CSE 311L (Database Systems Lab) Project Final Report

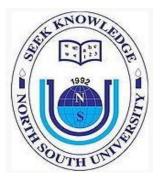
Summer 2020

Section: 09

Group: I

Project Title

'Lifeline', An Online Blood Management System



Submitted To

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Submitted By

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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.

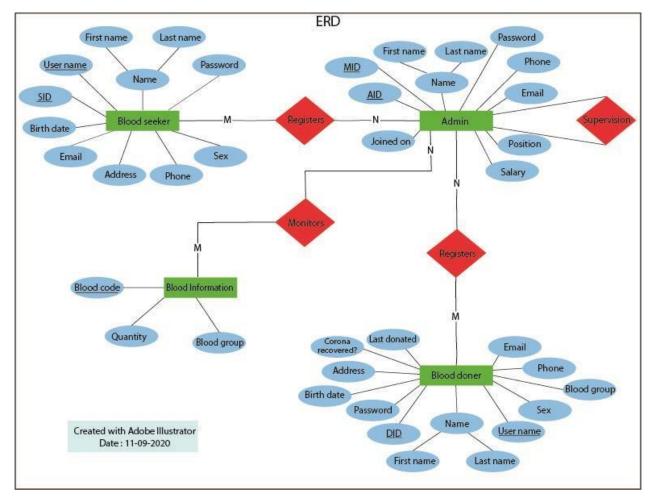
Work Division & Contributions

| Sharukh Eusha Ahsan | |
|---------------------|--|
|---------------------|--|

- 1. Project Idea.
- 2. Draw ER, SCHEMA & USER CASE Diagram.
- 3. Project Proposal
- 4. Created the initial database design in MySQL by creating multiple tables.
- Created registration forms, user logins
- 6. Did <u>100%</u> of the PHP codes with SQL queries in it.
- 7. Connected the parts (front-end and back-end to a whole project.
- 8. Created tables in the database.
- 9. Inserted data to the Database.
- 10.Created project logo and cartoon.
- 11.Presentation.
- 12. Project Report.

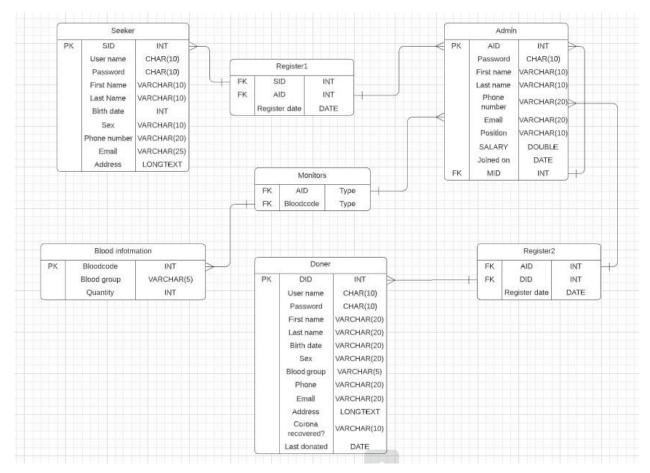
- 1. Project idea.
- 2. Project Proposal.
- 3. Created 4 tables and 3 relationship tables in database.
- 4. Inserted data in database tables. (Did 70% of all).
- 5. Did the Main front page design of the website.
- 6. Tried PHP codes.
- 7. Was co-operative during the whole project.

- 1. Project idea & Project name.
- 2. Did front page first demo design.
- 3. Did 3 welcome page design for 3 kind of users.
- 4. Project report
- 5. Inserted data to the database.
 (He was Covid19 positive)



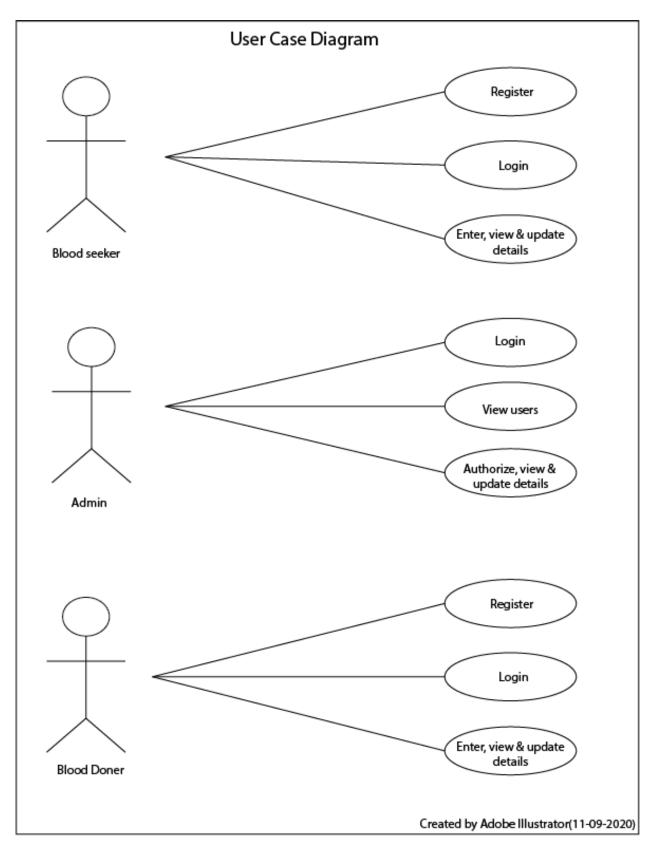
ER Diagram

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

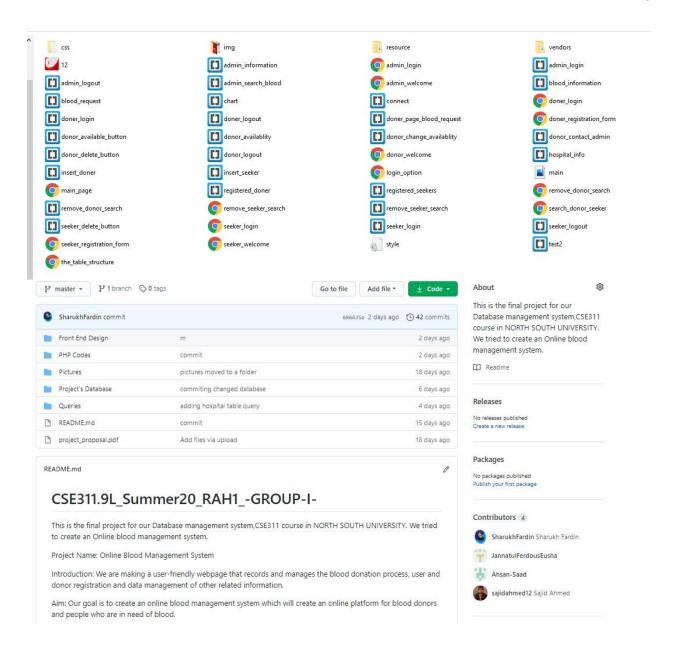
Conclusion

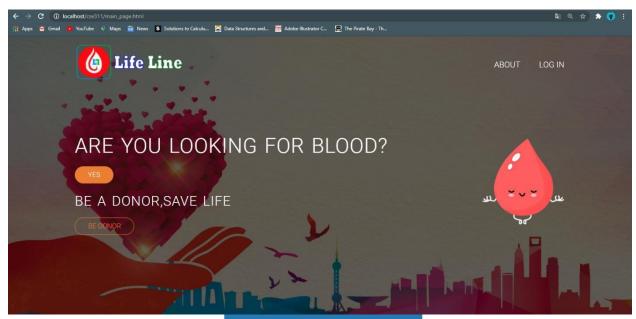
So, this is our project. We learned a lot of things by doing this project and it was a great experience. We really loved working on this instead of only doing it for educational purpose. This project can be really helpful in a country like ours where finding blood in a time of emergency is really tough 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

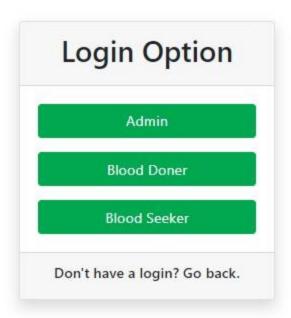
- 1. W3SCHOOLS https://www.w3schools.com/
- 2. STACK OVERFLOW https://stackoverflow.com/
- 3. PHP official website https://www.php.net/
- 4. YOUTUBE https://www.youtube.com/
- 5. BOOK Ramez Elmasri and Shamkant B. Navathe, Fundamentals of Database Systems (7/e), Addison-Wesley, 2015.

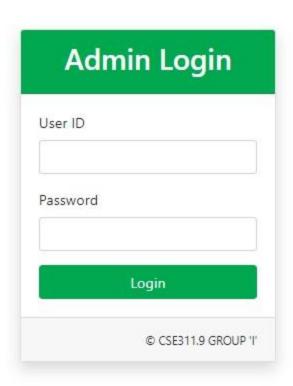
Some Screenshots













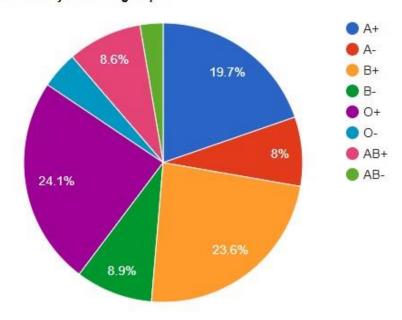
All Registered Seekers Information Seeker's First Last Phone Birth Username Name Name Number Email Date Gender Address 1997-12tanjim5 tanjim sorkar 01653673044 tanjim@gmail.com male kamarpara,Dhaka 27 purbachol,Dhaka fahim fahim alam 01824924696 fahim@gmail.com 1998-04male 23 01553893690 tasnuva tasnuva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

Home Donor Seeker

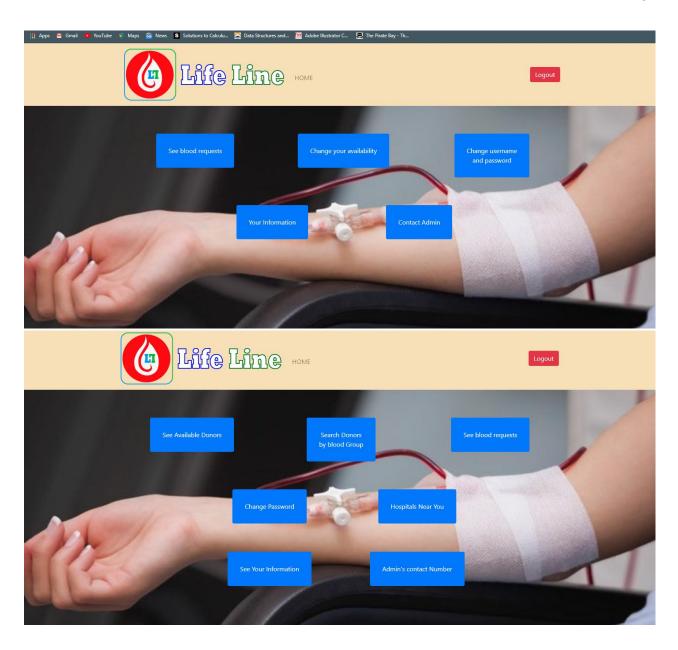
Select Donor or Seeker option for search

Search Blood Enter location Select blood group

Availablity of blood groups



| | | Blood Request Informa | ition | | |
|---------------|-----------------------|-----------------------|--------------|----------------|-------------|
| Seeker's Name | Requested Blood Group | Contact Number | Request Date | Request Status | Action |
| tanjim | A+ | 01653673044 | 2020-10-25 | Donor found | I will help |
| tasnuva | B+ | 01553893690 | 2020-10-25 | Donor found | I will help |
| yamin | AB- | 01913563603 | 2020-10-26 | No donor found | I will help |
| Rabbi | A+ | 01723779821 | 2020-10-27 | No donor found | I will help |



THANK YOU