FINAL REPORT

PROJECT: BLOOD BANK MANAGEMENT SYSTEM

SUBMITTED BY:

GROUP 2

ALIF AL RAZI ID: 2011358042

ONURUP RAHMAN ID: 1911479642

SAYMA AKHTER SNIGDHA ID: 1620838042

CSE311 SEC-2

INTRODUCTION:

Blood Bank Management System is a platform where donor and acceptor will have their individual profile with all records donation and acceptance. Acceptor can also request blood if blood group deficiency arises. Pathologist can register all the records including diagnosis history of donor. Acceptor can receive blood from their nearby registered hospital.

ANALYSIS:

Every seconds patients are being admitted in hospitals with major or minor injuries as well as critical diseases. Many of them need blood instantly. In that critical situation patients' relatives search for blood in different places and knock for others for donating blood. Sometimes it might need huge time managing blood. They need to go to traditional blood bank to find blood. Our project is to find blood easily. This projects aim to create a extended community where donor are registered and they can donate blood willingly matching the blood group and location of the patient. This system is for non profitable organization and a ongoing process. Every registered hospital would be a individual blood bank. Under this organized system both hospital and patient get maximum benefit. And the donor's role is to volunteer. Donor's activity will influence every person to donate blood willingly. Here pathologist will be employed by the organization and they will be provided in every hospital to play as admin role to input blood donation, acceptance, request and disease diagnosis records in the database.

REQUIRED TOOLS DEVELOPING THE WEBSITE:

Software: Visual Studio with different extensions, XAMPP, Microsoft Edge, Adobe Illustrator

Database Design: MYSQL

Front End: HTML, CSS, JavaScript

Back End: PHP

PROJECT DEISGN:

Specifications

Identify Entities.

- **Donor**
- **Acceptor**
- **Technician**
- **Hospital**
- **Diagnostic Test**

Identify Relationships.

- A donor may donate blood to as many hospitals as he/she wants. Also, a hospital can have multiple donors. So, Cardinality is M:M(many to many).
- An acceptor can receive blood from multiple hospital. Also, a hospital can give blood to many acceptors. So, Cardinality is M:M(many to many).
- An acceptor can request blood from multiple hospital. Also, a hospital can take request from multiple acceptor. So, Cardinality is M:M(Many to many).
- A hospital can have multiple technician. But, a technician can work for 1 hospital. So, Cardinality is 1:M(one to many).
- A technician can supervise multiple diagnostic test. But, a diagnostic test report belongs to only 1 technician. So, Cardinality is 1:M(one to many).
- A donor can take multiple diagnostic test for different diseases. But, a diagnostic test report can belong to only one donor. Here, the entity diagnostic test is a weak entity. So, Cardinality is 1:M(one to many).

Specifications

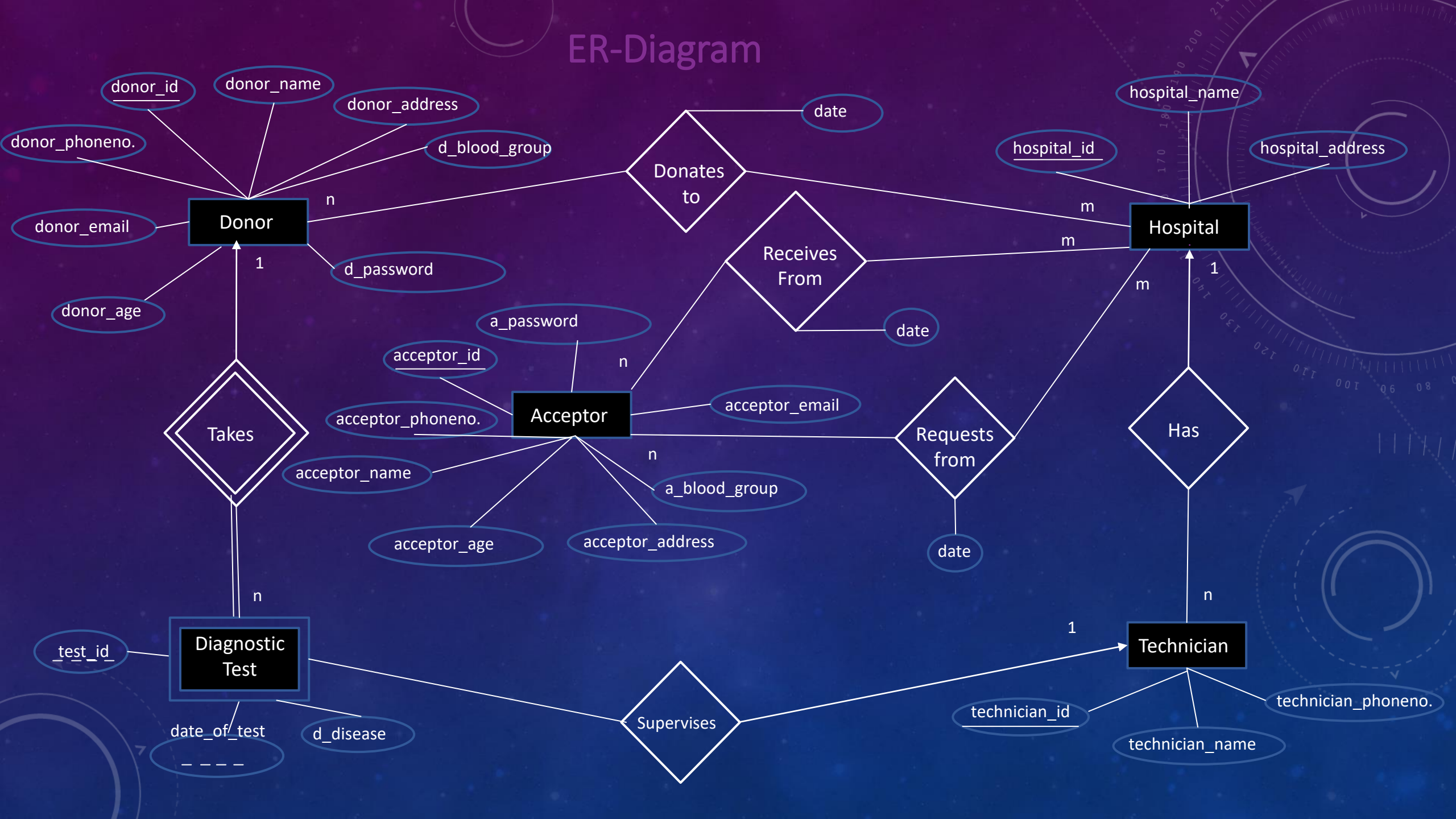
Identify the key attributes.

- **Donor:** donor-id
- **Acceptor:** acceptor-id
- **Technician:** technician-id
- **Hospital:** hospital-id
- **Diagnostic Test:** donor-id, test-id, date_of_test

Identify other relevant attributes.

- **Donor:** donor-id, donor_name, donor_address, donor_email, donor_phoneno., blood_group, date_of_donation
- **Acceptor:** acceptor-id, acceptor_name, acceptor_address, acceptor_email, acceptor_phoneno., blood_group
- **Technician :** technician -id, technician _name, technician _phoneno.
- **Hospital:** hospital-id, hospital_name, hospital_address
- **Diagnostic Test :** test-id, date_of_test

ER-Diagram

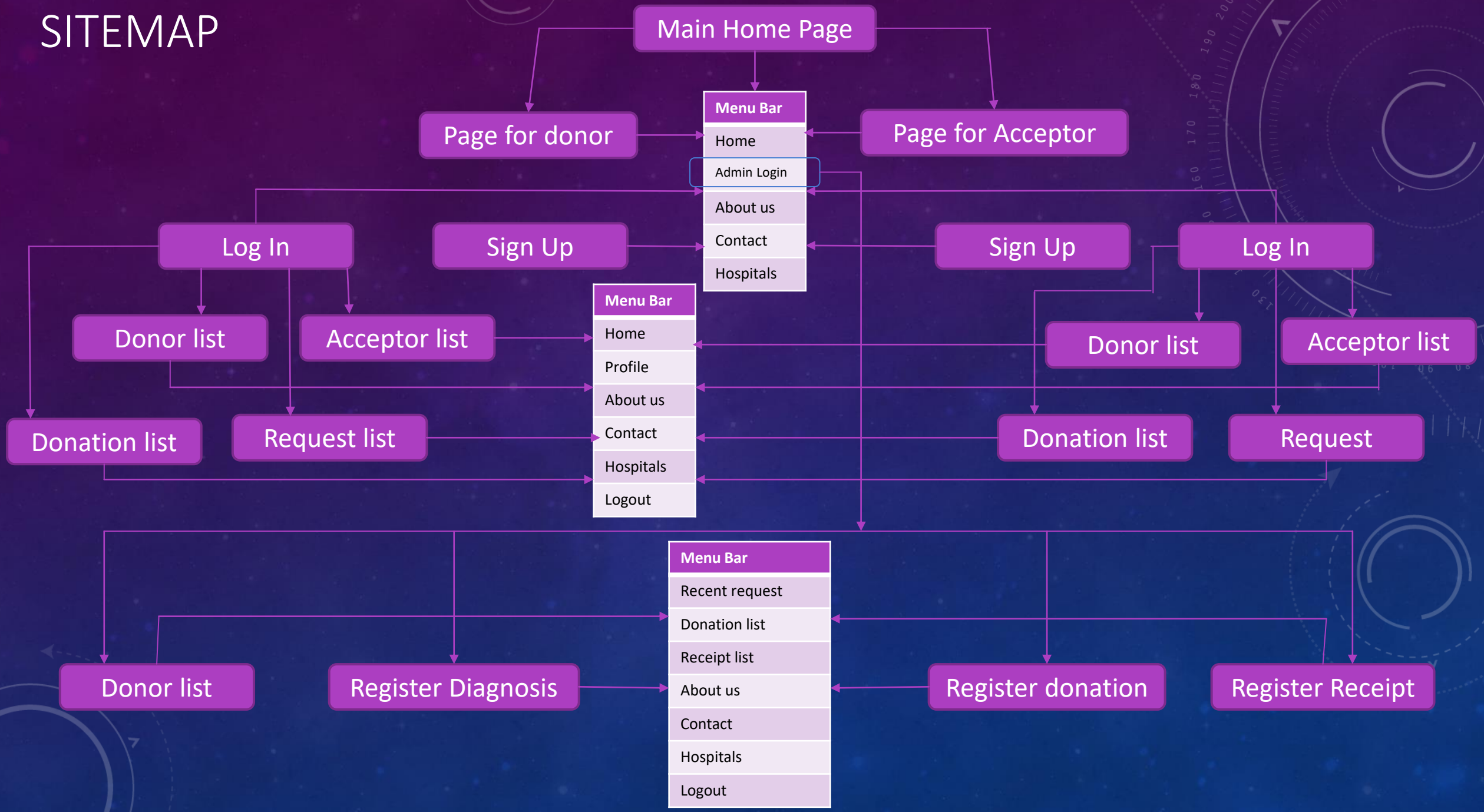

donor_id
donor_name
donor_address
donor_phoneno.
d_blood_group
donor_email
Donor
donor_age
d_password
n
1
Donates to
date
hospital_name
hospital_id
hospital_address
Hospital
m
m
Receives From
date
1
m
a_password
acceptor_id
n
Takes
Acceptor
acceptor_email
acceptor_phoneno.
Requests from
Has
n
acceptor_name
a_blood_group
acceptor_age
acceptor_address
date
n
n
1
_test_id_
Diagnostic Test
Supervises
Technician
date_of_test
d_disease
technician_id
technician_phoneno.
technician_name

Relational Table

Project Workflow

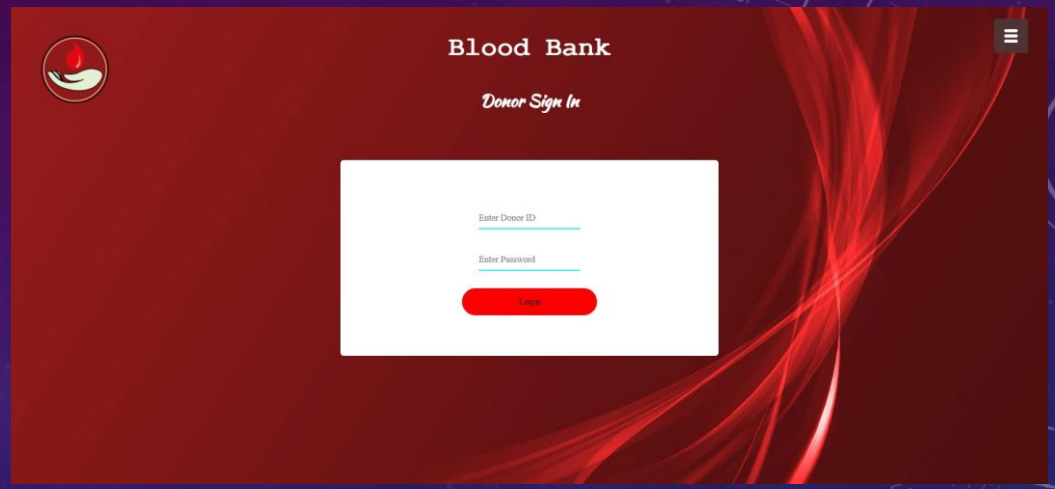
1st week	2nd week	3rd week	4th week
Designing ERD, Relational Model	Normalization, Creating database	Designing Frontend	Designing Backend, query language
In the first week all the entities with their attributes were designed. Relation among the attributes were built. New tables were generated through relational table. Identifying primary keys and foreign keys.	All the tables were checked whether they are in 4NF form. After ensuring 4NF form database were created,	All the pages were designed through HTML and CSS.	The backend part were designed and query code were written.

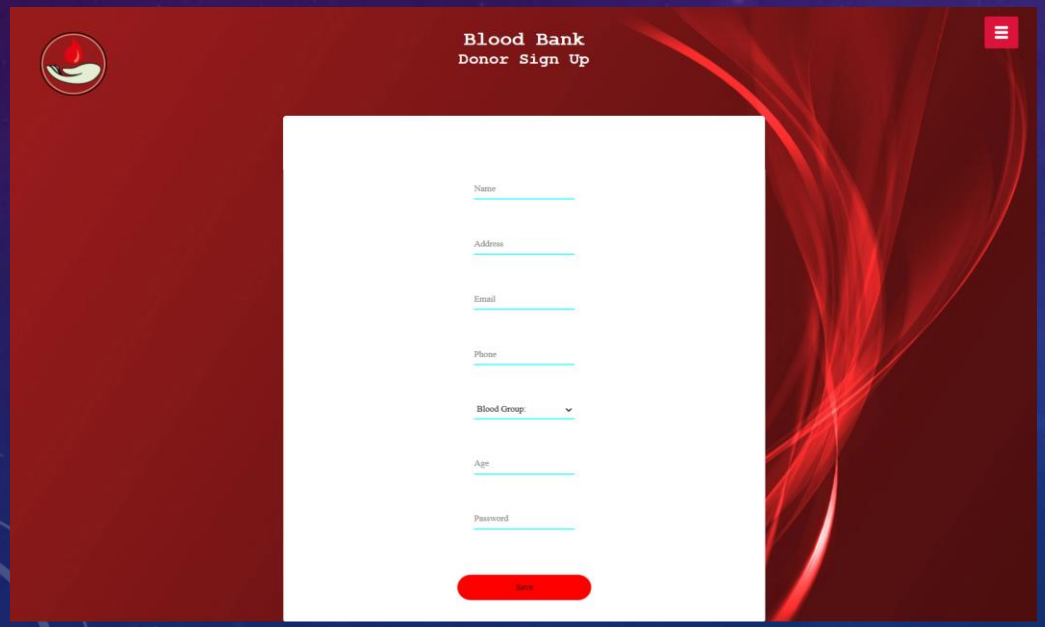
SITEMAP

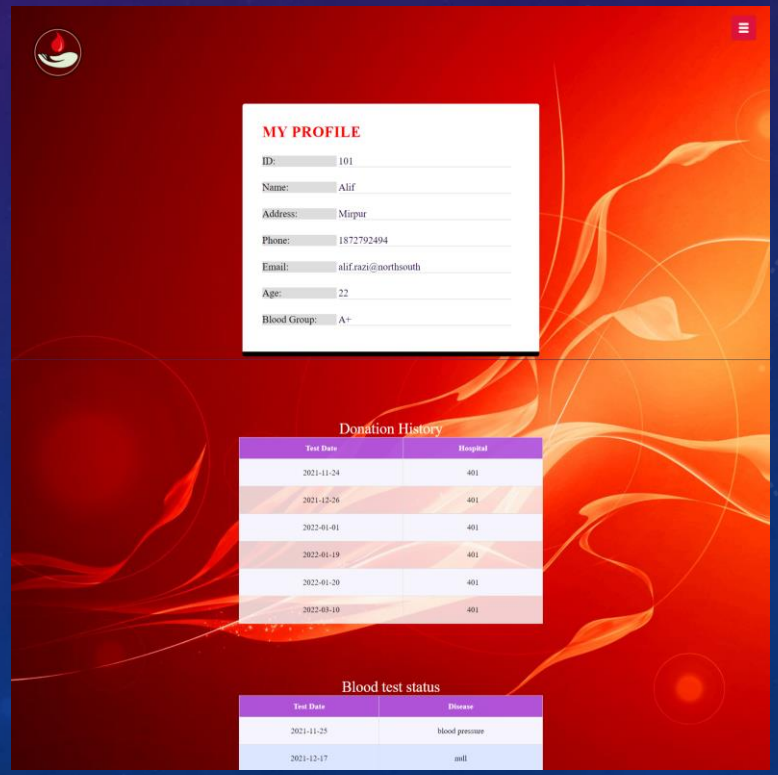

Main Home Page
Page for donor
Page for Acceptor
Menu Bar
Home
Admin Login
About us
Contact
Hospitals
Log In
Sign Up
Sign Up
Log In
Donor list
Acceptor list
Donor list
Acceptor list
Menu Bar
Home
Profile
About us
Contact
Hospitals
Logout
Donation list
Request list
Donation list
Request
Menu Bar
Recent request
Donation list
Receipt list
About us
Contact
Hospitals
Logout
Donor list
Register Diagnosis
Register donation
Register Receipt

SNAPSHOT


Blood Bank
MS
DONATE BLOOD?
NEED BLOOD?
Home
Admin Login
About Us
Contact
Hospitals


Blood Bank
Donor Sign In
Enter Donor ID
Enter Password
Login


Blood Bank
Donor Sign Up
Name
Address
Email
Phone
Blood Group:
Age
Password
Save

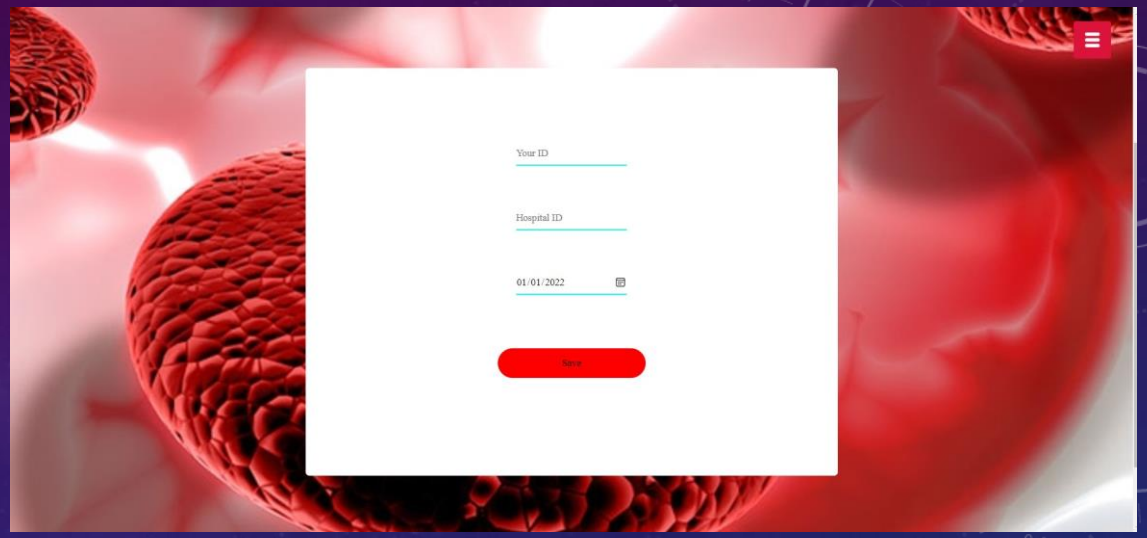

MY PROFILE
ID: 101
Name: Alif
Address: Mirpur
Phone: 1872792494
Email: alif.razi@northsouth
Age: 22
Blood Group: A+
Donation History
Test Date
Hospital
2021-11-24
401
2021-12-26
401
2022-01-01
401
2022-01-19
401
2022-01-20
401
2022-03-10
401
Blood test status
Test Date
Disease
2021-11-25
blood pressure
2021-12-17
null

Blood Bank

Give Blood to save a Life

Donor List

ID	Name	Address	Phone Number	Email	Blood Group	Age
101	Alif	Mirpur	1872792494	alif.razi@northsouth	A+	22
102	khaleq	Uttara	45	khaleq.rahman@gmail.com	B+	
103	khaleq	Uttara	1956756855	khaleq.rahman@gmail.com	B+	45
104	abdullah	Uttara	1565792103	abdullah.gmail.com	O+	27
105	mohibul	kajipara	1789236478	mohibul@gmail.com	O+	98
106	karim	Uttara	1862272365	karim@gmail.com	A+	87
107	Snighdha	khilkhet	1896453269	snighdha@gmail.com	B-	45



Blood Bank

Admin Sign In

Enter ID

Enter Password

Login

Blood Bank

Give Blood to save a Life

Request List

Acceptor ID	Acceptor Name	Blood Group	Hospital Name	Hospital Address	Date
201	rahim	AB+	Evercare Hospital	Bashundhara	2022-06-03
202	jalil	O+	Evercare Hospital	Bashundhara	2021-10-23
202	jalil	O+	Evercare Hospital	Bashundhara	2022-03-10
203	hamim	AB+	Evercare Hospital	Bashundhara	2021-12-04
204	hamim	AB+	Evercare Hospital	Bashundhara	2022-04-07

CONCLUSION & FUTURE WORK

By accomplishing this projects, our team learned a clear idea about developing websites, designing front end, backend and connecting database. We have completed our project successfully without any error and bugs. Our project had lacking designing front end as any framework was prohibited to use. But overall our project was successful as we completed it with the requirements including multiple sign in options, queries.

WORK CONTRIBUTIONS

Frontend: Alif Al Razi, Onurup Rahman, Sayma Akhter Snigdha

Backend: Alif Al Razi

Database creation: Alif Al Razi, Onurup Rahman

Database connection: Alif Al Razi

Query language: Alif Al Razi

Sign in, Sign up: Alif Al Razi

Logo design: Alif Al Razi, Onurup Rahman

GITHUB LINK

https://github.com/ALIF-AL-RAZI/bbms.git

THANKS