PROJECT:

BLOOD BANK MANAGEMENT SYSTEM

PROJECT MEMBERS

Shakeib-e-Shaida (Project coordinator)

Tehreem Faheem

Muslima Iliyas

INDEX

ABSTARCT:

Our project blood bank management system is desktop application that allows you to search nearest blood banks. The main objective of our system is that suppose you are new to the city, and an emergency occurred and you don't know any blood banks in the city.

So our aim is to manage and centralize all the data of all the blood banks in the city, so user can just use an app and search for the nearest blood bank just by area name or postal code and get the blood from there is they have the availability.

BLODD BANK MANGEMENT SYSTEM

1. INTRODUCTION:

In Pakistan there has been no project done like this before. In Pakistan all the blood banks manage their data separately and it decentralized.

The very big problem because of it is that the time consuming process during emergency.

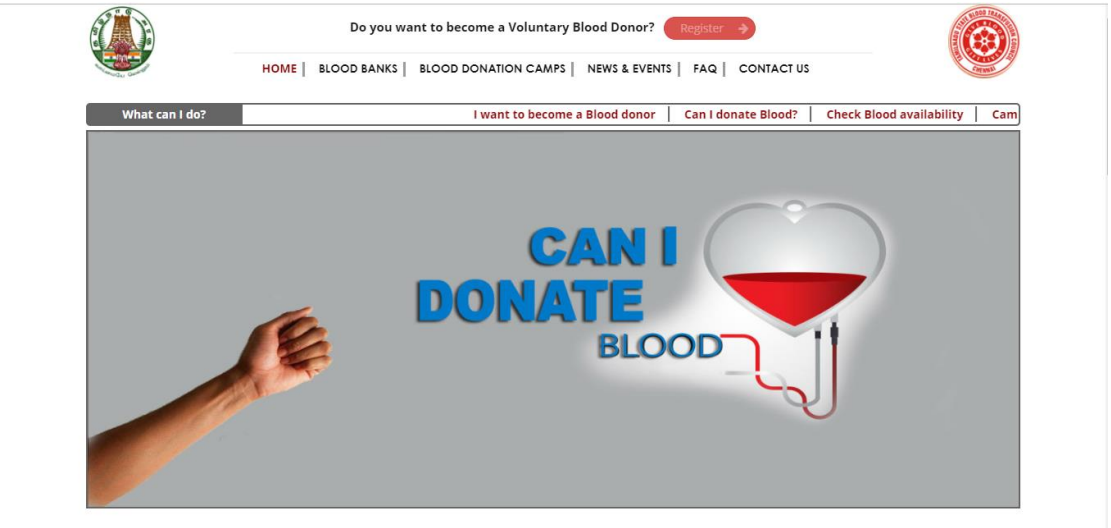
But I have found one project which resembles mine and it is being managed by Indian government.

1.1 WHAT THEY HAVE DONE:

They have done the same job that we want to do.

Following are the concise conclusion of the features of their project:

- User can register
- User can search all the blood banks with respect to area
- User can see the blood availability of the selected blood bank
- User can register as a donor
- User can ask for blood bottles
- Admin can manage the data of the blood banks.



1.2 PURPOSE OF THE SYSTEM:

The purpose of Blood Banks Management System is to manage and centralize all the data of all the blood banks and provide user with facilities to search the nearest blood banks in any case of emergency or if the user is new to the city or country and don't know where to go.

1.3 SCOPE OF THE SYSTEM:

The scope of our project for the time being is limited to only 10 blood banks and although admin can add new scope to manage data of all the blood banks in the country. Blood banks but in future we can widen the

1.4 OBJECTIVE AND SUCCESS CRITERIA:

Objective of the system is to save time of the user to search for blood banks and search for blood availability in the nearest blood bank. Once we can manage the data of all the blood banks and search blood banks through MAP APIs we can sell it in the market.

1.5 ASSUMPTIONS & DEPENDENCIES:

The flow of the system will be user search for blood banks by providing the of area and blood groups.

All the data entered will be correct.

1.6 MODULES:

The functionality of our project is divided into two modules basically:

- Admin
- User

1.7 METHODOLOGIES AND TECHNOLOGIES:

We will use different methodologies and technologies in our project.

1. METHODOLOGY:

The method we will use in our project will be inspired from SDLC model, iterative model .the reason for iterative model is that we don't know how our final product will look like but we know for sure that we can and will make enhancement to it.

2. TECHNOLOGIES:

We will use following technologies in our project:

- C#
- Visual Studio 2015

- Microsoft SQL Server 2012
- Microsoft SQL Server Management Studio
- Windows form
- SQL
- ADO.NET Framework

1.8 RESOURCES AND TOOLS AVAILABLE:

Well our project can be made also as a web based application.

Tools available are:

- HTML
- CSS
- ASP.NET
- Node.JS
- JavaScript
- Other databases

1.9 FLOW:

- Scope out and prioritize projects.
- Diagram requirements for the initial sprint.
- Construction/iteration.
- Release the iteration into production.
- Production and ongoing support for the software release Retirement.

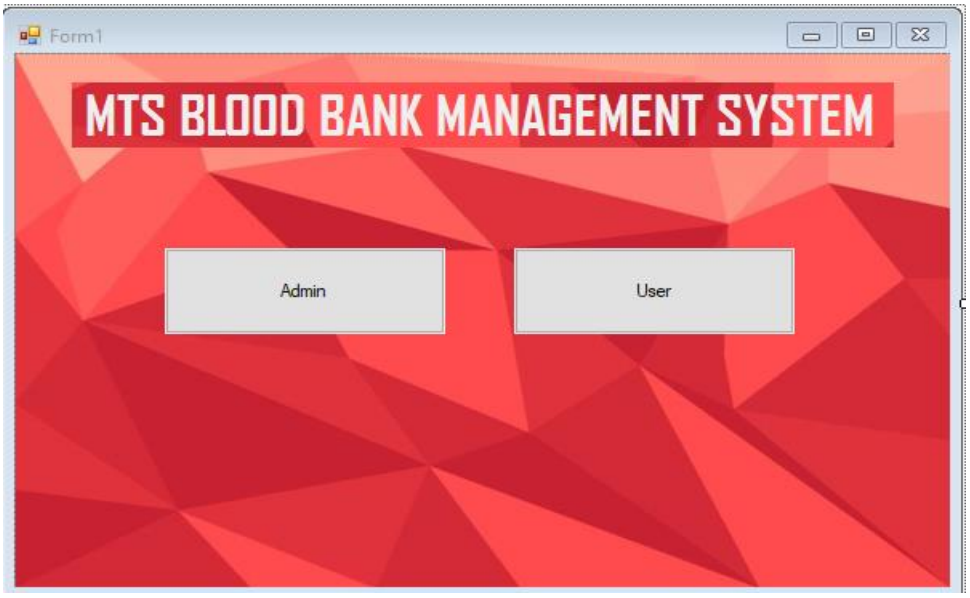
HARDWARE LIMITATIONS:

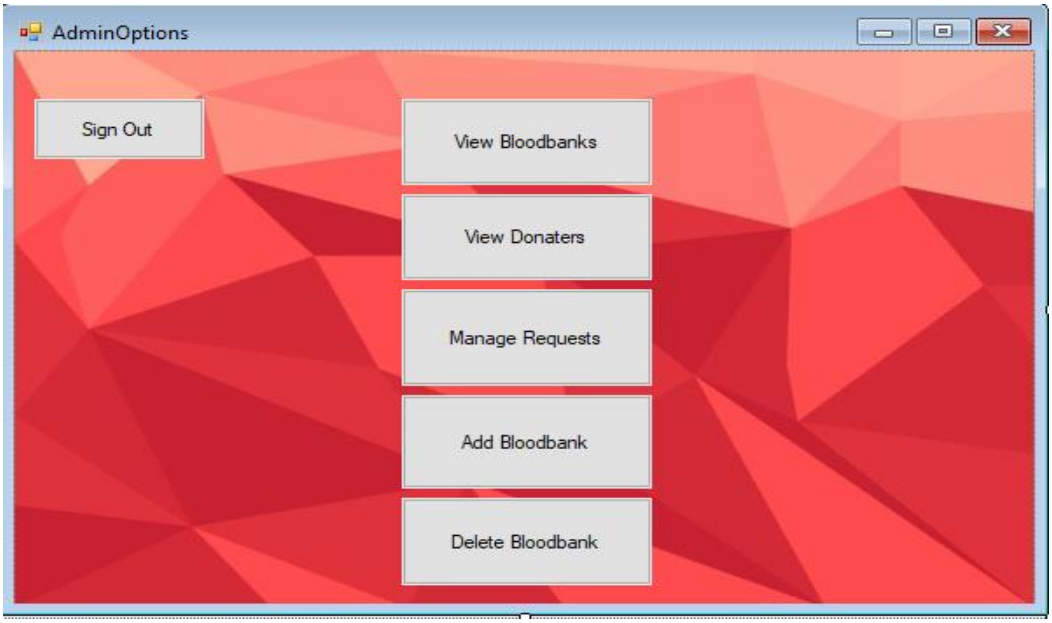
- **Processor:** Intel Core 2Duo
- **RAM:**2GB
- **Operating system:** Windows XP sp3 / Windows Vista Business sp1/windows 7,8,10
- **Online backup:** Windows Remote Desktop Connectivity

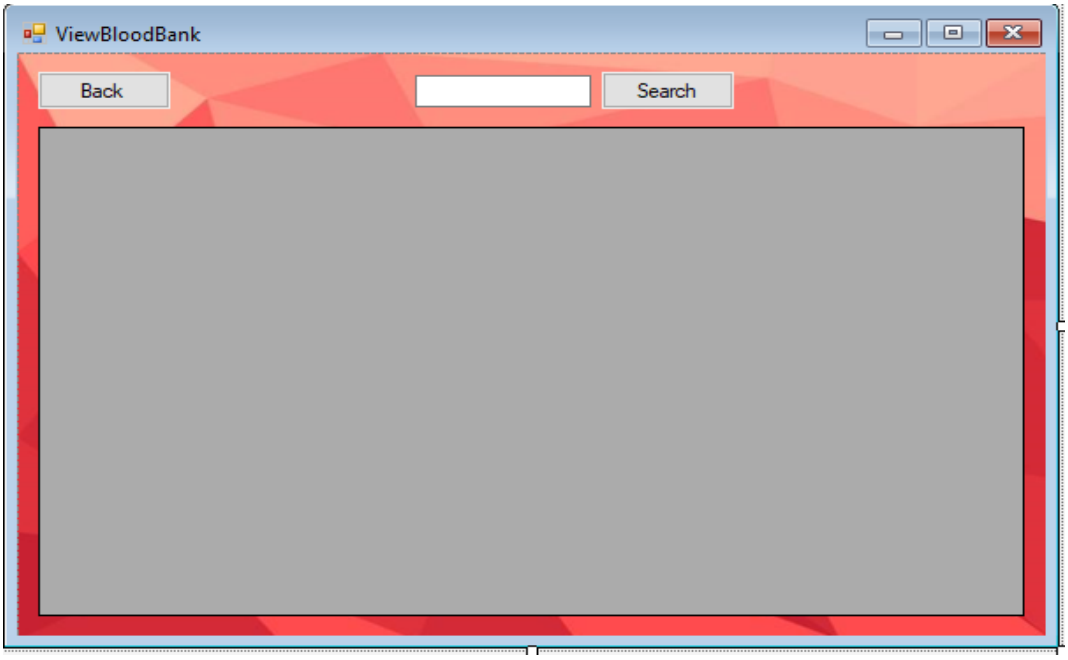
EVALUATION:

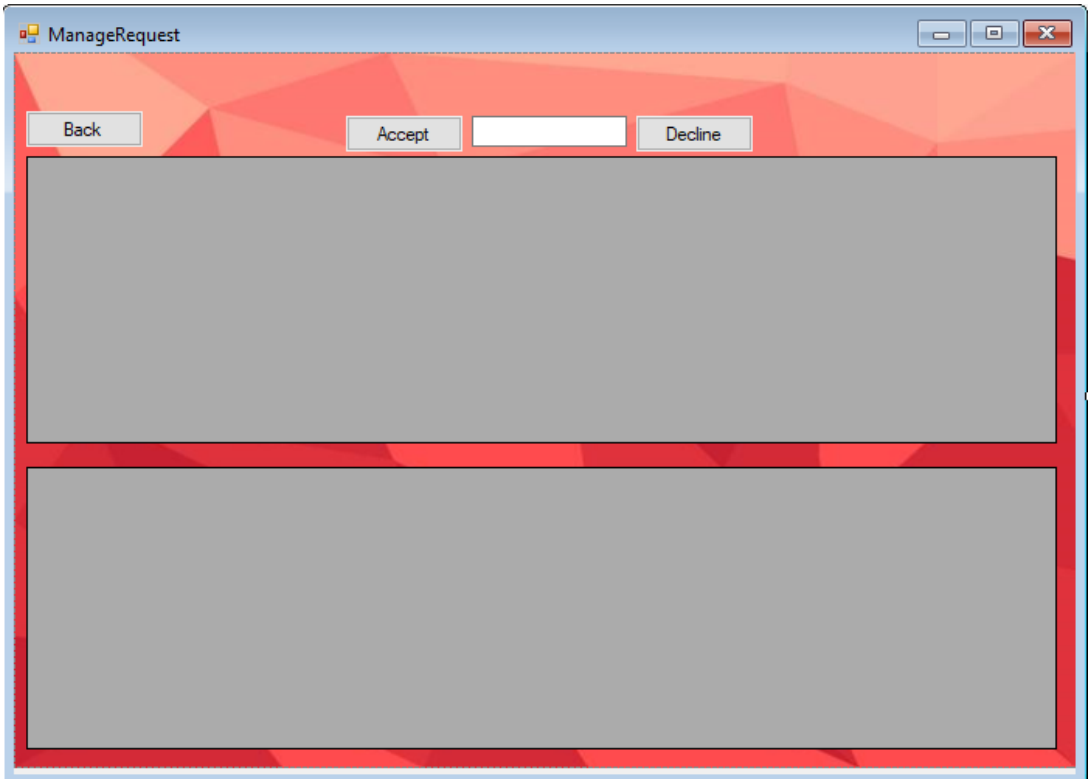
Our system looks like this:

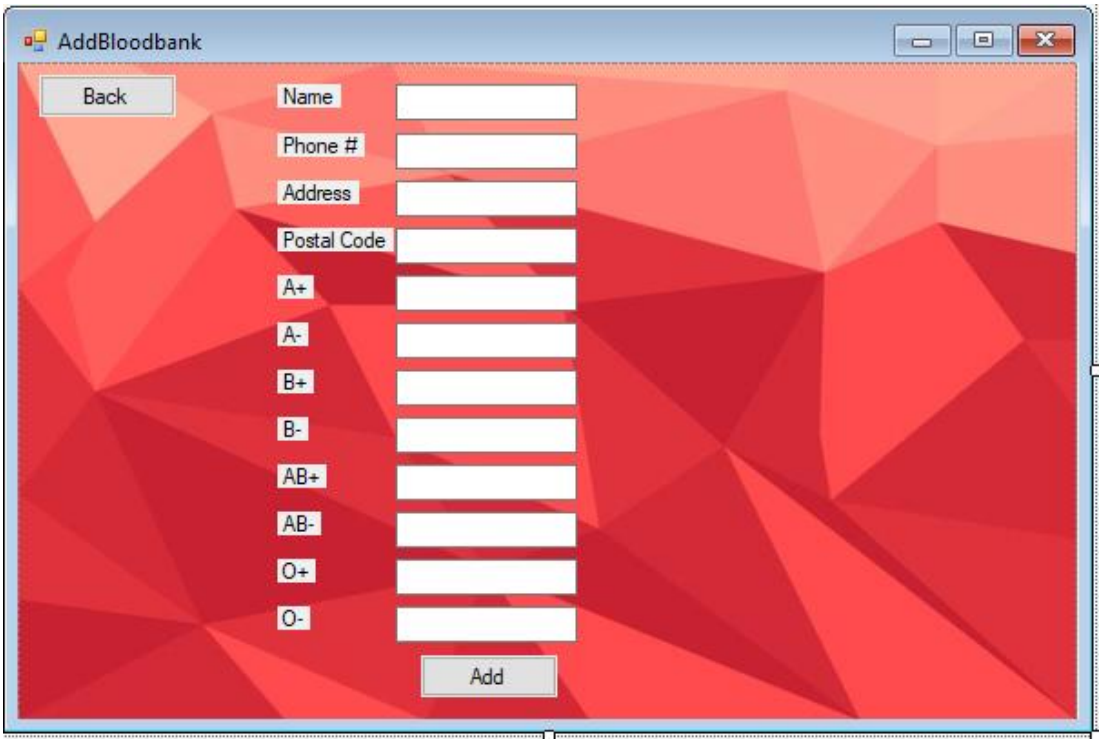
Screenshot:

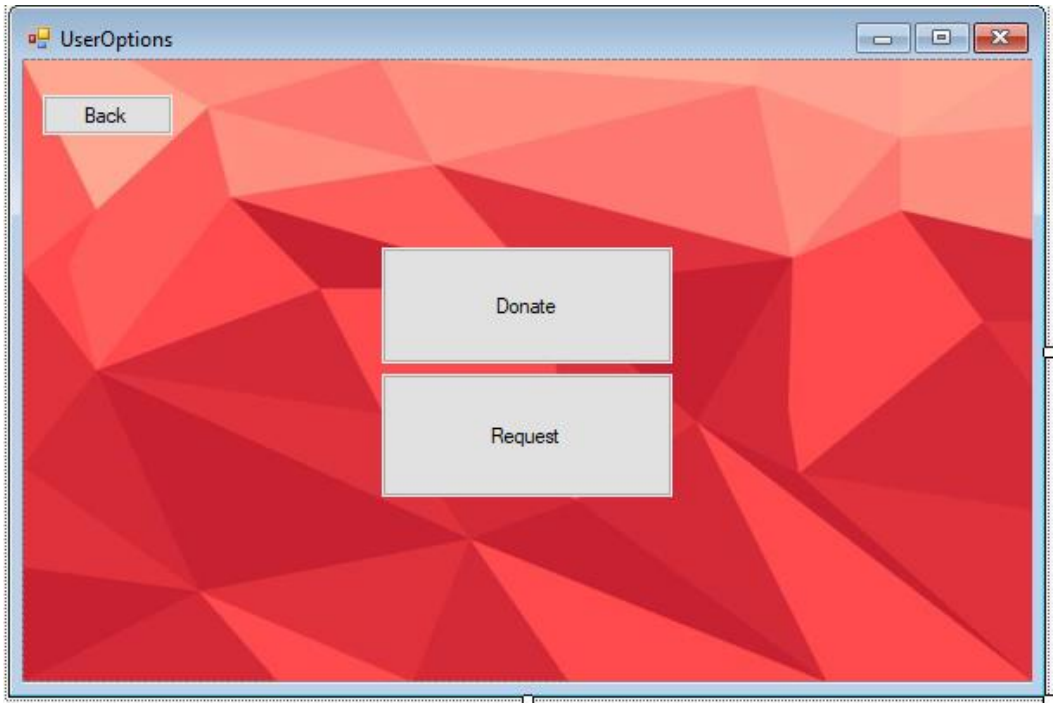


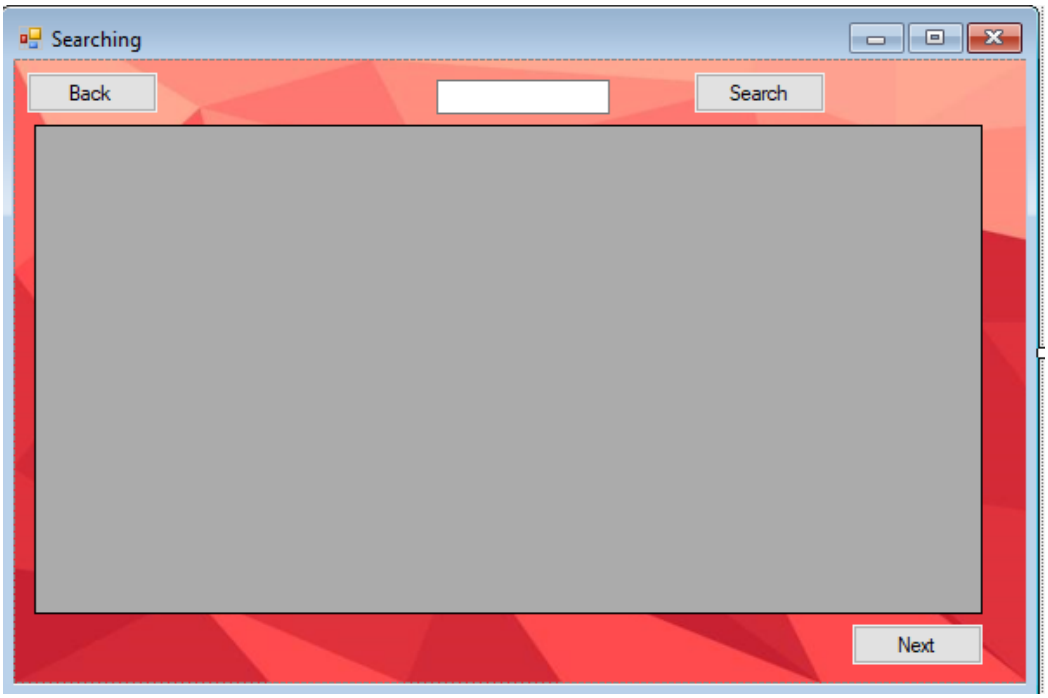

AdminOptions
Sign Out
View Bloodbanks
View Donaters
Manage Requests
Add Bloodbank
Delete Bloodbank

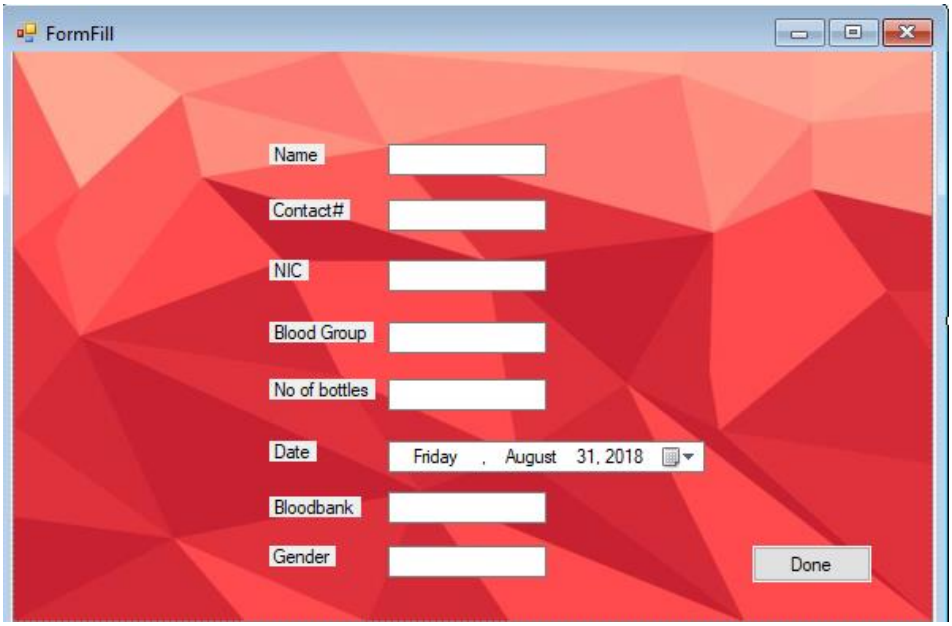

ViewBloodBank
Back
Search


ManageRequest
Back
Accept
Decline


AddBloodbank
Back
Name
Phone #
Address
Postal Code
A+
A-
B+
B-
AB+
AB-
O+
O-
Add


UserOptions
Back
Donate
Request


Searching
Back
Search
Next


FormFill
Name
Contact#
NIC
Blood Group
No of bottles
Date
Friday , August 31, 2018
Bloodbank
Gender
Done

2. RAD REPORT:

2.1 FUNCTIONAL REQUIREMENTS:

The functional requirements of the system is divided into two parts. Admin and user.

2.1.1ADMIN:

- Admin can **sign in** and **sign up**
- Admin can **see** all the blood banks data
- Admin can **Add** Blood banks
- Admin can **see** all the donors
- Admin can **Accept** or **Delete** request for blood bottles
- Admin can **Manage** blood requests
- Admin can **Delete** blood bank data
- Admin can **Search** for specific blood bank
- Admin can **Search** for specific donor

2.1.2 USER:

- User can **Request** for blood bottles
- User can **Search** for the nearest blood bank
- User can **Fill out** the form to make request
- User can directly **Become a donor**
- User can **See** all the basic info of all blood banks
- User can **Select** specific blood bank

DATA OF THE USER THAT WILL BE USED IN FORM AND DATABASE:

- Name
- NIC
- Phone Number
- Address
- Blood type
- No. of bottles
- Gender
- Age

DATA OF BLOOD BANK THAT WILL BE USED IN BLOOD BANK DATABASE:

- Name of blood bank
- Address
- Postal code
- No of bottles

2.2 NON FUNCTIONAL REQUIREMENTS:

- System UI should be red in color
- Buttons should be placed in center of the form
- UI should be easily understandable
- Every form should pop up in the center of the screen
- Button color should be gray

3. TOOLS FOR SDLC LIFE CYCLE:

3.1 ANALYSIS AND REQUIREMENT MANAGEMENT TOOLS :

Different tools used in analysis and requirement management are as follows:

- Process Street
- Visure
- Visual Trace Spec
- IBM Rational DOORS
- JAMA
- aNimble

WE ARE USING ANIMBLE.

3.2 DESIGN TOOLS:

Design Tools are separated into two categories:

1. Prototyping
2. UML Designing

3.2.1 PROTOTYPING TOOLS :

- ADOBE XD
- Invision Studio
- Proto.io
- Axure
- Origami Studio

3.2.2 UML DESIGNING:

- Microsoft Visio
- Visual paradigm
- Lucid Chart
- Enterprise Architecture

WE ARE USING VISUAL PARADIGM

3.3 PROJECT MANAGEMENT TOOLS:

- Microsoft Project
- Teamwork
- Asana
- Trello

WE ARE USING MICROSOFT PROJECT

3.4 DATABASE MANAGEMENT TOOLS:

- Oracle RDBMS
- IBM DB2
- Microsoft SQL Server
- MySql
- MongoDB
- Microsoft Access

WE ARE USING MS SQL SERVER

3.5 DOCUMENTATION TOOLS :

3.5.1 REQUIREMENT DOCUMENATION:

- Stories on board
- Trello
- And above req managing tools are also used for documentation
- UML designing are also included in this area
- Project management tools are also included in this area

3.5.2 WRITING ARCHITECTURE :

- GenMyModel

3.5.3 WRITING APIs :

- Swagger
- Slate

3.5.4 WRITING DATABASES :

- Schema Spy
- Lucid Chart
- And all UML designing apps

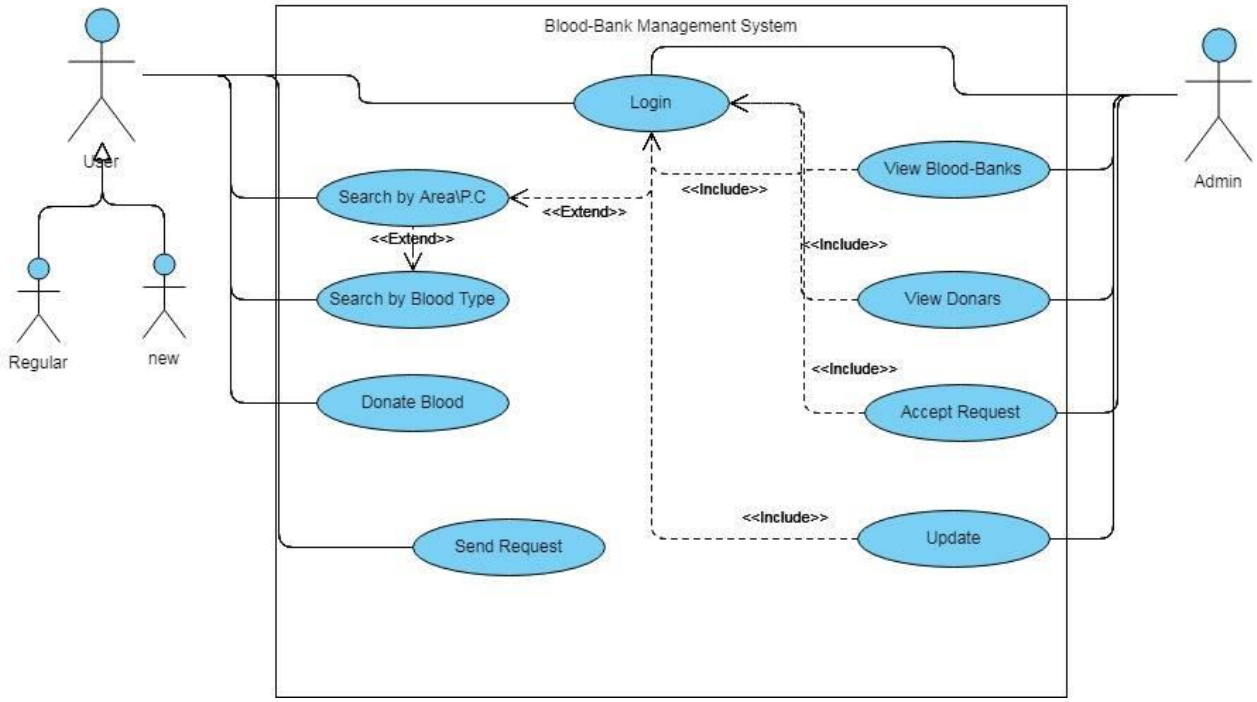
3.6 QA TESTING AND TEST MANAGEMENT :

- Xray for Jira
- Test Rail

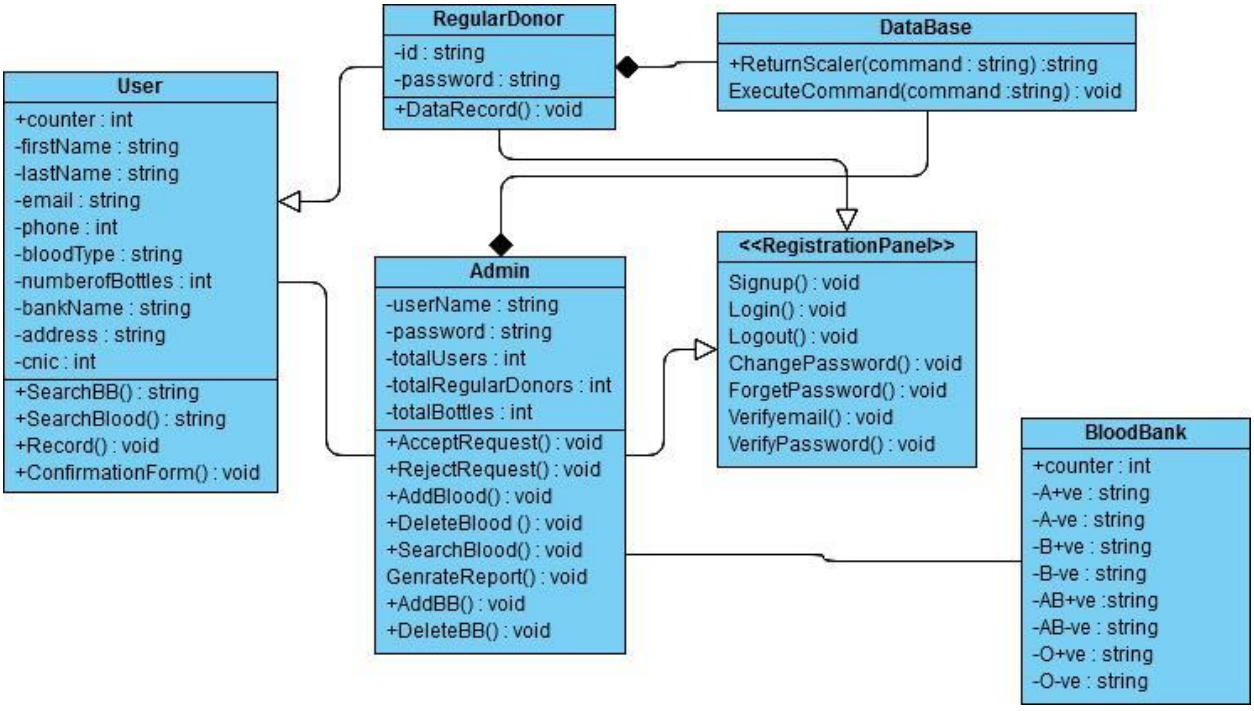
4. UML DIAGRAMS:

4.1USE CASE DIAGRAM:

BLOOD_BANK TRACKING SYSTEM

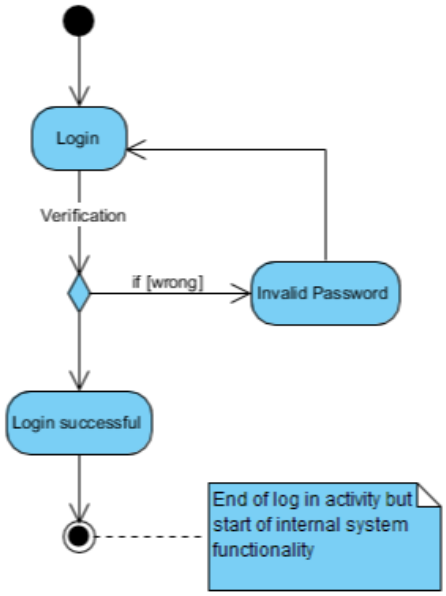


4.2 CLASS DIAGRAM:

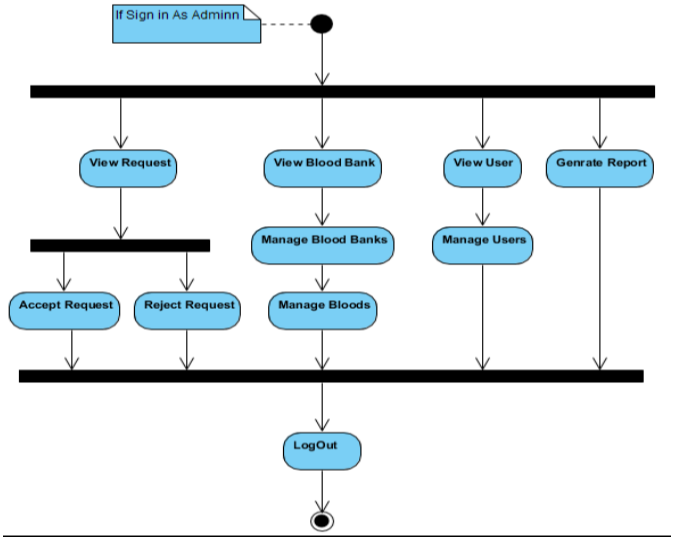


4.3 : ACTIVITY DIAGRAM:

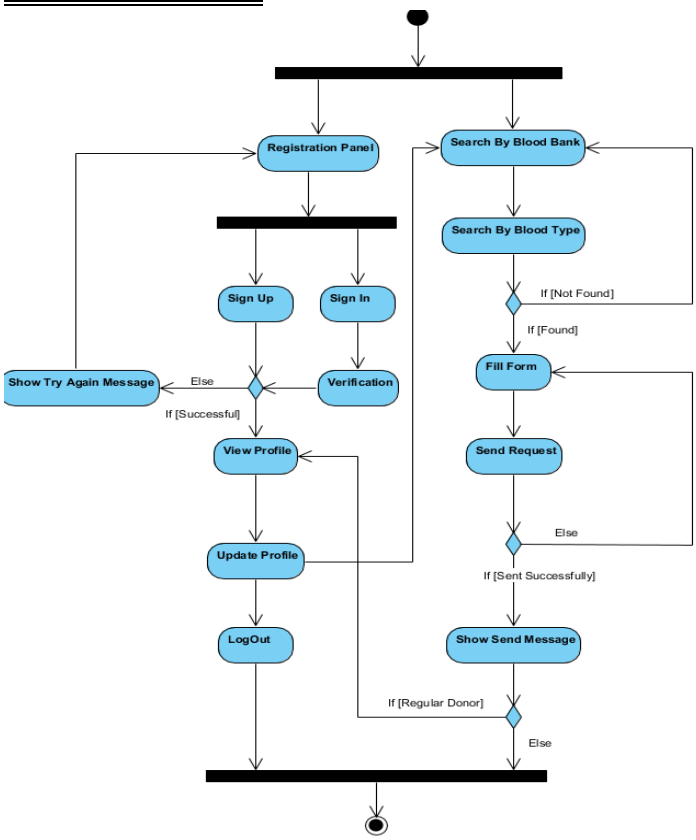
4.3.1 FOR LOGIN:



4.3.2: FOR ADMIN:

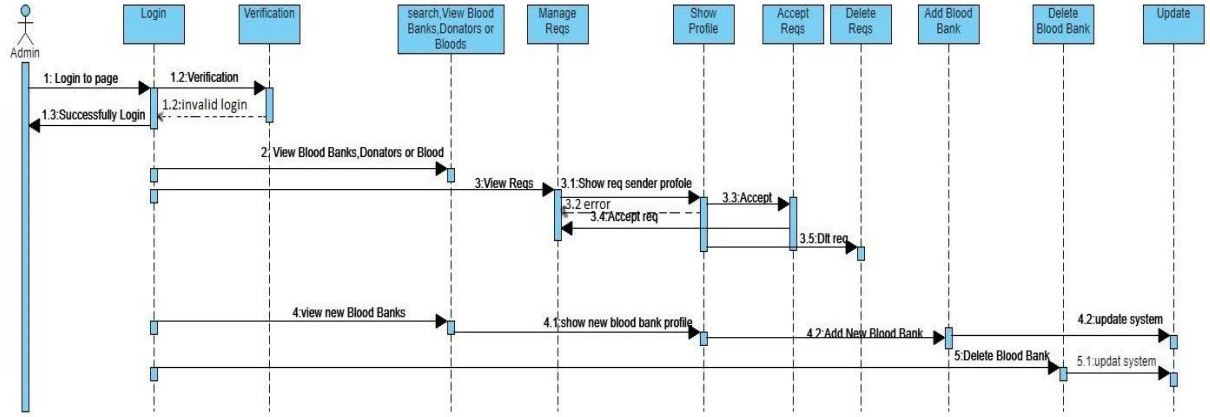


4.3.3: FOR USER:

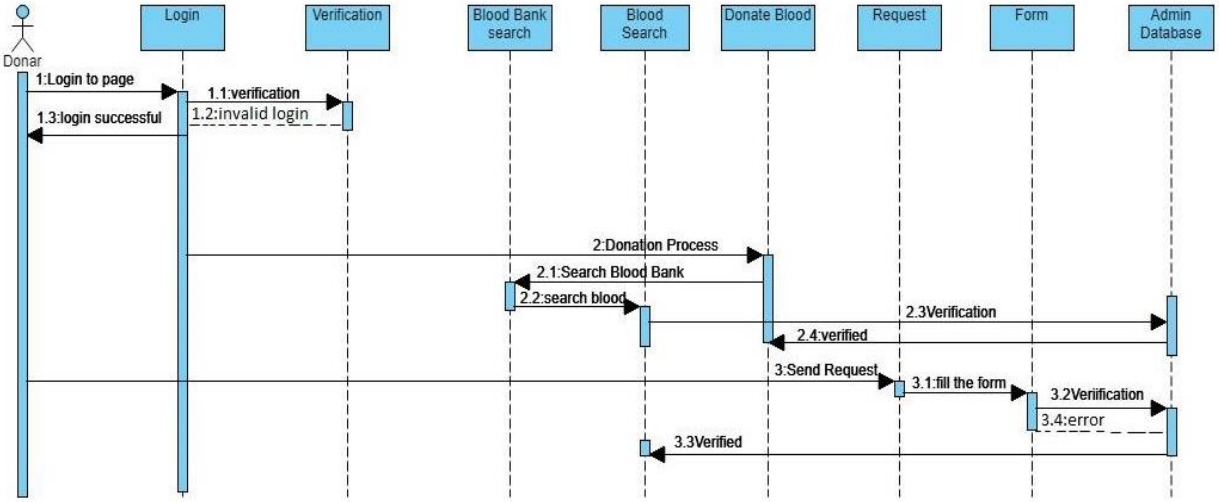


4.4: SEQUANCE DIAGRAM

4.4.1: FOR ADMIN:



4.4.2: FOR USER:



5: CONCLUSION:

The system can be extended to be used for maintaining records of more blood banks .it gives us idea about the function of blood bank .the main objective is to develop an emergency application for people who needs blood by using this system.

6: REFERENCES:

RELAVANT LINKS AND ARITCLES:

- (Scribd link for the article for the conventional blood bank management system)
- https://www.scribd.com/document/335504708/BLOOD-BANK-MANAGEMENT-SYSTEM-PROJECT-REPORT-docx
- (Sciene direct link for the article for the blood bank management system)
- https://www.sciencedirect.com/science/article/pii/S1877042815036940
- (Indian government online web application for centralized blood bank management system)
  http://www.tngovbloodbank.in/blood-bank.php
- Source: https://www.softwaretestinghelp.com/requirements-management-tools/
- Source: https://www.creativebloq.com/web-design/top-10-prototyping-tools-2016-21619216
- Source: https://en.wikipedia.org/wiki/List_of_Unified_Modeling_Language_tools
- Source: https://www.webconfs.com/1849/the-7-best-marketing-project-management-tools-for-your-agency/
- Source: https://www.softwaretestinghelp.com/database-management-software/
- Source: https://stepshot.net/21-software-documentation-tools-for-every-stage-of-project-implementation/#section1