CHAPTER 1

INTRODUCTION TO PROJECT

1.1 INTRODUCTION

A Blood Bank stores blood of various blood groups. Many donors donate blood, each of different blood group/type. A donor may donate blood more than once and donor is identified by a donor id (DID), name, sex, age, address and phone number. The blood donated by the donor is characterized by blood type, code and cost. Before each donor donates his blood, he is required to register himself as a donor with the receptionist who works at the Blood Bank. The receptionist is identified by employee id, name, address and phone number. The Blood Banks receives orders for blood from many hospitals for emergency purposes and other surgical requirements and each blood bank issues the same of required blood type. Each blood bank has its own blood bank number (BNO), issues, orders and blood types stored. The Blood Bank is managed by the blood bank manager who is identified by employee id, name, email id and phone number and his responsibility is to proper management of the blood bank. The hospitals are identified by name, address and phone number.

CHAPTER 2

REQUIREMENT SPECIFICATION

2.1 Functional Requirements

1. Blood Donor.
2. Register the donor by receptionist.
3. Search blood.
4. Adding blood by receptionist.
5. Ordering blood by hospital.
6. Viewing orders by blood bank.

2.2 Non-Functional Requirements

1. Secure access of required data.
2. User friendly.
3. Simple user interface.
4. 24*7 availability.

2.3 Hardware Requirements

1. Intel i3 2.00GHz or above.
2. 2GB RAM or above.
3. 125GB HDD Minimum.

2.4 Software Requirements

1. OS : Windows 8 or Higher
2. Data base : My SQL
3. Front end : ASP.NET
4. Language :C#.NET
5. IDE : VisualStudio.NET 2015.

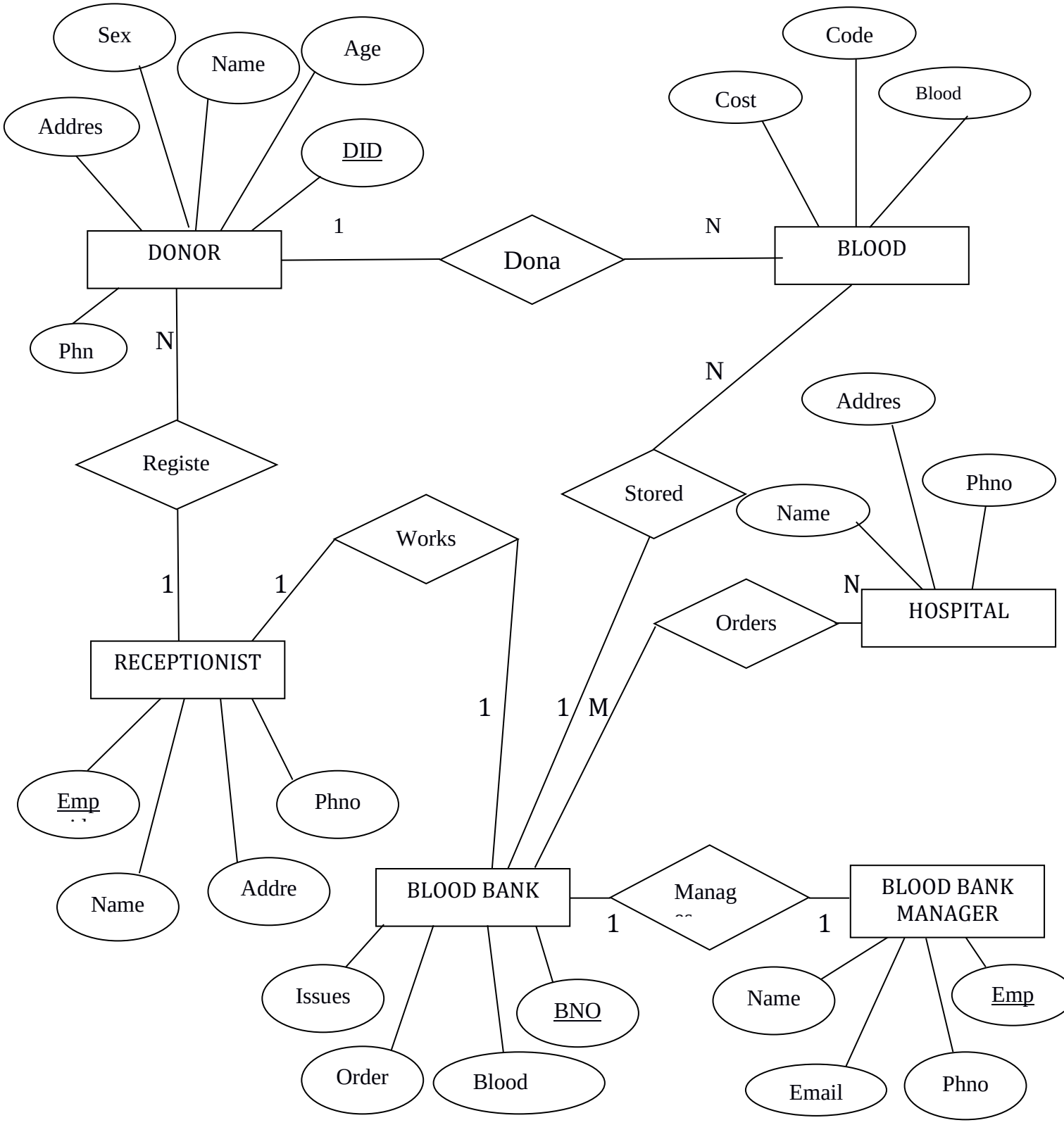
2.4.1 Why C# Language for this project?

1. High performance.
2. Easy to use and well-designed language.
3. Easy to Maintain.

CHAPTER 3

SYSTEM DESIGN

3.1Complete ER-diagram



1. **DONOR :-**

Name	Address	Age	Sex	Phno	DID

2. **BLOOD:-**

Blood type	COST	code

3. **HOSPITAL:-**

Name	Address	Phno

4. **RECEPTIONIST:-**

Name	Emp id	Address	Phno

5. **BLOODBANK:-**

Blood type	BNO	Orders	Issues

6. **MANAGER:-**

Name	Email id	Emp id	Phno

1. **ORDERS:-**

Ord_no	Ord_date	Btype	Quantity	HID

3.2 The entities

1. Donor
2. Blood
3. Receptionist
4. Blood Bank
5. Blood Bank Manager
6. Hospital

3.3 The relationships.

1. A donor may donate blood any number of times. So cardinality is 1:N.
2. Many donors may register blood donation with a single receptionist. So cardinality is N:1.
3. Blood of different type in large numbers is stored in a single Blood Bank. So cardinality is N:1.
4. Blood Bank is managed by an blood bank -manager. So cardinality is 1:1.
5. A receptionist works in a Blood Bank. So cardinality is 1:1.
6. Hospitals may order blood from different Blood Banks. So cardinality is N:M.

3.4 The key attributes.

1. Donor – donor id (DID).
2. Blood – code (code).
3. Receptionist – employee id (empid).
4. Blood Bank–Blood Bank number (BNO).
5. Blood Bank Manager – employee id (empid).
6. Hospital – name, phone number (phno).

3.5 Other relevant attributes

1. Donor – name, age, sex, address, phone number (phno).
2. Blood – blood type, cost.
3. Receptionist – name, address, phone number (phno).
4. Blood Bank– issues, orders, blood type.
5. Blood Bank Manager – name, email _id, phone number (phno).
6. Hospital-address.

CHAPTER 4

IMPLEMENTATION

DONOR

Field	Type	Null	Key	Default	Extra
DID	int(4)	NO	PRI	NULL	auto increment
Dname	varchar(15)	YES		NULL	
Sex	char(2)	YES		NULL	
Age	int(11)	YES		NULL	
Address	varchar(60)	YES		NULL	
Phno	varchar(11)	YES		NULL	

BLOOD

Field	Type	Null	Key	Default	Extra
Btype	char(3)	NO	PRI	NULL	

BBANK

Field	Type	Null	Key	Default	Extra
BID	int(4)	YES		NULL	
Btype	char(3)	YES	MUL	NULL	
Quantity	float	YES		NULL	
MID	int(4)	YES	MUL	NULL	

MANAGER

Field	Type	Null	Key	Default	Extra
Mname	varchar(15)	YES		NULL	
MID	int(4)	NO	PRI	NULL	
Mphno	varchar(11)	YES		NULL	

RECEPTIONIST

Field	Type	Null	Key	Default	Extra
Rname	varchar(15)	YES		NULL	
RID	int(4)	YES		NULL	
Rphno	varchar(11)	YES		NULL	
MID	int(4)	YES	MUL	NULL	

HOSPITAL

Field	Type	Null	Key	Default	Extra
HID	char(4)	NO	PRI	NULL	
Hname	varchar(20)	YES		NULL	
Haddress	varchar(60)	YES		NULL	
Hphno	varchar(11)	YES		NULL	

ORDERS

Field	Type	Null	Key	Default	Extra
Ord_no	int(4)	NO	PRI	NULL	auto_increment
Ord_date	date	YES		NULL	
Btype	char(3)	YES	MUL	NULL	
Quantity	float	YES		NULL	
HID	char(4)	YES	MUL	NULL	

CHAPTER 5

SCREEN SHOTS

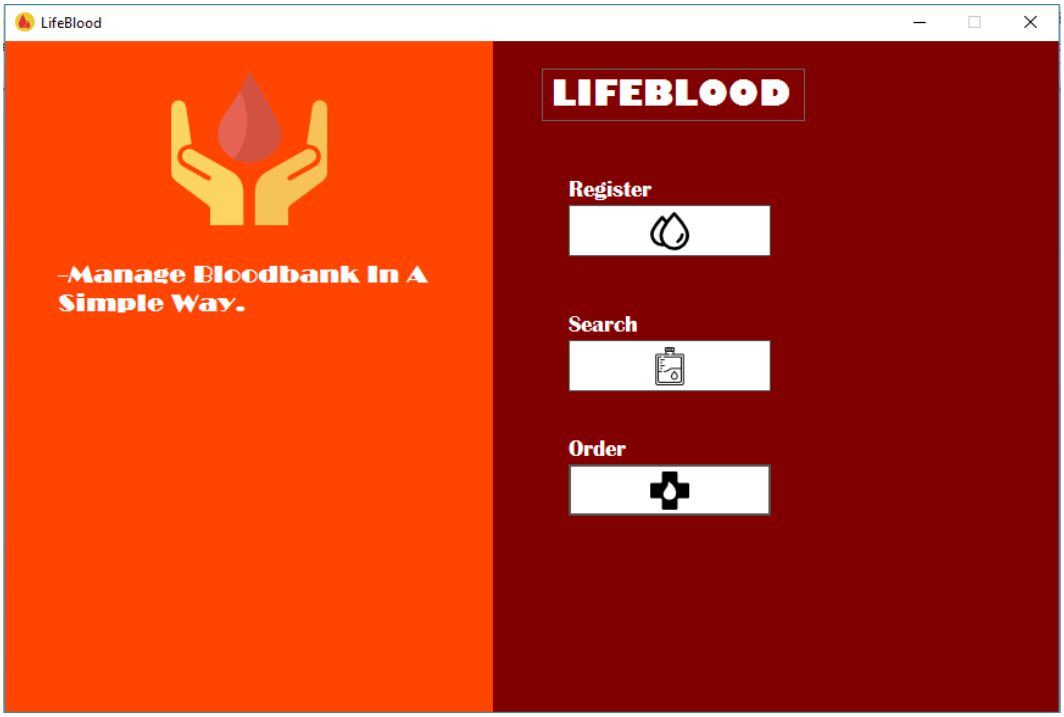


Figure 5.1: Starting page of Blood bank management system

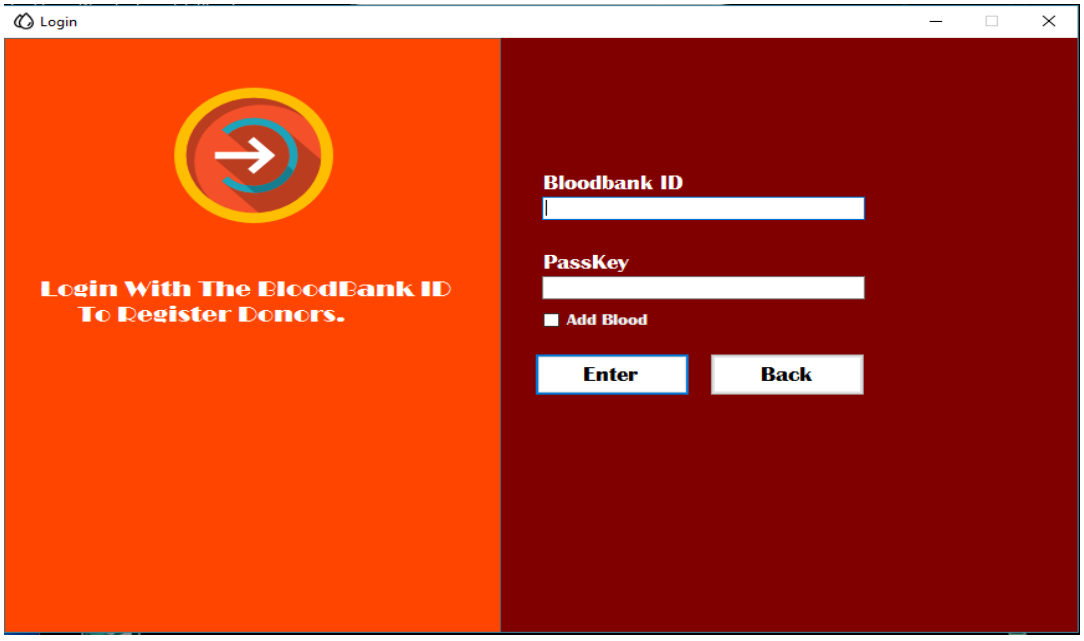


Figure 5.2: Receptionist Login using Blood bank ID

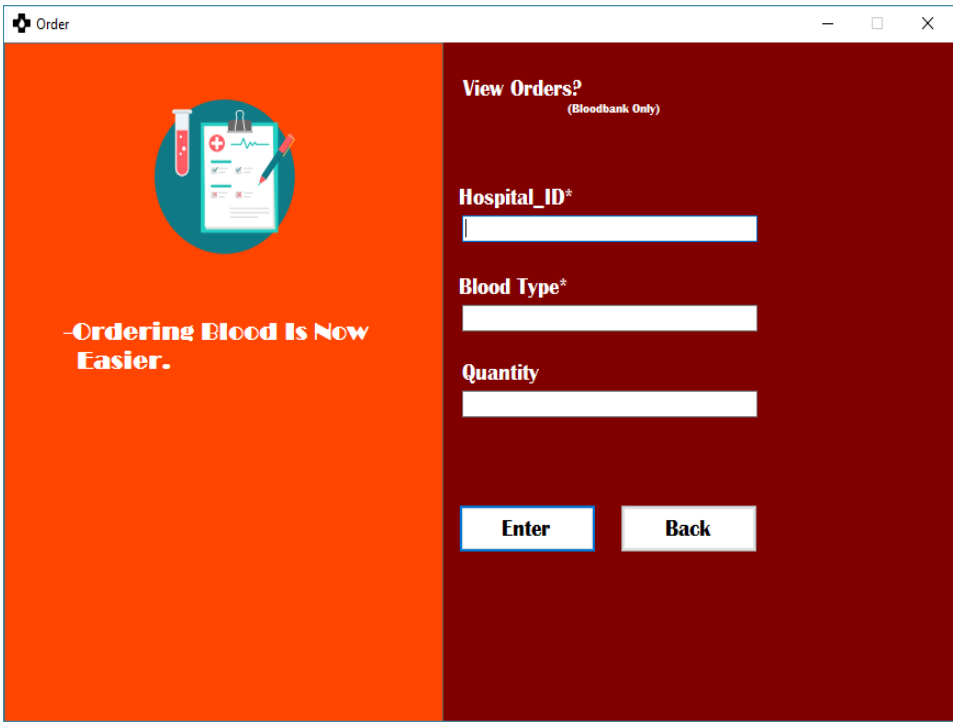


Figure 5.3: Hospitals Orders Blood.

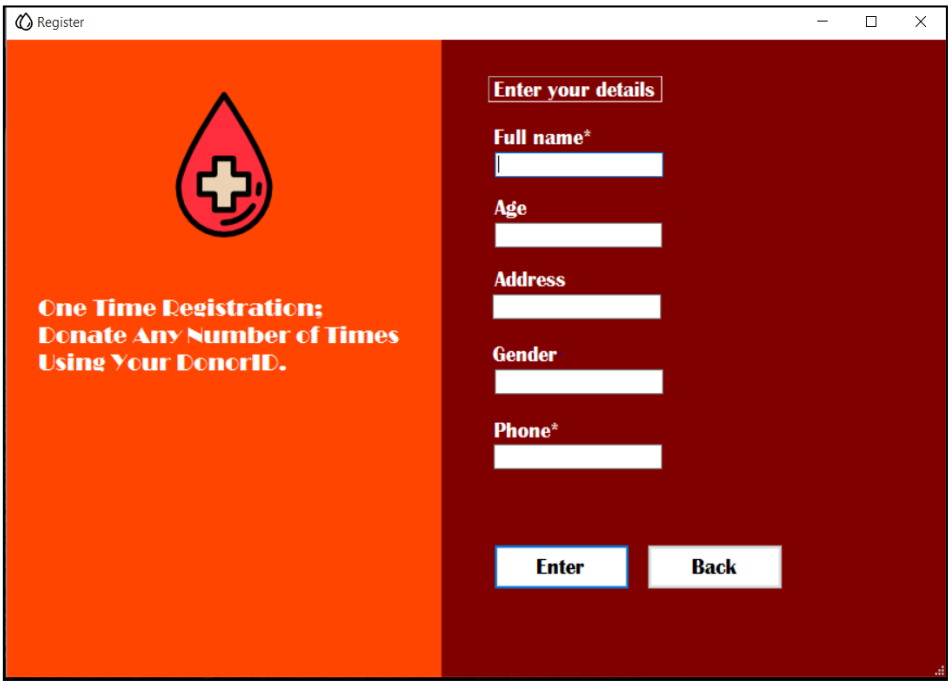


Figure 5.4: New user registration.

CHAPTER 6

CONCLUSION AND SCOPE FOR FUTURE WORK

Conclusion:-

- The software created with the purpose of replacing all of paper work done at the blood bank.
- All aspects of blood banking-Donor record management, blood search, blood availability, Blood ordering.

Future Work:-

- Our future work would be to integrate this blood bank management system with other health care provider center, hospital and blood bank.
- We will add new features as and when required.
- Improve the effectiveness.

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