[BLOOD BANK MANAGEMENT SYSTEM]

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1.Introduction: -

-The blood bank system is considered one of the most important systems in the health field as it is a well-established standard method for treating patients who suffer from a deficiency in one or more of the blood components, and therefore it is an essential part of health care.

The organization of blood transfusion services should receive the most attention and care for the smooth functioning of obtaining different blood groups and saving patients, the goal of the transfusion service is to provide blood and active blood components that are as safe as possible and sufficient to meet the needs of the patient.

-This system contains a page to login, and then the user chooses if he is a patient looking for a specific blood type -or if he is a donor who wants to donate.
Then the system contains a page for available and missing blood groups
If it is available, the patient is asked to reserve his blood type, and if it is not available, a message will be shown to him that this type is not available

If the user is a blood donor, if the blood types are available, the donation process is not carried out, and if it is incomplete, he will fill in the data and the donation process will take place

2.problems definition:-

-Wasting a patient's time finding his blood type

-The patient's life is at risk if he suffers an accident and needs a blood transfusion

-Providing the patient with the nearest place where his blood type is located

 -Providing blood groups for patients suffering from anemia as soon as possible

3.the functions used in the project:-

 -*The first concerns the patient* who needs his blood type, whether in the event of a disease or an accident, by recording his data such as (name - age - blood type - phone number)

-*The second part* includes the donor, where the donor fills out the form (name - age - phone number - are there blood diseases or not - address)

-*The third part* is the presence of a list of the names of the donors and the names of the patients, as it shows who registered in the form from a donor or a patient with his full data.

-And it also includes the log in page, where user data (e-mail - password) is recorded, and if it is correct, the user is logged into the system and his blood type is reserved or if he wants to donate ,and if there is an error in logging in, it will display the same page to register again or create a new account, or exit the system.

-There is also the registration page for the user if he is a patient or a donor, such as filling out the form for data such as (name - address - phone number - age - gender - are there diseases or not)

4.The objectives of the project:

-Providing a better environment to help and save the patient who suffers from anemia or is injured in an accident

-Helping those who want to donate blood by displaying the missing blood types and then recording their data if their blood type is the same as the missing blood type and does not suffer from any blood disease

-Maintain records of users, whether donors or patients

-Preserving the sick person by helping him find another place for his blood type.

5. Forms

this interface appears when you use the application for the first time or after using it, He can Register his data if he has registered last time , He can click log in to continue

He can enter his mail and password then he can enter the home page and can be able to use the rest of services.

This is the home page after he logs in

He can see 3 services that can make:

1. Ask for a Donation
2. Donation Request
3. Doner

Here He can be a Doner

Only he will fill this form as required

After filling he can click on

save to save his data
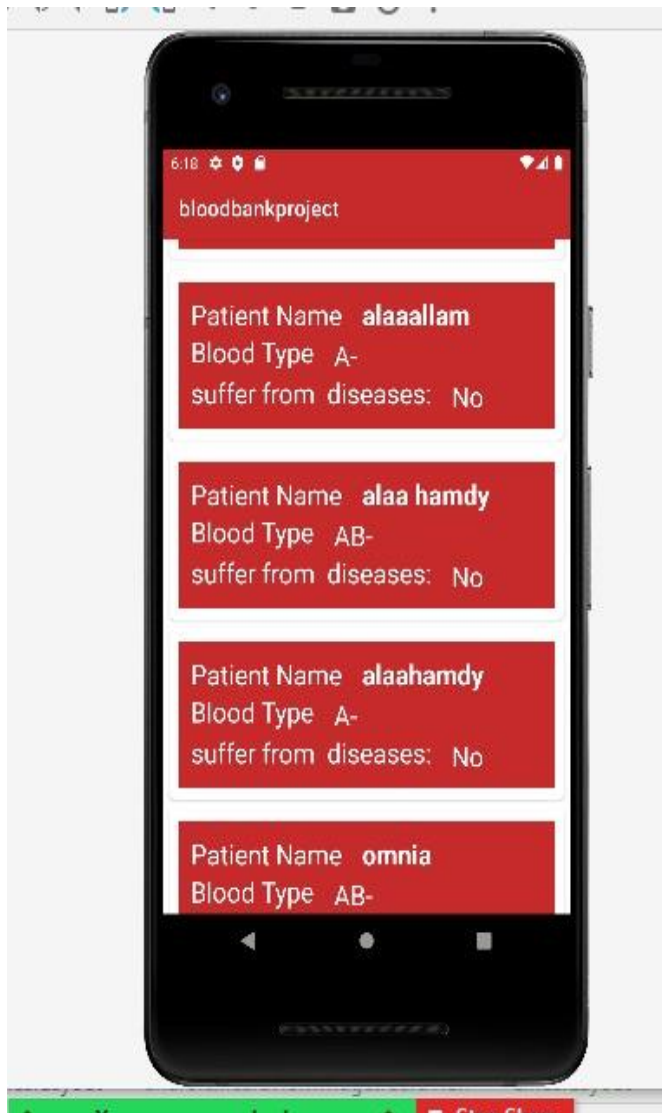
Here The Doner fill information about him like:

_Name, Sex Last time he donates

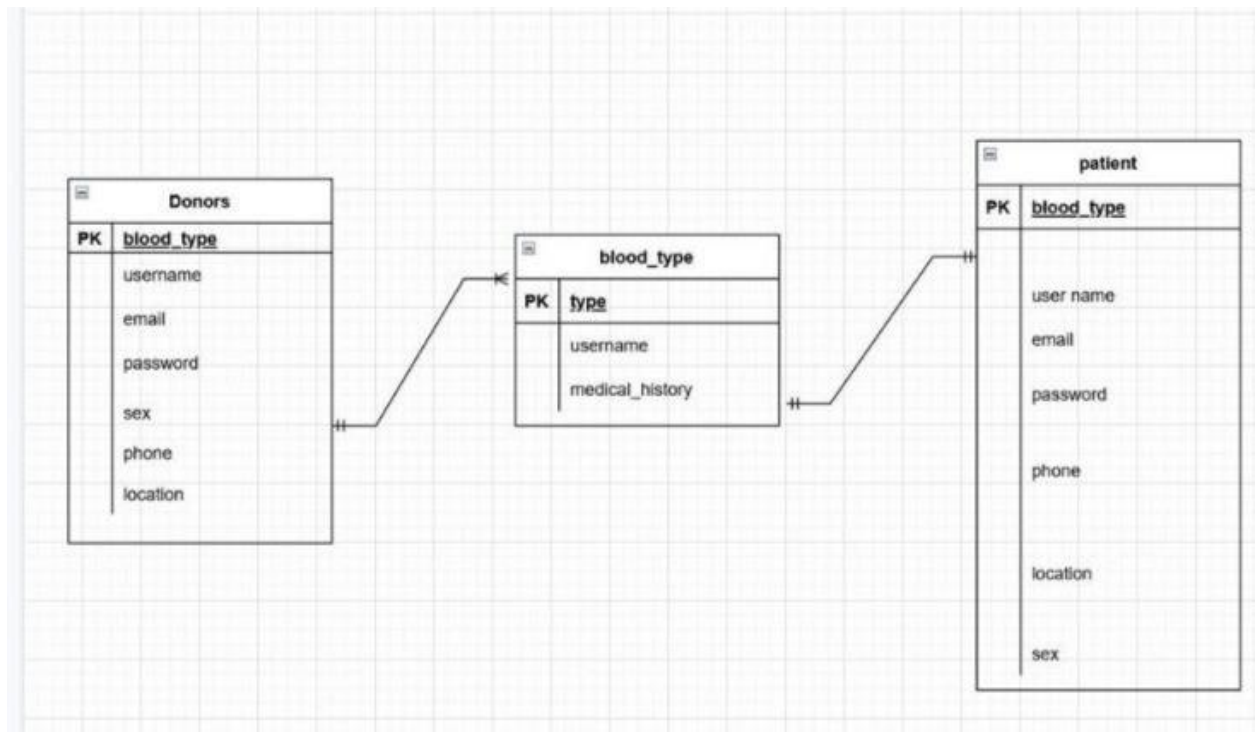If he suffers from any disease

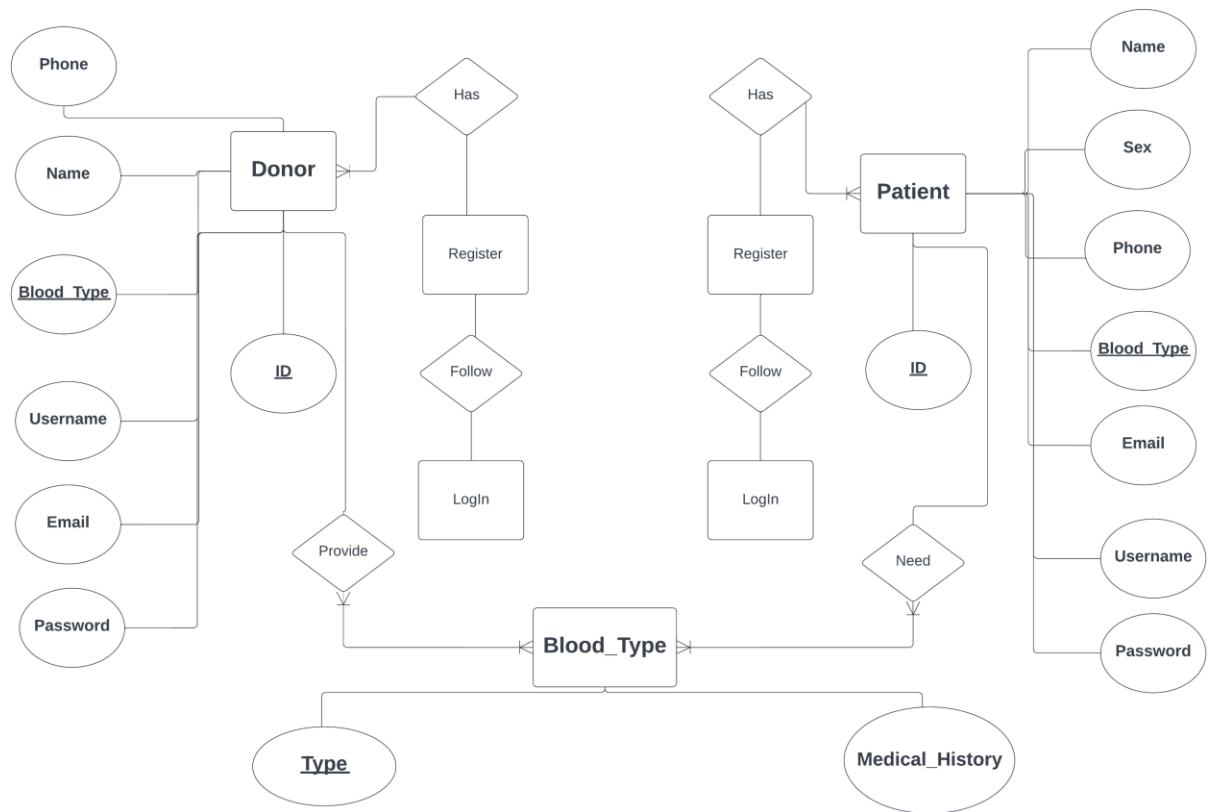After filling the information, he can donate.

6. Reports

In this interface, we can see all the donors in the application with their own blood group that login in the application.

7. Schema:

	Donors	
PK	blood_type	
	username	
	email	
	password	
	sex	
	phone	
	location	

	blood_type	
PK	type	
	username	
	medical_history	

	patient	
PK	blood_type	
	user name	
	email	
	password	
	phone	
	location	
	sex	

That's the schema of the database that is used in the application

8. Er Diagram

This Er Diagram shows relationship between entities in the Project and the attributes of each entity and some processes that is relevant to their movement

9. Conclusion

This project acts as an important role in saving the life of human beings and which is also its main aim. The project Android Blood Bank system is developed so that users can view the information about registered blood donors such as name, address, and touch personal information along with their details of blood group and other medical information of the donor. The project also has a login page where in in the user is required to register and only then can view the availability of blood and may also register to donate blood if he/she wishes to. This project requires internet access and thus there is a disadvantage of internet failure. Thus, this application helps to select the right donor online instantly using medical details along with the blood group. The main aim of developing this application is to reduce the time to a great extent that is spent in searching for the right donor and the availability of blood required. Thus, this application provides the required information in no time and also helps in quicker decision making.