

Mini Project Report on

# **BLOOD MANAGEMENT SYSTEM**

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**New Panvel**

**2022 - 2023**



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## **CERTIFICATE OF APPROVAL**

This is to certify that the requirements for the Bridge Course report entitled “**BLOOD MANAGEMENT SYSTEM**” has been successfully completed by the following students:

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In partial fulfillment of the Second year of Engineering in the Department of Computer Engineering, Pillai College of Engineering, New Panvel – 410206 during the Academic Year 2022 – 2023.

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## **Acknowledgement**

We would like to express our special thanks and gratitude to **Principal Dr. Sandeep Joshi, H.O.D. Dr. Sharvari Govilkar** and **Mini Project Coordinator Prof. Sangeetha Selvan** who gave us the opportunity to do this project as a part of Bridge Course Learning in the topic **BLOOD MANAGEMENT SYSTEM**, which helped us in applying the knowledge that we have acquired during the semester and learning new concepts.

We are immensely grateful to all of them for sharing their pearls of wisdom with us during this course.

# **Chapter 1**

## **Introduction**

### **1.1 Introduction**

The title of the project is 'Blood Management system'. A blood donation is a process whereby a person voluntarily has blood drawn to be used for future transfusions when in need at hospitals for treatment procedures that require them. Donation may be of whole blood (blood drawn directly from the body) or of specific components of the blood; such as red blood cells, white blood cells, plasma, and platelets. Blood banks often participate in the process of collecting blood and other procedures such as managing stocks, approving blood requests and updating donation information.

our python project (Blood management system) provides a menu such as home ,donor,register,donor, register, searchblood .our project enable user to register himself for blood donation.In registration form user needs to enter his personal credentials such as,name,gender,address,disease,etc.The information enter by the user will be safe and secure in the database.

# Chapter 2

## Objective

### 2.1 Problem Definition

- Scarcity of rare blood group.
- Unavailability of blood during emergency
- Less awareness among people about blood donation and blood transfusion.
- Death's do to lack of blood during surgery.
- The blood management system project aims to make all the procedures automated and therefore with computer system it can be more fast and accurate.
- This project is high quality software to manage all these cumbersome jobs.

### 2.2 System Requirements: -

Here are the minimum hardware and software requirements:

#### Software Requirements:

OS: Windows 11, Windows 10, Windows 8 or MACOs

Software: SQLITE 3 (any db browser) , Idle (any editor).

#### Hardware Requirements:

Ram: 4 GB or higher recommended Processor: Intel Pentium 4 or higher

## **Chapter 3**

### **Methodology**

3.1 FLOW OF MODEL

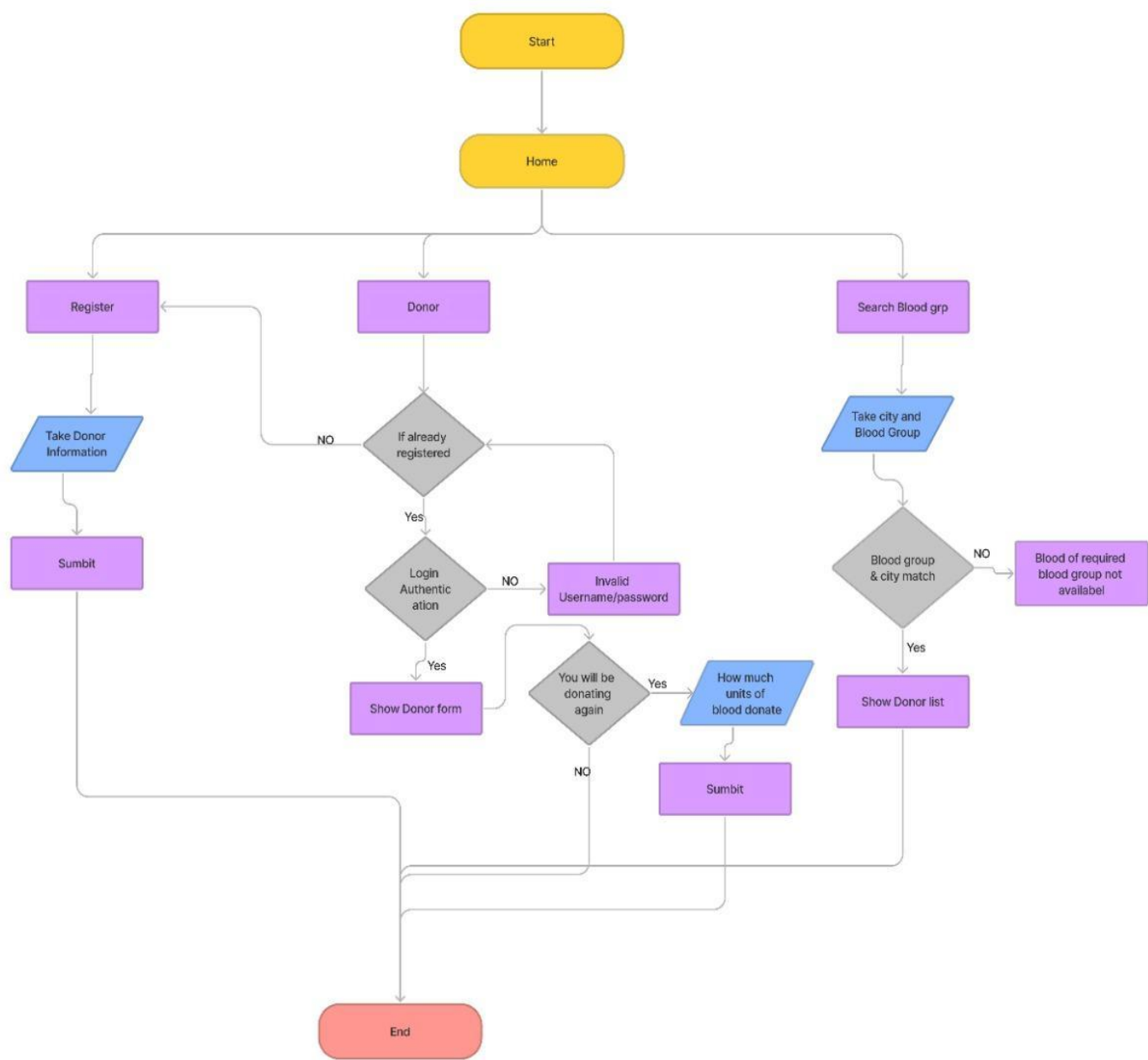


Fig1 - Flow Chart



### **3.2 TECHNOLOGIES USED :-**

#### **Python**

Python is a multi-paradigm programming language. Object-oriented programming and structured programming are fully supported, and many of their features support functional programming and aspect-oriented programming

#### **Python GUI -Tkinter**

Graphical User Interface(GUI) is a form of user interface which allows users to interact with computers. **Tkinter** is the inbuilt python module that is used to create GUI applications. It is one of the most commonly used modules for creating GUI applications in Python as it is simple and easy to work with. You don't need to worry about the installation of the Tkinter module separately as it comes with Python already.

#### **Python - DB browser (SQLITE 3)**

Python SQLite3 module is used to integrate the SQLite database with Python. It is a standardized Python DBI API 2.0 and provides a straightforward and simple-to-use interface for interacting with SQLite databases. There is no need to install this module separately as it comes along with Python after the 2.5x version.

# Chapter 4

## Implementation

### 4.1 System Overview

Blood management system is a GUI based system that serving the users throughout the world, The main idea of a system is to manage blood so hospitals will be able to provide blood to needy one's.

- Firstly user's need to create an account with all the basic information.
- If the user had already created his account then Log-In.
- If the user hasn't donated his blood , he needs to fill the registration form in order to donate his/her blood.
- Admin can perform operations like update ,delete,search but user's can only perform operations like register.
- For more information the user can navigate himself onto contact us.
- In order to gain insight of our project user's can navigate themselves onto us.

## 4.2 Project working with Snapshots

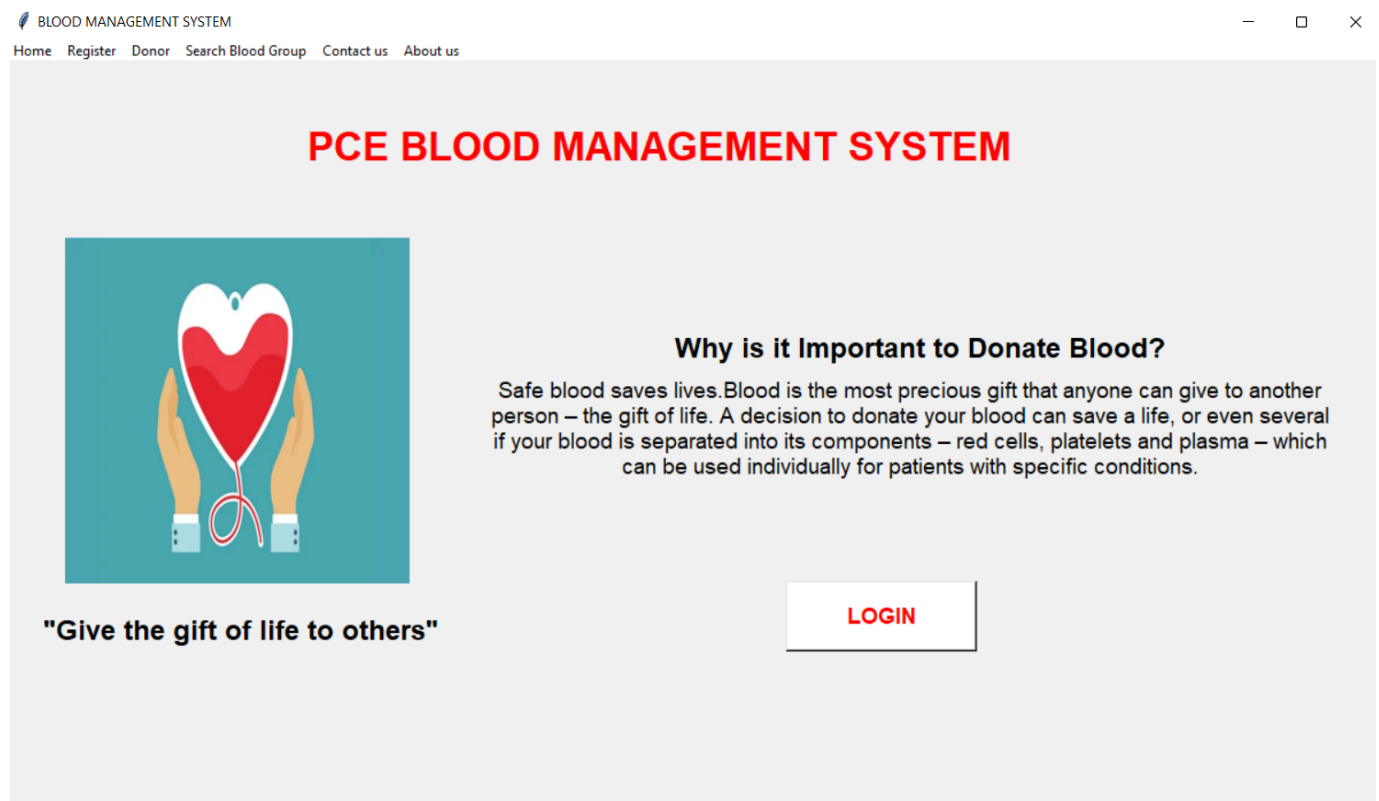


Fig2 - Home Page

## BLOOD DONATION FORM

Name	<input type="text"/>		
Gender	<input type="radio"/> Male <input type="radio"/> Female		
Date Of Birth	<input type="text" value="1/1/04"/>		
Blood Group	<input type="text" value="Select Blood Group"/>		
Contact No.	<input type="text"/>		
Email	<input type="text"/>		
Address	<input type="text"/>		
Weight	<input type="text"/>	Pulse	<input type="text"/>
Hb	<input type="text"/>	BP	<input type="text"/>
		Temperature	<input type="text"/>
		Have you donated previously?	<input type="radio"/> Yes <input type="radio"/> No
Do you suffer from or have suffered from any of the following diseases? <input type="text"/>			


Select from Below

- |                 |                    |                                 |   |
|-----------------|--------------------|---------------------------------|---|
| 1.Heart Disease | 2.Diabetes         | 3.Sexually Transmitted Diseases | 4.Abnormal Bleeding tendency epatatis B/C |
| 6.Lung Disease  | 7.Allergic Disease | 8.Cancer/Malignant Disease      | 9.Kidney Disease                          |
|                 |                    |                                 | 10.Tuberculosis                           |

**Register****Fig3 - Register page**

BLOOD MANAGEMENT SYSTEM

Home
Register
Donor
Search Blood Group
Contact us
About us



**Email**

**Password**


Your password is your DOB as MM/DD/YY

Log IN

Fig4 - Log In Page

BLOOD MANAGEMENT SYSTEM

Home
Register
Donor
Search Blood Group
Contact us
About us



**Email**

**Password**

Your password is your DOB as MM/DD/YY

Log IN

**Donor Details**

Name	ABC	Gender	Male
Date Of Birth	4/15/98	Blood Group	AB+
Contact No.	9876543210	Email	abc123@gmail.com
Address	Panvel	Weight	78
Pulse	85	Hb	11
BP	105	Temperature	96
Have you donated previously?	Yes		
Any disease(s)	Diabetes		

**About Donation**

When was the last time you Donated ?

When are you going to donate this time ?

Where are you going to donate(City) ?

How much units of Blood will you be donating?

Submit

Fig5 - After Log in

BLOOD MANAGEMENT SYSTEM

Home Register Donor Search Blood Group Contact us About us

Enter City

Select Blood Group

**Fig6 - Search Blood group**

BLOOD MANAGEMENT SYSTEM

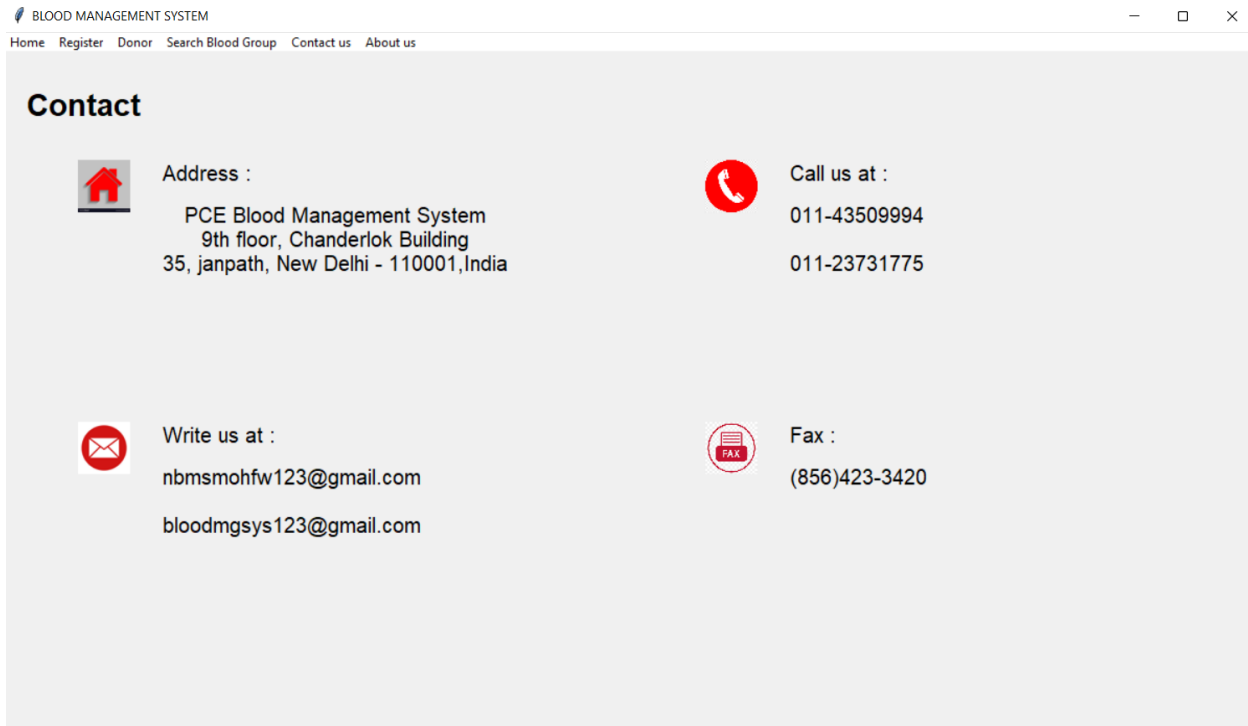
Home Register Donor Search Blood Group Contact us About us

Enter City

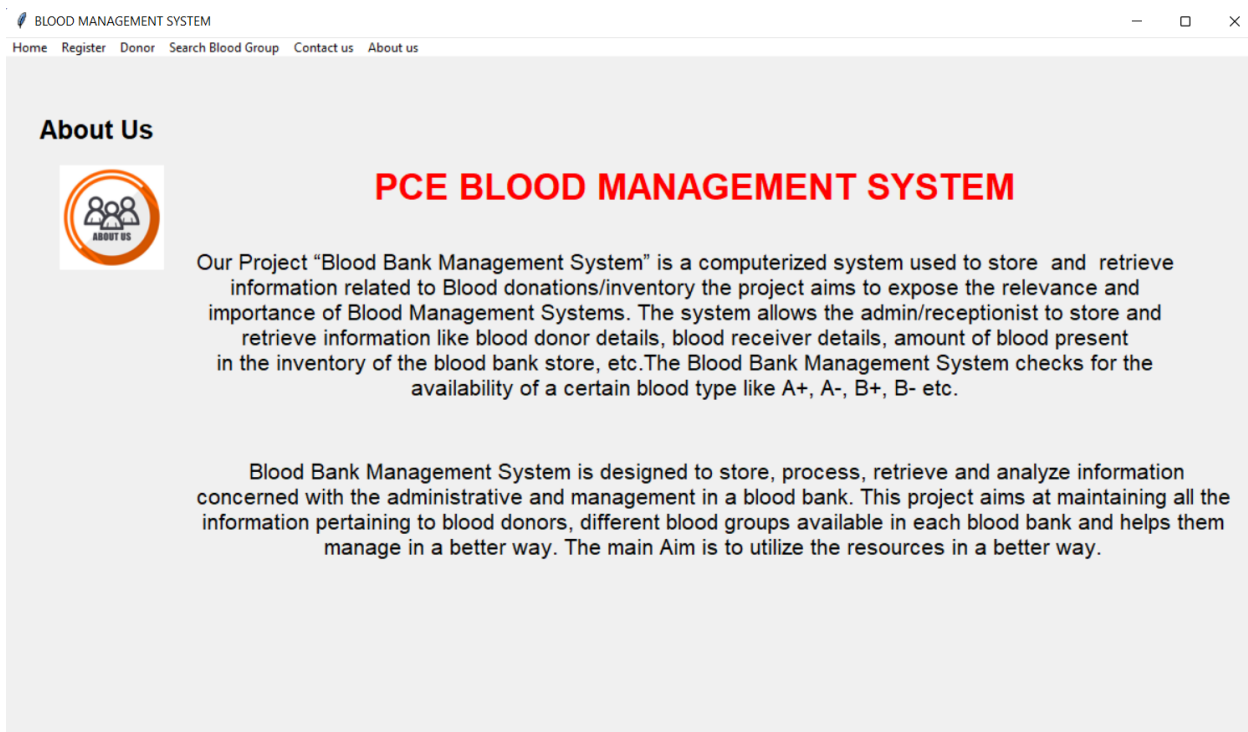
Select Blood Group

Name	Mobile No.	Email	Gender
ABC	9876543210	abc123@gmail.com	Male
LMN	9765206528	lmn7@gmail.com	Male

**Fig7 - After Searching**



**Fig8 - Contact Us**



**Fig9 - About Us**

Table: <span>details</span> <span>↕</span> <span>↺</span> <span>↻</span> <span>🔍</span> <span>🖨</span> <span>📄</span> <span>📅</span> <span>📧</span> <span>🔗</span> <span>🔗</span> <span>🔗</span> <span>Filter in any column</span>														
	name	gender	dob	bloodgrp	mobno	email	add	weight	pulse	temp	hb	bp	prevdonate	disease
	Filter	Filter	Filter	Filter	Filter	Filter	Filter	Filter	Filter	Filter	Filter	Filter	Filter	Filter
1	Rushabh Santosh Jain	Male	10/15/03	B+	9767922099	rushabhsjain40@gmail.com	Panvel	65	80	97	11	110	Yes	None
2	Sahil Chaudhari	Male	12/24/03	B+	9870607907	sahil2412@gmail.com	Panvel	75	70	96	11	110	No	None
3	Akshay Gaikwad	Male	8/5/03	A+	9876543210	akshay21@gmail.com	Thane	80	75	96	11	105	No	None
4	Sanjana Mittal	Female	2/10/97	A+	7698541254	sanjana44@gmail.com	Vashi	60	75	96	10	110	No	Diabetes
5	Meena Ranka	Female	1/1/97	O+	8495763215	rmeena@gmail.com	Thane	75	85	95	10	90	Yes	None

**Fig10 - Database**



## **Chapter 5**

### **Conclusion**

#### **5.1 Project Outcome**

- In this Project we made a blood management system with the help of python, Sqlite3.
- BloodManagement System lightens the manual work for the donor. It also reduces the paper work and data lost.

#### **5.2 Future Scope**

- Sending sms or email to donor when anyone requires the blood .
- Managing the Hospitals and making availability of hospitals or blood banks on our GUI.

#### **5.3 References**

<https://www.geeksforgeeks.org/>

<https://www.javatpoint.com/>