



Software requirements specification (SRS)
“**Blood Bank Management System**”

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1. INTRODUCTION

The blood bank administration framework is the venture which proposed to assist it collect blood from an assortment of sources and deliver it to those in require who have tall blood-supply necessities. The computer program is made to oversee the blood bank's every-day operations and seek for specifics as required. Enrolling donor data, blood collection data, and blood issued reports is additionally accommodating. The software application has been created in a way that it can oblige all blood bank necessities within the future. It'll help us in distinguishing the blood sort that can be dealt with the most excellent which is simpler to convey to the clinic so that patients can get blood on time. This all thing is been put away and been seen in this blood bank administration framework. To assist more individuals attempting best to do so.

1.1 OBJECTIVES

- To guarantee clinic to have great supply or inventories of blood packs.
- To check the accessibility of blood sacks anytime.
- To oversee the data of its blood giver.
- Work to check in the event that the individual give blood for the final 3 months.
- To permit great documentation almost the giver and its blood gift exercises.
- Back quick looking to discover coordinate blood packs for the proper individual

1.2PURPOSE

Blood Bank Administration Program is planned and appropriate for a few Blood Bank either working as person organization or portion of an organization which covers all blood managing an account handle from givers enrolment, benefactor administration, portable session component planning, screening covering all test, blood stock support, understanding enlistment, cross coordinating, persistent issues etc.

1.3 PRODUCT SCOPE

This application is built such a way that it suits for all sort of blood bank in future.so each exertion is taken to actualize this venture in this blood bank, on effective execution in this blood bank, we will target other blood banks within the city.

Main modules of the project:

This project have the following modules, to manage all the requirements of the blood bank.

- Blood donor details
- Donor details
- Recipient details

- Blood collection details
- Blood issued details
- Stock details
- Camp details
- Reports
- To manage employees in the blood bank it had the following modules:
- Employee details
- Employee attendance details
- Employee salary generation
- Employee salary payment
- Report

2 GENERAL DESCRIPTION

2.1 PROJECT PRESPECTIVE

- To give a productive giver and blood stock administration framework to the blood bank by recording the giver and blood points of interest.
- To progress the productivity of blood stock administration by changing the blood bank staff when the blood amount is too low standard level or when the blood stock has terminated.
- To give immaculate blood with no wastage blood is been collected in several sorts of packs. They are twofold, triple, and triple (AS), Fourfold pack.
- They give synchronized and centralized giver and blood stock database.
- To give quick capacity and recovery of information and data.

2.2 PRODUCT FUNCTION

Class of use cases	Use cases	Descriptions
Use cases related to system authorization of system administrator	Login of admin. Change password of admin.	1. Log admin into the system. 2. Change login password of the admin of the system.
Use cases related to registration of donor.	1. Register the donor by himself. 2. Register the donor by system admin.	Store personal, contact, medical details of donors. Store personal, contact, medical details of donors.

Use cases related to system authorization of the donor.	Login of donor. Change password of the donor.	1. Log donor into the system. 2. Change login password of the donors of the system.
Use cases related to change the registration details of donor.	Change personal, contact details by the donor himself. Change personal, contact details by system admin.	Change personal and contact details of donors. Change personal and contact details of donors.
Use cases related to withdraw names from the donor list.	Withdraw reg. details by the donor. Withdraw reg. details by the admin.	Delete all details of an exact donors by themselves. Delete all details of an exact donors by the system admin.
Use cases related to inform blood donation details.	Send blood donation details to the relevant donors.	Inform the requirement of the blood group to donors who has same blood group.
Use cases related to replace the older HC Certificates.	Replace donors' HC Certificates.	Override the help condition report details.
Use cases related to inform blood testing to the donor.	Send blood testing details.	Inform disease details to relevant donors. Inform donor details who has diseases, to relevant doctors.

Use cases related to access the database.	Search relevant details from the database.	Search and display relevant details from the database.
Use cases related to print statements.	Print the list of newly registered donors, donation details and list of removed names as statements.	Print the list of newly registered donors, donation details, and list of removed names of statements.

2.3 USER CLASSES AND CHARACTERISTICS

In here the framework admin & the donor are the framework clients. Agreeing to my presumptions the donor who will enlist to the framework from the site simple questions which are in English dialect & he/she has the capacity to realize little enlightening & fill the application without any mistakes & a little information of computers to transfer the wellbeing of Blood Bank Management System

presumptions the donor who will enlist to the framework from the site simple questions which are in English dialect & he/she has the capacity to realize little enlightening & fill the application without any mistakes & a little information of computers to transfer the wellbeing condition certificate to the frameworks. Client is exceptionally liberal to go to the gift with such a little declaration. (Mail & SMS Messages).

2.4 OPERATING ENVIRONMENT

Particulars	Client system	server system
Operating system	Windows2000prof/Linux	Linux
Processor	Pentium 4, 1.2GHz	Pentium4, 2GHz
Hard Disk	40GB	100GB
RAM	256MB	512GB

2.5 ASSUMPTIONS AND DEPENDENCIES

There are:

- Every giver encompasses a portable phone.
- The framework doesn't keep the points of interest of the gathering stock of blood.
- The framework database will be open in genuine time.
- The giver doesn't yield any fake reports to his framework.
- The givers who need to contribute to a gift will certainly answer to the ask of framework.
- The establishment of the framework to the site server hasn't considered as a prepare interior the framework that prepare will do by the specialists who controlling the site Subsequently, in here the establishment the method is considered as a handle which is in outside of the scope.
- A specialist or a quiet can ask for a correct blood bunch. But the ask comes through blood bank specialists to the framework admin. Subsequently, specialist, quiet are not coordinates clients of the framework.

3. External Interface Requirement

The framework gives a few development highlights to the framework admin than the giver. On the off chance that the framework admin logs within, the framework interface gives a few primary command buttons to the admin.

- Change login watchword.
- Edit giver profile points of interest.
- Search givers for a correct blood bunch and send messages.
- Print explanations.
- Update the database.
- Send blood testing points of interest.
- Search points of interest from the database.

If the benefactors log within, the framework will give another different interface with different commands.

- Change login passwords.
- Edit personal .contact details
- Details related to contributions to donations.
- Future blood donation details.
- Withdraw name from the system.

3.1 Hardware Interfaces

- 1GHz or High processor
- 512 MB RAM
- 50 GB Hard Disk

3.2 Software Interfaces

- Windows
- Internet Explorer, Chrome, Firefox

3.3 COMMUNICATION INTERFACE :

- Should run on 500GHz, 64MB Machine.
- Should have a proper internet connection.
- The response time for occurs a change will be more than 4 seconds.
- The response time for access the database will be no more 5 seconds.

4. SYSTEM FEATURES

There are:

- Donor management-donor enrollment, overseeing giver database, recording their physical and therapeutic measurements.
- Inventory administration in blood bank for capacity and issuance of blood.
- Online change of blood from one blood bank to another.
- Blood order and issuance of blood.
- Discarding of terminated and unacceptable blood (less Qty., receptive, clotting, hemolysis).
- Being a web based framework, can be actualized all through the state. Partitioned user's accounts can be made for each blood bank.
- Patient register/blood test getting enlist, benefactor enroll, and blood issue enroll and disposed of blood report.
- Fridge shrewd stock position and printing of ice chest stickers.
- List of givers who are qualified for gift on a specific date with contact number.

4.1 SYSTEM FEATURE 1

- Description and priority
- Information of all blood banks donor subtle elements, give blood with their intrigued and others will do in future.
- Interested in giving the blood can enlist.
- General clients need to contact blood givers by checking interested to give blood, he can take the assistance of this location.
- Rapid reaction of critical ask for blood components.
- Checking pre-transfusion tests and ask
- Assessing of Immunological compatibility between donor and quiet.
- Selecting of reasonable blood component of each clinical conditions.
- Safe delivery and taking care of blood components.
- Inventory and stock administration.
- Interactions with the blood foundation.

4.1.1 Functional Requirements

- Login of admin.
- Blood Donor.
- Change the login password of admin.
- Register the sby himself
- Register the donor by system admin
- Login of the donor.
- Change the login password of donor
- Change personal, contact details by the donors himself.
- Change personal, contact details by the system admin.
- Withdraw reg. details by the donor.
- Withdraw reg. details by the admin.
- Send blood donation details to the relevant donors.
- Send blood testing details.

4.2 SYSTEM FEATURES 2

There are some features of blood bank management system are:

- Donor database-blood group wise and area wise.
- Maintain and update unique donor identifications.
- Track and maintain all the donor types- voluntary, exchange and directed.
- Improved the Effectiveness and Efficiency of blood bank- faster response time and better control.
- Accurate database/Record management
- Blood cross match and result storage facility.
- Rejected donor database for donor control and identifications.
- Blood transfusion related diseases control and preventions
- Searched facility for destroyed and expired blood.
- Comprehensive donor database with search facility.
- Unique donor ID and patient record ID for managing future list.

- Improve blood bank processes by providing efficient and continuous software support.

5. OTHER NON FUNCTIONAL CHARACTERSTICS

A Characteristics of a quality SRS is that in expansion to describing the useful prerequisites of a framework, it'll moreover give point to point scope is of the non-functional prerequisites. In hone, this would involve point by point examination of issues such as accessibility, security, convenience and viability. Be that as it may, as this report is as it were a diagram detail, it doesn't contain the same degree of fix our that would regularly be anticipated in a formal SRS. In this manner, the areas underneath ought to be seen as characteristic instead of giving particular (i.e. testable) necessities.

5.1 PERFORMANCE REQUIREMENT

- The framework is intelligently and the delays included are less.
- When interfacing to the server the delays is based altering on the remove of the two Framework arrangement between them so there's tall likelihood that there will be or not an effective association in less than 20 seconds for the purpose of great communications

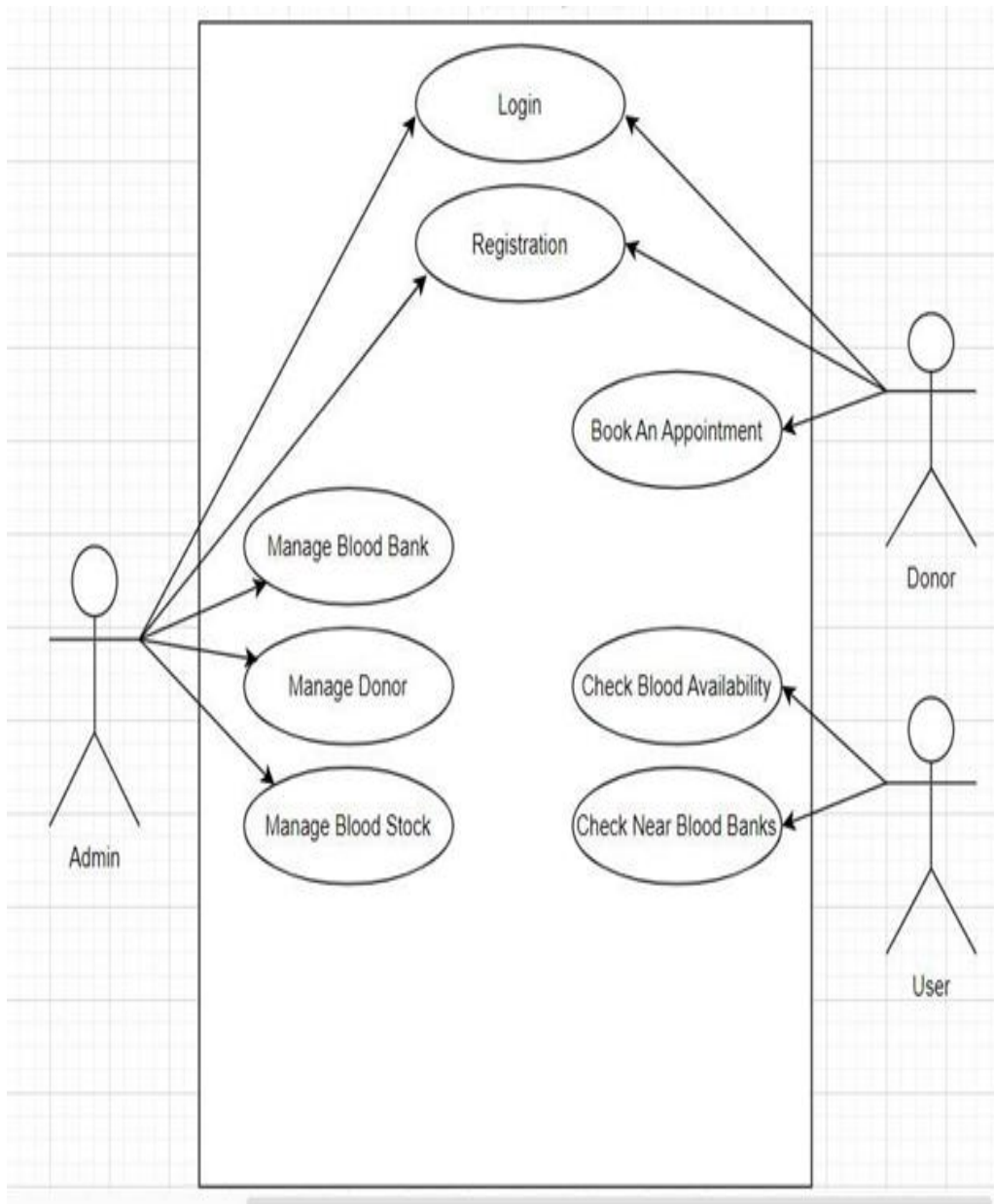
5.2 SAFETY REQUIREMENTS

Blood bank modules keeps up points of interest approximately the donors and beneficiaries. These blood bank modules is connected to other modules within the computer program for wards and OT within the healing centers, whereby, any and all blood prerequisites utilizing surgeries etc. That happens within the healing centers are known to the bank. Critical data and parameters such as accessibility of blood, cross-matching between donor's and recipient's blood bunches and blood transfusions responses are recorded. Too, the intuitive with other blood banks inside in a clinics or exterior and delivery/recipients of blood sacks between these banks or clinics are recorded and kept up.

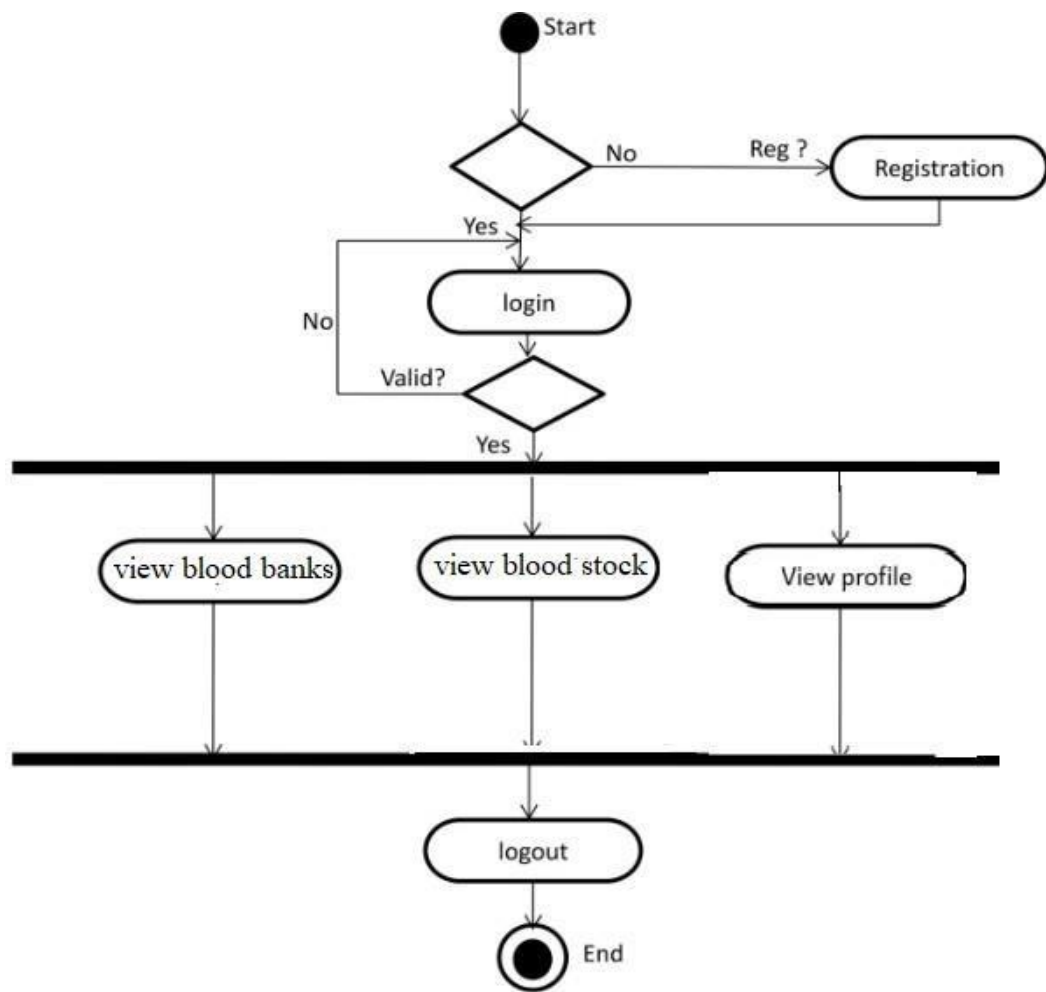
- The blood ask line screen, from where all the everyday transfusions can be taken care of.
- Fresh blood and put away blood ask preparing.
- Blood returns is made simple within the blood bank administration framework.
- Transfusion point by point and charging.
- Destruction Points of interest.
- Blood bank administration framework is coordinates with lab module for blood cross coordinate and gathering.

DIAGRAMS

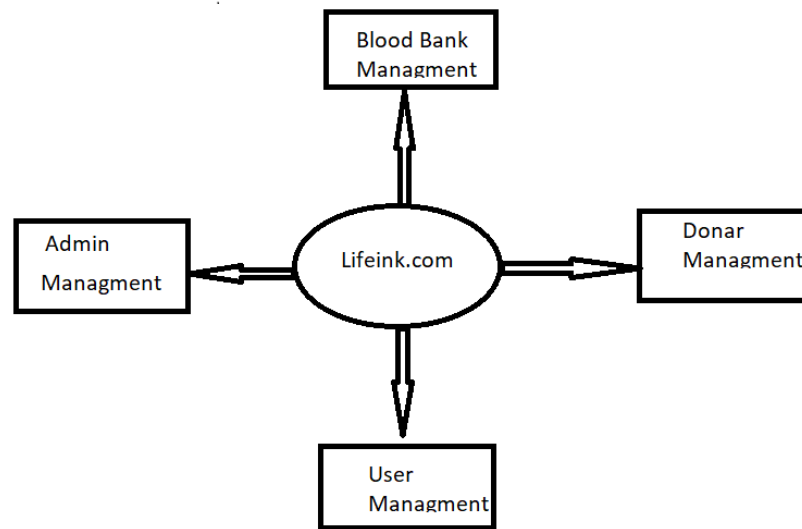
1. Blood Bank Management System
2. Activity diagram
3. Data flow (level 1) Diagram
4. Data flow (level 2) Diagram
5. E-R diagram



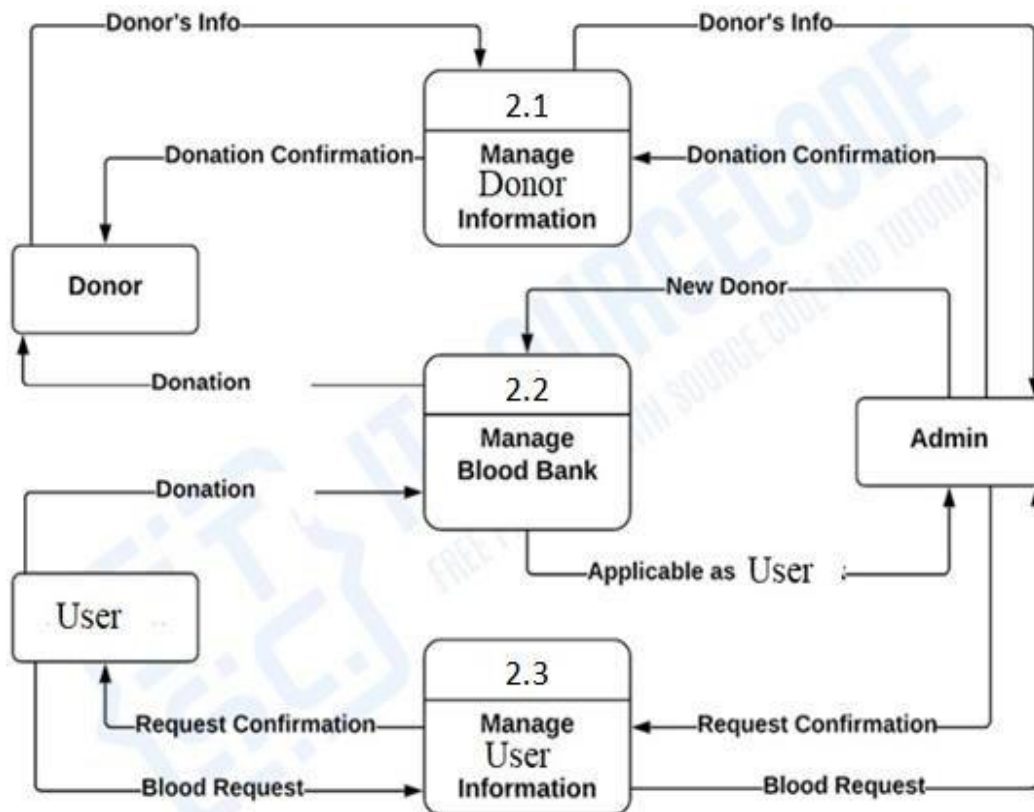
USE CASE DIAGRAM



ACTIVITY DIAGRAM

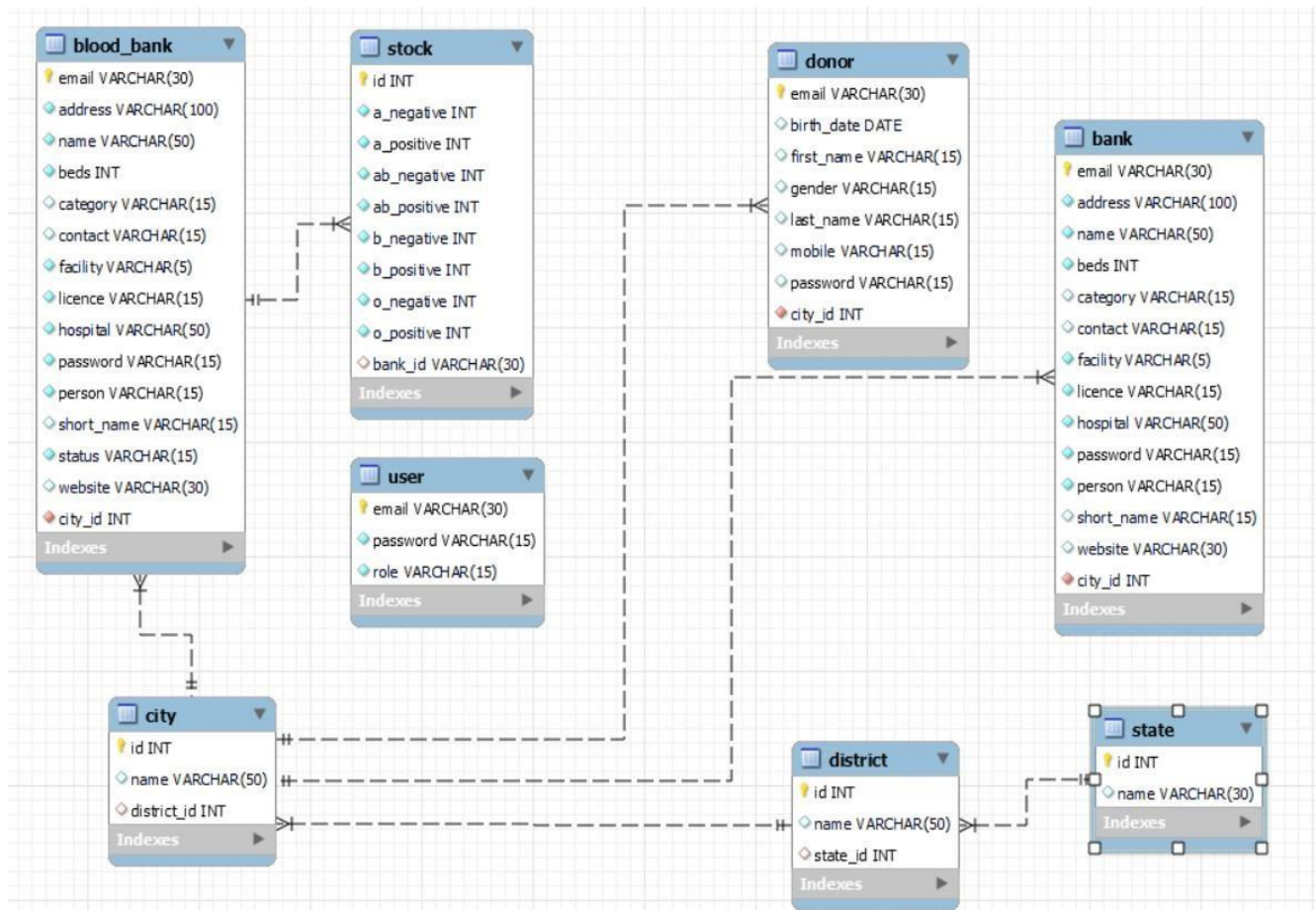


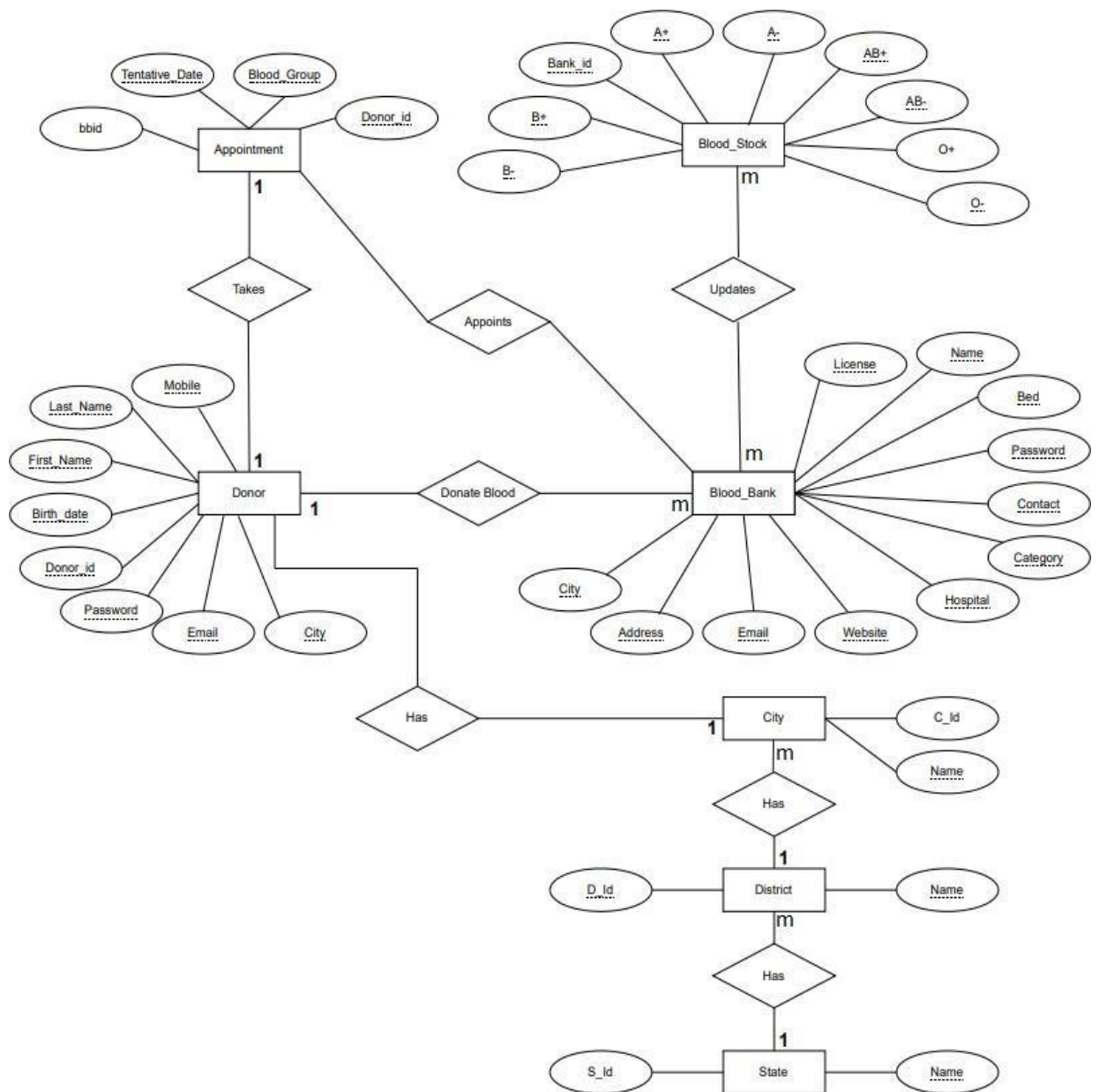
First Level Diagram



Second Level Diagram

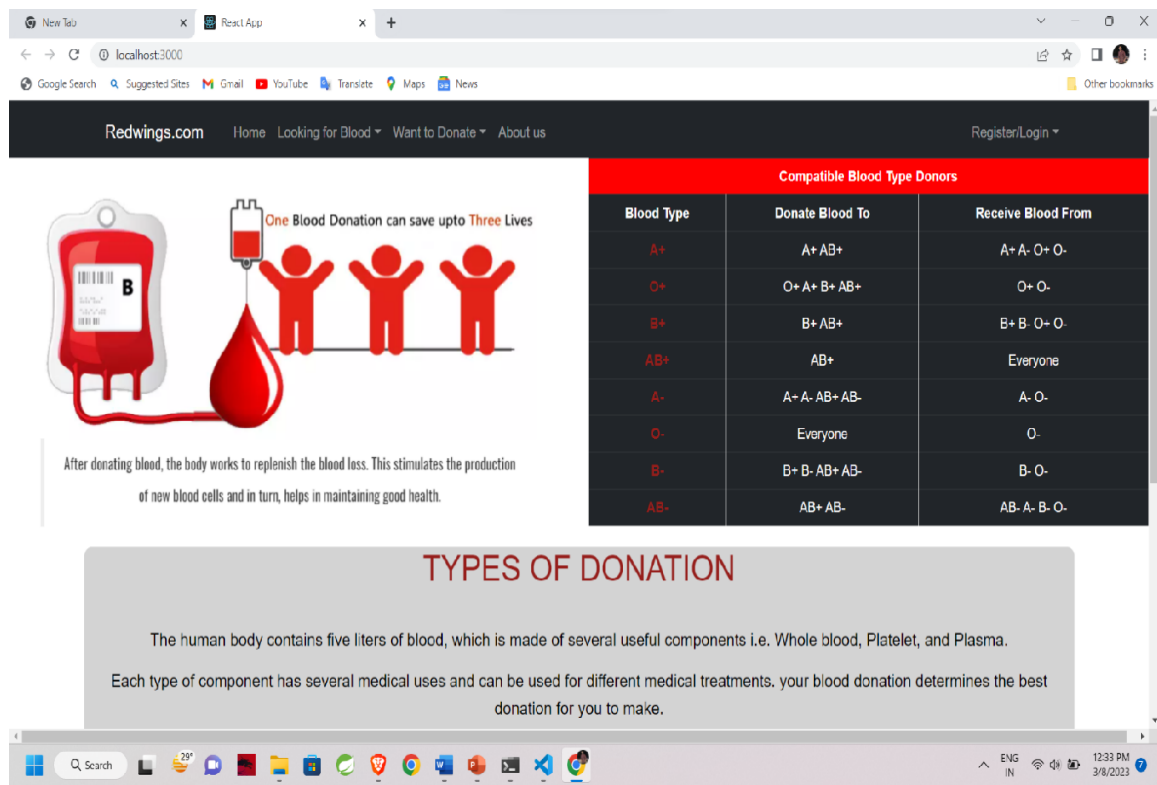
ER Diagram





PROJECT SCREENSHOTS

Home Page

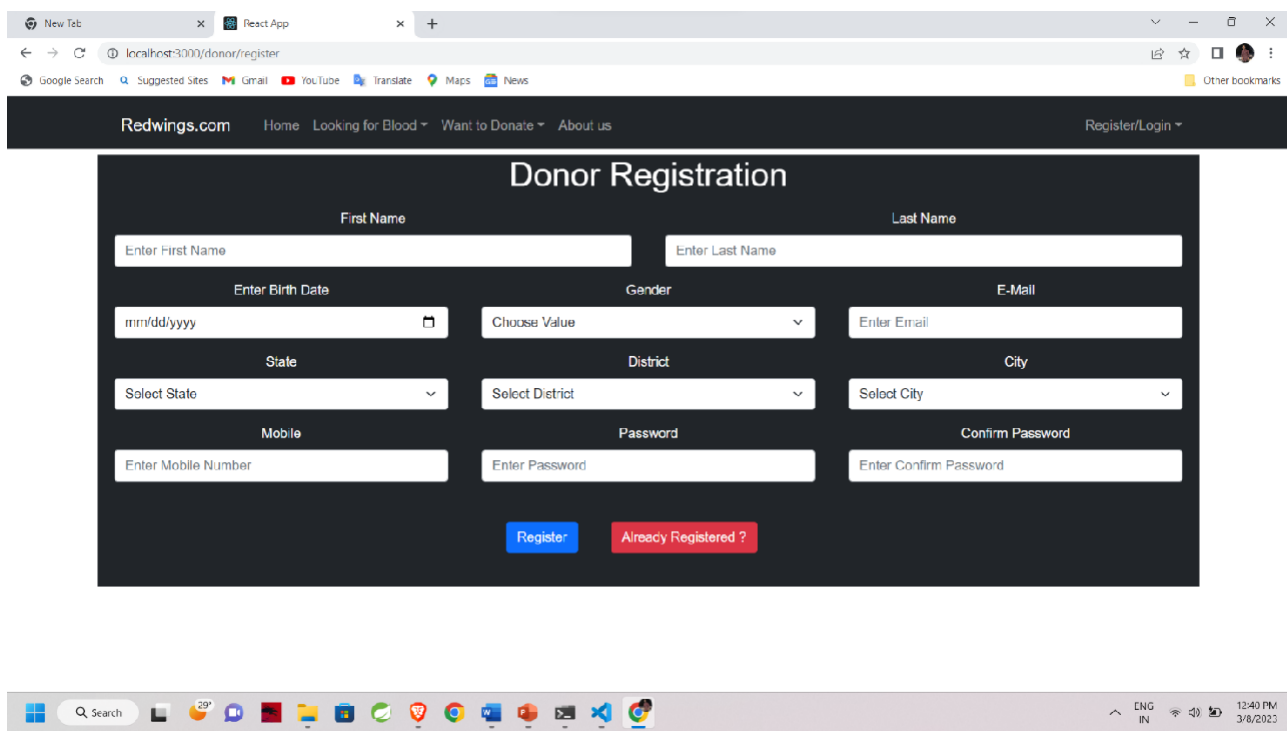


The screenshot shows the home page of Redwings.com. The header includes the site name, navigation links (Home, Looking for Blood, Want to Donate, About us), and a Register/Login link. The main content area features a large illustration of a blood bag and three people, with the text "One Blood Donation can save up to Three Lives". Below this, a paragraph explains that donating blood stimulates the production of new blood cells. To the right, a table titled "Compatible Blood Type Donors" lists blood types and their compatibility for donation and reception.

Blood Type	Donate Blood To	Receive Blood From
A+	A+ AB+	A+ A- O+ O-
O+	O+ A+ B+ AB+	O+ O-
B+	B+ AB+	B+ B- O+ O-
AB+	AB+	Everyone
A-	A- A- AB- AB-	A- O-
O-	Everyone	O-
B-	B- B- AB+ AB-	B- O-
AB-	AB+ AB-	AB- A- B- O-

TYPES OF DONATION

The human body contains five liters of blood, which is made of several useful components i.e. Whole blood, Platelet, and Plasma. Each type of component has several medical uses and can be used for different medical treatments. your blood donation determines the best donation for you to make.



The screenshot shows the Donor Registration form on Redwings.com. The form is titled "Donor Registration" and contains several input fields for user information. At the bottom, there are buttons for "Register" and "Already Registered?".

Donor Registration

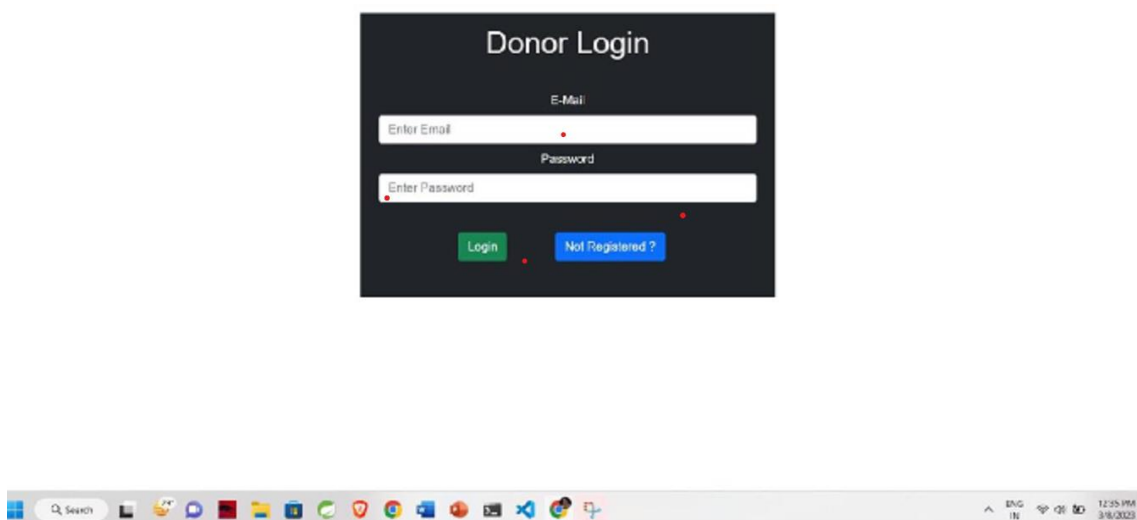
First Name: Last Name:

Enter Birth Date: Gender: E-Mail:

State: District: City:

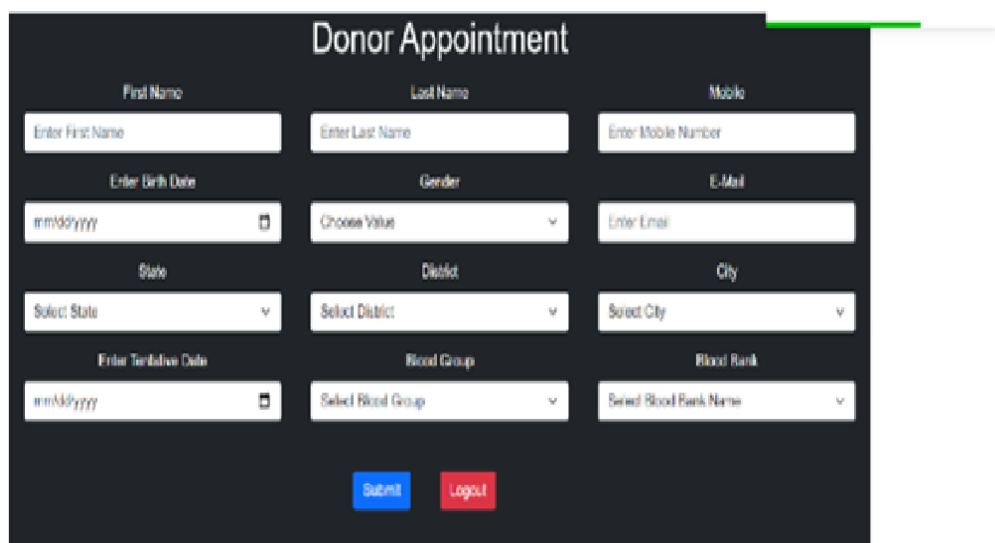
Mobile: Password: Confirm Password:

Donor Login Page



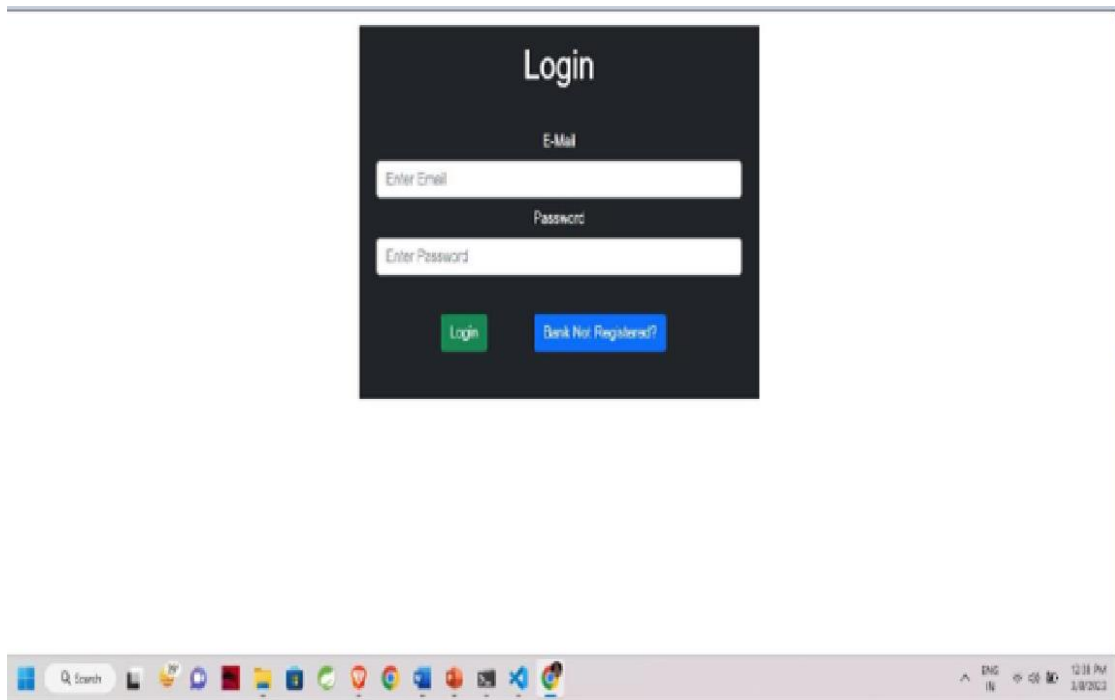
The screenshot shows a web browser window with a dark-themed login form titled "Donor Login". The form has two input fields: "Enter Email" and "Enter Password", both with red error indicators. Below the fields are two buttons: a green "Login" button and a blue "Not Registered?" button. The browser's taskbar at the bottom shows various application icons and the system clock indicating 12:35 PM on 3/8/2023.

Donor Appointment Page



The screenshot displays a "Donor Appointment" form with a dark background. The form is organized into a grid of input fields and dropdown menus. The fields include: "First Name" (text input), "Last Name" (text input), "Mobile" (text input), "Enter Birth Date" (date picker), "Gender" (dropdown menu), "E-Mail" (text input), "State" (dropdown menu), "District" (dropdown menu), "City" (dropdown menu), "Enter Tentative Date" (date picker), "Blood Group" (dropdown menu), and "Blood Bank" (dropdown menu). At the bottom of the form are two buttons: a blue "Submit" button and a red "Logout" button.

Admin/BloodBank Login Page



The screenshot displays a web browser window with a dark-themed login form titled "Login". The form contains two input fields: "E-Mail" with a placeholder "Enter Email" and "Password" with a placeholder "Enter Password". Below these fields are two buttons: a green "Login" button and a blue "Bank Not Registered?" button. The browser's taskbar at the bottom shows various application icons and the system clock indicating 12:18 PM on 3/8/2023.

Blood bank Registration Page



The screenshot shows a web browser window with a dark-themed registration form titled "Blood Bank Registration". The form is organized into several rows of input fields and dropdown menus. The fields include: "Blood Bank Name" (text), "Parent Hospital Name" (text), "Short Name" (text), "Category" (dropdown), "Licence No." (text), "Contact Person Name" (text), "E-Mail" (text), "Contact No." (text), "State" (dropdown), "District" (dropdown), "City" (dropdown), "Component Facility" (dropdown), "No of Bed Hospital" (text), "Website" (text), "Password" (text), "Confirm Password" (text), and "Address" (text). At the bottom of the form are two buttons: a blue "Register" button and a red "Already Registered?" button. The browser's taskbar at the bottom shows various application icons and the system clock indicating 12:31 PM on 3/8/2023.

Search for blood Availability

Camp Schedule

Search

S. No.	Date	Time	Camp Name	Address	State	District	Contact	Email	Conducted By	Organized By
NULL	NULL	NULL	NULL	NULL	NULL	NULL	NULL	NULL	NULL	NULL

Admin Home Page

Welcome Admin

Action on BloodBank Requests

AcceptReject

Search..

Email	Blood Bank Name	Parent Hospital	Short Name	Category	Licence	Person Name	Contact	City	Component Facility
<< Previous Page 1 of 0 Go to page: 1 Next >> Show 5									