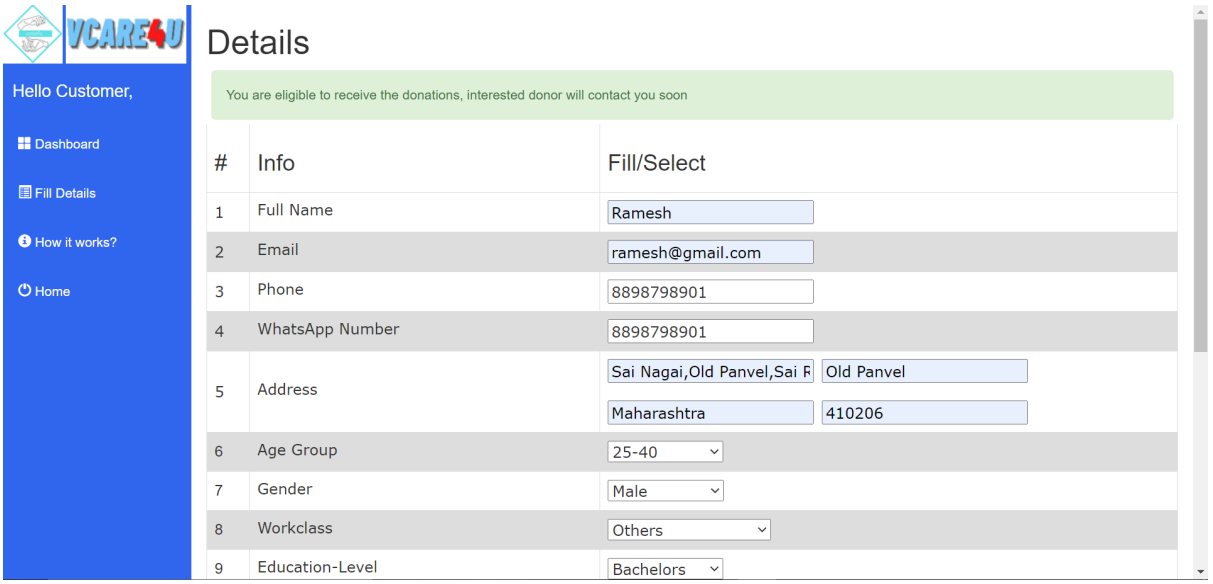
Test Case ID	2	**Test Case Description**	Test the Submission of Customer data in Database		
Created By	Shruti	**Reviewed By**	Asiya	**Version**	1
QA Tester's Log	Fill Customer Details				
Tester's Name	Asiya	**Date Tested**	14-05-2021	**Test Case (Pass/Fail/Not**	Pass

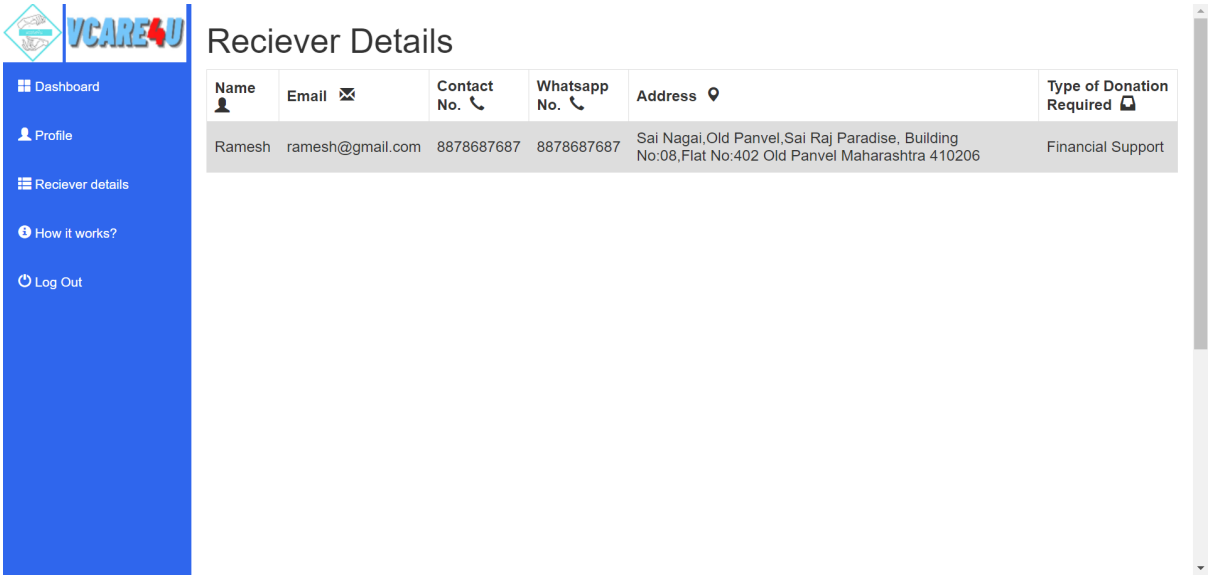
S #	Prerequisites:
1	Access to Chrome Browser
2	
3	
4	

S #	Test Data
1	Full Name= Asiya Pathan
2	Email= asiyapathan2000@gmail.com
3	Phone= 111122223
4	Whatsapp= 111122223
5	Address= Chakki naka,Kalyan, Maharashtra,421306
6	Age Group= 20-25
7	Gender= Female
8	Workclass= others
9	Education-level=HSC
10	Marital status= Unmarried
11	Hours of work=3-6
12	Income=below 1 lakh
13	Income file=file
14	Type of donation required=Financial Support

Step #	Step Details	Expected Results	Actual Results	Pass / Fail / Not executed / Suspended
1	Navigate to https://vcare4u.herokuapp.com	Site should open	As Expected	Pass
2	Click on Customer Card	Fill Details Form	As Expected	Pass
3	Click Submit	Eligibility Message appears	As Expected	Pass

Output:





iii)Test Case 3:

Test Case ID	3	**Test Case Description**	Test the Admin Login		
Created By	Asiya	**Reviewed By**	Shruti	**Version**	1
QA Tester's Log	View Donor and Customer details				
Tester's Name	Shruti	**Date Tested**	14-05-2021	**Test Case (Pass/Fail/Not**	Pass

S #	Prerequisites:	S #	Test Data
1	Access to Chrome Browser	1	Adminid= careadmin
2		2	Pass = vcare4u21
3		3	
4		4	

Test Scenario View Donor and Customer details

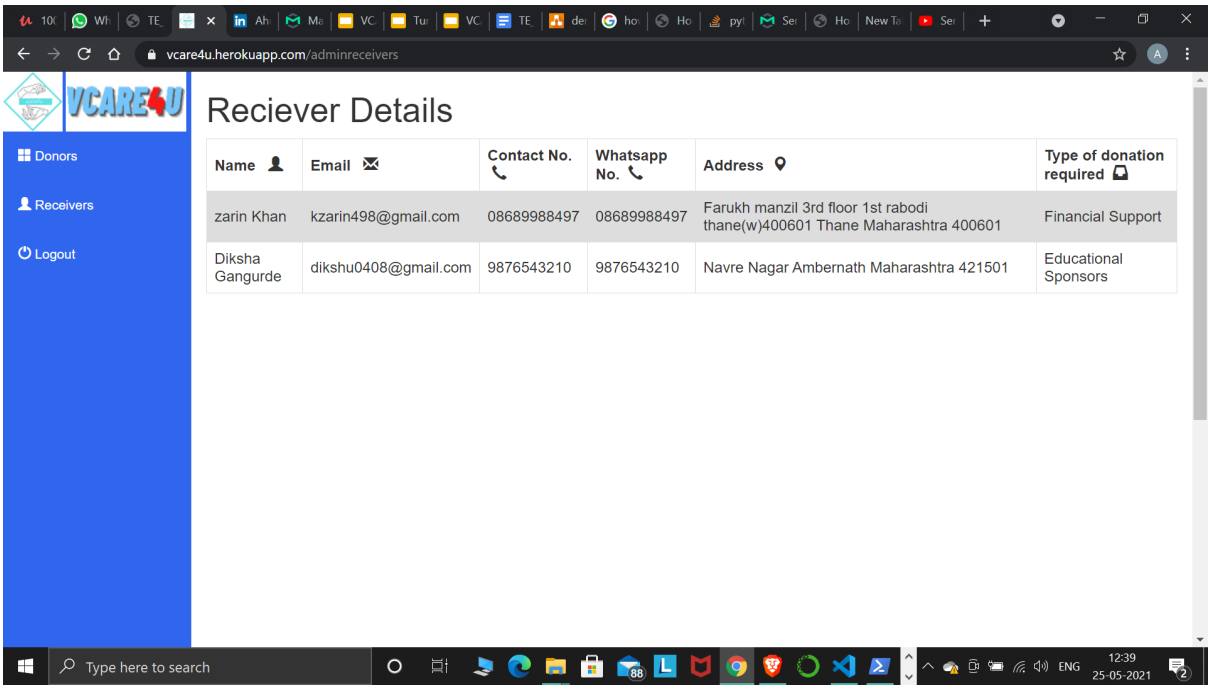
Step #	Step Details	Expected Results	Actual Results	Pass / Fail / Not executed / Suspended
1	Navigate to https://vcare4u.herokuapp.com/adminv	Site should open	As Expected	Pass
2	Enter Adminid & Password	Credential can be entered	As Expected	Pass
3	Click Submit	Donor is logged in	As Expected	Pass

Output:

Admin Login

Username	careadmin
Password	••••••••

Login Cancel



Name	Email	Contact No.	Whatsapp No.	Address	Type of donation required
zarin Khan	kzarin498@gmail.com	08689988497	08689988497	Farukh manzil 3rd floor 1st rabodi thane(w)400601 Thane Maharashtra 400601	Financial Support
Diksha Gangurde	dikshu0408@gmail.com	9876543210	9876543210	Navre Nagar Ambernath Maharashtra 421501	Educational Sponsors

iv) Test Case 4:

Test Case ID	4	**Test Case Description**	Test the Contact Us Form		
Created By	Ahmed	**Reviewed By**	Shruti	**Version**	1
QA Tester's Log	Test the funtioning of Feedback				
Tester's Name	Shruti	**Date Tested**	14-05-2021	**Test Case (Pass/Fail/Not**	Pass

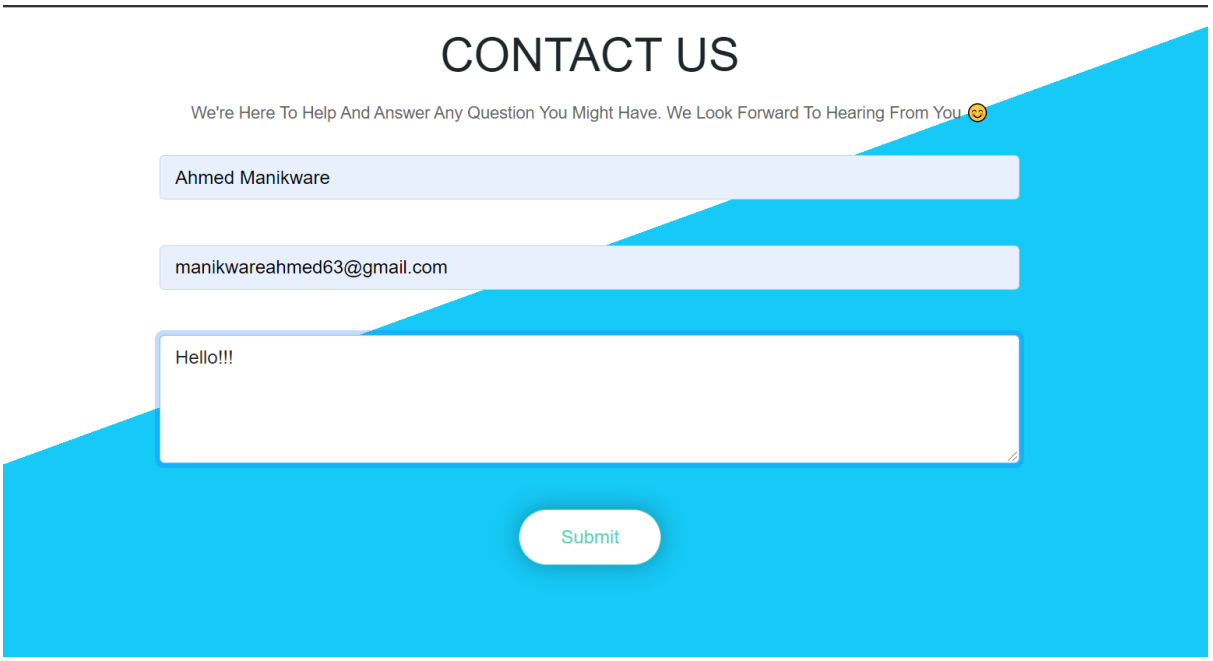
S #	Prerequisites:
1	Access to Chrome Browser
2	
3	
4	

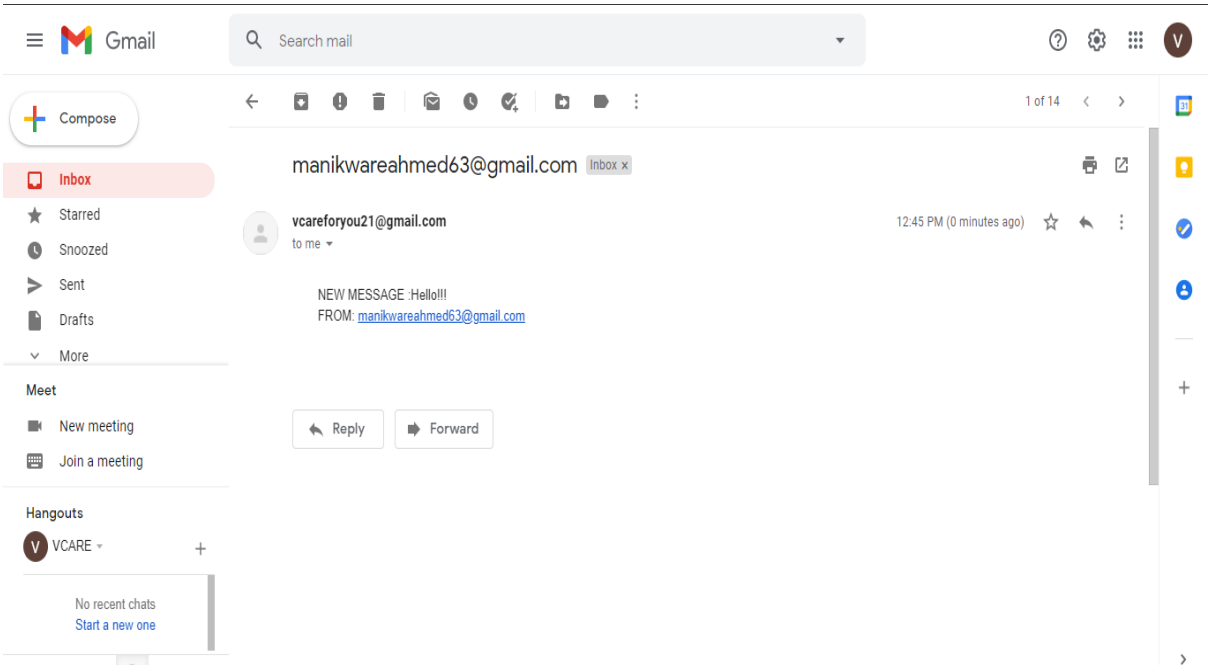
S #	Test Data
1	Name= Shruti Nair
2	Email = usnairsrc@gmail.com
3	Comment= Nice Website
4	

Test Scenario Successfully Submit the Review and Complaints or Compliments

Step #	Step Details	Expected Results	Actual Results	Pass / Fail / Not executed / Suspended
1	Navigate to https://vcare4u.herokuapp.com	Site should open	As Expected	Pass
2	Enter Name,Email and Comment	Details can be entered	As Expected	Pass
3	Click Submit	Feedback is sent	As Expected	Pass

Output:





v) Test Case 5:

Test Case ID	5	**Test Case Description**	Test the Forget Password		
Created By	Shruti	**Reviewed By**	Prasanna	**Version**	1
QA Tester's Log	Change the current password				
Tester's Name	Prasanna	**Date Tested**	14-05-2021	**Test Case (Pass/Fail/Not**	Pass

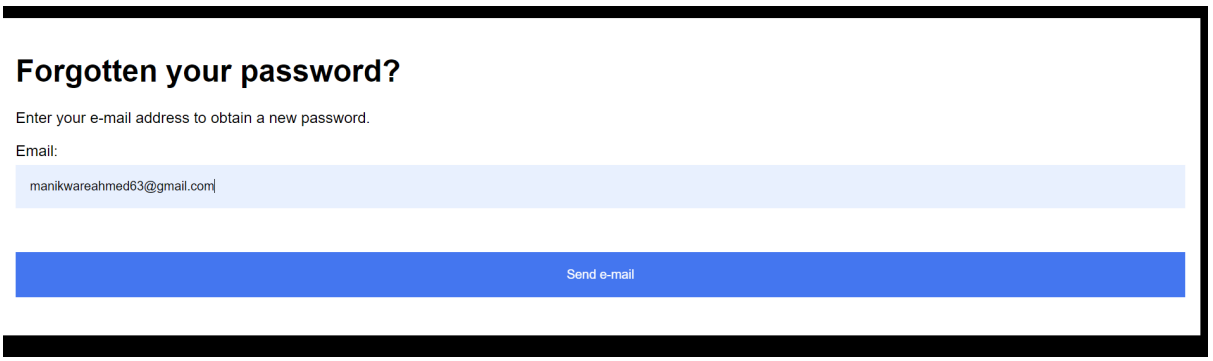
S #	Prerequisites:
1	Access to Chrome Browser
2	Registered Email ID
3	
4	

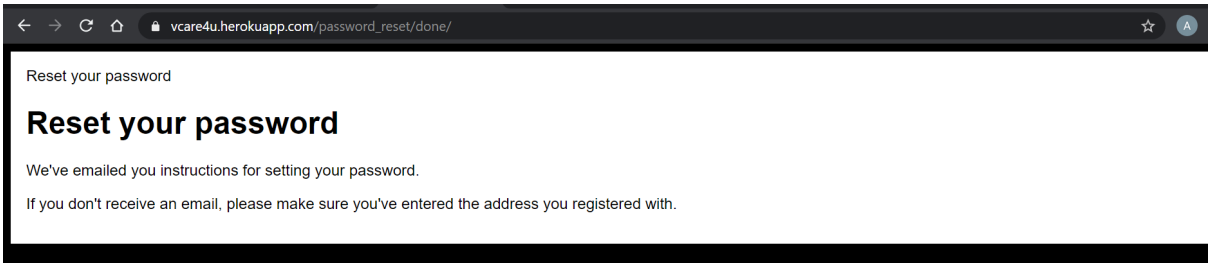
S #	Test Data
1	Email= usnairsrc@gmai.com
2	
3	
4	

Test Scenario Verify on entering valid emailid and sent link for password reset

Step #	Step Details	Expected Results	Actual Results	Pass / Fail / Not executed / Suspended
1	Navigate to https://vcare4u.herokuapp.com/login	Site should open	As Expected	Pass
2	Click on Forgot password	Redirect to enter email	As Expected	Pass
3	Enter Registered Email	Link sucessfully sent to email	As Expected	Pass
4	Click on the link and enter new password and submit	Redirect to password reset	As Expected	Pass
5	Enter Userid & Password	Credential can be entered	As Expected	Pass

Output:





vi) Test Case 6:

Test Case ID	6	**Test Case Description**	Test the Donor Registration Page		
Created By	Shruti	**Reviewed By**	Asiya	**Version**	1
QA Tester's Log	Test Registration Page validation				
Tester's Name	Asiya	**Date Tested**	14-05-2021	**Test Case (Pass/Fail/Not**	Pass

S #	Prerequisites:
1	Access to Chrome Browser
2	
3	
4	

S #	Test Data
1	Userid= Shru890
2	Email = usnairsrc@gmail.com
3	Password= Shruti2000
4	

Test Scenario Should give an error for password similar to email id.

Step #	Step Details	Expected Results	Actual Results	Pass / Fail / Not executed / Suspen
1	Navigate to https://vcare4u.herokuapp.com/register	Site should open	As Expected	Pass
2	Enter Userid, Email, Password and Confirm Password	Details can be entered	As Expected	Pass
3	Click Submit	Error for password similar to email id is shown.	As Expected	Pass

Output:

Register

Please fill in this form to create an account as Donor.

Username

asad

Email

asad@gmail.com

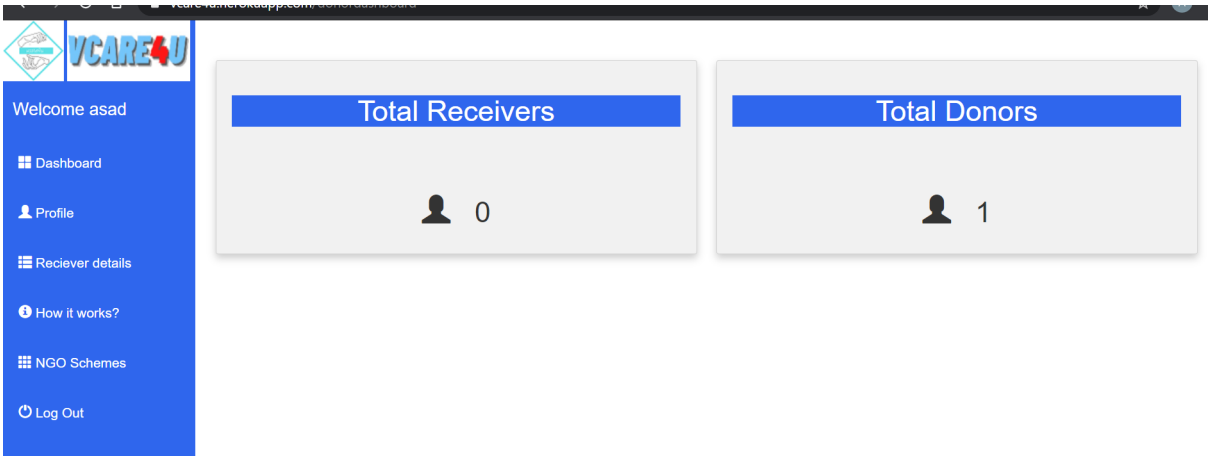
Password

••••••••

Password confirmation

••••••••

Register



Conclusion and Future work.

Conclusion:

The current work is the initial background report for the website development project. This report aims to provide a critical review of the relevant literature in the web field. To design an optimal database and complete the three anomalies. So, there is no redundant data for the website in the database. Doing it with a website helps to gain practical knowledge, this report is to show the practical knowledge gained and the functionalities of the project. How to write the proper queries and extract the data, and how to process the extracted data inside your work. Getting hand in hand with a powerful back end framework Mastering the database design and handling data from the database, taking data of users and processing it with the help of a strong database.

Future work:

- Application Status Updation services.
- Receiver dashboard is to be implemented.
- Real money transfers can be made using Razorpay.
- Location tracking(Using google maps).
- Validation of Documents Uploaded.

References:

1. https://www.youtube.com
2. https://stackoverflow.com/
3. https://www.w3schools.com/
4. https://getbootstrap.com/