Ex No: 8 DEVELOPMENTS OF A BLOOD BANK MANAGEMENT SYSTEM

Blood bank is a place where blood bag that is collected from blood donation events is stored in one place. The term "blood bank" refers to a division of a hospital laboratory where the storage of blood product occurs and where proper testing is performed to reduce the risk of transfusion related events.

Online Blood Bank management system is to provide services for the people who need blood by getting help from the donors who are interested in donating blood for the people. Blood Bank donation system can collect blood from many donators in short from various sources and distribute that blood to needy people who require blood. To do all this we require high quality Web Application to manage those jobs.

Problem Statement

1. The first problem is to search for blood donation records. Staffs of the hospital have to search one-by-one and it may take a lot of time. Besides that, the paper records can be lost or undefined.
2. Location of blood donation campaign and planning. Donor usually heard the location for blood donation campaign from friends or family and cannot plan well for next donation.
3. The staffs of the hospitals are having difficulty to make report for total blood packet by monthly basis. Missing and duplicate blood donation information records make the count inaccurate and this will be problem to detect critical blood demand
4. One of the factors of the public afraid to donate their blood is they believe in myths. The myths that they always believe are, if they donate their blood they will become weak and pale. This system hopes to solve that problem by creating more awareness of the process of blood donation.

System Requirement Specification (SRS)

Purpose:

- The main purpose of this application is to automate the complete operations of the blood bank.
- The intended audience is anyone working at a bloodbank who wants to keep track and maintain blood donation records **Scope:**
- The product is titled Blood Bank Management System (BBMS) The product will perform the following tasks:
- Allow users to register for blood donation
- Allow admin to maintain blood donation records of various different donors and blood group in a single system.
- Allows super admin to manage admins so that there is no abuse of power.

Definitions, Acronyms and Abbreviations:

BBMS – Blood Bank Management System

References:

- IEEE standard 830-1998 recommended practice for Software Requirements Specifications-Description.
- IEEE Software Requirements Specifications

Templatehttp://www.cas.master.ca/~carette/SE3M04/2003/files/ srs_template.doc

Overview:

- The SRS contains an analysis of the requirements necessary to help easy design.
- The overall description provides interface requirements for the Blood Bank Management System, product perspective, hardware interfaces, software interfaces, communication interface, memory constraints, product functions, user characteristics and other constraints.
- Succeeding pages illustrate the functions of typical users accessing the system along with the different functions available for the admins and super admins and the responsibilities they must share to make proper and efficient use of the Blood Bank Management System.

Hardware and Software Requirements Hardware Requirements:

Processor	:	Intel Core Duo 2.0 GHz or more
RAM	:	1 GB or More
Hard disk	:	80GB or more
Monitor	:	15” CRT, or LCD monitor
Keyboard	:	Normal or Multimedia
Mouse	:	Compatible mouse

Software Requirements:

i. XAMPP (Cross Platform(X) for Apache, MySQL, PHP and Perl)

ii. Notepad iii. Google Chrome or Mozilla Firefox or Internet Explorer

Languages Used:

Front End : PHP, HTML, CSS

Back End : MySQL Database Server

Operating System : Windows 7 or above

FRONT-END DESCRIPTION

The proposed system (Blood Bank Management System) is designed to help the Blood Bank administrator to meet the demand of Blood by sending and/or serving the request for Blood as and when required. The proposed system gives the procedural approach of how to bridge the gap between Recipient, Donor, and Blood Banks. The system has a registration process wherein the user can register as a Donor. The system will provide the admin the option to look at the details of the Donor and verify the integrity of the user before either accepting or rejecting the user. The administrator can also alter all the system data. The Super Admin feature has been added to manage and control all admins so that there is no abuse or corruption of power.

BACK-END DESCRIPTION

There are 7 tables. The 1st table contains admin details such as username and password. The 2nd table contains information about blood donation camps. The 3rd table contains the user queries that are sent to the admin. It contains details such as name, email, mobile, subject and date. The 4th table contains the details of the registered blood donors. The 5th table contains the login credentials of the super admins whose main function is to manage the other admins. The 6th table contains the blood requests made by the recipients or hospitals. The req id is the primary key of the table and it is also auto incremented for every entry in the table. The 7th table contains all the blood groups. The bg attribute is also the primary key.

DATA STRUCTURE

Admin (admin):

Attributes	Data Type	Constraints
Username	varchar(100)	NOT NULL
Pwd	varchar(100)	NOT NULL
Adminname	varchar(100)	NOT NULL

Camps (camp):

Attributes	Data Type	Constraints
camp id	int(100)	PRIMARY KEY(AUTO INCREMENT)
Campname	varchar(500)	NOT NULL
Organisedby	varchar(500)	NOT NULL
City	varchar(100)	NOT NULL
State	varchar(100)	NOT NULL
Detail	varchar(1000)	NOT NULL

Contact Us (contacts):

Attributes	Data Type	Constraints
Name	varchar(100)	NOT NULL
Email	varchar(100)	NOT NULL
Mobile	varchar(100)	NOT NULL
Subj	varchar(100)	NOT NULL
Date	timestamp(5)	NOT NULL

Donors (registereddonors):

Attributes	Data Type	Constraints
Donorid	int(100)	PRIMARY KEY(AUTO INCREMENT)
Name	varchar(100)	NOT NULL
Gender	varchar(10)	NOT NULL
Age	int(3)	NOT NULL
Mobile	varchar(10)	NOT NULL
b_g	varchar(15)	NOT NULL
Email	varchar(100)	NOT NULL
City	varchar(100)	NOT NULL

Super Admin (superadmin):

Attributes	Data Type	Constraints
Username	varchar(100)	NOT NULL
Pwd	varchar(100)	NOT NULL
Adminname	varchar(100)	NOT NULL

Blood Request (requests):

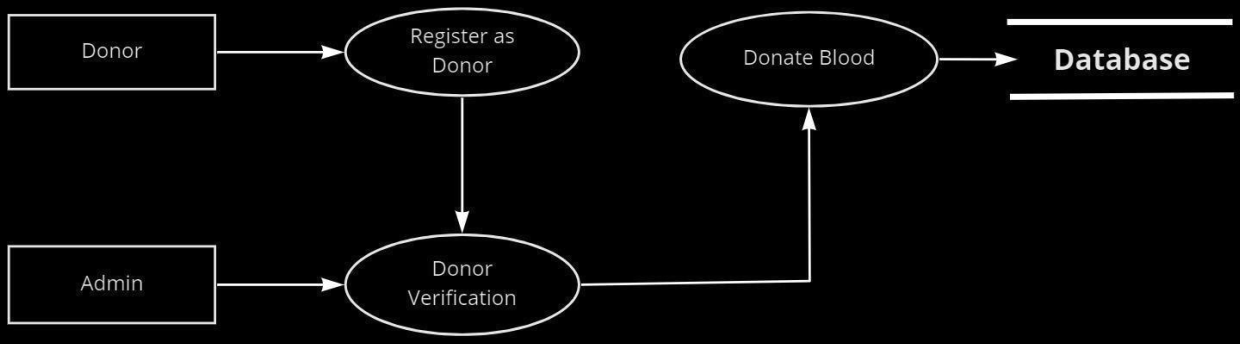
Attributes	Data Type	Constraints
Reqid	int(100)	PRIMARY KEY(AUTO INCREMENT)
Name	varchar(100)	NOT NULL
Gender	varchar(100)	NOT NULL
Age	int(3)	NOT NULL
Mobile	varchar(13)	NOT NULL
Bg	varchar(15)	NOT NULL
Email	varchar(100)	NOT NULL
Deadline	date	NOT NULL
Detail	varchar(500)	NOT NULL

Blood Group (bloodgroup):

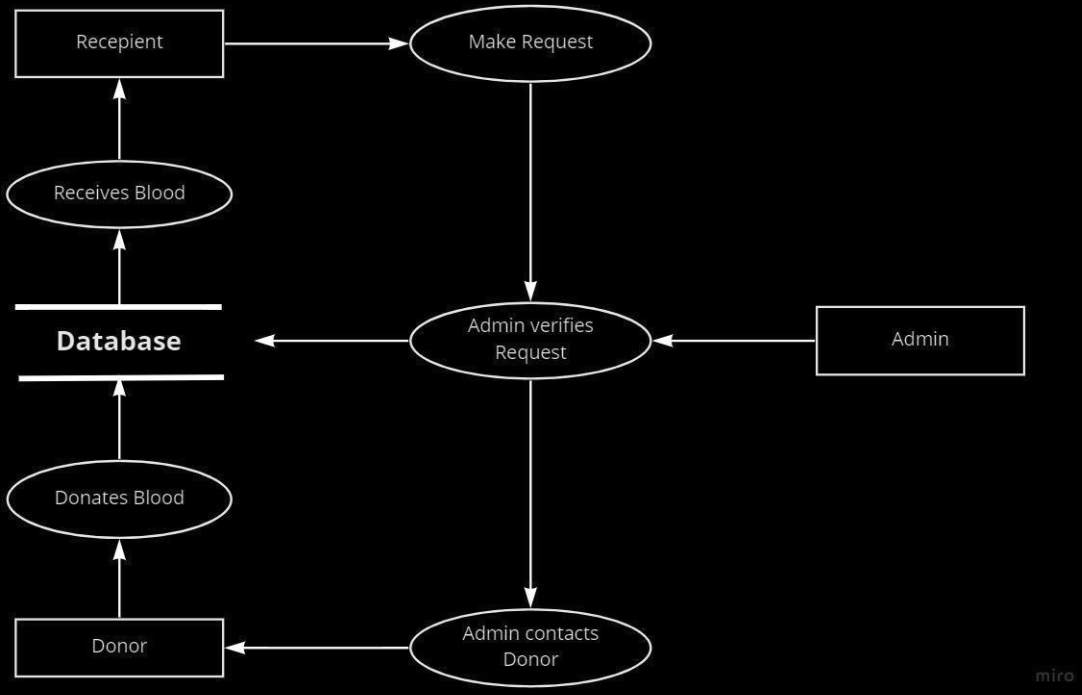
Attributes	Data Type	Constraints
Bg	varchar(100)	NOT NULL

DATA FLOW DIAGRAM (DFD) LEVEL 0 DFD:

LEVEL 1 DFD:



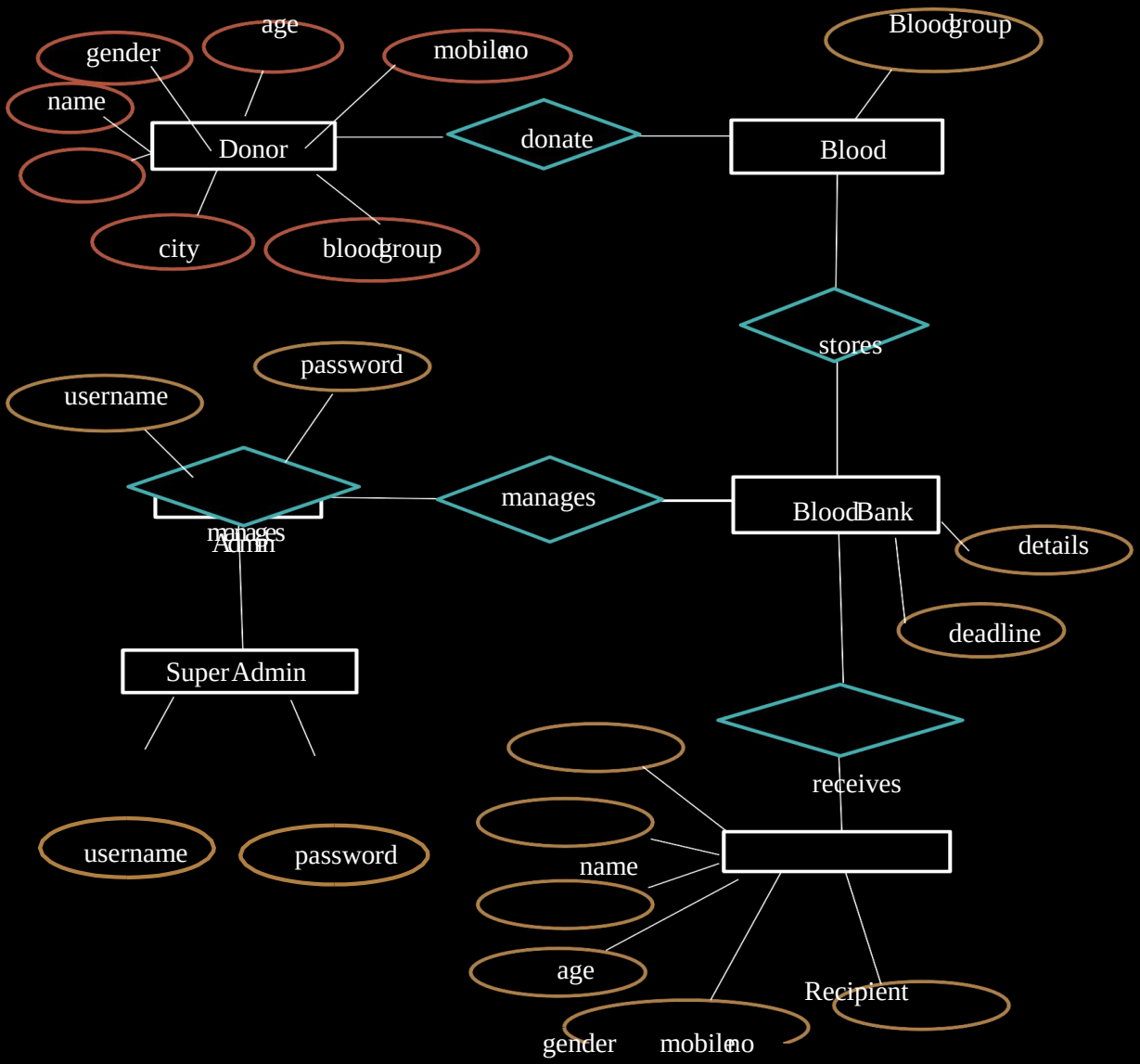
LEVEL 2 DFD:



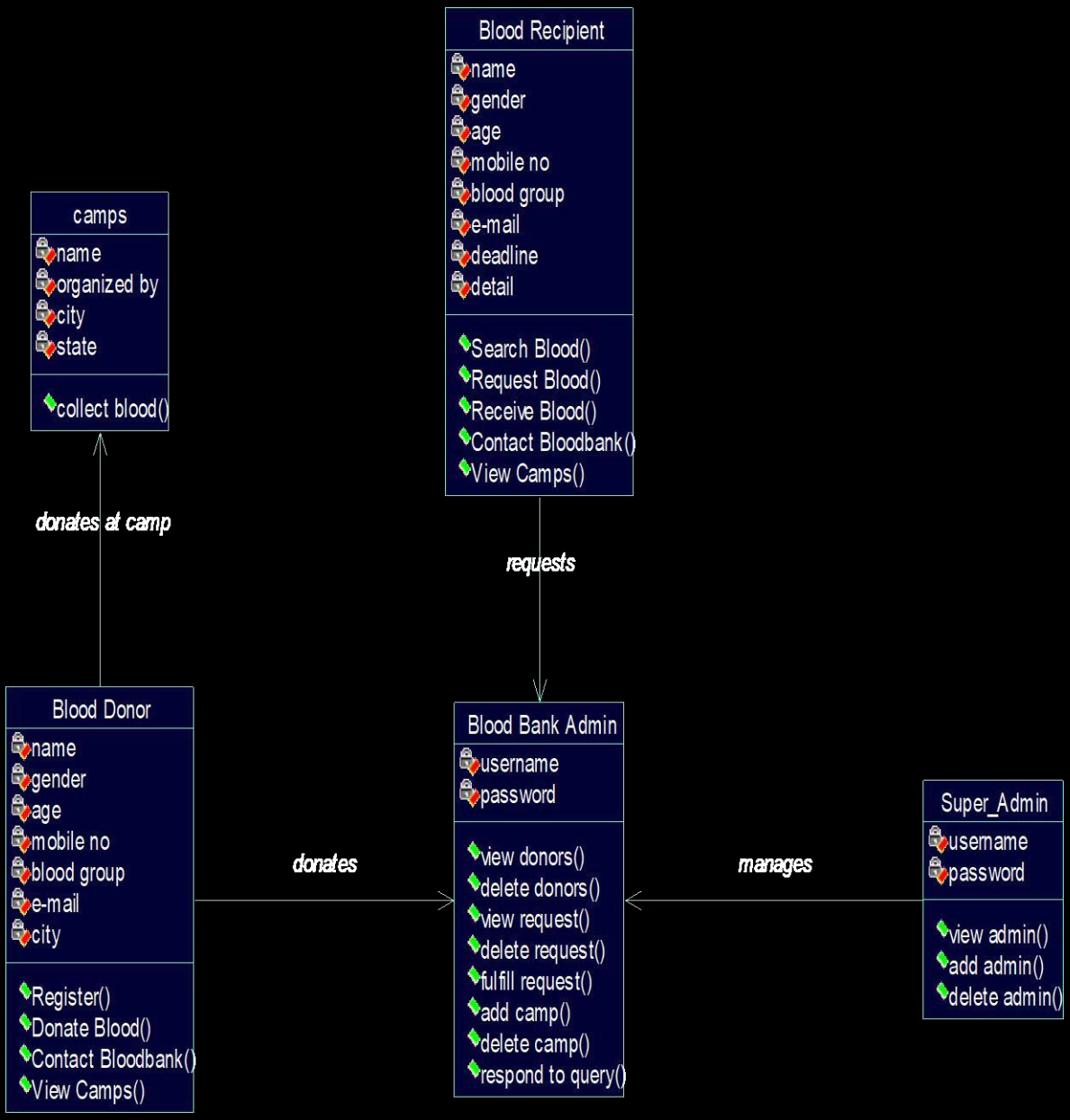
E-R DIAGRAM FOR BLOODBANK:

The E-R Diagram defines 6 different entities and their attributes along with the relationship between these entities. The entities are Donor, Blood, Blood Bank, Admin, Super Admin and Recipient. The relationship between these entities are as follows:

- Donor donates Blood
- Blood Bank Stores Blood
- Recipient receives Blood
- Admin Manages Blood Bank
- Super Admin Manages Admin

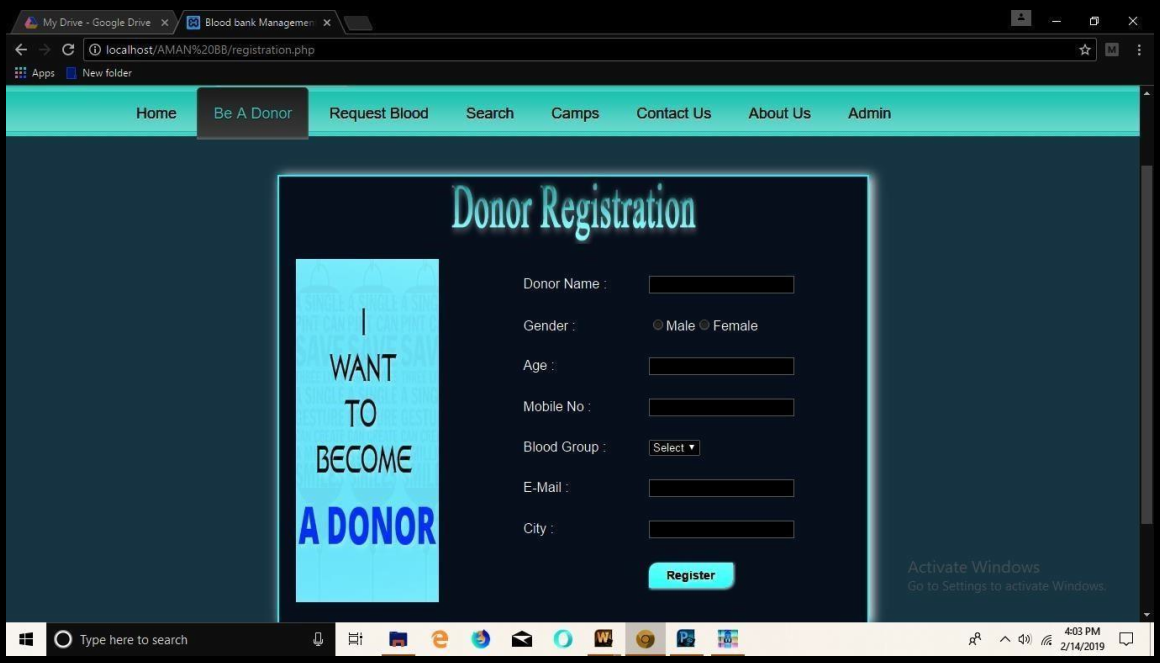


CLASS DIAGRAM:

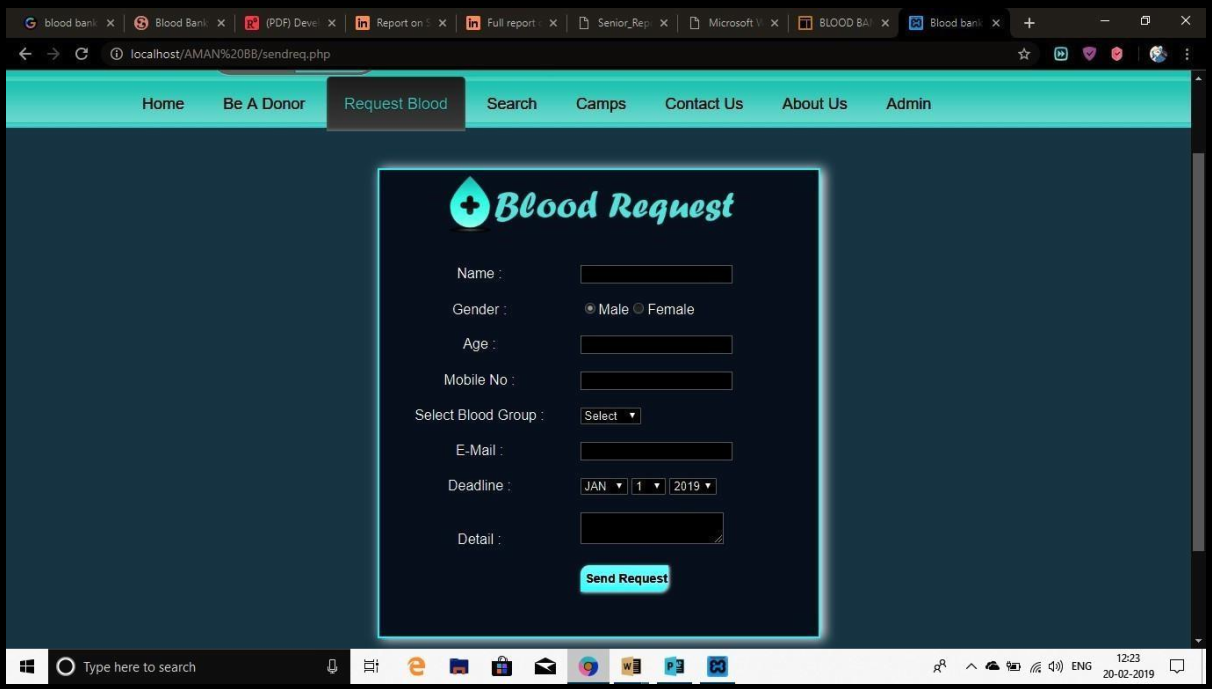


Sample Forms:

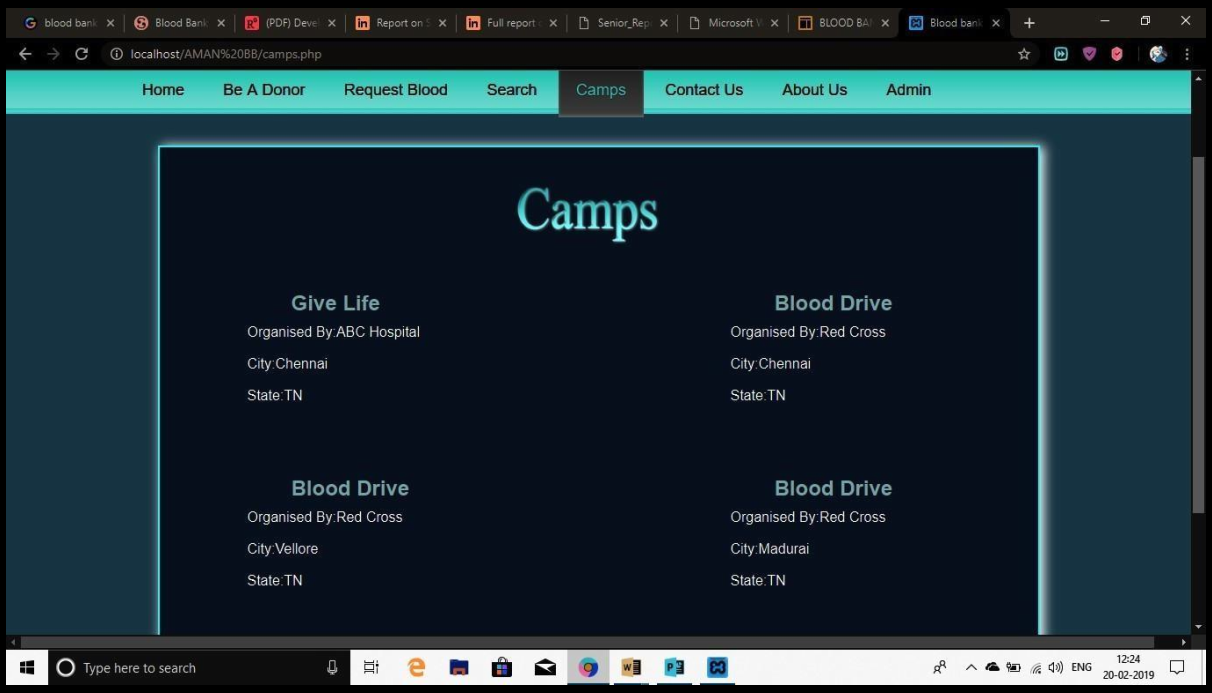
Donor Registration Page:



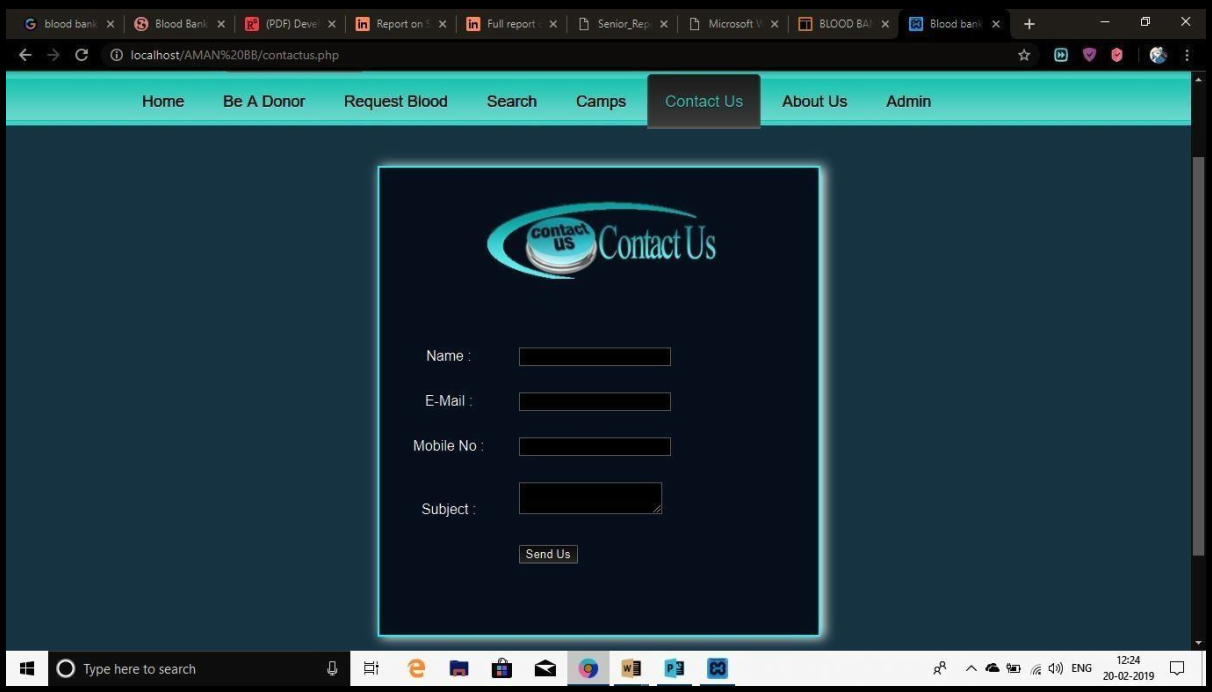
Request Blood Page:



Camps Page:

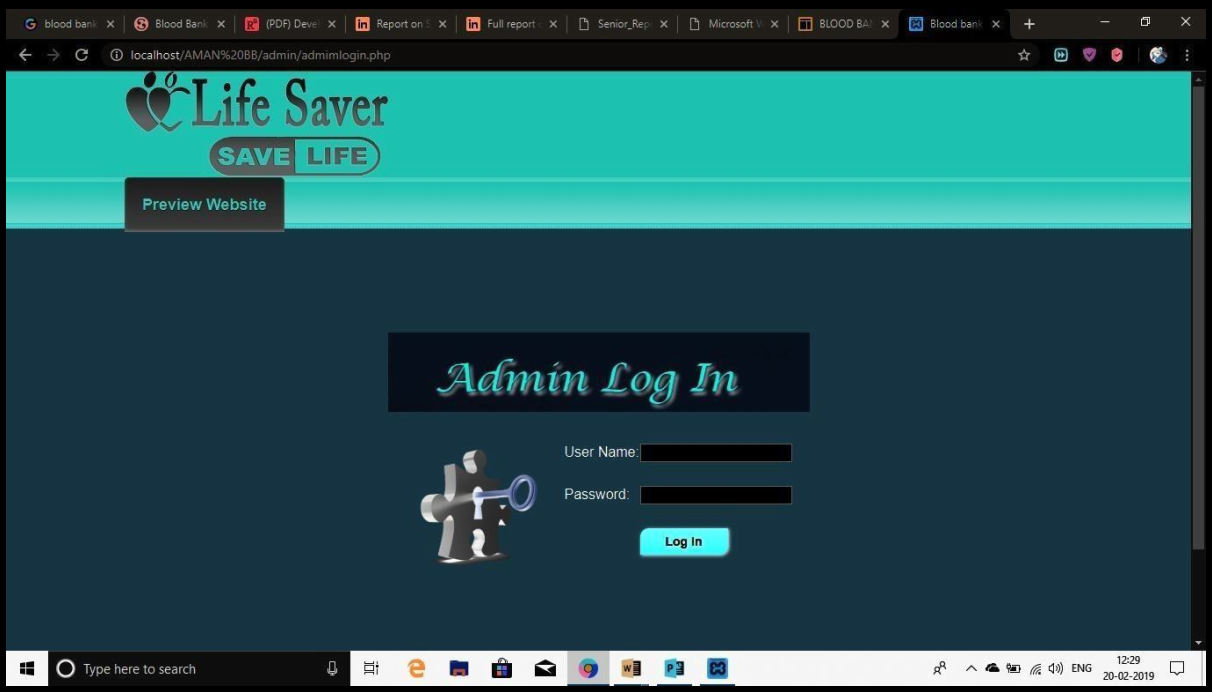


Contact Us Page:

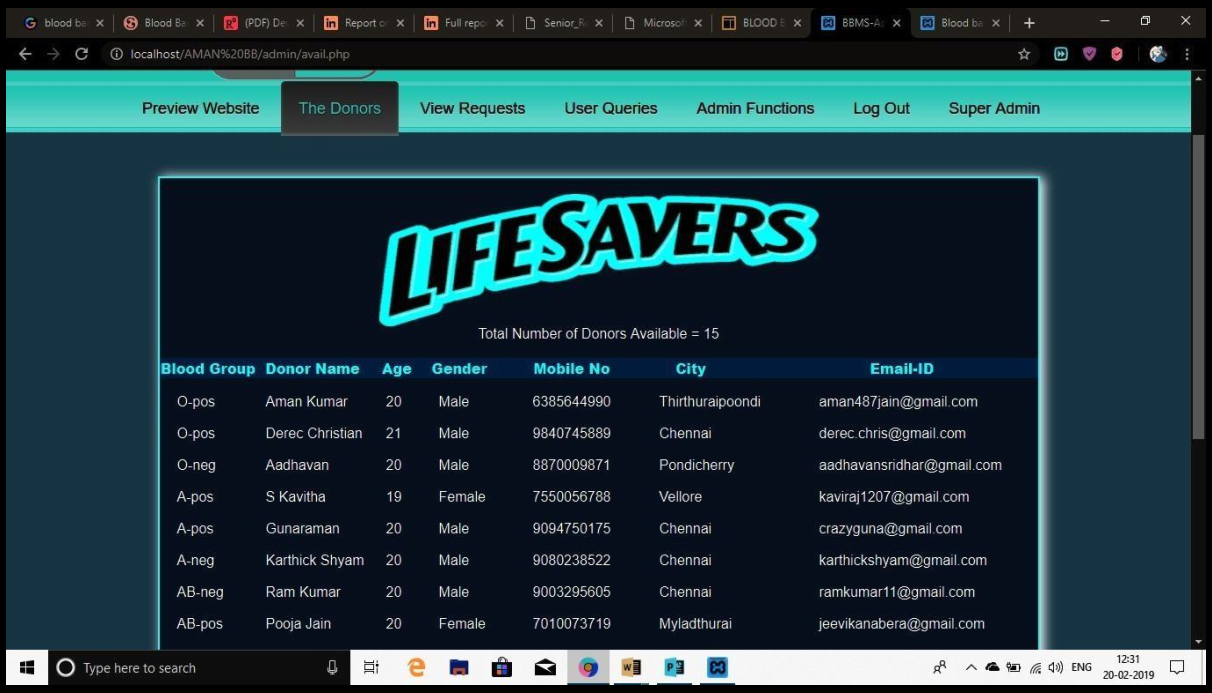


About Us Page:

Admin Log in Page:



The Donors Page:



View Requests Page: