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ID: **24252**

Course: **WEB TECHNOLOGY & INTERNET**

Group: **Wednesday, 18h**

Teacher Name: **Dushimimana Patrick**

## FINAL EXAM PROJECT

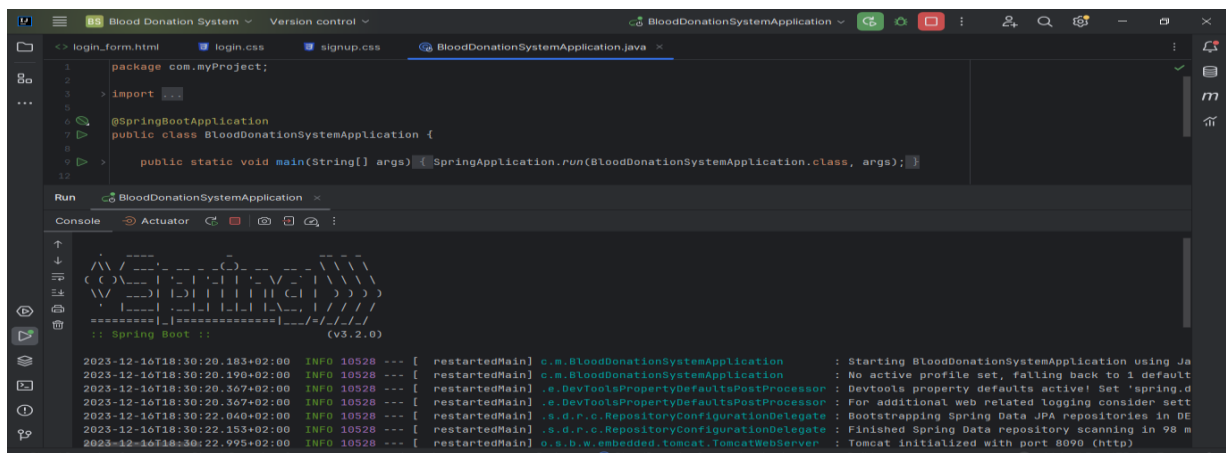
### Topic: **BLOOD DONATION MANAGEMENT SYSTEM**

This System (Blood Donation Management System) is a comprehensive software solution designed to streamline and enhance the processes involved in blood donation and distribution. This system serves as a crucial bridge between individuals in need of blood and the administrators responsible for managing and coordinating the donation process.

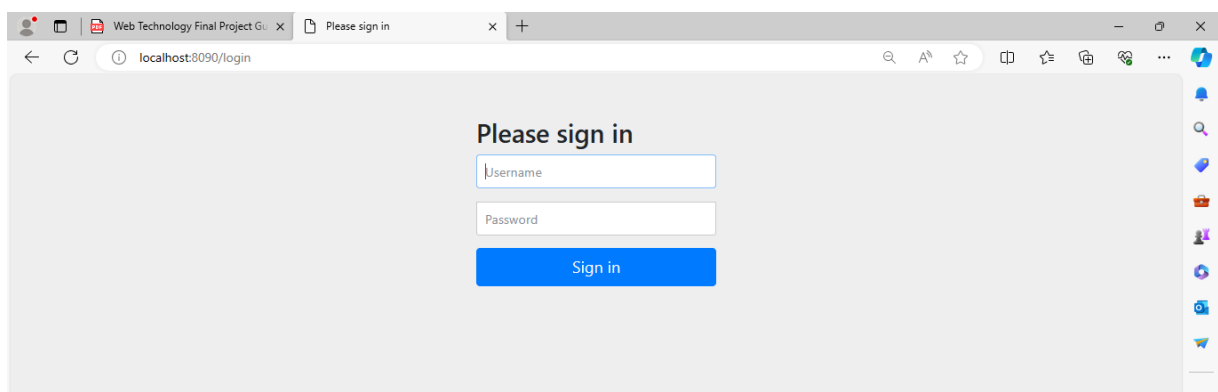
**Project Objectives:** The primary objectives of the Blood Donation Management System are to facilitate efficient communication between blood donors and recipients, ensure timely responses to blood requests, and empower administrators with tools to manage donors effectively.

In brief, here is how the System works with the following explained images:

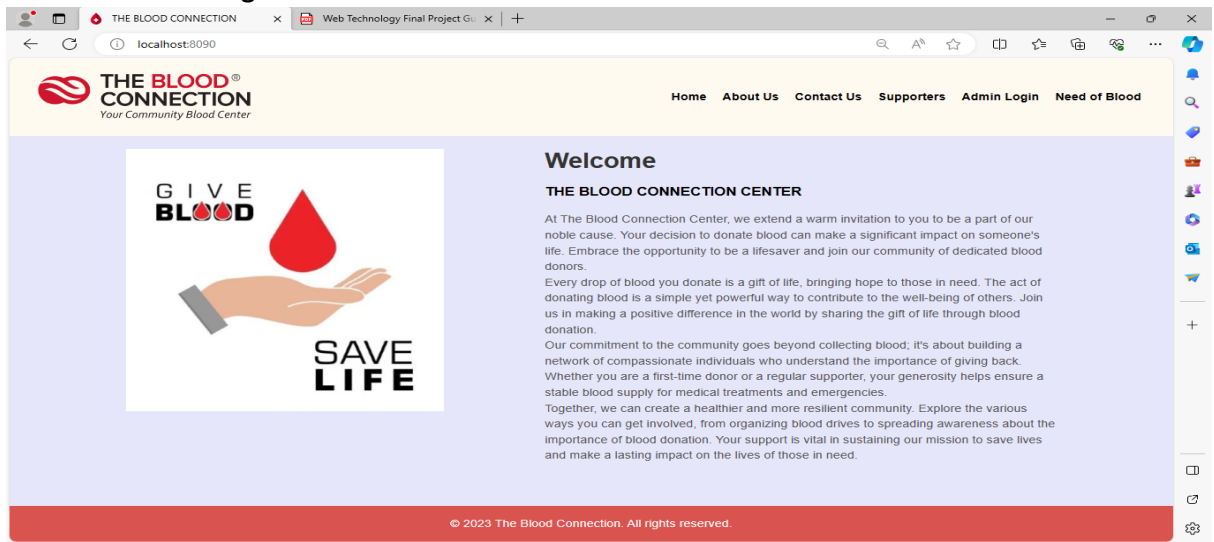
➔ I'm using **IntelliJ as Editor**. First of all, we run the Application in the Editor:



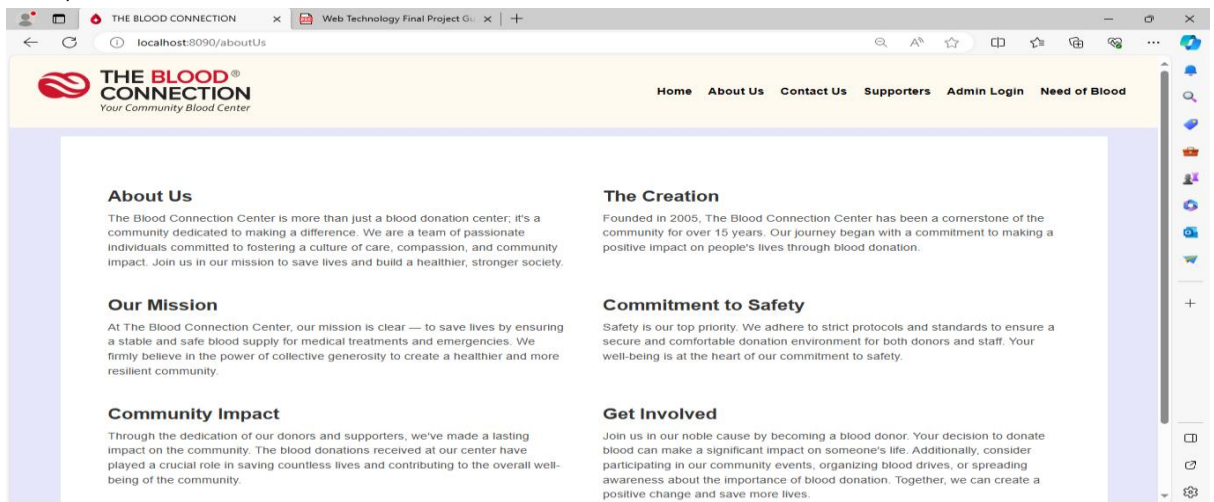
➔ Secondly, we open the Application in any Browser (e.g. I use **Microsoft Edge**) to open the system. I implemented the **Spring Security**. Before opening the Application, **you're required to put the username and password**, in order to have access to the Application.



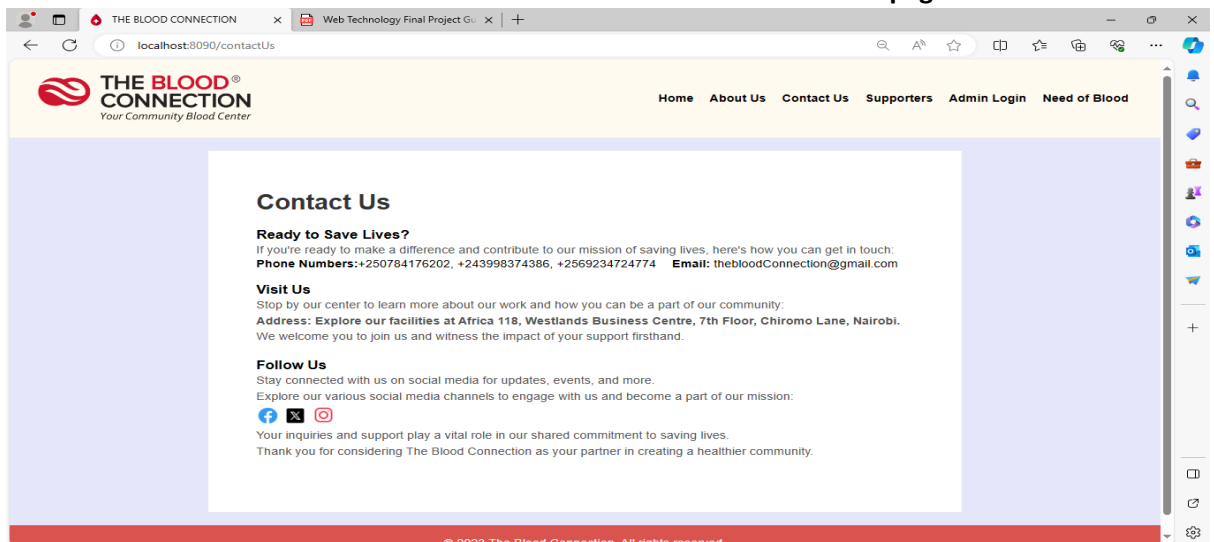
➔ Then, after entering the right Username and Password, the Application comes on the Brower. This is the **Home Page**.



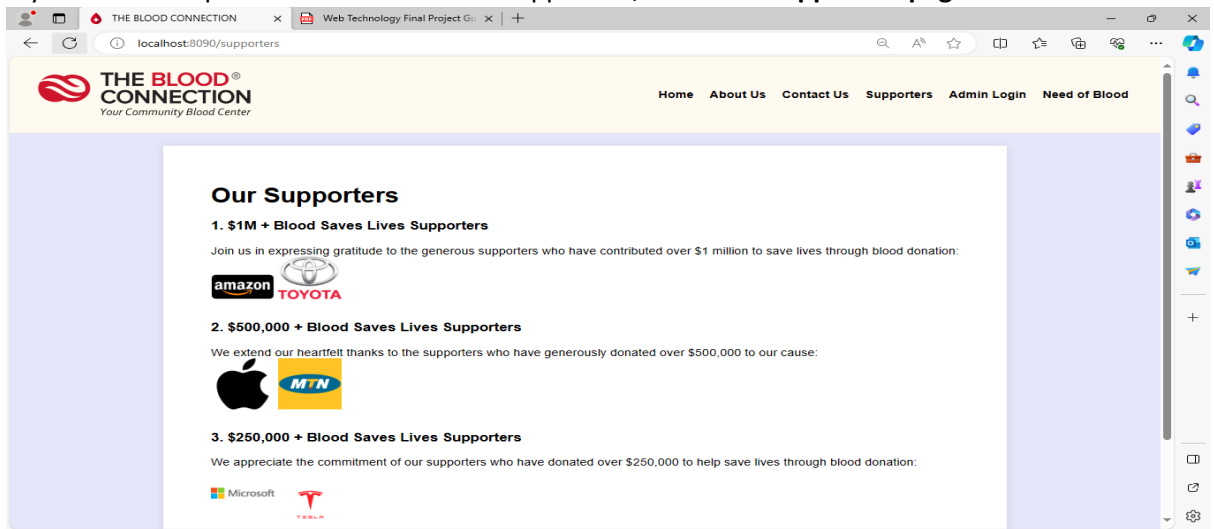
➔ Then, after clicked on the **About Us** this is how it looks:



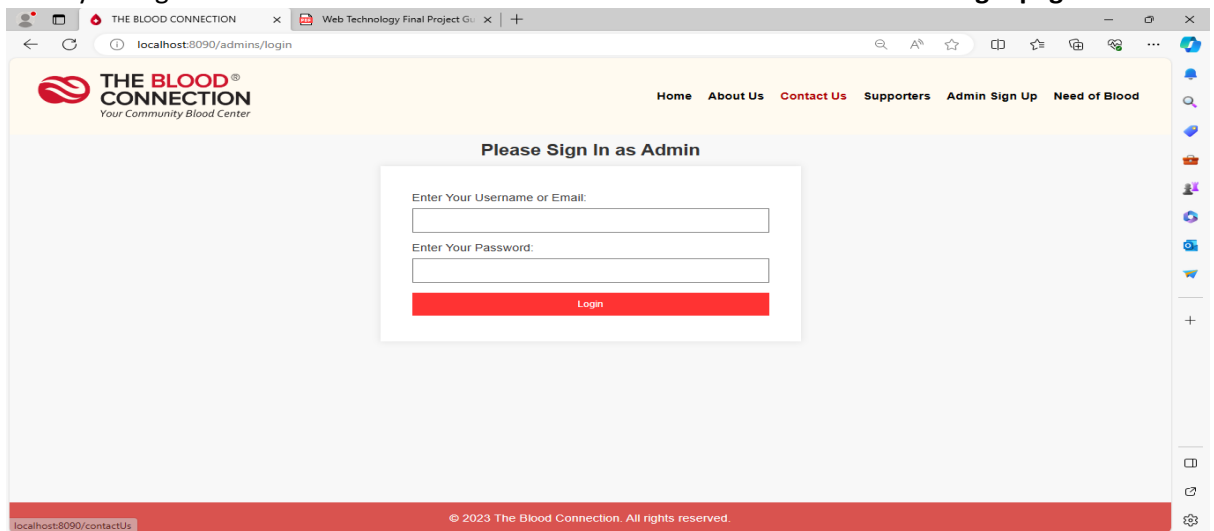
➔ If we wish we can click to know Contacts of the Center. This is the **Contact page**:



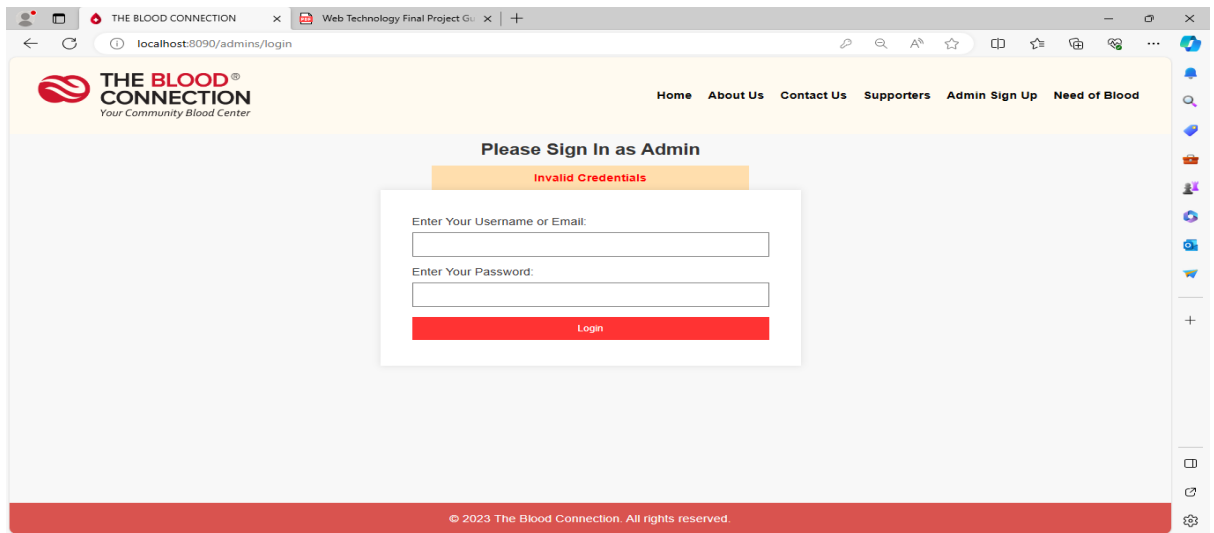
➔ If you want to explore more about all our Supporters, this is the **Supporters page**:



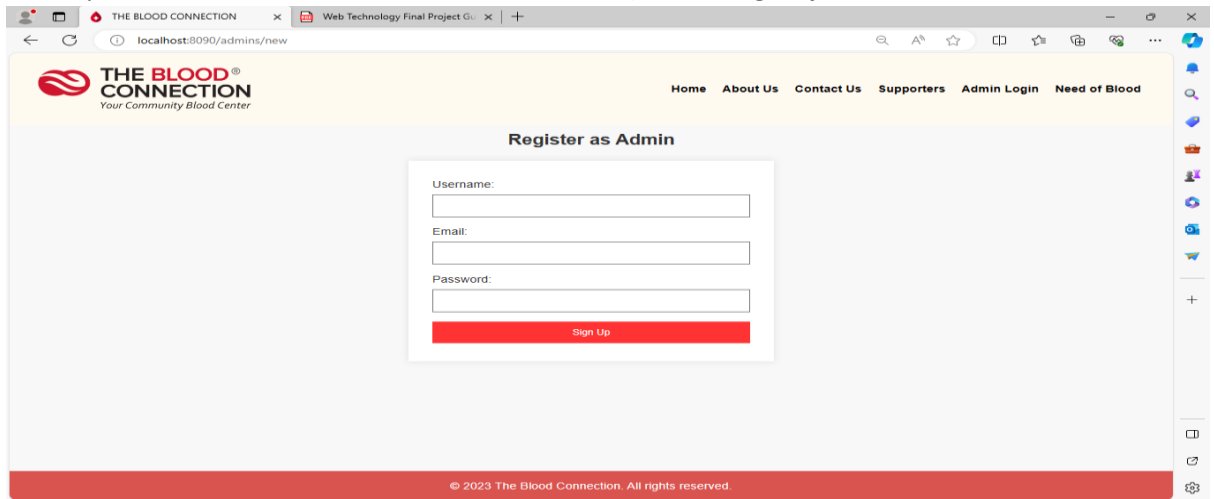
➔ If you are an Administrator and wish to manage Donors, you have to click **Admin Login**, and enter your right credentials to have access to the Admin Dashboard. This is the **Login page**.



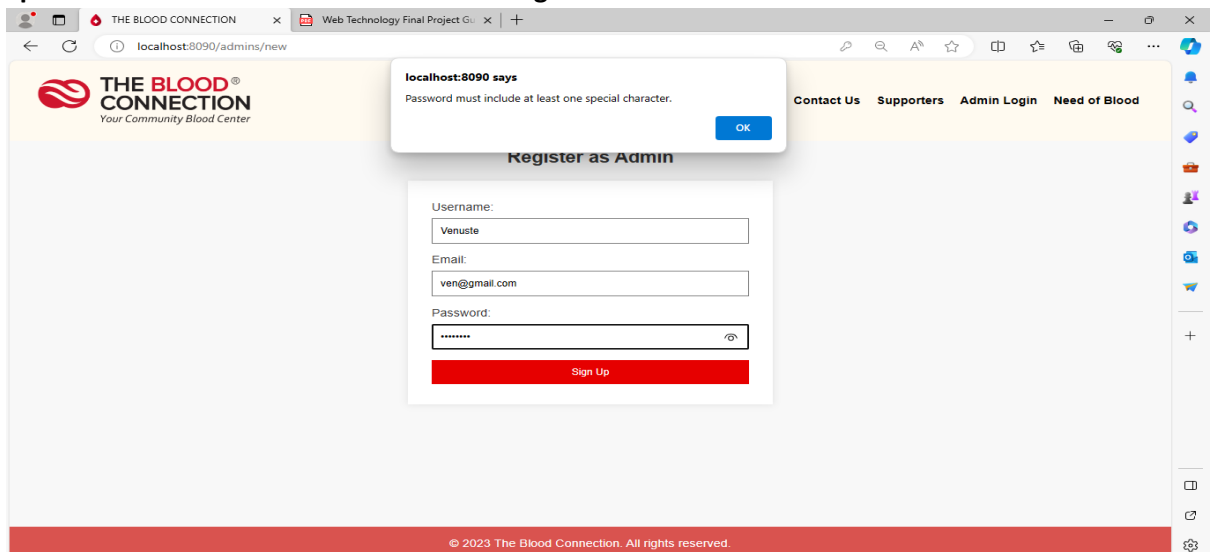
➔ If you enter Bad Credentials, such as Username and/or Password, a message will appear on the screen, saying **Invalid Credentials in red**:



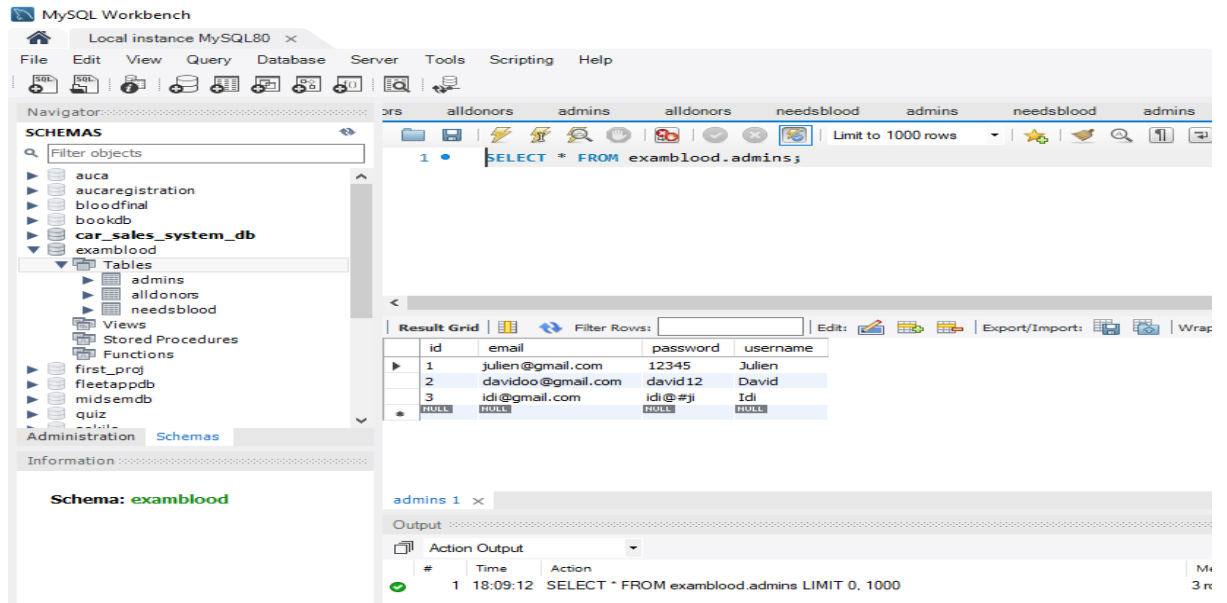
- ➔ If you wish to register as an Admin, you have to click on **Admin Sign Up**, and Register (Enter the required Details: Username, Email and Password). This is **Sign Up form**.



- ➔ On the Sign-Up form, if you enter a password without at least One Special Character, like #@()%^&\*, it will bring an error on the Screen saying that the Password must have **at least one Special Character**. This is a validation message.



➔ But after entering correctly the right required details, the Data will be inserted in the Database. I'm using MySQL Database.



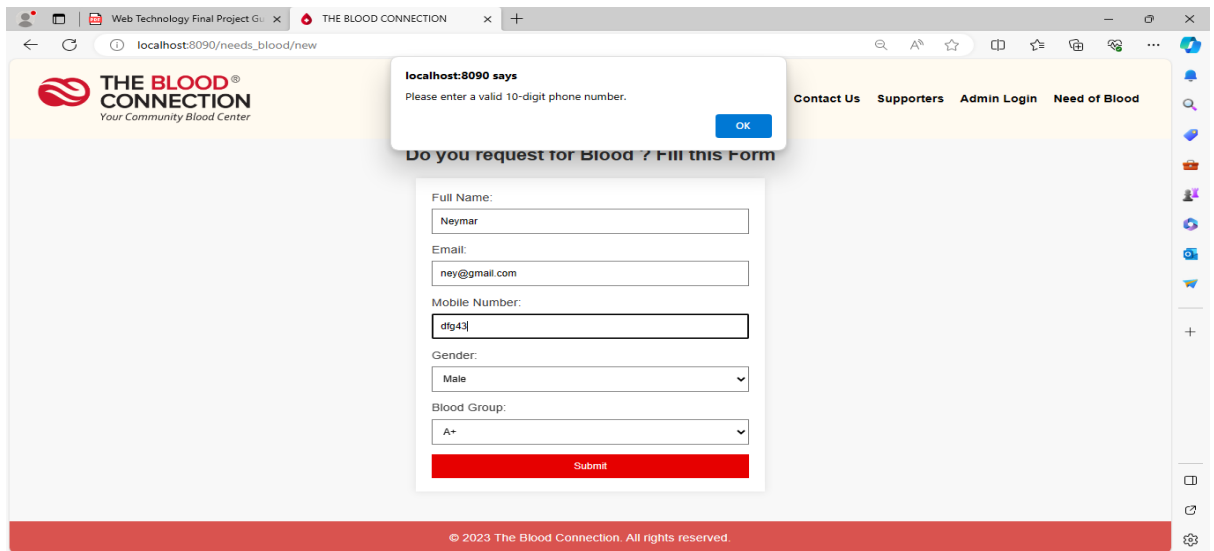
➔ Then, if you wish as a User to Request for Blood, you have to click on Need Blood, and fill the form. This is the **Request Blood Form**:

The screenshot shows a web browser window displaying the 'Request Blood Form' on the 'THE BLOOD CONNECTION' website. The form is titled 'Do you request for Blood ? Fill this Form' and contains the following fields:

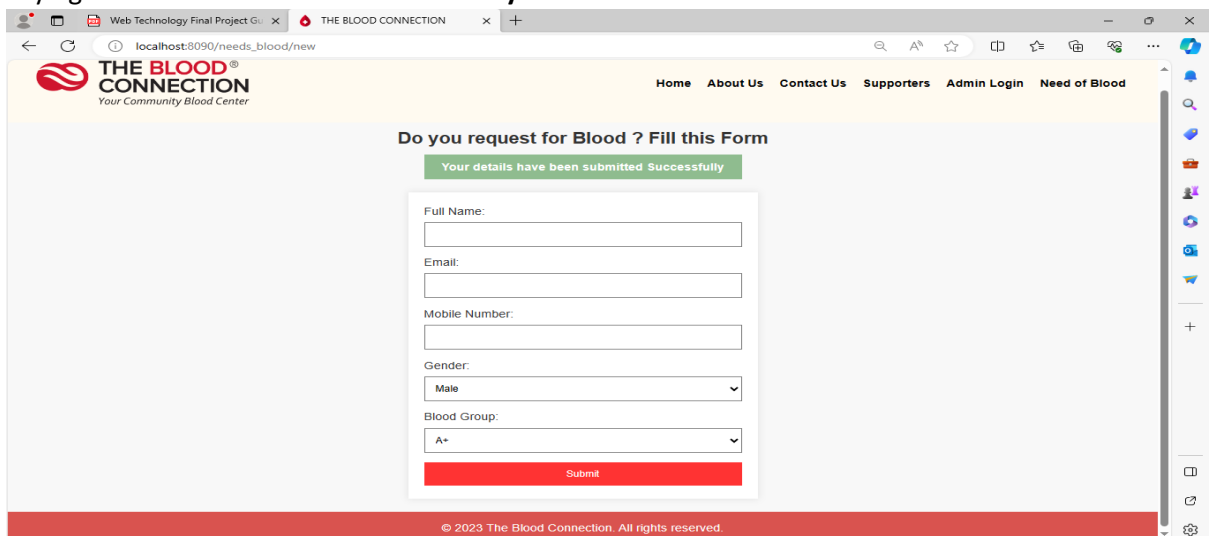
- Full Name:
- Email:
- Mobile Number:
- Gender:
- Blood Group:

A red 'Submit' button is located at the bottom of the form. The website header includes the logo and navigation links: Home, About Us, Contact Us, Supporters, Admin Login, and Need of Blood. The footer contains the copyright notice: '© 2023 The Blood Connection. All rights reserved.'

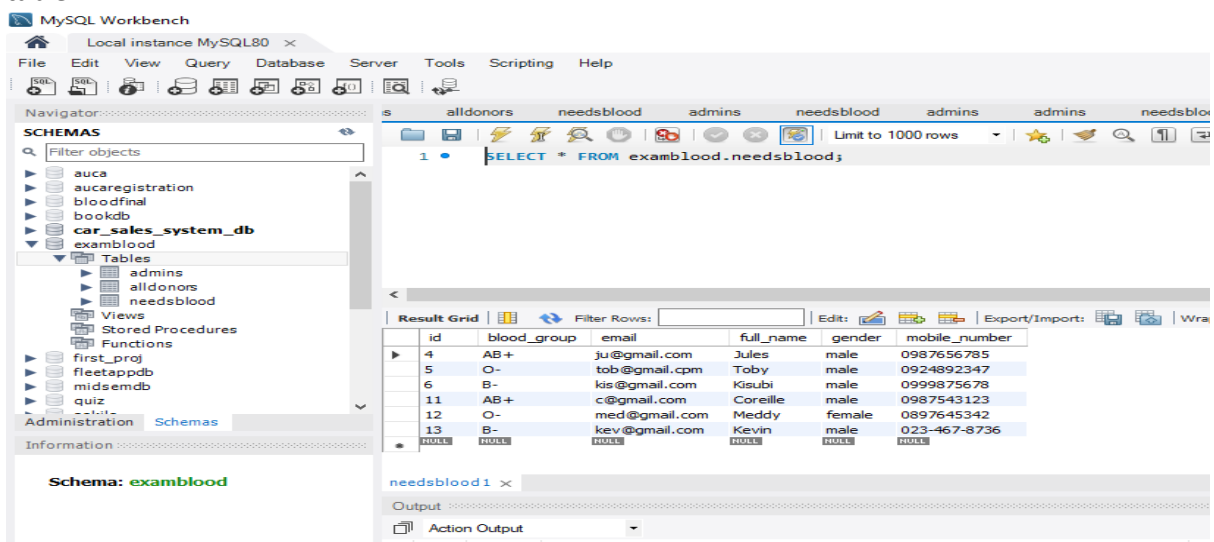
➔ After, if you include wrong one of the required details, like a Mobile Number, a message will come as an error message on the screen. For this case, it is the **Mobile Number**. As validation, it has to be 10-digits number:



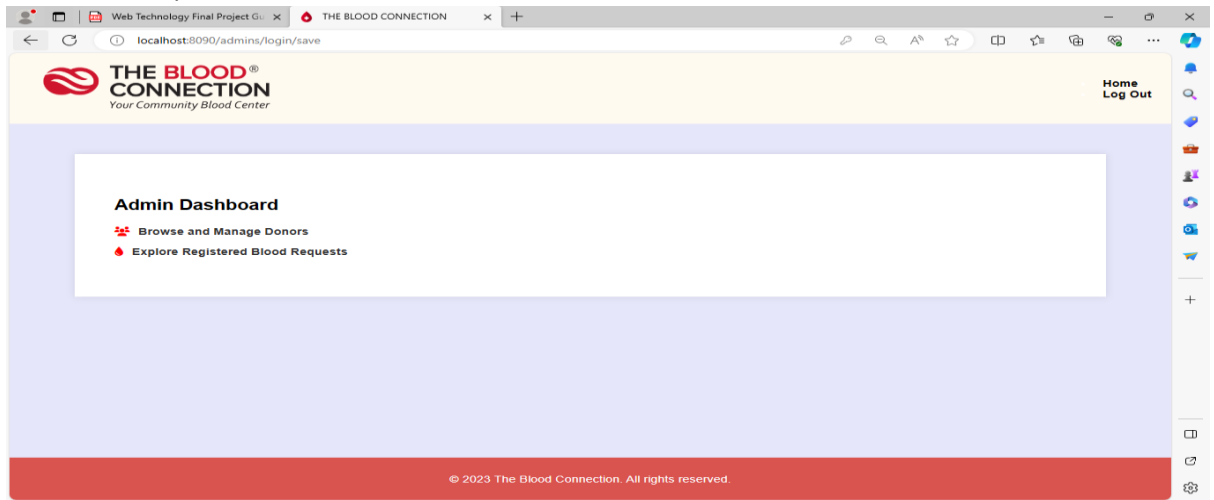
➔ After entered the right required details, it will send a confirmation message on the Screen.  
Saying that: **Details submitted Successfully.**



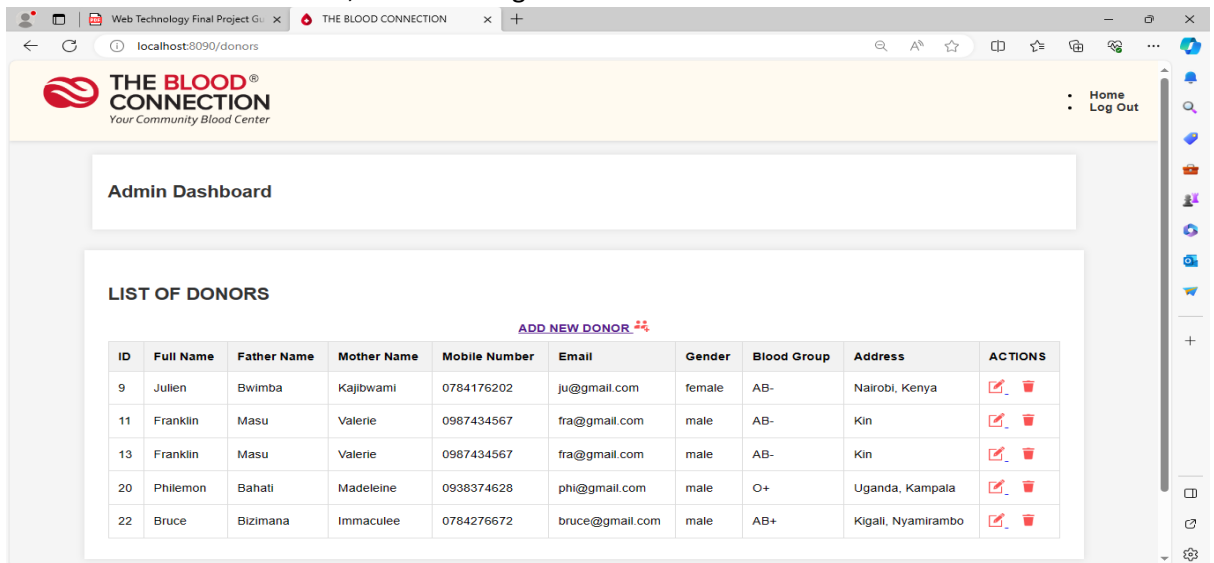
➔ Then, we can check in the Database if the request is in the Database in the **needsblood** table:



- ➔ After a successful Admin Login, the Admin will be redirected to the **Admin Dashboard** page, where he can perform various tasks. This is the **Admin Dashboard**:



- ➔ If you wish to **Browse and Manage Donors**, then click there and redirect you the Donors page, where you can **Add a new Donor**, see(list) available Donors, edit details of a Donor, and even **Delete a Donor**. So, this is the Page:



- ➔ Now, as an Admin you can add a new Donor, by clicking on **ADD NEW DONOR**. This is the form of the new Donor.

Web Technology Final Project Gu x Add New Donor x +

localhost:8090/donors/new

THE BLOOD<sup>®</sup> CONNECTION  
Your Community Blood Center

• Home  
• Log Out

**Add New Donor**

Full Name:

Father Name:

Mother Name:

Mobile Number:

Email:

Gender:  
Male

Blood Group:  
A+

➔ If you enter wrong one of the required details on the form. The Application will bring an **error message on the screen**. For this case, it is the Mobile Number, saying that it has to be 10-digits(numbers). Then it is validation on the Mobile Number:

localhost:8090 says  
Please enter a valid 10-digit phone number.  
OK

THE BLOOD<sup>®</sup> CONNECTION  
Your Community Blood Center

• Home  
• Log Out

**Add New Donor**

Full Name:  
Fostin

Father Name:  
Ndugutse

Mother Name:  
Habyara

Mobile Number:  
kshjd93

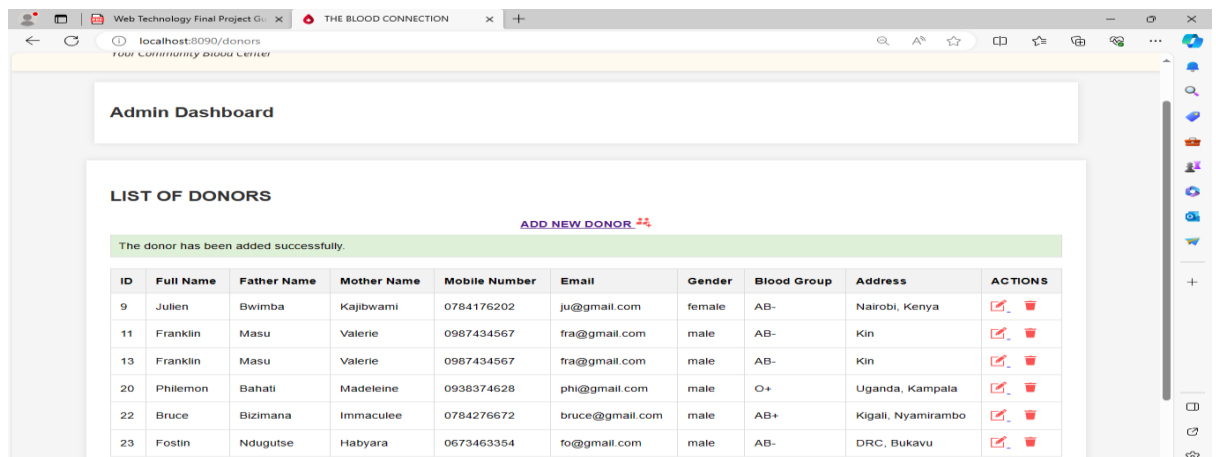
Email:

Gender:  
Male

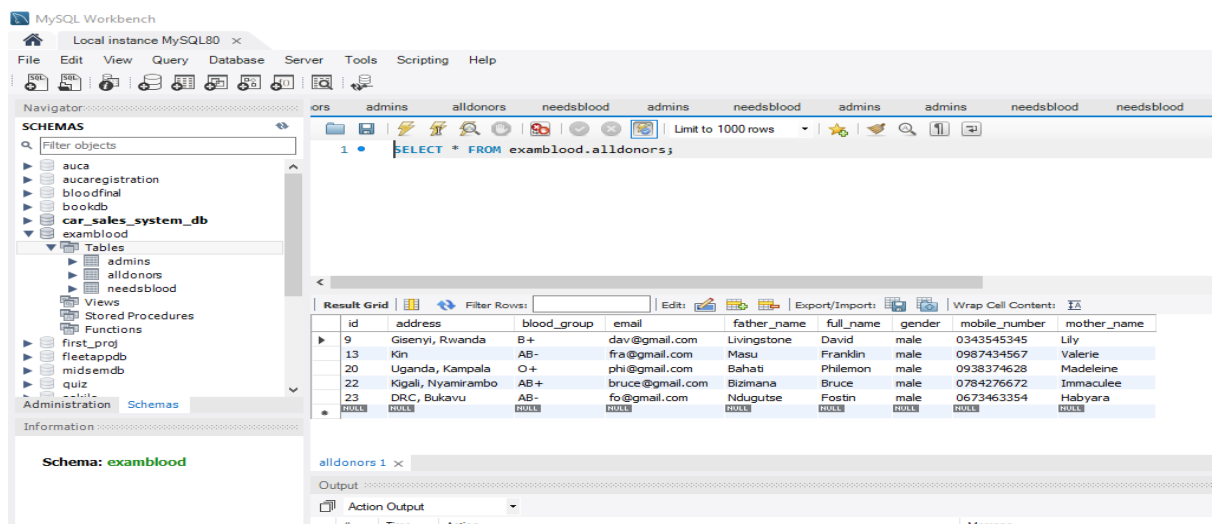
Blood Group:  
A+

➔ If all required details are correctly entered, it will redirect the Admin on the List of Donors, it will bring a confirmation message on List page and see that **the donor has been saved Successfully**:

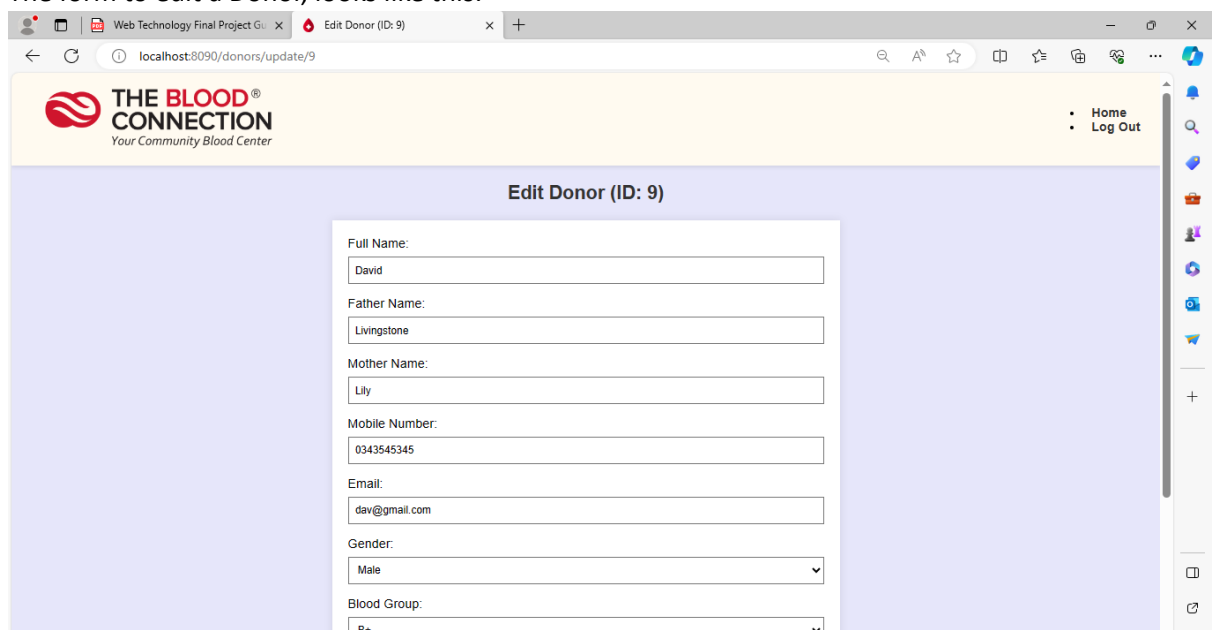




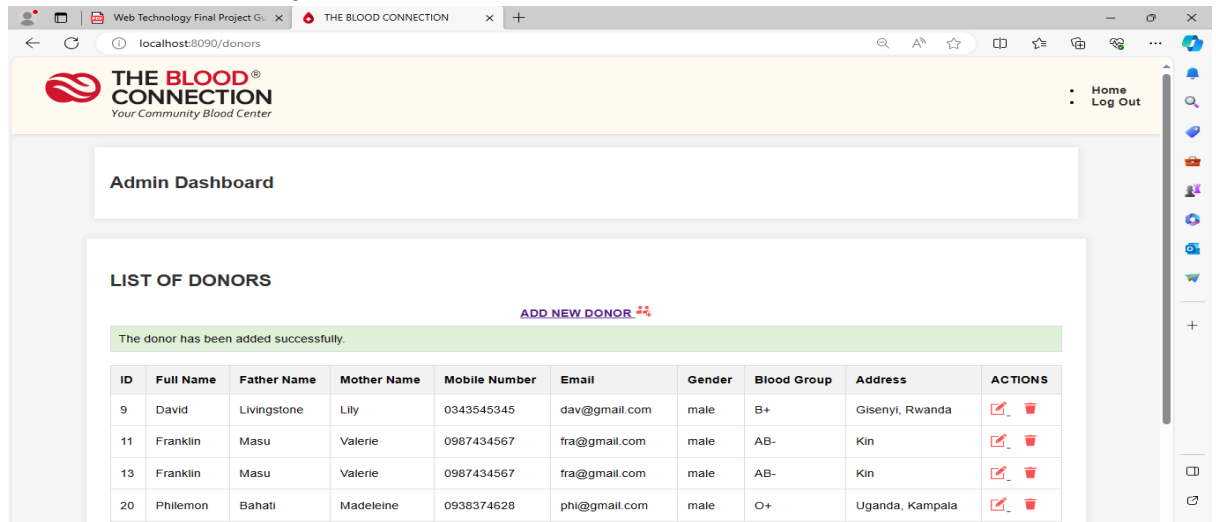
➔ Then, after we go in the Database to check if the Donor has been added in the table **allDonors**:



➔ Then, if you wish to edit the Donor, you have to click on the icon to redirect to the **Edit Form**.  
The form to edit a Donor, looks like this:



➔ Then in the list of the Donors, we can realize that the Donor Details of the Donor ID: 9 have been edited successfully, and of course a confirmation:



**THE BLOOD CONNECTION**  
Your Community Blood Center

Admin Dashboard

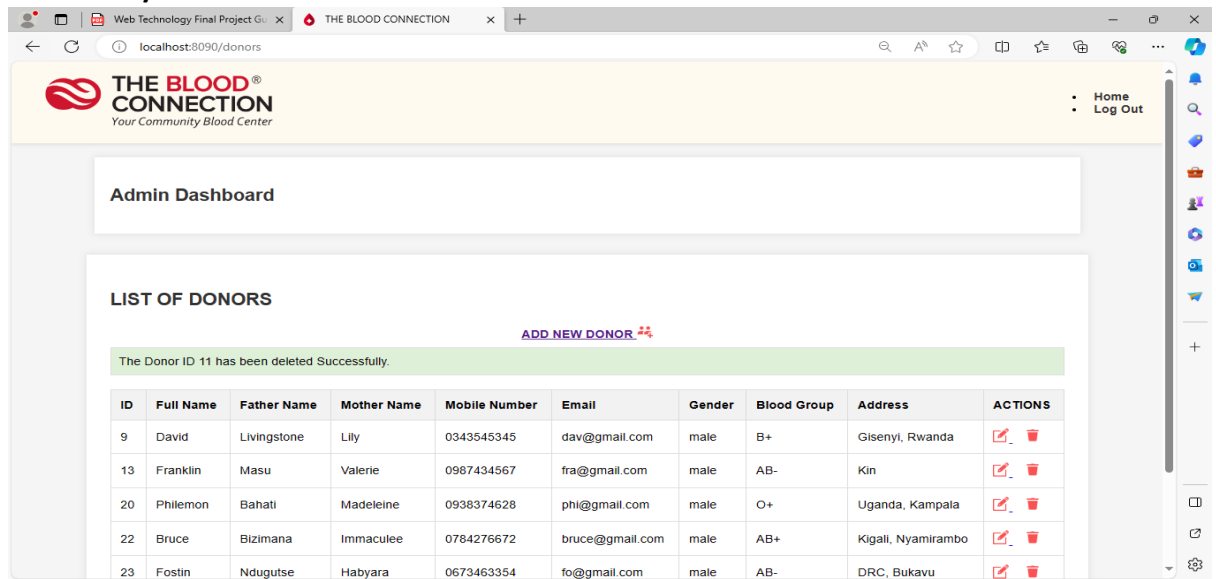
LIST OF DONORS

ADD NEW DONOR

The donor has been added successfully.

ID	Full Name	Father Name	Mother Name	Mobile Number	Email	Gender	Blood Group	Address	ACTIONS
9	David	Livingstone	Lily	0343545345	dav@gmail.com	male	B+	Gisenyi, Rwanda	
11	Franklin	Masu	Valerie	0987434567	fra@gmail.com	male	AB-	Kin	
13	Franklin	Masu	Valerie	0987434567	fra@gmail.com	male	AB-	Kin	
20	Philemon	Bahati	Madeleine	0938374628	phi@gmail.com	male	O+	Uganda, Kampala	

➔ Then, if you wish to delete a Donor, you have to click on the icon to delete the User. After, a confirmation message will be appeared that the donor with ID has been deleted Successfully:



**THE BLOOD CONNECTION**  
Your Community Blood Center

Admin Dashboard

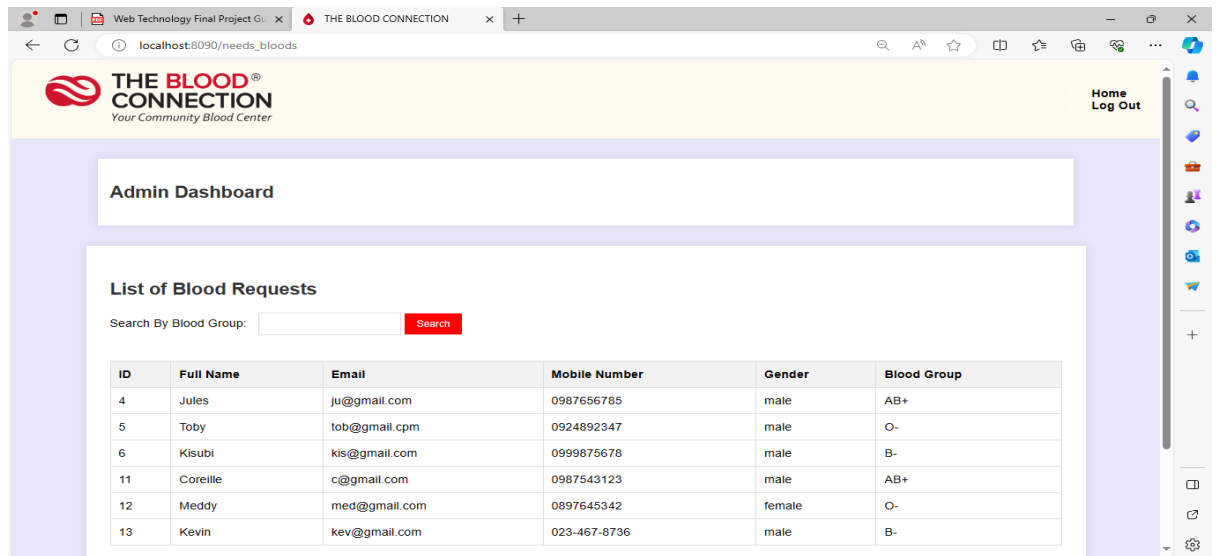
LIST OF DONORS

ADD NEW DONOR

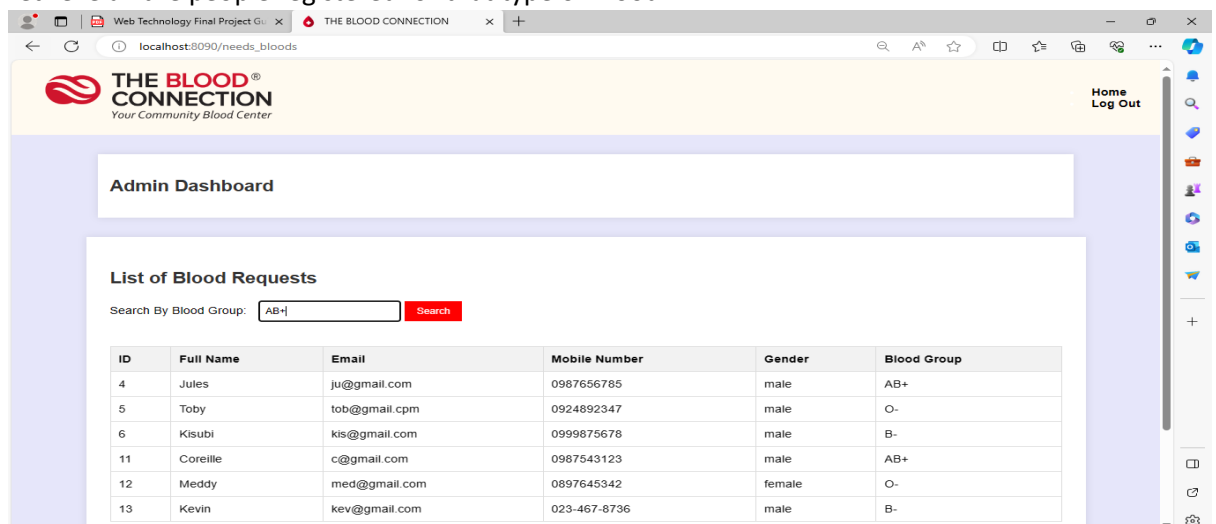
The Donor ID 11 has been deleted Successfully.

ID	Full Name	Father Name	Mother Name	Mobile Number	Email	Gender	Blood Group	Address	ACTIONS
9	David	Livingstone	Lily	0343545345	dav@gmail.com	male	B+	Gisenyi, Rwanda	
13	Franklin	Masu	Valerie	0987434567	fra@gmail.com	male	AB-	Kin	
20	Philemon	Bahati	Madeleine	0938374628	phi@gmail.com	male	O+	Uganda, Kampala	
22	Bruce	Bizimana	Immaculee	0784276672	bruce@gmail.com	male	AB+	Kigali, Nyamirambo	
23	Fostin	Ndugutse	Habyara	0673463354	fo@gmail.com	male	AB-	DRC, Bukavu	

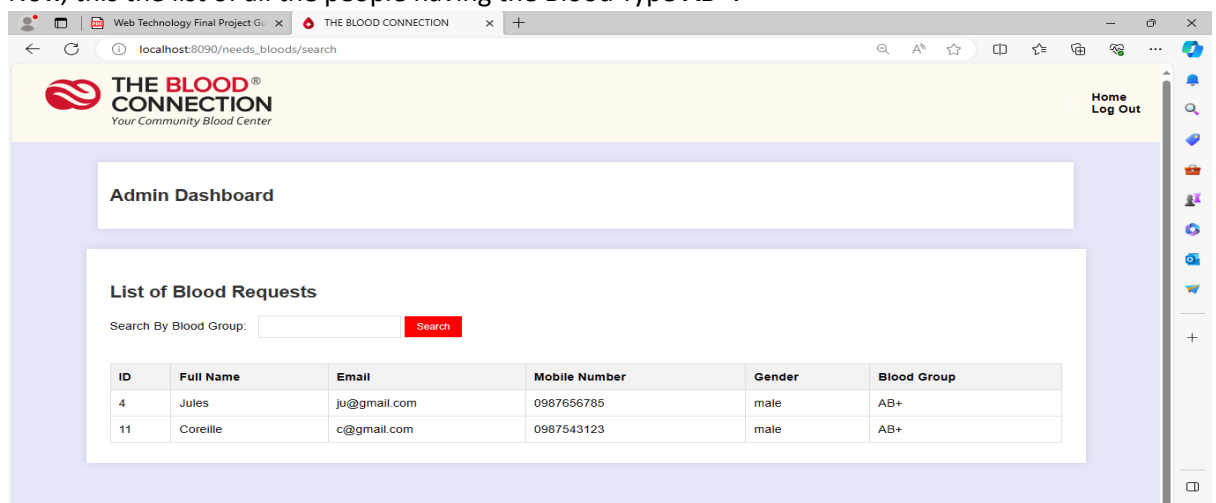
➔ When you're on the Admin Dashboard, and wish to Explore all Requested Blood. This is the list all people of people who requested for the Blood:



➔ After, if you wish you can search people according to a specific Blood Group. (**Search by Blood Group**). For this case, I search by the type of **AB+ Blood Group**, and after it will retrieve all the people registered for that type of Blood:



➔ Now, this is the list of all the people having the Blood Type **AB+**:



**\_\_CONCLUSION\_\_**