

**North Western University, Khulna**  
**Department of Computer Science and Engineering**

**Project Title: "Blood Bank Management System"**

**Course Title:** Database Systems Sessional  
**Course Code:** CSE-3108

**Submitted By:**

**Team – 3 Bumbling**

**Tarek Ahmmed**  
**ID: 20181023010**

**Erina Momtaz**  
**ID: 20181054010**

**Md. Hasanul Banna Khan Abir**  
**ID: 20181004010**

**Submitted To:**

**M. Raihan**  
Lecturer  
Computer Science and Engineering Department,  
**North Western University, Khulna.**

Date of Submission: 13. 03. 2020

.....  
Signature

## **Introduction:**

The project blood bank management system is known to be a pilot project that is designed for the blood bank to gather blood from various sources and distribute it to the needy people who have high requirements for it. The software is designed to handle the daily transactions of the blood bank and search the details when required. It also helps to register the details of donors, blood collection details as well as blood issued reports. This software application is password protected and it is designed in such a way that some individual users have their login access only. The software application is designed in such a manner that it can suit the needs of all the blood bank requirements in the course of future.

## **Description:**

The BLOOD BANK MANAGEMENT SYSTEM project is designed for successful completion of a project on blood bank management system. The main aim of developing this system is to provide blood to the people who are in need of blood. The basic building aim is to provide blood donation service to the city recently. The Blood Bank Management System (BBMS) is a password protected application that is designed to store, process, retrieve and analyze information concerned with the administrative and inventory management within a blood bank. This project aims at maintaining all the information pertaining to blood donors, different blood groups available in each blood bank and help them manage in a better way.

Project Aim is to provide transparency in this field, make the process of obtaining blood from a blood bank hassle-free and corruption-free and make the system of blood bank management effective. 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.

## Features:

1. Add, Update and Delete Users
2. Register Donors and Keep Their Details.
3. Admins can manage (Add, Update and Delete) Donors
4. Login Function
5. Splash Screen (Animation before loading application)

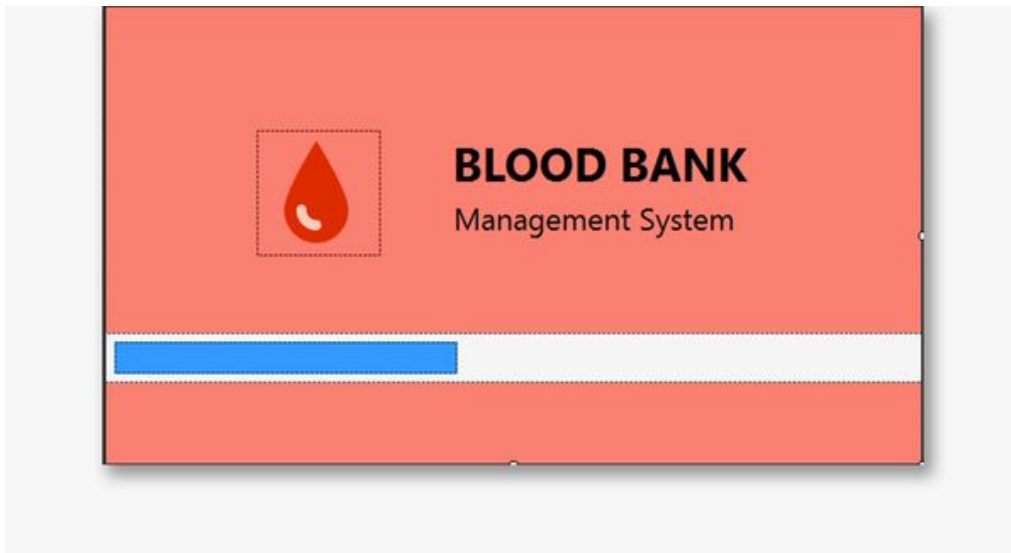
## Technology Used


1. C# (C Sharp) Programming Language and 3-tier architecture of Software Development
2. MS SQL Server Database and Relational Database Management System (RDBMS)

## Tools Used:

1. SQL Server Management Studio
2. Visual Studio

## ScreenShots:






## Blood Bank

Management System

Username

Password

Login



## Blood Bank

Management System

Login Successful.  

OK

Username

Password

Login

Users

Donors

Logged In As:

abir004

O+

7

Donors

O-

3

Donors

A+

13

Donors

A-

3

Donors

B+

2

Donors

B-

0

Donors

AB+

9

Donors

AB-

3

Donors

Search Donor


	donor_id	donor_name	blood_group	last_donation_date	contact
▶	1	Muslamul Haq Si...	A+	2 month ago	1300234533
	2	Sukanto	AB+	3 month ago	1400234544
	3	Md Sakib Hossain	A+	4 month ago	1987625255
	4	Md Abdul	AB-	2 month ago	1725652662
	5	Rahim shaikh	O+	3 month ago	1772354151
	6	Ayfull Islam	O-	3 month ago	1774545342
	7	Saima Siddika	A+	1 month ago	1772334555
	8	Mostafa Asif	A+	6 month ago	1772345123
	9	Imran Hossain	AB+	3 month ago	1332345673
	10	Sadia Islam	A+	1 month ago	1448978364
	11	Naim Islam	AB-	1 month ago	1881233443
	12	Nazmul Hossain	A+	3 month ago	1312323335
	13	Nasim Islam	AB+	7 month ago	1998123445
	14	Rafikul Islam	A+	3 month ago	1998727733
	15	Ripon Mollick	O+	3 month ago	1882345233
	16	Salim Hosain	O-	6 month ago	1887623453
<	17	Naef ali	AB-	4 month ago	1443523445

Blood Bank Management System

Developed By - 3 Bumbling

### Manage Users

Profile Picture



Select Image

User ID:

Full Name:

Email:

Username:

Password:

Contact:

Address:


Search:

	user_id	username	email	password
▶	1	abir004	abir69832@gmail...	021478
	2	tarek023	tarekahmednwu...	023
	3	erina054	erinarothy100@g...	054
*				

Blood Bank Management System Developed By - **3 Bumbling**

### Manage Donors

Profile Picture



Select Image

Donor ID:

Donor Name:

Blood Group:

Last Donation Date:

Gender:

Contact:

Address:

Search:

	donor_id	donor_name	blood_group	last_donation_date
▶	1	Muslimul Haq Si...	A+	2 month ago
	2	Sukanto	AB+	3 month ago
	3	Md Sakib Hossain	A+	4 month ago
	4	Md Abdul	AB-	2 month ago
	5	Rahim shaikh	O+	3 month ago
	6	Arifull Islam	O-	3 month ago
	7	Saima Siddika	A+	1 month ago
	8	Mostafa Asif	A+	6 month ago
	9	Imran Hossain	AB+	3 month ago
	10	Sadia Islam	A+	1 month ago
	11	Naim Islam	AB-	1 month ago
	12	Nazmul Hossain	A+	3 month ago
	13	Nasim Islam	AB+	7 month ago
	14	Rofikul Islam	A+	3 month ago
	15	Ripon Mollick	O+	3 month ago
	16	Salim Hosain	O-	6 month ago

Blood Bank Management System Developed By - **3 Bumbling**

## Queries (SQL Commands):

```
USE [master]
GO
/***** Object: Database [BloodBankManagementSystem]    Script Date: 28-Feb-20 9:30:24
AM *****/
CREATE DATABASE [BloodBankManagementSystem]
    CONTAINMENT = NONE
    ON PRIMARY
( NAME = N'BloodBankManagementSystem', FILENAME = N'C:\Program Files\Microsoft SQL
Server\MSSQL11.AUNGSTROMESQL\MSSQL\DATA\BloodBankManagementSystem.mdf' , SIZE = 11264KB ,
MAXSIZE = UNLIMITED, FILEGROWTH = 1024KB )
    LOG ON
( NAME = N'BloodBankManagementSystem_log', FILENAME = N'C:\Program Files\Microsoft SQL
Server\MSSQL11.AUNGSTROMESQL\MSSQL\DATA\BloodBankManagementSystem_log.ldf' , SIZE =
1024KB , MAXSIZE = 2048GB , FILEGROWTH = 10%)
GO
ALTER DATABASE [BloodBankManagementSystem] SET COMPATIBILITY_LEVEL = 110
GO
IF (1 = FULLTEXTSERVICEPROPERTY('IsFullTextInstalled'))
begin
EXEC [BloodBankManagementSystem].[dbo].[sp_fulltext_database] @action = 'enable'
end
GO
ALTER DATABASE [BloodBankManagementSystem] SET ANSI_NULL_DEFAULT OFF
GO
ALTER DATABASE [BloodBankManagementSystem] SET ANSI_NULLS OFF
GO
ALTER DATABASE [BloodBankManagementSystem] SET ANSI_PADDING OFF
GO
ALTER DATABASE [BloodBankManagementSystem] SET ANSI_WARNINGS OFF
GO
ALTER DATABASE [BloodBankManagementSystem] SET ARITHABORT OFF
GO
ALTER DATABASE [BloodBankManagementSystem] SET AUTO_CLOSE OFF
GO
ALTER DATABASE [BloodBankManagementSystem] SET AUTO_CREATE_STATISTICS ON
GO
ALTER DATABASE [BloodBankManagementSystem] SET AUTO_SHRINK OFF
GO
ALTER DATABASE [BloodBankManagementSystem] SET AUTO_UPDATE_STATISTICS ON
GO
ALTER DATABASE [BloodBankManagementSystem] SET CURSOR_CLOSE_ON_COMMIT OFF
GO
ALTER DATABASE [BloodBankManagementSystem] SET CURSOR_DEFAULT GLOBAL
GO
ALTER DATABASE [BloodBankManagementSystem] SET CONCAT_NULL_YIELDS_NULL OFF
GO
ALTER DATABASE [BloodBankManagementSystem] SET NUMERIC_ROUNDABORT OFF
GO
ALTER DATABASE [BloodBankManagementSystem] SET QUOTED_IDENTIFIER OFF
GO
ALTER DATABASE [BloodBankManagementSystem] SET RECURSIVE_TRIGGERS OFF
GO
ALTER DATABASE [BloodBankManagementSystem] SET DISABLE_BROKER
GO
ALTER DATABASE [BloodBankManagementSystem] SET AUTO_UPDATE_STATISTICS_ASYNC OFF
```

```

GO
ALTER DATABASE [BloodBankManagementSystem] SET DATE_CORRELATION_OPTIMIZATION OFF
GO
ALTER DATABASE [BloodBankManagementSystem] SET TRUSTWORTHY OFF
GO
ALTER DATABASE [BloodBankManagementSystem] SET ALLOW_SNAPSHOT_ISOLATION OFF
GO
ALTER DATABASE [BloodBankManagementSystem] SET PARAMETERIZATION SIMPLE
GO
ALTER DATABASE [BloodBankManagementSystem] SET READ_COMMITTED_SNAPSHOT OFF
GO
ALTER DATABASE [BloodBankManagementSystem] SET HONOR_BROKER_PRIORITY OFF
GO
ALTER DATABASE [BloodBankManagementSystem] SET RECOVERY FULL
GO
ALTER DATABASE [BloodBankManagementSystem] SET MULTI_USER
GO
ALTER DATABASE [BloodBankManagementSystem] SET PAGE_VERIFY CHECKSUM
GO
ALTER DATABASE [BloodBankManagementSystem] SET DB_CHAINING OFF
GO
ALTER DATABASE [BloodBankManagementSystem] SET FILESTREAM( NON_TRANSACTED_ACCESS = OFF )
GO
ALTER DATABASE [BloodBankManagementSystem] SET TARGET_RECOVERY_TIME = 0 SECONDS
GO
EXEC sys.sp_db_vardecimal_storage_format N'BloodBankManagementSystem', N'ON'
GO
USE [BloodBankManagementSystem]
GO
/***** Object: Table [dbo].[donor]      Script Date: 28-Feb-20 9:30:25 AM *****/
SET ANSI_NULLS ON
GO
SET QUOTED_IDENTIFIER ON
GO
CREATE TABLE [dbo].[donor](
    [donor_id] [int] NOT NULL,
    [donor_name] [nvarchar](255) NULL,
    [blood_group] [nvarchar](255) NULL,
    [last_donation_date] [nvarchar](255) NULL,
    [contact] [int] NULL,
    [gender] [nvarchar](255) NULL,
    [address] [nvarchar](255) NULL,
    [added_date] [nvarchar](255) NULL,
    [added_by] [nvarchar](255) NULL,
    CONSTRAINT [PK_donor] PRIMARY KEY CLUSTERED
(
    [donor_id] ASC
)WITH (PAD_INDEX = OFF, STATISTICS_NORECOMPUTE = OFF, IGNORE_DUP_KEY = OFF,
    ALLOW_ROW_LOCKS = ON, ALLOW_PAGE_LOCKS = ON) ON [PRIMARY]
) ON [PRIMARY]

GO
/***** Object: Table [dbo].[tbl_donors]  Script Date: 28-Feb-20 9:30:25 AM *****/
SET ANSI_NULLS ON
GO
SET QUOTED_IDENTIFIER ON
GO
CREATE TABLE [dbo].[tbl_donors](

```

```

        [donor_id] [int] IDENTITY(1,1) NOT NULL,
        [donor_name] [nvarchar](50) NULL,
        [email] [nvarchar](150) NULL,
        [contact] [nvarchar](20) NULL,
        [gender] [nvarchar](10) NULL,
        [address] [nvarchar](250) NULL,
        [blood_group] [nvarchar](10) NULL,
        [added_date] [datetime] NULL,
        [added_by] [int] NULL,
    CONSTRAINT [PK_tbl_donor] PRIMARY KEY CLUSTERED
(
    [donor_id] ASC
)WITH (PAD_INDEX = OFF, STATISTICS_NORECOMPUTE = OFF, IGNORE_DUP_KEY = OFF,
ALLOW_ROW_LOCKS = ON, ALLOW_PAGE_LOCKS = ON) ON [PRIMARY]
) ON [PRIMARY]

GO
/***** Object: Table [dbo].[tbl_users]    Script Date: 28-Feb-20 9:30:25 AM *****/
SET ANSI_NULLS ON
GO
SET QUOTED_IDENTIFIER ON
GO
CREATE TABLE [dbo].[tbl_users](
    [user_id] [int] IDENTITY(1,1) NOT NULL,
    [username] [nvarchar](50) NULL,
    [email] [nvarchar](150) NULL,
    [password] [nvarchar](150) NULL,
    [full_name] [nvarchar](150) NULL,
    [contact] [nvarchar](20) NULL,
    [address] [nvarchar](250) NULL,
    [added_date] [datetime] NULL,
    [image_name] [nvarchar](50) NULL,
    CONSTRAINT [PK_tbl_user] PRIMARY KEY CLUSTERED
(
    [user_id] ASC
)WITH (PAD_INDEX = OFF, STATISTICS_NORECOMPUTE = OFF, IGNORE_DUP_KEY = OFF,
ALLOW_ROW_LOCKS = ON, ALLOW_PAGE_LOCKS = ON) ON [PRIMARY]
) ON [PRIMARY]

GO
INSERT [dbo].[donor] ([donor_id], [donor_name], [blood_group], [last_donation_date],
[contact], [gender], [address], [added_date], [added_by]) VALUES (1, N'Muslamul Haq
Siam', N'A+', N'2 month ago', 1300234533, N'Male', N'103, Hazi Ismail Road, Khulna.',
N'2020-02-21 15:20:00.000', N'tarek023')
INSERT [dbo].[donor] ([donor_id], [donor_name], [blood_group], [last_donation_date],
[contact], [gender], [address], [added_date], [added_by]) VALUES (2, N'Sukanto', N'AB+',
N'3 month ago', 1400234544, N'Male', N'11/b, Hazi Mohasheen Road, Khulna.', N'2020-02-21
15:20:00.000', N'tarek023')
INSERT [dbo].[donor] ([donor_id], [donor_name], [blood_group], [last_donation_date],
[contact], [gender], [address], [added_date], [added_by]) VALUES (3, N'Md Sakib Hossain',
N'A+', N'4 month ago', 1987625255, N'Male', N'112, KDA Avenue, Khulna.', N'2020-02-21
15:20:00.000', N'tarek023')
INSERT [dbo].[donor] ([donor_id], [donor_name], [blood_group], [last_donation_date],
[contact], [gender], [address], [added_date], [added_by]) VALUES (4, N'Md Abdul', N'AB-',
N'2 month ago', 1725652662, N'Male', N'26/a, Bashupara Road, khulna.', N'2020-02-21
15:20:00.000', N'tarek023')
INSERT [dbo].[donor] ([donor_id], [donor_name], [blood_group], [last_donation_date],
[contact], [gender], [address], [added_date], [added_by]) VALUES (5, N'Rahim shaikh',

```



```

N'O+', N'3 month ago', 1772354151, N'Male', N'273, Hazi Ismail Road, Khulna.', N'2020-02-21 15:20:00.000', N'tarek023')
INSERT [dbo].[donor] ([donor_id], [donor_name], [blood_group], [last_donation_date], [contact], [gender], [address], [added_date], [added_by]) VALUES (6, N'Arifull Islam', N'O-', N'3 month ago', 1774545342, N'Male', N'32/c, Boira Cross Road, Khulna.', N'2020-02-21 15:20:00.000', N'tarek023')
INSERT [dbo].[donor] ([donor_id], [donor_name], [blood_group], [last_donation_date], [contact], [gender], [address], [added_date], [added_by]) VALUES (7, N'Saima Siddika', N'A+', N'1 month ago', 1772334555, N'Female', N'45, Ikbal Nagor Moshjid Road, Khulna.', N'2020-02-21 15:20:00.000', N'tarek023')
INSERT [dbo].[donor] ([donor_id], [donor_name], [blood_group], [last_donation_date], [contact], [gender], [address], [added_date], [added_by]) VALUES (8, N'Mostafa Asif', N'A+', N'6 month ago', 1772345123, N'Male', N'31/4, Bashupara lane, Khulna.', N'2020-02-21 15:20:00.000', N'tarek023')
INSERT [dbo].[donor] ([donor_id], [donor_name], [blood_group], [last_donation_date], [contact], [gender], [address], [added_date], [added_by]) VALUES (9, N'Imran Hossain', N'AB+', N'3 month ago', 1332345673, N'Male', N'14, Hazi Ismail Road, khulna.', N'2020-02-21 15:20:00.000', N'tarek023')
INSERT [dbo].[donor] ([donor_id], [donor_name], [blood_group], [last_donation_date], [contact], [gender], [address], [added_date], [added_by]) VALUES (10, N'Sadia Islam', N'A+', N'1 month ago', 1448978364, N'Female', N'19/1, SS College Road, Banorgati, Khulna.', N'2020-02-21 15:20:00.000', N'tarek023')
INSERT [dbo].[donor] ([donor_id], [donor_name], [blood_group], [last_donation_date], [contact], [gender], [address], [added_date], [added_by]) VALUES (11, N'Naim Islam', N'AB-', N'1 month ago', 1881233443, N'Male', N'245, Hazi Ismail Road, Khulna.', N'2020-02-21 15:20:00.000', N'tarek023')
INSERT [dbo].[donor] ([donor_id], [donor_name], [blood_group], [last_donation_date], [contact], [gender], [address], [added_date], [added_by]) VALUES (12, N'Nazmul Hossain', N'A+', N'3 month ago', 1312323335, N'Male', N'12, Farazi Para Lane, Khulna.', N'2020-02-21 15:20:00.000', N'tarek023')
INSERT [dbo].[donor] ([donor_id], [donor_name], [blood_group], [last_donation_date], [contact], [gender], [address], [added_date], [added_by]) VALUES (13, N'Nasim Islam', N'AB+', N'7 month ago', 1998123445, N'Male', N'32, Bashupara More, Khulna.', N'2020-02-21 15:20:00.000', N'tarek023')
INSERT [dbo].[donor] ([donor_id], [donor_name], [blood_group], [last_donation_date], [contact], [gender], [address], [added_date], [added_by]) VALUES (14, N'Rofikul Islam', N'A+', N'3 month ago', 1998727733, N'Male', N'110/a, Hazi Meher Ali Road, Khulna.', N'2020-02-21 15:20:00.000', N'tarek023')
INSERT [dbo].[donor] ([donor_id], [donor_name], [blood_group], [last_donation_date], [contact], [gender], [address], [added_date], [added_by]) VALUES (15, N'Ripon Mollick', N'O+', N'3 month ago', 1882345233, N'Male', N'16/b, Hazi Mohasheen Road, Khulna.', N'2020-02-21 15:20:00.000', N'tarek023')
INSERT [dbo].[donor] ([donor_id], [donor_name], [blood_group], [last_donation_date], [contact], [gender], [address], [added_date], [added_by]) VALUES (16, N'Salim Hosain', N'O-', N'6 month ago', 1887623453, N'Male', N'48/6, Ahsn Ahmed Road, Khulna.', N'2020-02-21 15:20:00.000', N'tarek023')
INSERT [dbo].[donor] ([donor_id], [donor_name], [blood_group], [last_donation_date], [contact], [gender], [address], [added_date], [added_by]) VALUES (17, N'Nasif ali', N'AB-', N'4 month ago', 1443523445, N'Male', N'69,cometery Road,Dak Bangla,Khulna.', N'2020-02-21 15:20:00.000', N'tarek023')
INSERT [dbo].[donor] ([donor_id], [donor_name], [blood_group], [last_donation_date], [contact], [gender], [address], [added_date], [added_by]) VALUES (18, N'Riyaj Shaikh', N'A+', N'3 month ago', 1323432987, N'Male', N'Moulvi Para RD,Khulna 1100.', N'2020-02-21 15:20:00.000', N'tarek023')
INSERT [dbo].[donor] ([donor_id], [donor_name], [blood_group], [last_donation_date], [contact], [gender], [address], [added_date], [added_by]) VALUES (19, N'Md Masum Sk', N'O+', N'5 month ago', 1923339499, N'Male', N'Shere-Bangla-Road, Power House Mor, Khulna 9100.', N'2020-02-21 15:20:00.000', N'tarek023')

```

```

INSERT [dbo].[donor] ([donor_id], [donor_name], [blood_group], [last_donation_date],
[contact], [gender], [address], [added_date], [added_by]) VALUES (20, N'Youbair Islam',
N'A-', N'1 month ago', 1987234645, N'Male', N'81, Boyra Bazar Road, Khulna.', N'2020-02-
21 15:20:00.000', N'tarek023')
INSERT [dbo].[donor] ([donor_id], [donor_name], [blood_group], [last_donation_date],
[contact], [gender], [address], [added_date], [added_by]) VALUES (21, N'Karim islam',
N'AB+', N'6 month ago', 1771263553, N'Male', N'11/b, Hazi Mohasheen Road, Khulna.',
N'2020-02-21 15:20:00.000', N'erina054')
INSERT [dbo].[donor] ([donor_id], [donor_name], [blood_group], [last_donation_date],
[contact], [gender], [address], [added_date], [added_by]) VALUES (22, N'Rokib Hassain',
N'A+', N'1 month ago', 1342525454, N'Male', N'112, KDA Avenue, Khulna.', N'2020-02-21
15:20:00.000', N'erina054')
INSERT [dbo].[donor] ([donor_id], [donor_name], [blood_group], [last_donation_date],
[contact], [gender], [address], [added_date], [added_by]) VALUES (23, N'Babul Khan',
N'AB+', N' 4 month ago', 1909875646, N'Male', N'26/a, Bashupara Road, khulna.', N'2020-
02-21 15:20:00.000', N'erina054')
INSERT [dbo].[donor] ([donor_id], [donor_name], [blood_group], [last_donation_date],
[contact], [gender], [address], [added_date], [added_by]) VALUES (24, N'Sumaiya Hassain',
N'B+', N'8 month ago', 1323143332, N'Female', N'273, Hazi Ismail Road, Khulna.', N'2020-
02-21 15:20:00.000', N'erina054')
INSERT [dbo].[donor] ([donor_id], [donor_name], [blood_group], [last_donation_date],
[contact], [gender], [address], [added_date], [added_by]) VALUES (25, N'Rani Islam',
N'O+', N'2 month ago', 1775434344, N'Female', N'32/c, Boira Cross Road, Khulna.', N'2020-
02-21 15:20:00.000', N'erina054')
INSERT [dbo].[donor] ([donor_id], [donor_name], [blood_group], [last_donation_date],
[contact], [gender], [address], [added_date], [added_by]) VALUES (26, N'Md Nadim', N'A+',
N'1 month ago', 1978654363, N'Male', N'45, Ikbal Nagor Moshjid Road, Khulna.', N'2020-02-
21 15:20:00.000', N'erina054')
INSERT [dbo].[donor] ([donor_id], [donor_name], [blood_group], [last_donation_date],
[contact], [gender], [address], [added_date], [added_by]) VALUES (27, N'Md Miraz', N'O+',
N'7 month ago', 1887654673, N'Male', N'31/4, Bashupara lane, Khulna.', N'2020-02-21
15:20:00.000', N'erina054')
INSERT [dbo].[donor] ([donor_id], [donor_name], [blood_group], [last_donation_date],
[contact], [gender], [address], [added_date], [added_by]) VALUES (28, N'Marufa katun',
N'B+', N'4 month ago', 1342356743, N'Male', N'14, Hazi Ismail Road, khulna.', N'2020-02-
21 15:20:00.000', N'erina054')
INSERT [dbo].[donor] ([donor_id], [donor_name], [blood_group], [last_donation_date],
[contact], [gender], [address], [added_date], [added_by]) VALUES (29, N'Kona Halder',
N'AB+', N'2 month ago', 1967543762, N'Female', N'19/1, SS College Road, Banorgati,
Khulna.', N'2020-02-21 15:20:00.000', N'erina054')
INSERT [dbo].[donor] ([donor_id], [donor_name], [blood_group], [last_donation_date],
[contact], [gender], [address], [added_date], [added_by]) VALUES (30, N'Abdullah', N'O-',
N'5 month ago', 1453765286, N'Male', N'245, Hazi Ismail Road, Khulna.', N'2020-02-21
15:20:00.000', N'erina054')
INSERT [dbo].[donor] ([donor_id], [donor_name], [blood_group], [last_donation_date],
[contact], [gender], [address], [added_date], [added_by]) VALUES (31, N'Md Billah',
N'A+', N'1 month ago', 1876766760, N'Male', N'12, Farazi Para Lane, Khulna.', N'2020-02-
21 15:20:00.000', N'erina054')
INSERT [dbo].[donor] ([donor_id], [donor_name], [blood_group], [last_donation_date],
[contact], [gender], [address], [added_date], [added_by]) VALUES (32, N'Md Rubel', N'O+',
N'7 month ago', 1765435876, N'Male', N'32, Bashupara More, Khulna.', N'2020-02-21
15:20:00.000', N'erina054')
INSERT [dbo].[donor] ([donor_id], [donor_name], [blood_group], [last_donation_date],
[contact], [gender], [address], [added_date], [added_by]) VALUES (33, N'Ali Akbar', N'A-
', N'5 month ago', 1776545448, N'Male', N'110/a, Hazi Meher Ali Road, Khulna.', N'2020-
02-21 15:20:00.000', N'erina054')
INSERT [dbo].[donor] ([donor_id], [donor_name], [blood_group], [last_donation_date],
[contact], [gender], [address], [added_date], [added_by]) VALUES (34, N'Mostafa', N'A-',

```

```

N'3 month ago', 1776545449, N'Male', N'16/b, Hazi Mohasheen Road, Khulna.', N'2020-02-21
15:20:00.000', N'erina054')
INSERT [dbo].[donor] ([donor_id], [donor_name], [blood_group], [last_donation_date],
[contact], [gender], [address], [added_date], [added_by]) VALUES (35, N'Md Rahim',
N'AB+', N'4 month ago', 1654554455, N'Male', N'48/6, Ahsn Ahmed Road, Khulna.', N'2020-
02-21 15:20:00.000', N'erina054')
INSERT [dbo].[donor] ([donor_id], [donor_name], [blood_group], [last_donation_date],
[contact], [gender], [address], [added_date], [added_by]) VALUES (36, N'saddam hossain',
N'O+', N'3 month ago', 1923876647, N'Male', N'69,cometery Road,Dak Bangla,Khulna.',
N'2020-02-21 15:20:00.000', N'erina054')
INSERT [dbo].[donor] ([donor_id], [donor_name], [blood_group], [last_donation_date],
[contact], [gender], [address], [added_date], [added_by]) VALUES (37, N'Aslam Shaikh',
N'A+', N'2 month ago', 1887656255, N'Male', N'Moulvi Para RD,Khulna 1100.', N'2020-02-21
15:20:00.000', N'erina054')
INSERT [dbo].[donor] ([donor_id], [donor_name], [blood_group], [last_donation_date],
[contact], [gender], [address], [added_date], [added_by]) VALUES (38, N'Billal Hossain',
N'AB+', N'1 month ago', 1776355378, N'Male', N'Shere-Bangla-Road, Power House Mor, Khulna
9100.', N'2020-02-21 15:20:00.000', N'erina054')
INSERT [dbo].[donor] ([donor_id], [donor_name], [blood_group], [last_donation_date],
[contact], [gender], [address], [added_date], [added_by]) VALUES (39, N'Ariful Islam',
N'A+', N'2 month ago', 1712339848, N'Male', N'81, Boyra Bazar Road, Khulna.', N'2020-02-
21 15:20:00.000', N'erina054')
INSERT [dbo].[donor] ([donor_id], [donor_name], [blood_group], [last_donation_date],
[contact], [gender], [address], [added_date], [added_by]) VALUES (40, N'Billal Hossain',
N'AB+', N'1 month ago', 1880928782, N'Male', N'Moulvi Para RD,Khulna 1100.', N'2020-02-21
15:20:00.000', N'erina054')
INSERT [dbo].[donor] ([donor_id], [donor_name], [blood_group], [last_donation_date],
[contact], [gender], [address], [added_date], [added_by]) VALUES (41, NULL, NULL, NULL,
NULL, NULL, NULL, NULL, NULL)
SET IDENTITY_INSERT [dbo].[tbl_users] ON

INSERT [dbo].[tbl_users] ([user_id], [username], [email], [password], [full_name],
[contact], [address], [added_date], [image_name]) VALUES (1, N'abir004',
N'abir69832@gmail.com', N'021478', N'Md. Hasanul Banna Khan Abir', N'01984772121',
N'25/2, Hazi Mohshin Road, Khulna.', CAST(0x0000AB6800FC8F80 AS DateTime),
N'Blood_Bank_MS_001.jpg')
INSERT [dbo].[tbl_users] ([user_id], [username], [email], [password], [full_name],
[contact], [address], [added_date], [image_name]) VALUES (2, N'tarek023',
N'tarekahmednwu@gmail.com', N'023', N'Tarek Ahmed', N'01400652322', N'Farazaipara Road,
Khulna.', CAST(0x0000AB6B0125E260 AS DateTime), N'Blood_Bank_MS_002.jpg')
INSERT [dbo].[tbl_users] ([user_id], [username], [email], [password], [full_name],
[contact], [address], [added_date], [image_name]) VALUES (3, N'erina054',
N'erinarothy100@gmail.com', N'054', N'Erina Momtaz', N'01309188935', N'Ghop, Jessore,
Khulna.', CAST(0x0000AB6E013BDB60 AS DateTime), N'Blood_Bank_MS_003.jpg')
SET IDENTITY_INSERT [dbo].[tbl_users] OFF
USE [master]
GO
ALTER DATABASE [BloodBankManagementSystem] SET READ_WRITE
GO

```

## Source Code:

- **frmSplash.cs:**

```

using System;
using System.Collections.Generic;
using System.ComponentModel;

```

```

using System.Data;
using System.Drawing;
using System.Linq;
using System.Text;
using System.Threading.Tasks;
using System.Windows.Forms;

namespace BloodBankManagementSystem.UI
{
    public partial class frmSplash : Form
    {
        public frmSplash()
        {
            InitializeComponent();
        }
        int move = 0;

        private void timerSplash_Tick(object sender, EventArgs e)
        {
            //Write the code to show Loading Animation
            timerSplash.Interval = 20;
            panelMovable.Width += 5;

            move += 5;

            //If the loading is complete then display login form and close this
            if(move==640)
            {
                //Stop the Timer and Close this Form
                timerSplash.Stop();
                this.Hide();

                //Display the Login Form
                frmLogin login = new frmLogin();
                login.Show();
            }
        }

        private void frmSplash_Load(object sender, EventArgs e)
        {
            //Load the Timer
            timerSplash.Start();
        }
    }
}

```

- **frmHome.cs:**

```

using BloodBankManagementSystem.DAL;
using BloodBankManagementSystem.UI;
using System;
using System.Collections.Generic;
using System.ComponentModel;

```

```

using System.Data;
using System.Drawing;
using System.Linq;
using System.Text;
using System.Threading.Tasks;
using System.Windows.Forms;

namespace BloodBankManagementSystem
{
    public partial class frmHome : Form
    {
        public frmHome()
        {
            InitializeComponent();

            //Create the Object of Donor Dal
            donorDAL dal = new donorDAL();

            private void pictureBoxClose_Click(object sender, EventArgs e)
            {
                //Code to Close this Application
                this.Hide();
            }

            private void usersToolStripMenuItem_Click(object sender, EventArgs e)
            {
                //Open Users Form
                frmUsers users = new frmUsers();
                users.Show();
            }

            private void donorsToolStripMenuItem_Click(object sender, EventArgs e)
            {
                //Open Manage Donors Form
                frmDonors donors = new frmDonors();
                donors.Show();
            }

            private void frmHome_Load(object sender, EventArgs e)
            {
                //Load all the Blood Donors Count When Form is Loaded
                //Call allDonorCountMethod
                allDonorCount();

                //Display all the Donors
                DataTable dt = dal.Select();
                dgvDonors.DataSource = dt;

                //Display the username of Logged In user
                lblUser.Text = frmLogin.loggedInUser;
            }

            public void allDonorCount()
            {
                //Get the Donor Count from DAtabase and SEt in respective label
                lblOpositiveCount.Text = dal.countDonors("O+");
                lblOnegativeCount.Text = dal.countDonors("O-");
            }
        }
    }
}

```

```

        lblApositiveCount.Text = dal.countDonors("A+");
        lblAnegativeCount.Text = dal.countDonors("A-");
        lblBpositiveCount.Text = dal.countDonors("B+");
        lblBnegativeCount.Text = dal.countDonors("B-");
        lblABpositiveCount.Text = dal.countDonors("AB+");
        lblABnegativeCount.Text = dal.countDonors("AB-");
    }

    private void frmHome_Activated(object sender, EventArgs e)
    {
        //Call allDonorCount Method
        allDonorCount();
    }

    private void txtSearch_TextChanged(object sender, EventArgs e)
    {
        //Get the Keywords from the SEarch TextBox
        string keywords = txtSearch.Text;

        //Check whether the TextBox is Empty or Not
        if(keywords != null)
        {
            //Filter the Donors based on Keywords
            DataTable dt = dal.Search(keywords);
            dgvDonors.DataSource = dt;
        }
        else
        {
            //Display all the Donors
            DataTable dt = dal.Select();
            dgvDonors.DataSource = dt;
        }
    }

    private void lblDeveloper_Click(object sender, EventArgs e)
    {
    }
}

```

- **frmLogin.cs:**

```

using BloodBankManagementSystem.BLL;
using BloodBankManagementSystem.DAL;
using System;
using System.Collections.Generic;
using System.ComponentModel;
using System.Data;
using System.Drawing;
using System.Linq;
using System.Text;
using System.Threading.Tasks;
using System.Windows.Forms;

namespace BloodBankManagementSystem.UI

```

```

{
    public partial class frmLogin : Form
    {
        public frmLogin()
        {
            InitializeComponent();

            //Create the Object of BLL and DAL
            loginBLL l = new loginBLL();
            loginDAL dal = new loginDAL();

            //Create a Static String method to save the username
            public static string loggedInUser;

            private void pictureBox1_Click(object sender, EventArgs e)
            {
                //Write the Code to Close the Application
                this.Close();
            }

            private void btnLogin_Click(object sender, EventArgs e)
            {
                //Write the Code to Login our Application
                //1. Get the username and password from login form
                l.username = txtUsername.Text;
                l.password = txtPassword.Text;

                //Check the Login Credentials
                bool isSuccess = dal.loginCheck(l);

                //Check whether the login is success or not
                //If login is success then isSuccess will be true else it will be false
                if(isSuccess==true)
                {
                    //Login Success
                    //Display Success Message
                    MessageBox.Show("Login Successful.");

                    //Save the username in loggedInUser Static Method
                    loggedInUser = l.username;

                    //Display home Form
                    frmHome home = new frmHome();
                    home.Show();
                    this.Hide(); //To Close Login Form
                }
                else
                {
                    //Login Failed
                    //Display the Error Message
                    MessageBox.Show("Login Failed. Try Again.");
                }
            }
        }
    }
}

```

- **frmUsers.cs:**

```

using BloodBankManagementSystem.BLL;
using BloodBankManagementSystem.DAL;
using System;
using System.Collections.Generic;
using System.ComponentModel;
using System.Data;
using System.Drawing;
using System.IO;
using System.Linq;
using System.Text;
using System.Threading.Tasks;
using System.Windows.Forms;

namespace BloodBankManagementSystem.UI
{
    public partial class frmUsers : Form
    {
        public frmUsers()
        {
            InitializeComponent();

            //Create Objects of userBLL and userDAL
            userBLL u = new userBLL();
            userDAL dal = new userDAL();

            string imageName = "no-image.jpg";

            private void pictureBoxClose_Click(object sender, EventArgs e)
            {
                //Add functionality to close this form
                this.Hide();
            }

            private void btnAdd_Click(object sender, EventArgs e)
            {
                //Step 1: Get the Values from UI
                u.full_name = txtFullName.Text;
                u.email = txtEmail.Text;
                u.username = txtUsername.Text;
                u.password = txtPassword.Text;
                u.contact = txtContact.Text;
                u.address = txtAddress.Text;
                u.added_date = DateTime.Now;
                u.image_name = imageName;

                //Step2: Adding the Values from UI to the Database
                //Create a Boolean Variable to check whether the data is inserted
                successfully or not
                bool success = dal.Insert(u);

                //Step 3: Check whether the Data is Inserted Successfully or Not
                if(success==true)

```



```

    {
        //Data or User Added Successfully
        MessageBox.Show("New User added Successfully.");

        //Display the user in DataGrid View
        DataTable dt = dal.Select();
        dgvUsers.DataSource = dt;

        //Clear TextBoxes
        Clear();
    }
    else
    {
        //Failed to Add User
        MessageBox.Show("Failed to Add New User.");
    }
}

//Method or Function to Clear TextBoxes
public void Clear()
{
    txtFullName.Text = "";
    txtEmail.Text = "";
    txtUsername.Text = "";
    txtContact.Text = "";
    txtAddress.Text = "";
    txtPassword.Text = "";
    txtUserID.Text = "";
    //Path to Destination Folder
    //Get the Image path
    string paths = Application.StartupPath.Substring(0,
(Application.StartupPath.Length - 10));
    string imagePath = paths + "\\images\\no-image.jpg";
    //Display in Picture Box
    pictureBoxProfilePicture.Image = new Bitmap(imagePath);
}

private void dgvUsers_RowHeaderMouseClick(object sender,
DataGridViewCellEventArgs e)
{
    //Find the Row Index of the Row Clicked on Users Data Grid View
    intRowIndex = e.RowIndex;
    txtUserID.Text = dgvUsers.Rows[RowIndex].Cells[0].Value.ToString();
    txtUsername.Text = dgvUsers.Rows[RowIndex].Cells[1].Value.ToString();
    txtEmail.Text = dgvUsers.Rows[RowIndex].Cells[2].Value.ToString();
    txtPassword.Text = dgvUsers.Rows[RowIndex].Cells[3].Value.ToString();
    txtFullName.Text = dgvUsers.Rows[RowIndex].Cells[4].Value.ToString();
    txtContact.Text = dgvUsers.Rows[RowIndex].Cells[5].Value.ToString();
    txtAddress.Text = dgvUsers.Rows[RowIndex].Cells[6].Value.ToString();
    imageName = dgvUsers.Rows[RowIndex].Cells[8].Value.ToString();

    //Display the Image of SElected User
    //Get the Image path
    string paths = Application.StartupPath.Substring(0,
(Application.StartupPath.Length - 10));

    if(imageName != "no-image.jpg")
    {

```

```

        //Path to Destination Folder
        string imagePath = paths + "\\images\\" + imageName;
        //Display in Picture Box
        pictureBoxProfilePicture.Image = new Bitmap(imagePath);
    }
    else
    {
        //Path to Destination Folder
        string imagePath = paths + "\\images\\no-image.jpg";
        //Display in Picture Box
        pictureBoxProfilePicture.Image = new Bitmap(imagePath);
    }
}

private void frmUsers_Load(object sender, EventArgs e)
{
    //Display the Users in DATagrid View When the Form is Loaded
    DataTable dt = dal.Select();
    dgvUsers.DataSource = dt;
}

private void btnUpdate_Click(object sender, EventArgs e)
{
    //Step1: Get the Values from UI
    u.user_id = int.Parse(txtUserID.Text);
    u.full_name = txtFullName.Text;
    u.email = txtEmail.Text;
    u.username = txtUsername.Text;
    u.password = txtPassword.Text;
    u.contact = txtContact.Text;
    u.address = txtAddress.Text;
    u.added_date = DateTime.Now;
    u.image_name = imageName;

    //Step 2: Create a Boolean variable to check whether the data is
    updated successfully or not
    bool success = dal.Update(u);

    //Let's check whether the data is updated or not
    if(success==true)
    {
        //Data Udated Successfully
        MessageBox.Show("User Updated Successfully.");

        //Refresh DATA Grid View
        DataTable dt = dal.Select();
        dgvUsers.DataSource = dt;

        //Clear the TextBoxes
        Clear();
    }
}

private void btnDelete_Click(object sender, EventArgs e)
{
    //Step 1: Get the UserID from Text Box to Delete the User
    u.user_id = int.Parse(txtUserID.Text);

```

```

not        //Step Create the Boolean value to check whether the user deleted or

bool success = dal.Delete(u);

//Let's check whether the user is Deleted or Not
if(success==true)
{
    //User Deleted Successfully
    MessageBox.Show("User Deleted Successfully.");

    //Refresh DataGrid View
    DataTable dt = dal.Select();
    dgvUsers.DataSource = dt;

    //Clear the TextBoxes
    Clear();
}
}

private void btnClear_Click(object sender, EventArgs e)
{
    //Call the user Function
    Clear();
}

private void btnSelectImage_Click(object sender, EventArgs e)
{
    //Write the Code to Upload the Image of User
    //Open Dialog Box to Select Image
    OpenFileDialog open = new OpenFileDialog();

    //Filter the File Type, Only Allow Image File Types
    open.Filter = "Image Files (*.jpg; *.jpeg; *.png; *.PNG; *.gif;)|*.jpg; *.jpeg; *.png; *.PNG; *.gif;";

    //Check if the file is selected or Not
    if(open.ShowDialog()==DialogResult.OK)
    {
        //Check if the file exists or not
        if(open.CheckFileExists)
        {
            //Display the Selected File on Picture Box
            pictureBoxProfilePicture.Image = new Bitmap(open.FileName);

            //Rename the Image we selected
            //1. Get the Extension of Image
            string ext = Path.GetExtension(open.FileName);

            //2. Generate Random Integer
            Random random = new Random();
            int RandInt = random.Next(0, 1000);

            //3. Rename the Image
            imageName = "Blood_Bank_MS_" + RandInt + ext;

            //4. Get the path of Selected Image
            string sourcePath = open.FileName;

```

```

        //5. Get the Path of Destination
        string paths = Application.StartupPath.Substring(0,
Application.StartupPath.Length - 10);
        //Paths to Destination Folder
        string destinationPath = paths + "\\images\\" + imageName;

        //6. Copy image to the Destination Folder
        File.Copy(sourcePath, destinationPath);

        //7. Display Message
        MessageBox.Show("Image Successfully Uploaded.");
    }
}

private void txtSearch_TextChanged(object sender, EventArgs e)
{
    //Write the Code to Get the users BAsed on Keywords
    //1. Get the Keywords from the TextBox
    String keywords = txtSearch.Text;

    //Check whether the textbox is empty or not
    if(keywords!=null)
    {
        //TextBox is not empty, display users on DAta Grid View based on
the keywords
        DataTable dt = dal.Search(keywords);
        dgvUsers.DataSource = dt;
    }
    else
    {
        //TExtbox is Empty and display all the users on DAta Grid View
        DataTable dt = dal.Select();
        dgvUsers.DataSource = dt;
    }
}
}
}

```

- **frmDonors.cs:**

```

dgvUsers.DataSource = dt; using BloodBankManagementSystem.BLL;
using BloodBankManagementSystem.DAL;
using System;
using System.Collections.Generic;
using System.ComponentModel;
using System.Data;
using System.Drawing;
using System.IO;
using System.Linq;
using System.Text;
using System.Threading.Tasks;
using System.Windows.Forms;

namespace BloodBankManagementSystem.UI
{
    public partial class frmDonors : Form

```

```

{
    public frmDonors()
    {
        InitializeComponent();
    }
    //Create object of Donor BLL and Donor DAL
    donorBLL d = new donorBLL();
    donorDAL dal = new donorDAL();
    userDAL udal = new userDAL();

    //Global Variable for Image
    string imageName = "no-image.jpg";

    private void frmDonors_Load(object sender, EventArgs e)
    {
        //Display Donors in DataGrid View
        DataTable dt = dal.Select();
        dgvDonors.DataSource = dt;

        //First we need to get the image Path
        string path = Application.StartupPath.Substring(0,
(Application.StartupPath.Length) - 10);

        string imagepath = path + "\\images\\no-image.jpg";

        //Display Image in PictureBox
        pictureBoxProfilePicture.Image = new Bitmap(imagepath);
    }

    private void pictureBoxClose_Click(object sender, EventArgs e)
    {
        //Close this form
        this.Hide();
    }

    private void btnAdd_Click(object sender, EventArgs e)
    {
        //We will write the code to Add new Donor
        //Step 1. Get the DATA from Manage Donors Form
        d.donor_name = txtFirstName.Text;
        d.last_donation_date = txtEmail.Text;
        d.gender = cmbGender.Text;
        d.blood_group = cmbBloodGroup.Text;
        d.contact = txtContact.Text;
        d.address = txtAddress.Text;
        d.added_date = DateTime.Now;

        //Get The ID of Logged In User
        string loggedInUser = frmLogin.loggedInUser;
        userBLL usr = udal.GetIDFromUsername(loggedInUser);

        d.added_by = usr.user_id;

        d.image_name = imageName;

        //Step2: Inserting Data into Database
        //Create a Boolean Variable to Isnert DATA into DATABASE and check
        whether the data inserted successfully or not
    }
}

```

```

        bool isSuccess = dal.Insert(d);

        //if the Data is inserted successfully then the values of isSuccess
will be True else it will be false
        if(isSuccess==true)
        {
            //Data Inserted Successfully
            MessageBox.Show("New Donor Added Successfully");

            //Refresh Datagrid View
            DataTable dt = dal.Select();
            dgvDonors.DataSource = dt;

            //Clear all the Textboxes
            Clear();
        }
        else
        {
            //Failed to Insert Data
            MessageBox.Show("Failed to Add new Donor.");
        }
    }

    //Create a Method to Clear all the Textboxes
    public void Clear()
    {
        //Clear all the TExtboxes
        txtFirstName.Text = "";
        txtEmail.Text = "";
        txtDonorID.Text = "";
        cmbGender.Text = "";
        cmbBloodGroup.Text = "";
        txtContact.Text = "";
        txtAddress.Text = "";

        //Clear the PictureBox
        //First we need to get the image Path
        string path = Application.StartupPath.Substring(0,
(Application.StartupPath.Length) - 10);

        string imagepath = path + "\\images\\no-image.jpg";

        //Display Image in PictureBox
        pictureBoxProfilePicture.Image = new Bitmap(imagepath);
    }

    private void dgvDonors_RowHeaderMouseClick(object sender,
DataGridViewCellEventArgs e)
    {
        //Select the DATA from DATagrid View and Display in our Form

        //1. Find the Row Selected
        int RowIndex = e.RowIndex;

        txtDonorID.Text = dgvDonors.Rows[RowIndex].Cells[0].Value.ToString();
        txtFirstName.Text =
dgvDonors.Rows[RowIndex].Cells[1].Value.ToString();
        txtEmail.Text = dgvDonors.Rows[RowIndex].Cells[3].Value.ToString();
    }

```

```

        txtContact.Text = dgvDonors.Rows[RowIndex].Cells[4].Value.ToString();
        cmbGender.Text = dgvDonors.Rows[RowIndex].Cells[5].Value.ToString();
        txtAddress.Text = dgvDonors.Rows[RowIndex].Cells[6].Value.ToString();
        cmbBloodGroup.Text =
dgvDonors.Rows[RowIndex].Cells[7].Value.ToString();

        /*imageName = dgvDonors.Rows[RowIndex].Cells[9].Value.ToString();
        //Display The image of Selected Donor
        //Get the image path
        string paths = Application.StartupPath.Substring(0,
(Application.StartupPath.Length) - 10);
        string imagePath = paths + "\\images\\" + imageName;
        //Display the Image of SElected User
        pictureBoxProfilePicture.Image = new Bitmap(imagePath);*/
    }

    private void btnUpdate_Click(object sender, EventArgs e)
    {
        //Add the Functionality to Update the Donors
        //1. Get the Values from Form
        d.donor_id = int.Parse(txtDonorID.Text);
        d.donor_name = txtFirstName.Text;
        d.last_donation_date = txtEmail.Text;
        d.gender = cmbGender.Text;
        d.blood_group = cmbBloodGroup.Text;
        d.contact = txtContact.Text;
        d.address = txtAddress.Text;
        //Get The ID of Logged In USer
        string loggedInUser = frmLogin.loggedInUser;
        userBLL usr = udal.GetIDFromUsername(loggedInUser);

        d.added_by = usr.user_id;
        d.image_name = imageName;

        //Create a Boolean Variable to Check whether the data updated
        successfully or not
        bool isSuccess = dal.Update(d);

        //If the data updated successfully then the value of isSuccess will be
        true else it will be false
        if(isSuccess == true)
        {
            //Donor Updated Successfully
            MessageBox.Show("Donor updated Successfully.");
            Clear();

            //Refresh Datagridview
            DataTable dt = dal.Select();
            dgvDonors.DataSource = dt;
        }
        else
        {
            //Failed to Update
            MessageBox.Show("Failed to update donors.");
        }
    }
}

```

```

private void btnDelete_Click(object sender, EventArgs e)
{
    //Get the value from form
    d.donor_id = int.Parse(txtDonorID.Text);

    //Create a Boolean Variable to Check whether the donor deleted or not
    bool isSuccess = dal.Delete(d);

    if(isSuccess==true)
    {
        //Donor Deleted Successfully
        MessageBox.Show("Donor Deleted Successfully.");

        Clear();

        //Refresh Datagrid View
        DataTable dt = dal.Select();
        dgvDonors.DataSource = dt;
    }
    else
    {
        //Failed to Delete Donor
        MessageBox.Show("Failed to Delete Donor");
    }
}

private void btnClear_Click(object sender, EventArgs e)
{
    //Clear the TExtboxes
    Clear();
}

private void btnSelectImage_Click(object sender, EventArgs e)
{
    //Code to Select Image and Upload
    //1. Open the Dialog Box to SElect Image
    OpenFileDialog open = new OpenFileDialog();

    //2. Filter the File Type (allow only image files)
    open.Filter = "Image Files Only (*.jpg; *.jpeg; *.png; *.gif| *.jpg; *.jpeg; *.png; *.gif)";

    //3. Check whether the image is selected or not
    if(open.ShowDialog()==DialogResult.OK)
    {
        //Check if the file exists or not
        if(open.CheckFileExists)
        {
            //Display the Selected Image in PictureBox
            pictureBoxProfilePicture.Image = new Bitmap(open.FileName);

            //Rename the selected image
            //1. Get the Extension of SElected Image
            string ext = Path.GetExtension(open.FileName);

            string name = Path.GetFileNameWithoutExtension(open.FileName);

            //Generate Random but Globally Unique Identifier

```



```

        Guid g = new Guid();
        g = Guid.NewGuid();

        //Finally RENAME our Image
        imageName = "Blood_Bank_MS_" + name + g + ext;

        //Get the Source Path (Path of Image)
        string sourcePath = open.FileName;

        //Get the Destination Path
        string paths = Application.StartupPath.Substring(0,
Application.StartupPath.Length - 10);
        //Path to Destination
        string destinationPath = paths + "\\images\\" + imageName;

        //Upload the Image to Destination Folder
        File.Copy(sourcePath, destinationPath);

        //Display Message after the image is uploaded successfully
        MessageBox.Show("Image successfully uploaded.");
    }
}

private void txtSearch_TextChanged(object sender, EventArgs e)
{
    //Let's Add the Functionality to Search the Donors

    //1. Get the Keywords Typed on the Search Text Box
    string keywords = txtSearch.Text;

    // Check Whether the Search TextBox is Empty or Not
    if(keywords != null)
    {
        //Display the information of Donors Based on Keywords
        DataTable dt = dal.Search(keywords);
        dgvDonors.DataSource = dt;
    }
    else
    {
        //Display all the Donors
        DataTable dt = dal.Select();
        dgvDonors.DataSource = dt;
    }
}

private void lblFirstName_Click(object sender, EventArgs e)
{
}
}
}

```

## **Conclusion:**

A Blood Bank is a software product suite designed to improve the quality and management of blood bank and hospital health care management in the areas of health process analysis and activity-based costing. Blood Bank Manager enables to develop organization and improve its effectiveness and quality of work, Managing the key processes efficiently is critical to the success of the pharmacy. Blood Bank Manager helps manage processes. A Blood Bank Manager provides all process management tool elements:

Modeling, analysis, and simulation. Documentation though an important part of a blood bank management, is a nonproductive exercise for the intellectual human being, whose ability lies in core areas of excellence. Hence a systematic approach to the way documents are managed,

Blood Bank Management System is an efficient project. Effective analysis of data can help a lot in medical field as many other objects and fields can be added to this system for the different blood groups.