

DEPARTMENT OF COMPUTER SCIENCES

Air University

Software Design Documentation

“Blood Bank Management”

Name:

Hamza Ayub *161110*

Muhammad Jahangir Khan *161116*

Affan Zahid *161128*

Muhammad Afnan *161130*

Usama Khalid *161140*

Submitted To:

Ma'am Aatika Ali



INTRODUCTION

The Blood Management system is our software engineering project. This project is designed as per the need of today's world that the information of blood donors has to be managed and supervised. The basic building aim is to provide blood donation service to our society and to give access to local public and different hospitals. Whoever need blood, they can get access to our system and can be facilitated.

Blood Management System is a Desktop application that is designed to store, process, retrieve and analyze information concerned with the administrative and inventory management within a blood bank.

Purpose

Blood Bank Management Software is designed & suitable for several Blood Bank either operating as individual organization or part of Hospital. It covers all Blood banking process from Donor recruitment, donor management, mobile sessions, component preparation, screening covering all tests, blood stock inventory maintenance, patient registration, cross matching, patient issues etc.

Scope

The scope of the specification includes the following scenarios: Routine blood transfusion;

Transfusion for special requirements (for example, cytomegalovirus (CMV) seronegative blood, irradiated blood or antigen negative blood); Emergency issue of blood; Management of returned and unused blood units.

Overview

- User friendly design
- User can easily find and choose a donor accordingly by the blood group
- Find with location or address
- Status about the donors
- Donors details
- Acceptors details
- Acceptors can contact with the donor by email or phone

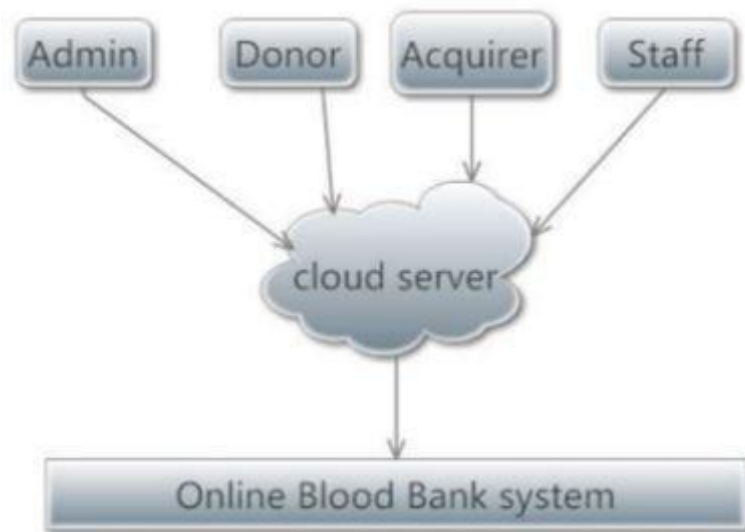
References

- https://www.academia.edu/3755503/SRS_on_Blood_Bank_Management_System
- <https://www.slideshare.net/udaschand940/software-requirementspecification-srs>
- <https://prezi.com/rldjosa6vmn/srs-on-blood-management-system/>

Architectural Design

Architecture is referred to be a back bone of software. Different components are interlinked with each other

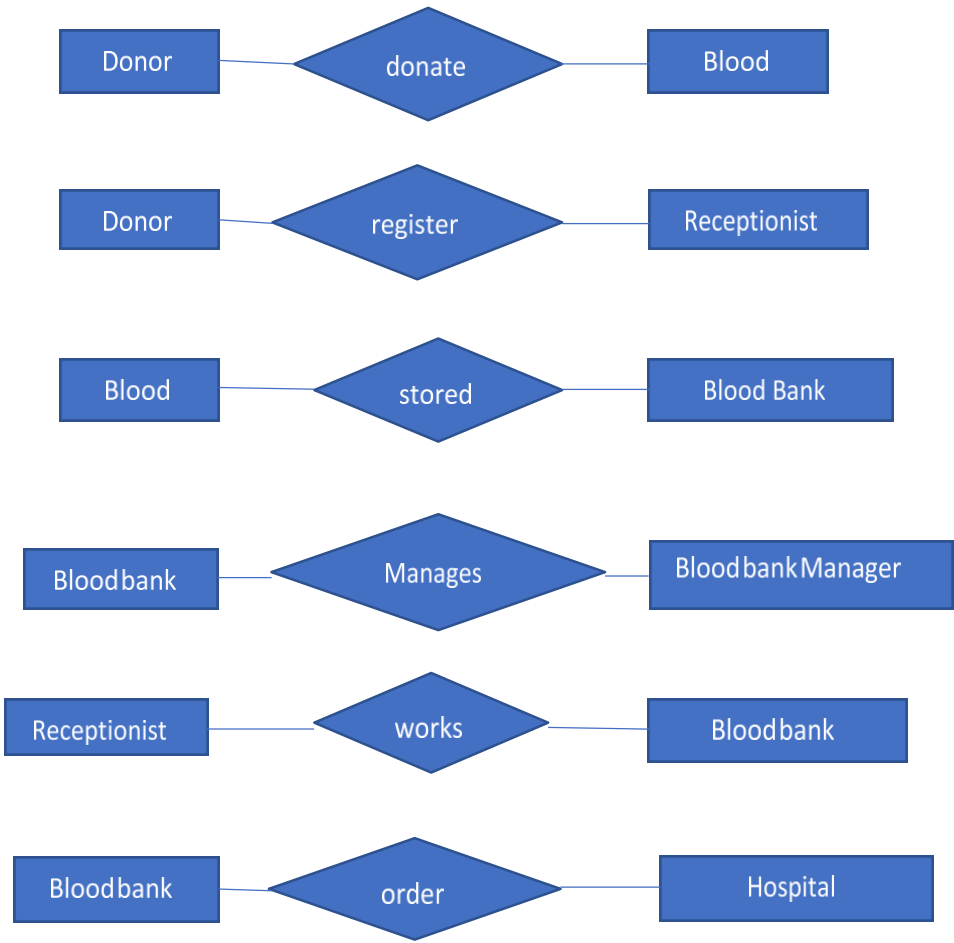
- Admin
- Donor
- Acquirer
- Staff



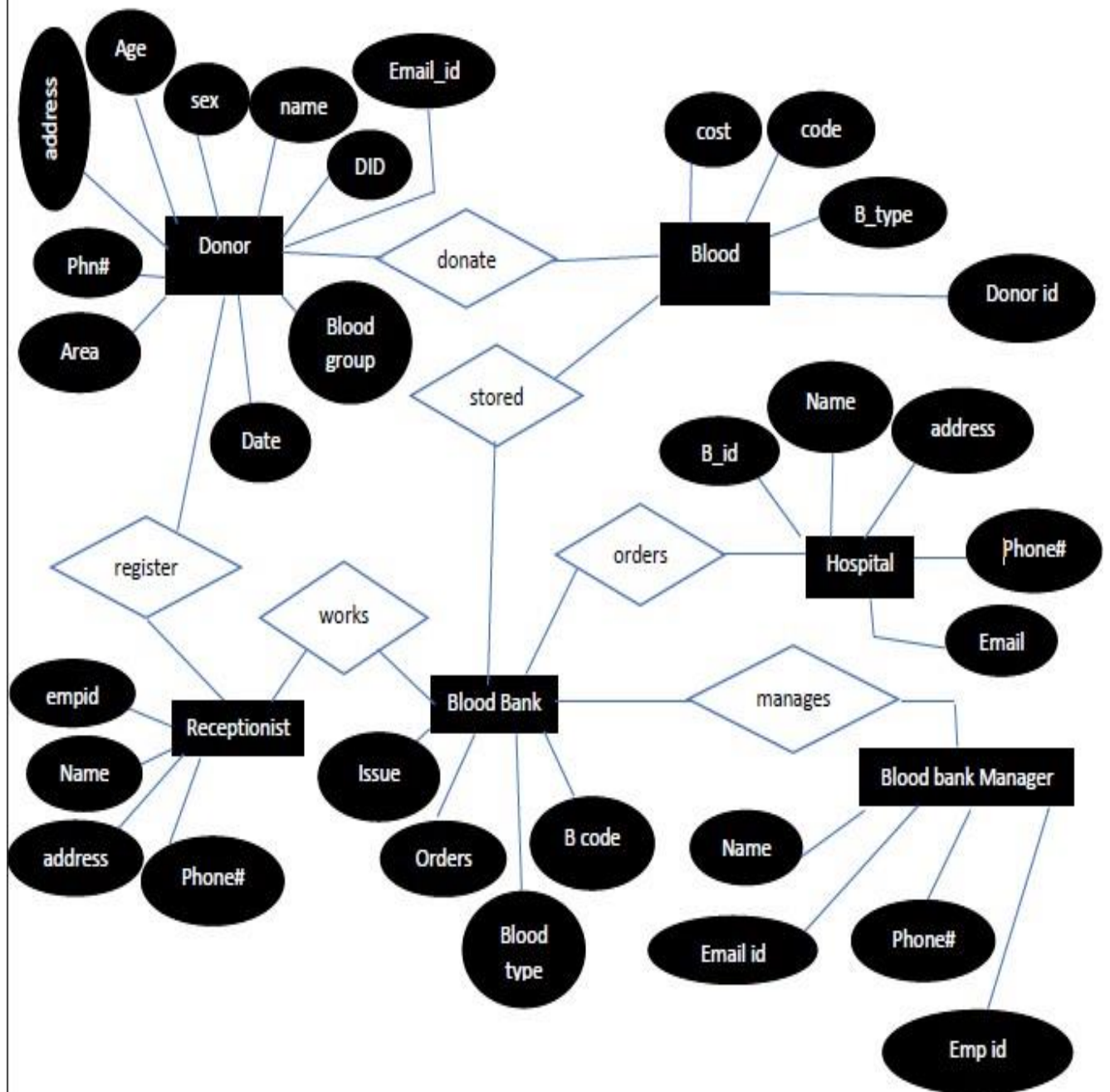
Entities/Objects

- Donor
- Blood
- Blood Bank
- Receptionist
- Blood bank Manager
- Hospital

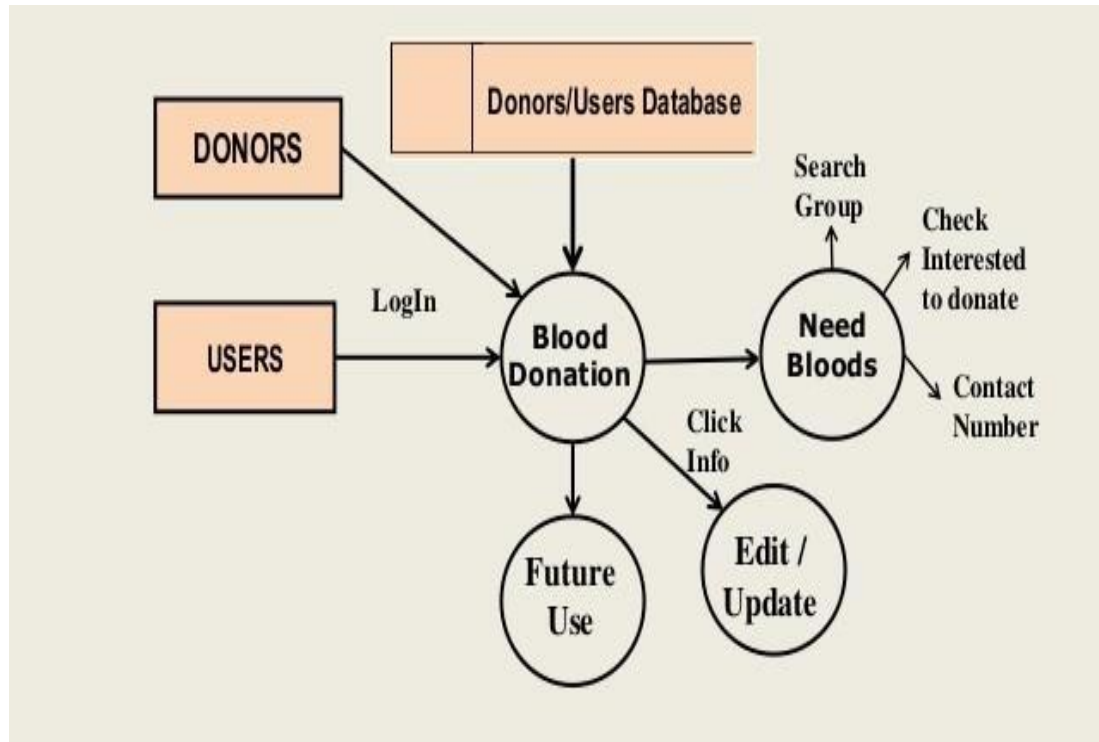
Relationships



ER Model of Blood Donation System

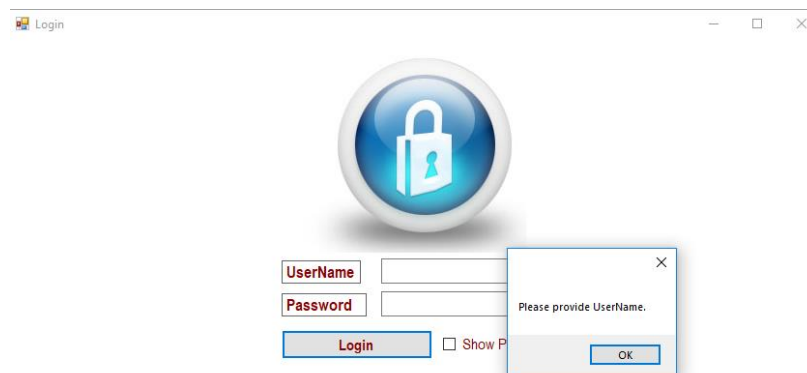


Data Flow Diagram (Sample)

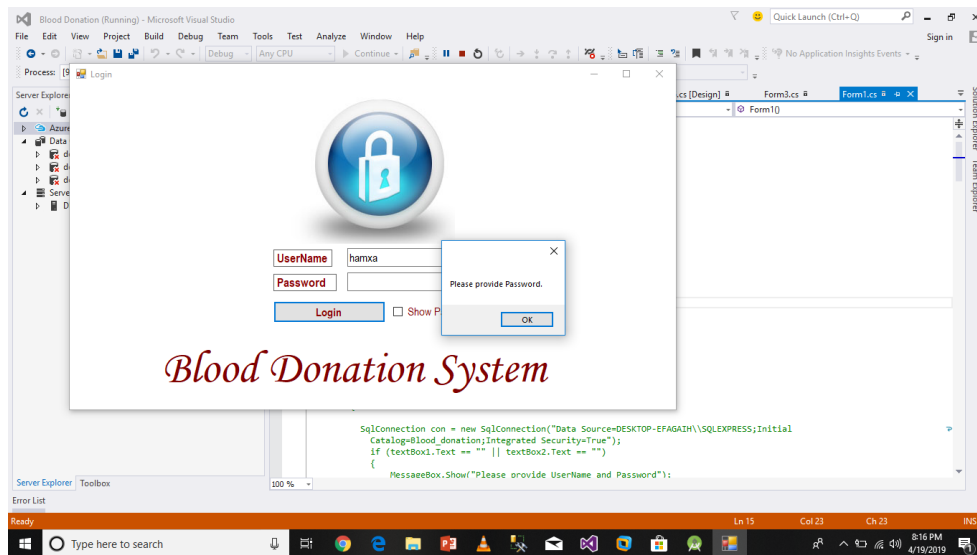


Human Interface Design

Overview of user interface



Blood Donation System



Screen Images

Person Data

Personal Data

Name

Father Name

Age Yrs. Sex: ☒ Male ☐ Female

Date of Birth Contact

CNIC

City

Address

Medical Data

Height (cm) Blood Group

Diseases (any) Donated Blood Before ☒ Yes ☐ No

Date Of Donation


Save Data

Exit

Warning

! Please provide Name

OK



Screen Objects and Actions

Search Person

Search for save life

CNIC **Search**

Blood Group **Search**

Name **Search**

City **Search**

Age **Search**

Delete **Exit**

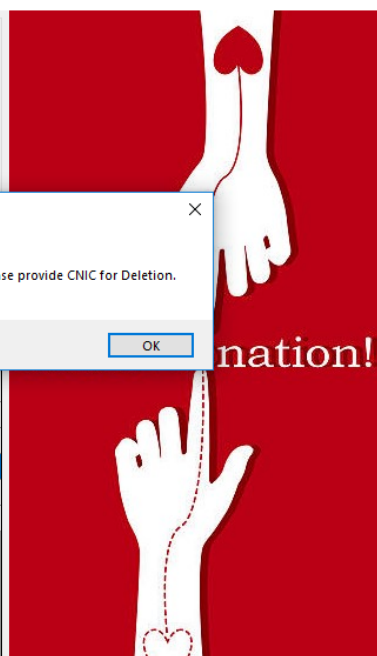
Warning

! Please provide CNIC for Deletion.

OK

Data

	Name	Fname	Age	DOB	Sex
	hamza	ayub	12	5/2/2018	Male
	hamza	ayub	12	4/29/2018	Male
▶	Jahangir khan	Ishfaq Raajp...	75	4/30/1995	Male
	hamza	ayub	12	4/29/2018	Male



Person Data

Personal Data

Name: hamxa

Father Name: ayub

Age: 12 Yrs. Sex: ☒ Male ☐ Female

Date of Birth: Friday, April 19, 2019 Contact:

CNIC: 3630244826613

City: multan

Address: scsd

Medical Data

Height (cm): 12 Blood Group: B+

Diseases (any): no Donated Blood Before: ☒ Yes ☐ No

Date Of Donation: Friday, April 19, 201


Save Data

Exit

Warning

Please provide Contact

OK



Requirements:

Issues	Description	Activities
Project Focus	Time, budget and quality.	Focused on achieving these broad goals.
Planning	Engage in planning – detailed and systematic.	Planning and preplanning.
Sense of Urgency	Limited time, money, and other resources.	Regular status checks, meetings, and reminders are essential.
Use a time-tested, proven project life Cycle	Use standard models to build into project plans.	Identify the best project life cycle.
Evolve gradually to succeed	Involvement of users in cost and time estimation and risk management.	Maintain a controlled evolution.
Clear approvals and sign-off by Sponsors	Clear approval points.	Examine and approve.