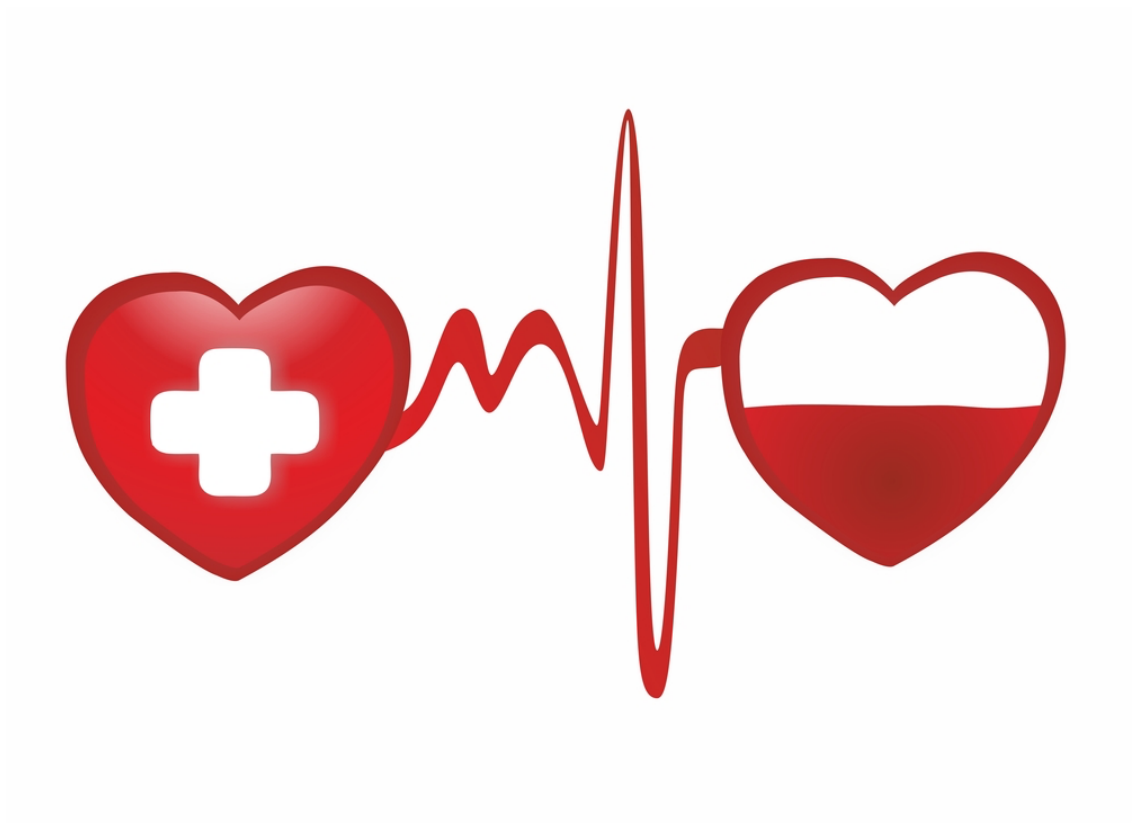# USER MANUAL FOR BLOOD BANK APPLICATION

Welcome to the Blood Bank Application User Manual. This guide is designed to help you efficiently manage and navigate our application, ensuring you can make the most out of its features.

Introduction

The Blood Bank Application is designed for the management of personal, donors, blood donations, and distribution of blood to hospitals that request for blood. This manual provides step-by-step instructions and helpful tips to ensure you can effectively use all the features available.

Getting Started

System Requirements
- A computer with Eclipse IDE installed
- Java Development Kit (JDK) installed
- Access to the application's source code

Installation
1. Open Eclipse IDE on your computer.
2. Import the Blood Bank Application project into Eclipse:
   - Select **File** > **Import**.
   - Choose **Existing Projects into Workspace**.
   - Browse to the location of the application's source code and select it.
   - Click **Finish**.
3. Build and run the project to ensure all dependencies are correctly configured.

APPLICATION

A menu will appear with this options.

The first step is to sign-up as a new user

```
 WELCOME TO THE BLOOD BANK MAIN MENU!
Choose an option
1. Login User
2. Sign-up new user
3. Delete user
4. Update password
0. Exit.
```

You will have to introduce an email , password (will be encrypted) and the role

```
Add info of new user.
Introduce email:
hello@gmail.com
Introduce the password
password
Introduce the role of the user.
 1: personal, 2: hospital
1
Sign up as personal successfull
```

Now you will be able to LOGIN IN THE APPLICATION

```
 WELCOME TO THE BLOOD BANK MAIN MENU!
Choose an option
1. Login User          ⬅
2. Sign-up new user
3. Delete user
4. Update password
0. Exit.
```

SIGN-UP AS PERSONAL

If you have signed-up as a personal you will be able to enter the blood bank and manage it.

A first menu will appear with different options regarding different actions you can perform about the personal, the donors, the donations and the blood stock.

```
Email:
hello@gmail.com
Password:
password
Login of personal successful!

HELLO user!
Welcome to the personal menu of the blood bank database
Select an option (REGISTER FIRST!)

1. REGISTER as personal in the  blood bank database to perform any action
2. Personal options
3. Donor options
4. Donations options
5. Get list of blood remaining
0. Return.
```

OPTION 1: REGISTRATION OF THE USER IN THE BLOOD BANK AS A PERSONAL

If you don't register as a personal, you won't be able to perform any action.
The application will ask you to introduce:
1. Name
2. Surname
3. Establish a contract by introducing the number of hours you want to work, which will automatically set the salary and the contract will be done.
4. A photo which will be saved in the data base and it can bee seen there.

```
You have entered the personal menu as a user with the email:  hello@gmail.com
but you are not registered in the blood bank database,
Please register first-> OPTION 1

YOU ARE IN OPTION 1, REGISTER PLEASE:
Type your name
CARLOTA
Type your surname
PEREZ
Establishing a contract
How many hours do you want to work?
   1. 20 hours
   2. 30 hours
   3. 40 hours
3
Contract added successfully.
Please introduce a photo  by typing the file path
/Users/mariavivasarias/Desktop/PhotoNurseGirl.png
Nurse added successfully to the blood bank database
```

The Personal MENU will appear and you will have different options to choose.

OPTION 2 : PERSONAL OPTIONS

```
1. Modify your information
2. Delete personal
3. List personal
4. Save you as personal to file
5. Load you as personal from xml
0. Return to main Personal menu.
```

1. **Modify your information:**
   1. Type your new name
   2. Type your new surname
   3. Introduce a new photo
2. **Delete personal**
   It will ask you to enter the id of the nurse you want to delete, and it will automatically delete him/her.
3. **List personal**
   It will list all the nurses registered by their id.
4. **Save you as a personal to file**
   1. XTML
   2. HTML
   - XTML FORMAT:
   Personal will be saved in an xml file named as "PersonalID**X**.xml"

```xml
<?xml version="1.0" encoding="UTF-8" standalone="yes"?>
<Personal name="CARLOTA"surname="PEREZ">
<email>hello@gmail.com</email>
<contract>
        <id>11</id>
        <salary>40</salary>
        <hours>400</hours>
</contract>
<photo> gdfjf...</photo>
<Donations/>
</Personal>
```

   - HTML FORMAT:
   The person with the donations that has extracted will be printed (in this case the example hasn't done any donations so it is empty.

Personal Details with Donations

Personal Details

Name	Surname	Email	Contract ID	Salary	Hours	Photo
CARLOTA	PEREZ	hello@gmail.com	11	40	400	

Donations

Amount	Date

This is an example of another nurse that has performed several donations.

Personal Details with Donations

Personal Details

Name	Surname	Email	Contract ID	Salary	Hours	Photo
carmenc	clar	carmenc@gmail.com	5	20	200	

Donations

Amount	Date
12.0	2024-05-23
11.0	2024-05-23
3.0	2024-05-23
5.0	2024-05-23
10.0	2024-05-23
3.0	2024-05-23
12.0	2024-05-25
3.0	2024-05-25

5. **Load you as a personal from XML**
It will export the XML file that has been created from personal.

OPTION 3 : DONOR OPTIONS

```
1. Register a donor
2. Modify information of a donor
3. Delete donor
4. List donors
0. Return to main Personal menu.
```

1. **Register a donor**

```
Donor´s name :
pepa
Donor´s surname :
arias
Donor´s dob d
YEAR yyyy
2002
MONTH MM
02
DAY DD
21
Donor´s blood type
    1. A+
    2. A-
    3. B+
    4. B-
    5. AB+
    6. AB-
    7. 0+
    8. 0-
5
Donor added successfully.
```

2. **Modify a donor**
    1. Type the new donor´s name
    2. Type the new donor´s surname
    3. Type the new donor´s date of birth
    4. Type the new donor´s blood type

3. Delete a donor

It will ask you to introduce the name, surname and blood type of the donor you want to delete

4. List donors

It will list all the donors ordered by name

OPTION 4 : DONATION OPTIONS

```
1. Add donation
2. Delete donation
3. List donations
4. Save a list of donations to file
5. Load a donation from xml
0. Return to main Personal menu.
```

1. Add donation
   1. It will ask you to introduce the email of the nurse who has extracted the donation
   2. It asks about the donor's name, surname and blood type (previously registered as a donor)
   3. It asks how many liters the donor has donated.
   4. The donor´s times donated increments one and the blood gets the donation!

```
Type the email of the nurse who has performed the extraction of blood
hello@gmail.com
You are successfuly registered as personal with email: hello@gmail.com contiue with your action

Type the name of the donor
pepa
Type the surname of the donor
arias
Type the blood type of the donor
Blood type
   1. A+
   2. A-
   3. B+
   4. B-
   5. AB+
   6. AB-
   7. 0+
   8. 0-
5
How many liters is the donor donating
10
Donation added successfully.
Donor pepa arias has donated blood 1 times.
Blood record added successfully.
```

2. Delete donation

It asks how would you like to delete a donation:

1. Delete donation by ID
2. Delete donation by blood type

3. List donations

It will list all the donations ordered by blood type

4. Save you as a personal to file

1. XTML
2. HTML

- XTML FORMAT:

Donations will be saved in an xml file named as "DonationBloodType**X**.xml"

```xml
<?xml version="1.0" encoding="UTF-8" standalone="yes"?>

<donations>
    <donation amount="10.0">
        <date>2024-05-25</date>
        <donor name="pepa" surname="arias">
            <dob>2002-02-21</dob>
            <BloodType>AB+</BloodType>
            <BloodType>1</BloodType>
        </donor>
        <nurse name="CARLOTA" surname="PEREZ">
            <email>hello@gmail.com</email>
            <contract>
                <photo> gdfjf...</photo>
                <id>11</id>
                <salary>40</salary>
                <hours>400</hours>
            </contract>
```

- HTML FORMAT:
  In this case there is only one donation of AB+, if there were more, all of them will be printed.

Donations

Amount	Date	Donor	Donor DOB	Blood Type	Nurse	Nurse Email	Nurse Salary	Nurse Hours
10.0	2024-05-25	pepaarias	2002-02-21	AB+	CARLOTAPEREZ	hello@gmail.com	40	400

5. Load donations from XML

It will export the XML file that has been created from donations depding on the blood type you introduce.

OPTION 5 : Get list of blood remaing

As the hospital makes requests of blood, the donations are still registered but the blood stock changes so the personal can see the stock that is left.

SIGN-UP AS PERSONAL

If you have chosen to sign- up as hospital, the application will ask you to introduce the email, password, role: hospital, and the address.

```
Add info of new user.
Introduce email:
hospitalClinic@gmail.com
Introduce the password
clinic
Introduce the role of the user.
 1: personal, 2: hospital
2
Type the name of the Hospital
Infanta Sofia
Type the address of the Hospital
Calle Princesa, 23
Hospital added successfully to the database
Sign up as hospital successfull
```

Once you have logged in the hospital menu will appear:

```
_
Email:
hospitalClinic@gmail.com
Password:
clinic
Login of hospital successful!

Welcome to the hospital menu of the blood bank database
Select an option
1. Request blood
2. Show requests of this hospital
0. Return.
|
```

OPTION 1: REQUEST BLOOD TO THE BLOOD BANK

The application will ask you to type the liters you want, it will show you the date that you are performing the request and it will ask you what type of blood

```
Type the liters needed
4
Request date and time: 2024-05-25 19:51:58

Type the blood type needed
Introduce blood type:
    1. A+
    2. A-
    3. B+
    4. B-
    5. AB+
    6. AB-
    7. 0+
    8. 0-
5
Blood stock of AB+ in the blood bank
Blood [id=15, bloodType=AB+, liters=10.0, date=2024-05-25]


Sufficient blood of type AB+ is available for the request.
Request added successfully to hospital_blood table.
Blood request has been successfully processed.

Blood stock of AB+ in the blood bank after request.
Blood [id=15, bloodType=AB+, liters=6.0, date=2024-05-25]
```

you need. It will show you the stock that the blood bank has before you perform the request and after it is done.

OPTION 2: SHOW REQUESTS OF BLOOD FROM THE HOSPITAL THAT HAS LOGGED-IN

In this case the hospital that has requested blood has only done one request so it will be showing the one request.

Request
[Hospital
[id=6, name=Infanta Sofia, address=Calle Princesa, 23, email=hospitalClinic@gmail.com],
date=2024-05-25, liters=4.0, blood type=AB+]

BACK TO MAIN MENU:

```
 WELCOME TO THE BLOOD BANK MAIN MENU!
Choose an option
1. Login User
2. Sign-up new user
3. Delete user
4. Update password
0. Exit.
```

OPTION 3: DELETE USER

By entering the email of the user, you want to delete, it will automatically delete the user.

OPTION 4: UPDATE PASSWORD

By introducing the email of the user, the actual password and the new password you want to update, the user will be updated with the new password.