

# **CSE 311L (Database Systems Lab)**

## **Project Final Report**

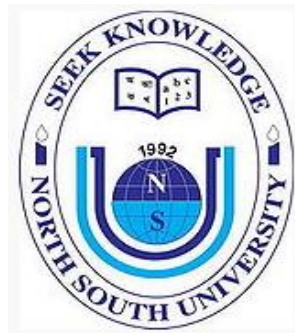
**Summer 2020**

**Section: 09**

**Group: I**

### **Project Title**

**‘Lifeline’, An Online Blood Management System**



### **Submitted To**

**Rifat Ahmed Hassan (RAH1)**

### **Submitted By**

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**Submitted On - 30<sup>th</sup> September, 2020**

**DEPARTMENT OF ELECTRICAL AND COMPUTER ENGINEERING  
NORTH SOUTH UNIVERSITY**

## Table of Contents

1. Introduction .....	2
2. Executive Summary .....	2
3. Features .....	3
4. Technology Stacks.....	4
5.Future Plans On Lifeline .....	4
6. Work Division & Contributions.....	5
7. ER Diagram.....	6
8. Database Diagram/ Schema Diagram .....	7
9. User-Case Diagram.....	8
10. Conclusion.....	9
11. References.....	10
11. Some Screenshots.....	11

## **Introduction**

The name of our project is Lifeline. Lifeline is an online Blood Donation platform. Using Lifeline, a seeker can connect with available blood donors around them, and donors can also find people around them who need blood. We wanted to build something keeping the current situation of the world in our head. The information we collected to build Lifeline can be used to help people in need, and we can use it even after our course.

## **Executive Summary**

In Lifeline platform, every registered donor and seeker has individual accounts with all their information. In Lifeline a seeker can find donors with his own blood group or any other blood group separately. Once a donor's information matches with seeker's needs, seeker can contact the donor with given contact no. A seeker can request blood through Lifeline's website and Donor can response to that request if he is available or he knows someone who can donate. We also kept information of hospitals nearest to the seekers and donors so that they can cut off some hassles. Admin of Lifeline can easily preview and remove any account he wants. Admin can also use Donor and Seeker's information to contact each other in a time of emergency.

## Features

1. The website contains registration option for both Blood seekers and donors. Those who're looking for blood and those who're willing to donate blood can register.
2. After registration, users (donor & seeker) can log in for further details using their user id and password.
3. When a donor registers, he enters his blood group in the registration form. This information will be added in the total quantity of that specific blood group.
4. Admins have their own login for the website.
5. Those who're in need of blood can look out for available donors, their information and availability of blood they're looking for.
6. Seeker can search for blood donors by location to see who lives nearest to them.
7. A seeker can make blood request, which can be viewed by any donors and admins.
8. Donors can response to blood requests and after positive response from a donor, the seeker can view the response. Admin can also act in this case. He can contact the donors and seekers for connecting them to each other in the case of emergency.
9. A donor can log in and view all the blood requests and the contact information of those who're looking for blood.
10. A donor can change his availability for blood donation. The change can be viewed by seekers and admins.
11. Donor and Seeker both can change their login at will.
12. Donors and seekers can look for many hospital's information and search hospitals by location.
13. Donor and seeker can look admin information so that they can contact them in case of problems related the website or blood case emergency.
14. All admins can view all the users (Donors and Seekers) information.
15. Admins can view the connected hospitals with Lifeline.
16. Admin can view all blood related information and the available quantity of each blood group.
17. For see the availability of blood there is also an auto adjusting pie chart in the admin page. It will change as the quantity changes.
18. Admin can view all the blood requests made by seekers and availability of all the donors.
19. An admin can search for any donor by blood group or by location or by both.

## **Technologies Stacks**

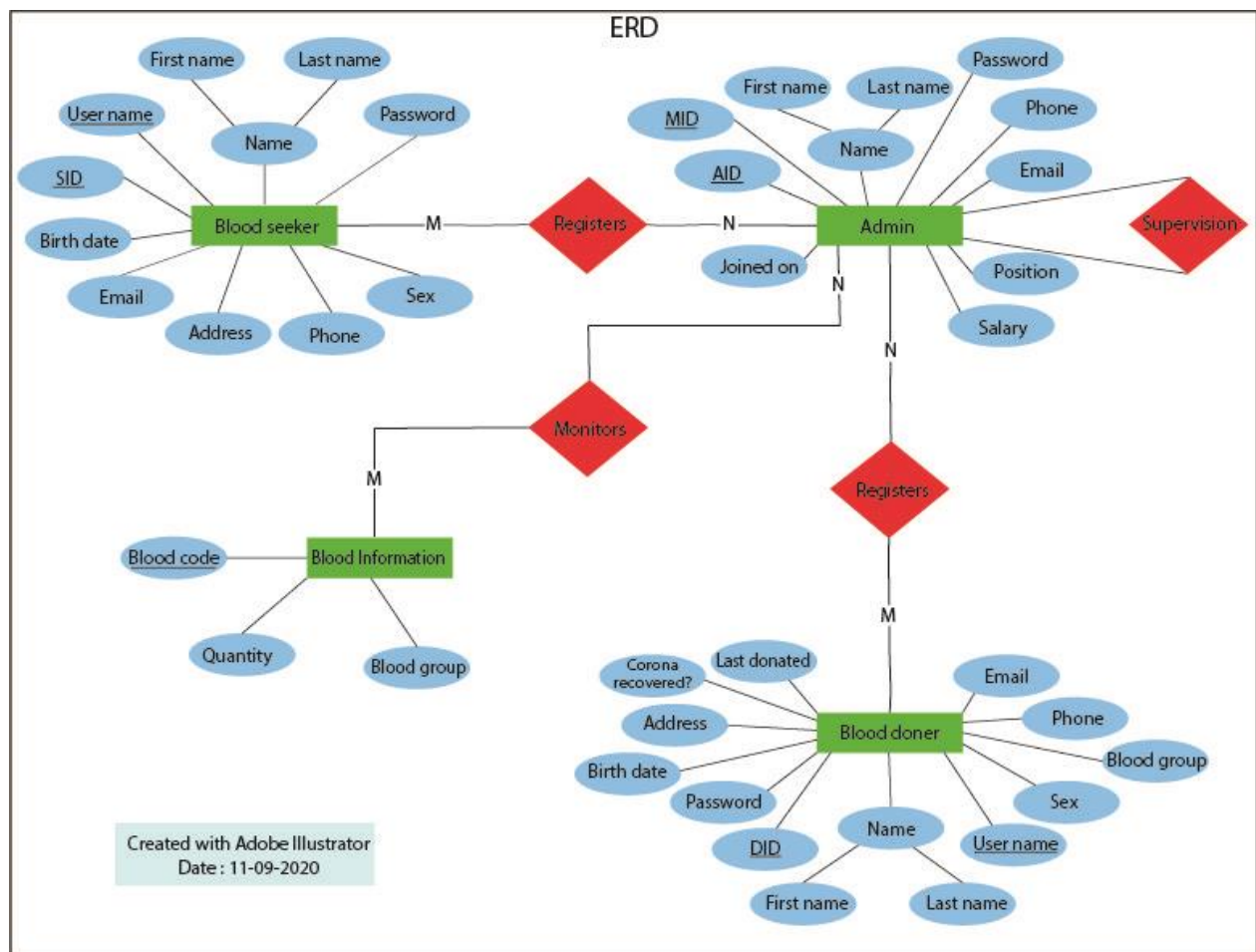
1. MySQL and XAMP – Used to make database and tables needed for the project.
2. HTML - Used to design the frontend of the webpages.
3. CSS – Used to add styling elements to the webpages.
4. BOOTSTRAP – Used this framework of CSS in many front-end designs.
4. PHP – Used to execute the backend works of the webpages (To connect the webpages with the database)
5. MS Word – Used to make ER diagram and UML diagram.
6. Google Charts – Used for the Pie Chart of the website.
7. JavaScript – Used few lines of code in two php files.

## **Future Plans On Lifeline**

We have plans on customizing front-end aspects and adding many other features in the project. There is a saying, “Only the imagination is the limit”. We aim on Improving the project big time in future by working and contributing individually.

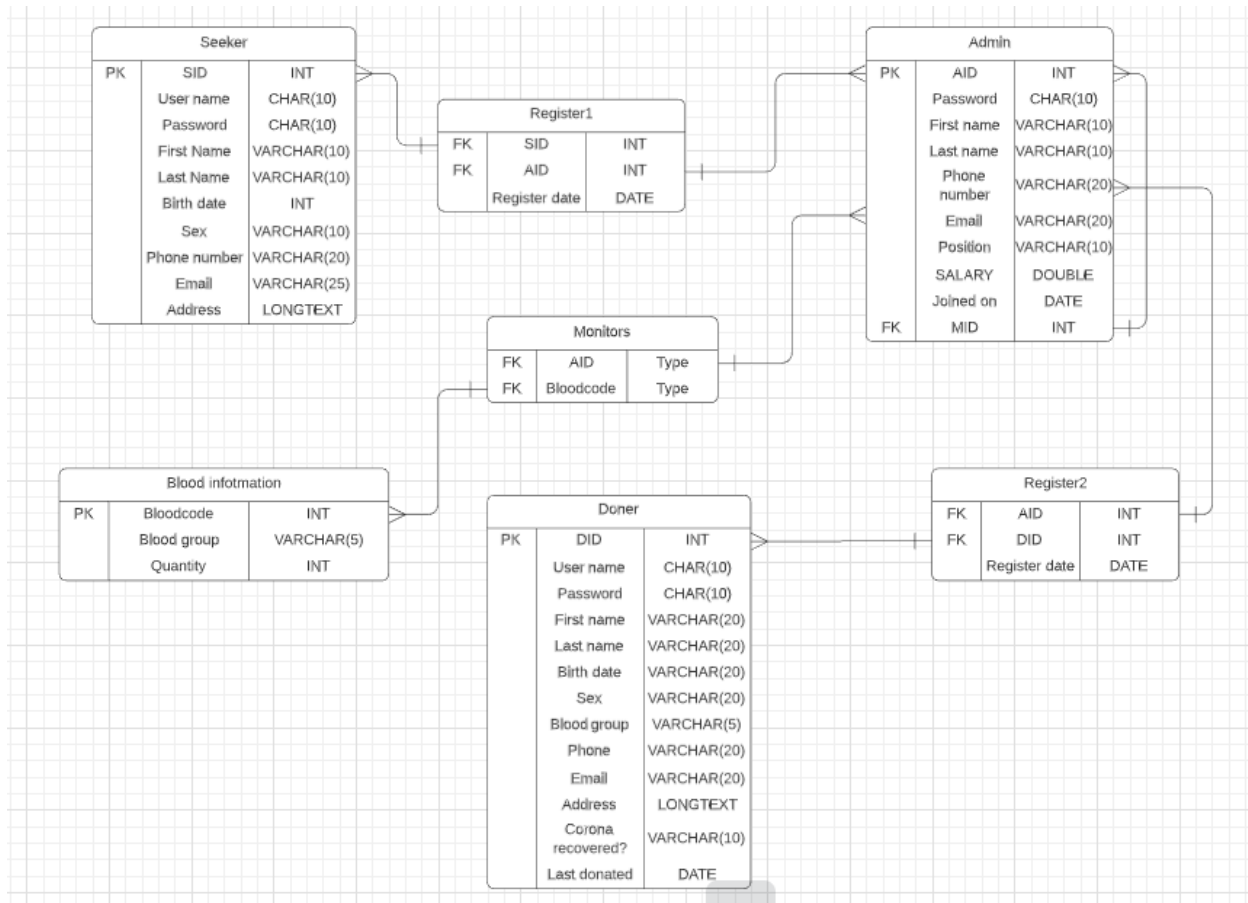
## Work Division & Contributions

Sharukh	Eusha	Ahsan
<ol style="list-style-type: none"> <li>1. Project Idea.</li> <li>2. Draw ER, SCHEMA &amp; USER CASE Diagram.</li> <li>3. Project Proposal</li> <li>4. Created the initial database design in MySQL by creating multiple tables.</li> <li>5. Created registration forms, user logins</li> <li>6. Did <b>100%</b> of the PHP codes with SQL queries in it.</li> <li>7. Connected the parts (front-end and back-end to a whole project.</li> <li>8. Created tables in the database.</li> <li>9. Inserted data to the Database.</li> <li>10. Created project logo and cartoon.</li> <li>11. Presentation.</li> <li>12. Project Report.</li> </ol>	<ol style="list-style-type: none"> <li>1. Project idea.</li> <li>2. Project Proposal.</li> <li>3. Created 4 tables and 3 relationship tables in database.</li> <li>4. Inserted data in database tables. (Did 70% of all).</li> <li>5. Did the Main front page design of the website.</li> <li>6. Tried PHP codes.</li> <li>7. Was co-operative during the whole project.</li> </ol>	<ol style="list-style-type: none"> <li>1. Project idea &amp; Project name.</li> <li>2. Did front page first demo design.</li> <li>3. Did 3 welcome page design for 3 kind of users.</li> <li>4. Project report</li> <li>5. Inserted data to the database.</li> </ol> <p>(He was Covid19 positive)</p>



### ER Diagram

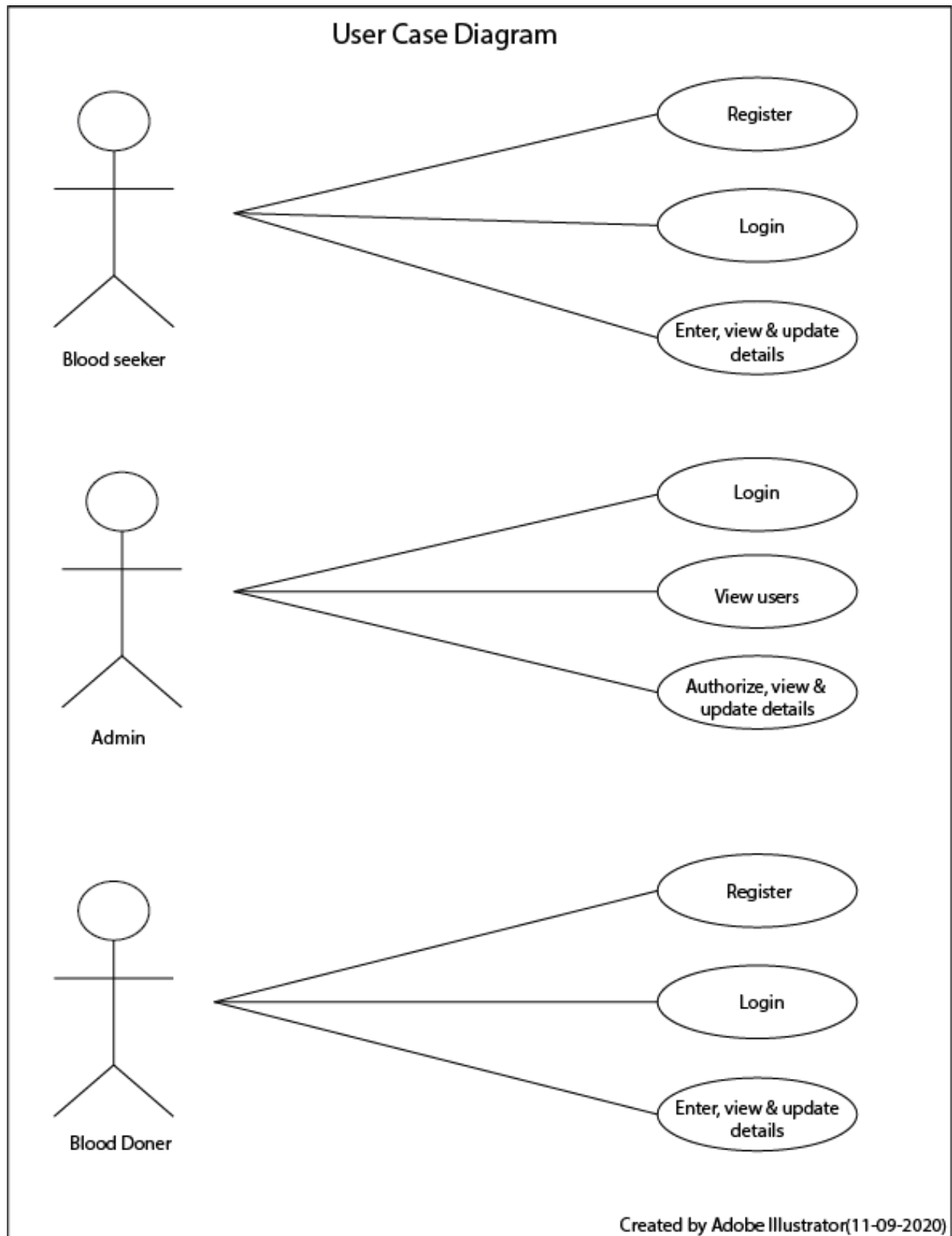
Note – We added Hospital table, blood request tables and updated and alter the database as per needed for the success of the project.



### Schema Diagram

Note – We added Hospitals tables, blood request tables and updated and alter the database as per needed for the success of the project.



**User-Case Diagram**

## Conclusion

So, this is our project. We learned a lot of things by doing this project and it was a great experience. We really loved working on this instead of only doing it for educational purpose. This project can be really helpful in a country like ours where finding blood in a time of emergency is really tough in many cases. There are plenty of people who love to donate blood for humanity. But often they don't know where to donate and in where blood donation will really be worth it. There are many NGO's and medical centers who take blood donation from donors and sell it at high price to those who are looking for blood. In future, we can add options like donating Oxygen, plasma, Organs of our registered donors after their death, money to people in need etc. We believe that with lifeline, we can give a new life to someone who was at the end of his lifeline. Our main goal for now was to create a bridge between those who need blood and those who can spare some of their blood for greater cause. We, tried our best and we're really happy on the outcome. And we hope, we can make this project better in future.

## References

1. W3SCHOOLS - <https://www.w3schools.com/>
2. STACK OVERFLOW - <https://stackoverflow.com/>
3. PHP official website - <https://www.php.net/>
4. YOUTUBE - <https://www.youtube.com/>
5. BOOK - Ramez Elmasri and Shamkant B. Navathe, Fundamentals of Database Systems (7/e), Addison-Wesley, 2015.

## Some Screenshots

The screenshot displays a GitHub repository interface. At the top, there are four columns of file and folder icons representing the repository's structure: **css**, **img**, **resource**, and **vendors**. Each column lists specific files, many with colored icons indicating their type (e.g., CSS, image, script, or document). Below the file list, a navigation bar includes buttons for 'Go to file', 'Add file', and 'Code'. The main content area is divided into two sections. The left section, titled 'About', contains a commit history table with columns for the commit message, the user (SharukhFardin), and the time elapsed since the commit. The right section, titled 'README.md', contains the project's description, name, introduction, and aim. The README text states that this is the final project for a database management system course, aimed at creating an online blood management system.

Commit Message	User	Time Ago
Front End Design	m	2 days ago
PHP Codes	commit	2 days ago
Pictures	pictures moved to a folder	18 days ago
Project's Database	committing changed database	6 days ago
Queries	adding hospital table query	4 days ago
README.md	commit	15 days ago
project_proposal.pdf	Add files via upload	18 days ago

**README.md**

### CSE311.9L\_Summer20\_RAH1\_-GROUP-I-

This is the final project for our Database management system,CSE311 course in NORTH SOUTH UNIVERSITY. We tried to create an Online blood management system.

Project Name: Online Blood Management System

Introduction: We are making a user-friendly webpage that records and manages the blood donation process, user and donor registration and data management of other related information.

Aim: Our goal is to create an online blood management system which will create an online platform for blood donors and people who are in need of blood.

**About**

This is the final project for our Database management system,CSE311 course in NORTH SOUTH UNIVERSITY. We tried to create an Online blood management system.

[Readme](#)

**Releases**

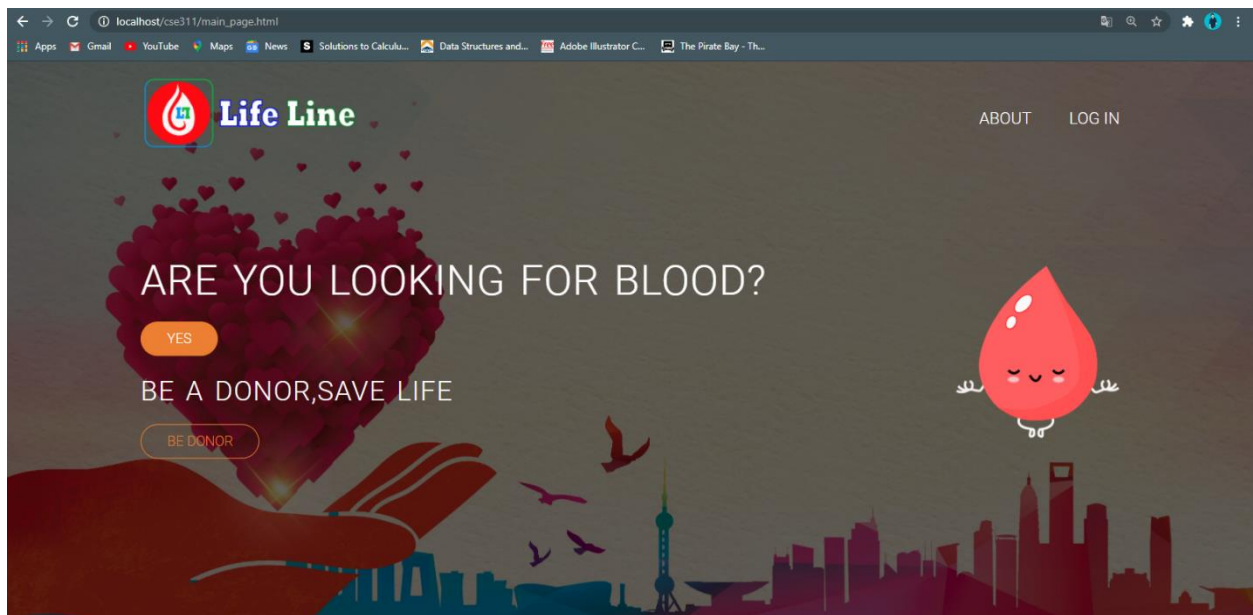
No releases published  
[Create a new release](#)

**Packages**

No packages published  
[Publish your first package](#)

**Contributors** 4

- SharukhFardin Sharukh Fardin
- JannatulFerdousEusha
- Ahsan-Saad
- sajidahmed12 Sajid Ahmed



### Seeker Registration Form

First Name

Last Name

Phone number

Email

Gender  
☐ Male ☐ Female ☐ Other

Username

Password  
At max 10 characters

Birth Date

Address

© CSE311 9 GROUP T

## Login Option

Admin

Blood Doner

Blood Seeker

Don't have a login? Go back.

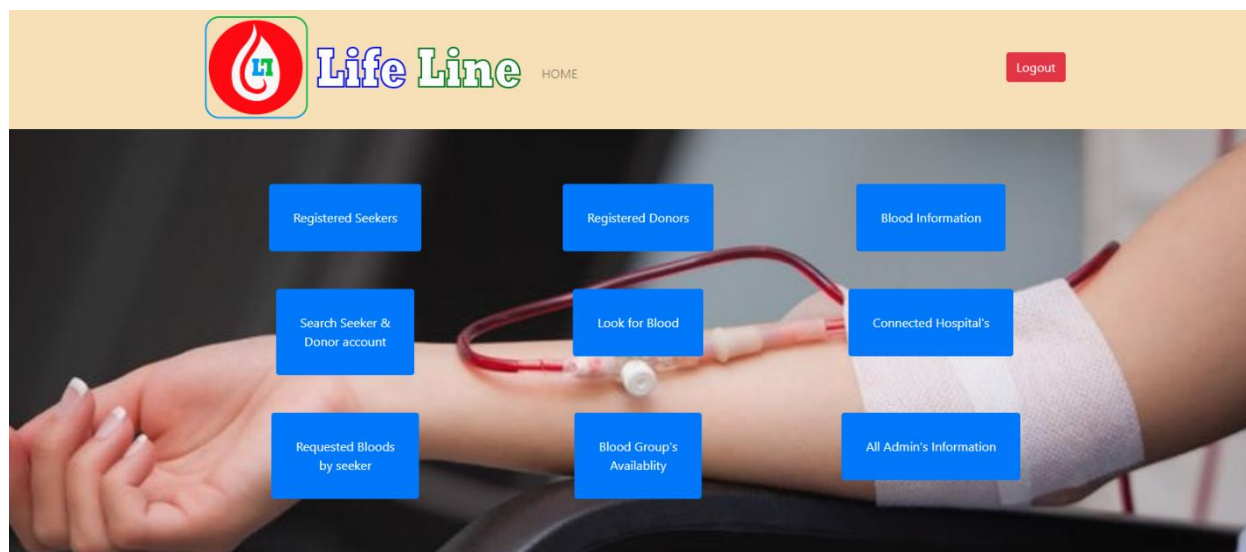
## Admin Login

User ID

Password

Login

© CSE311.9 GROUP 'I'



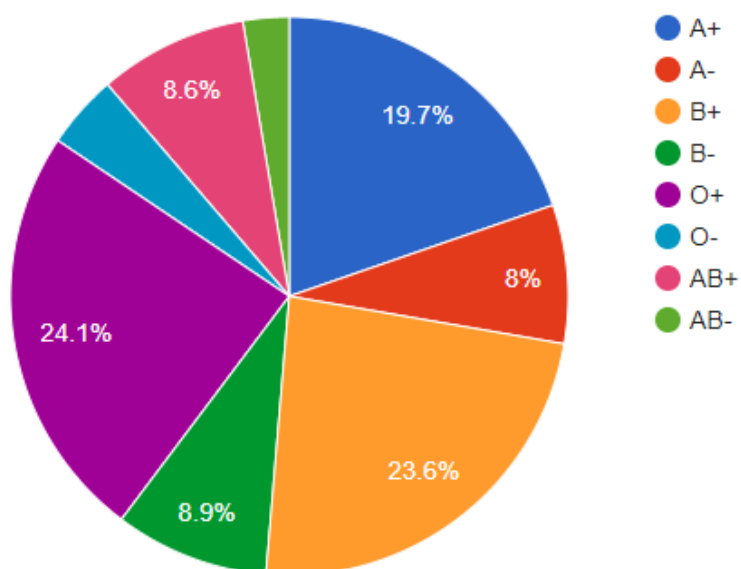
All Registered Seekers Information							
Seeker's Username	First Name	Last Name	Phone Number	Email	Birth Date	Gender	Address
tanjim5	tanjim	sorkar	01653673044	tanjim@gmail.com	1997-12-27	male	kamarpara,Dhaka
fahim	fahim	alam	01824924696	fahim@gmail.com	1998-04-23	male	purbachol,Dhaka
tasnuva	tasnuva	sneha	01553893690	tasnuva@gmail.com	1995-07-23	female	eskaton road,Dhaka
isabela	isabela	gomez	01799643602	isabela@gmail.com	2000-09-14	female	boshundhora R/A,Dhaka
abrar	abrar	shajmain	01953873684	abrar@gmail.com	2001-06-15	male	nodda,Dhaka
yamin	yamin	khan	01913563603	yamin@gmail.com	1994-07-20	male	shahajadpur,Dhaka
toukir	toukir	ahmed	01770268465	toukir@gmail.com	1998-12-28	male	malibag,Dhaka

**Home** Donor Seeker

Select Donor or Seeker option for search

## Search Blood

Availability of blood groups



Blood Request Information

Seeker's Name	Requested Blood Group	Contact Number	Request Date	Request Status	Action
tanjim	A+	01653673044	2020-10-25	Donor found	<input type="button" value="I will help"/>
tasnuva	B+	01553893690	2020-10-25	Donor found	<input type="button" value="I will help"/>
yamin	AB-	01913563603	2020-10-26	No donor found	<input type="button" value="I will help"/>
Rabbi	A+	01723779821	2020-10-27	No donor found	<input type="button" value="I will help"/>

**THANK YOU**