

**DEVELOPMENT OF
“HELPLINE FOR UTTARA CAMPUS”**

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This Report Presented in Partial Fulfillment of the Requirements for the Degree of
Bachelor of Science in Computer Science and Engineering

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DAFFODIL INTERNATIONAL UNIVERSITY

DHAKA, BANGLADESH

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APPROVAL

This Project titled “**Helpline For Uttara Campus**”, submitted by Afroja khanam and Asa Akter Rimy, department of Computer Science and Engineering, Daffodil International University, has been accepted as satisfactory for the partial fulfillment of the requirements for the degree of B.Sc in Computer Science and Engineering (B.Sc) and approved as to its style and contents. The presentation has been held on 10-12-2019.

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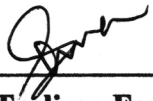
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DECLARATION

We hereby declare that, this project has been done by us under the supervision of **Taslima Ferdaus Shuva, Senior Lecturer, Department of CSE of Daffodil International University.**

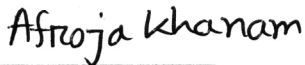
We also declare that neither this project nor any part of this project has been submitted elsewhere for award of any degree or diploma.

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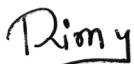


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We would like to thank and give best wishes to our entire course mate in Daffodil International University, who help us in every part of the discussion while completing the course work.

Finally, we must acknowledge with due respect for the infinite support and patients of our parents.

ABSTRACT

Our final project is a web based application for the students of utara campus of Daffodil International University. This system deals with the counseling system, blood bank, previous project information, library management system, virtual notice board and accounts information. This application has been developed considering student's benefits and requirement. By using this system not only the students will be benefited but also teachers will be benefited. By this application the students will be able to check and confirm their counseling appointment easily. This application will also increase the interest of donating blood to the users both faculty and students as there is a blood bank. Students will be able to easily communicate with their seniors and juniors whenever they need blood in emergency. By using this application, students can get all advantage of library management through online. Students can easily get all notifications of accounts section through this application. They don't need to check the email for accounts related information. This application includes six different beneficial features like "Counseling Management System", "Library Management System", "Blood Bank", "Virtual Notice Board", "Previous project list" and "Accounts Notification". This project trades with the salvation of information through an INTRANET based campus wide portal.

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CHAPTER 1

INTRODUCTION

Introduction:

Our final project title is "Helpline For Uttara Campus". This is a web based application. By this application students will be benefited most. Because in this application there are many beneficial and helpful feature are exist. In this application we put "Counseling times and guidelines", "Library Management System" ,"Previous Project List", "Blood Bank", "Notice Board", "Accounts Information". By using "Library management system", students can see the available books in library, can see the issued booklists which he/she borrowed from library, and also get a notification and message from librarian if needed. In admin panel, admin/librarian can add books information, can issue books for student, can message to students if needed. By using "Counseling Management System", students can check the Counseling times of faculty members and if the teacher is free then students can send an appointment request also. After sending the request from student, teacher can accept the request if he/she is free in that moment. If the teacher accepted the request, the student will get a notification. The students can also see the all accepted list of a particular teacher and also himself/herself. By using "Previous project List", student will see the all previous project list of DIU. By using "Blood Bank ", students can request for blood if they need and they can easily contact with the donors through this application. When user login our website and go to blood bank, they get notified if anyone request for blood. They can be a donor also by registered themselves. By using "Account Information", student can see all the accounts related information. Admin can post something, update, and can delete it also. By using "Notice board" students and teachers can post anything related to our campus, can comment also and get notification if someone post something.

1.2 Motivation

If we talk about the motivation, at first we should talk about our honorable supervisor Taslima Ferdaus Shuva. She encourage us for develop something new that can be beneficial for our campus. Then We decide that we develop an application for our campus. Because of our highly interest in Web development, we decide to develop our application based in web. Then we thought some unique ideas which is not implement yet. “Counseling Management System, Previous Project List, Account’s Notification”, are new idea’s which are not implemented yet. In other hand, we also include ”Notice Board, Blood Bank and Library Management System”, in point of view that if students will get more facilities in one application at a time, it will be more beneficial and more preferable. From our point of view this application will be very helpful, easy to use and user friendly. This application is not only helpful for students of our campus but also for teachers and account’s section.

Our main Motivation Comes from the fact that, we just want to do something new for our campus which will be beneficial and more preferable.

1.3 Objectives

The object of this project is :-

Students can easily help each other by donating blood and easily contact when needed blood in emergency

Students can get all facilities of a library, sitting at home through this application

Students can check the available books, borrowed books, delay fines and returned date also.

Students can check faculty members counseling times and send requests sitting at home

By this application students can confirmed their counseling appointment sitting at home

New students can easily find the previous final project list of our university through this application

New students can understand what kinds of projects are accepted by our faculty and authority

The communication between students and teachers will be more interactive using Notice Board

Students don't have to check email for accounts related information

Students can get easily Accounts related information through this application

1.4 Expected Result

There are many new and efficient features we added in our proposed system so that we can achieve the following expected outcomes:-

- Increase interaction among students
- Increase interaction between students and teachers
- Increase student interest and engagement in counseling times
- Increase student relationship with library
- Decrease student's problems
- Improve student's performance

1.5 Report Scheme

1.5.1 System Analysis and Design

Systems analysis and design is a methodical process which includes stages like planning, exploration, design, expansion, and maintenance. In this stage, the structure of software, design, and developing process of the system and its new and unique features are defined. In period of the SQL server technology, the amount of a layer for the tectonics, structural sketch and design of database etc are defined at this stage. The most used, demotic and necessary system analysis and design life cycle models are given below :

- Waterfall model
- Spiral model V-model
- Agile model
- Iterative model

System analysis and design is very important because this is a cycle of development. When any software will be designed, obviously at first it needs analysis and in last stage of implementation, the software needs to fulfill its requirements.[2]

1.5.2 Development Analysis and Implementation

In this phase, we worked for the design of our application by using some programming languages. The programs are written in the platform of Notepad++. We use different kinds of languages in our application for better development of our software such as PHP, JavaScript, html, CSS. We use frameworks for our software designs such as Bootstrap, jQuery.

1.5.3 Testing Process

After completing the application, it needs to go through a testing process. It is very important stage for all software applications. In this testing process, we can easily explore all errors. Different kind of testing method is available for testing a software or application. Some institute is created their own testing instruments for better perform their testing process.[3]

Some types of testing process are given below:-

- Unit testing

- Functional testing

- Performance testing

- Interface testing

1.5.3 Maintenance

Maintenance is a very important part for a software development process. In this phase, we ensure that we will check regularly of our website for solve issues and mistakes and keep it updated and pertinent. If an application can't manage properly, the efficiency of the software will be decreased day by day. For that maintenance is a very important.

CHAPTER 2

BACKGROUND ANALYSIS

2.1 Introduction

Three languages of the front end are wildly popular – HTML used for markup webpage, CSS used for portrayal the webpage, and JavaScript for Script the web page. The back end is different from front end. We can run any content which we wish to on our server.

In this project “Helpline For Uttara Campus”, we used PHP very popular language as our backend language. We also used XAMPP server as a local host for using mysqli database. For accessing a database in PHP language in font end, we mainly use mysqli database for back end development.

2.2 Related works

2.2.1studentportal.diu.edu.bd: In this web application students or admin can login into the web application using their email and password. Students can see their dashboard, profile, payment ledger, payment scheme, smart card, registered course, live result, transcript certificate and convocation, laptop details, routine, result. They can also update their profile, fulfill their teaching evaluation for every course and can drop semester. [1]

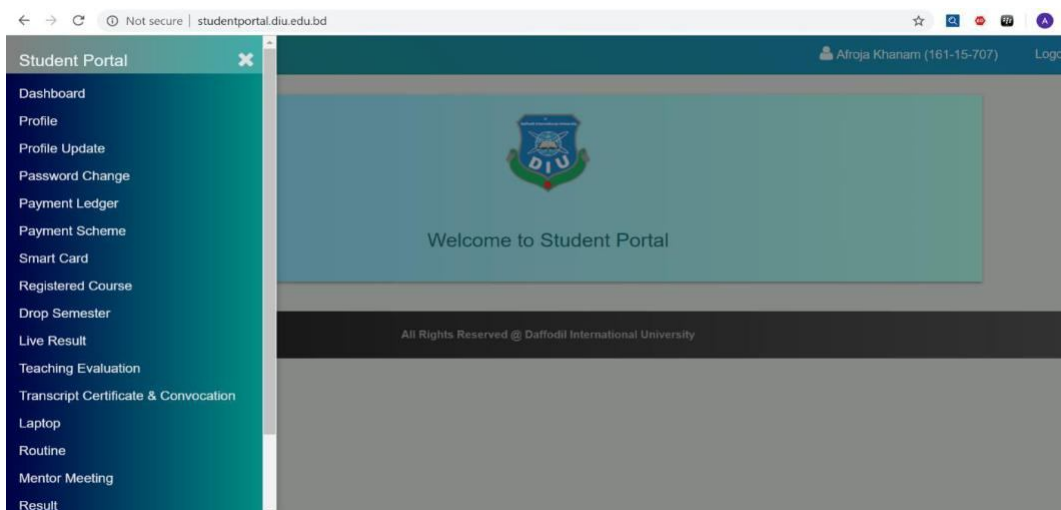


Figure 2.1: Front view of student portal.

2.2.2Victory university web application: This web application is a little related to our project. In this web application, there is a list of current student. Have section for staff researchers and alumni. Have a section for library and research lists. Student, faculty or admin can access this application by login into this system.[7]

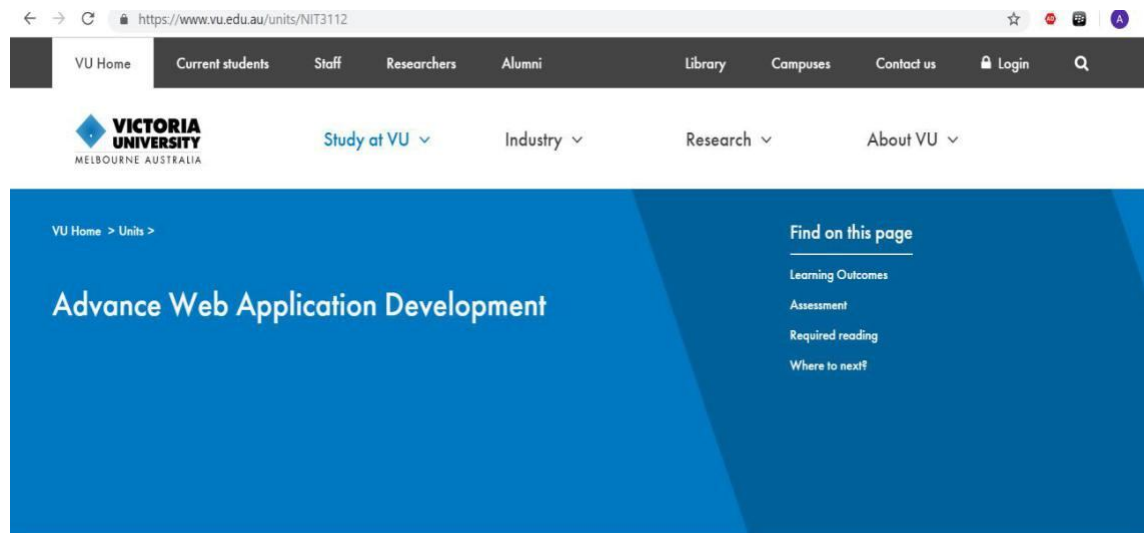


Figure 2.2: Front view of victory university web application.

2.3 Challenges of This Project

There are a lot of challenges in our project. Main challenge of our project is ensure security. Other challenges are given below:

- Performance should be maintain

 - User interface design should be proper

 - Accurate Data must be maintain

 - Database connection and data passing should be

 - ensure Authorization must be maintain

- Responsiveness must be maintain

- Proper communication should be ensured

2.4 Features and Explanation

User Registration: In this application 4 type of user module such as students, faculty, account officer and admin. Admin can control the whole system. To use this system user needs register first.

Login: In this system three login panel are exist where user can login with their e-mail and password.

Notice Board: In this section user can post notices and other user get notification and can comment on someone's post and can delete their own post

Account Information: Here accountant can update his password, can post something, update and delete their own post and student get notification for that post

Previous Project Lists: Here user can find all previous project information and this information are categorize with some features. In project lists, user can see project number, title, category, department and email address of project owners

Blood Bank:

Camps: Here user can see the upcoming camps name, address, city, time and date.

Request donor: Here user can request himself/herself to be a donor.

Donor details: Here user can see the donor name, email, mobile number, address, city and blood group

Send blood request: Here user need to fill up a form to send blood request.

View blood Request: Here user can see blood request. Name of requested person, city, blood group, hospital name, mobile number and units of blood. It last till 5 days.

Notification: If someone send blood request, one can get notification

Library Management System :

Signup: User needs to register first for login the system.

Login: User needs to login for enter the system.

Librarian Panel: Here librarian can add books, remove books, issue books, can see available books detail, can see student delay fines, send messages to student.

Student panel: Here student can see the all books detail, available books, issued books and return books and delay fines of themselves and get notification and message by librarian.

Counseling Management System :

Signup: User needs to register first for login the system.

Login: User needs to login for enter the system.

Admin Panel: Here admin can add counseling times, remove counseling times, can see student request, can accept student request.

Student panel: Here student can see the all counseling times, can send request for counseling appointment, can see accepted list also.

CHAPTER 3

REQUIREMENT SPECIFICATION

3.1 Application Process Modeling

Application process modeling represents the entire systems working procedure. This process can represent the whole conception of a process. Before developing a process, we have to ensure the requirement and application process. For this we have to analysis the whole process with proper diagram. We establish many diagram for ensure our requirements like use case diagram, context diagram, block diagram and E-R diagram.

3.2 Requirement Analysis

Software requirements:

Admin panel, Librarian panel, Accountant panel, Student panel

Time convenience

User friendly nature

Responsiveness

Easily accessible for any device

Login System for Admin, Librarian, Accountant, Student

Admin can directly login this system but students can login after their registration. If a user uses his/her username, email and password, then an user can access the functions which is established for him/her.

3.2.1 Hardware and Software Requirements for this system

Hardware Requirements for this system:

Server Configuration: Minimum storage 1.5GB, Bandwidth which are needed.

Ram: 3GB

Laptop, Desktop or all kinds of Smart Phone

Software Requirements for this system:

Operating system like Windows/Linux

Language: PHP

Database: XAMPP, MySQLi Database

Chrome and Other browsers

Communication Requirements for this system:

Email, internet, browser, electronic devices can be given for communication. For this particular situation, we can utilize similar models, like FTP or HTTP to give security utilizing encryption and calculations.

3.3 Design and Model Requirements

This system will make its obligation unique with the help of its design requirements. If we want to get actual output in a short time we have to designed database carefully and in an ornamental way. There are different types of user panel (Admin, Librarian, Accounts and Student). All data requirements are arranged in a particular form. We have different Sections for data storage so that the information can be organized in an ornamental way. From this kind of information our campus will be benefited easily from this application.

CHAPTER 4

SYSTEM DESIGN

4.1 Use Case Modeling

Use case model can represent different types of users and their activities into a system. This models are indicates the activities of admin, librarian, Accountants and Student.

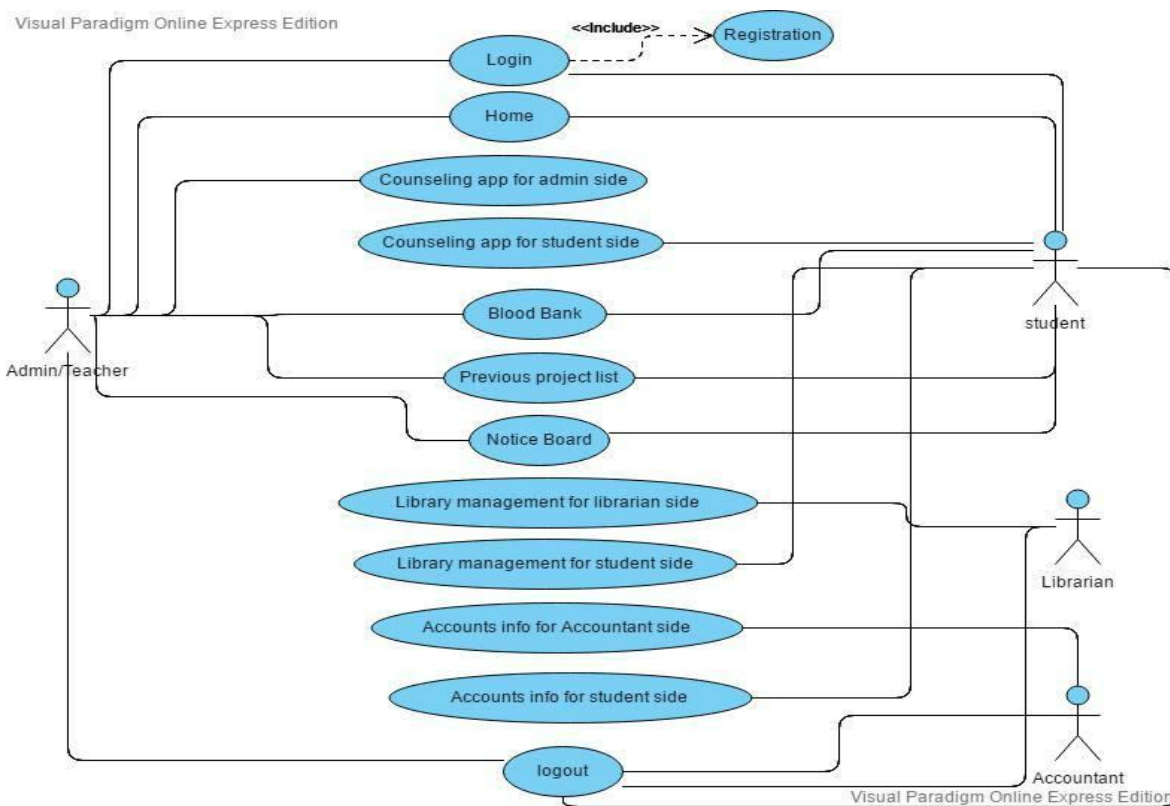


Figure 4.1.1: Use case model of the complete view of this project.

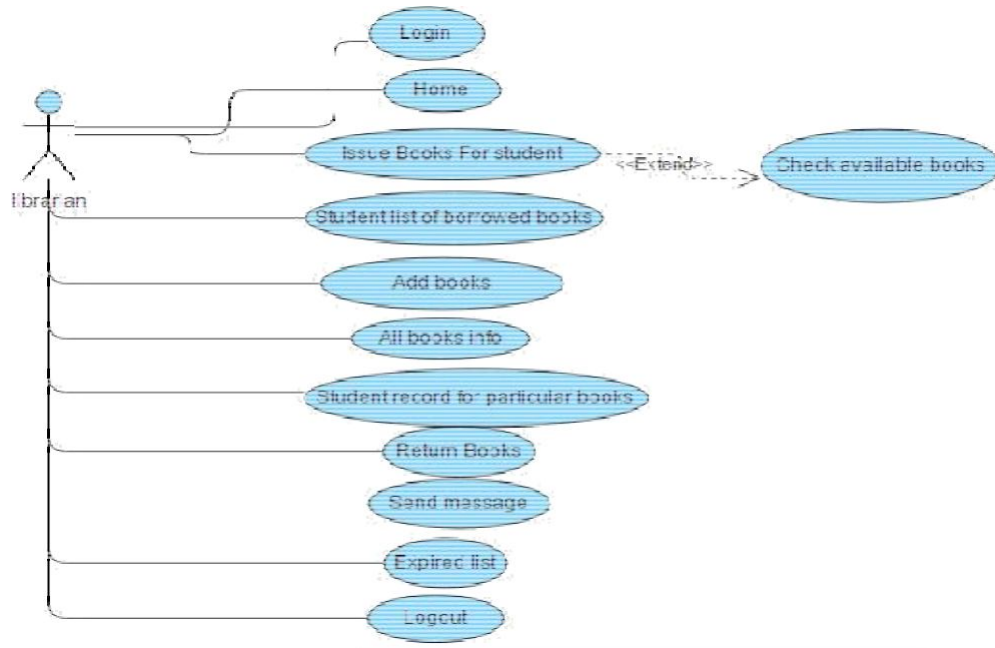


Figure 4.1.2: Use case model of Library management system (librarian side).

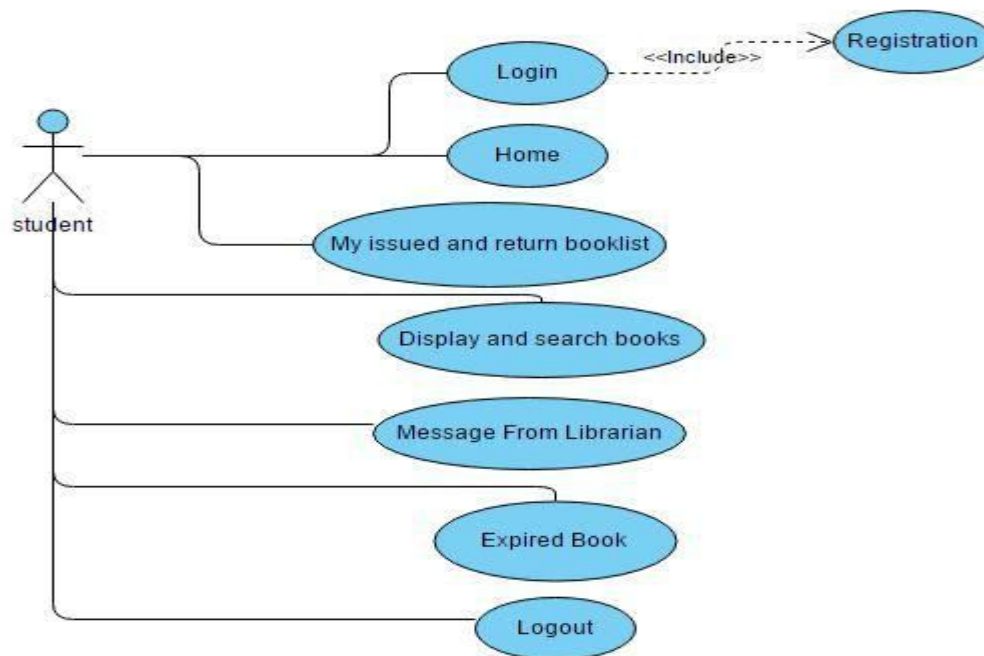


Figure 4.1.3: Use case model of Library management system (student side).

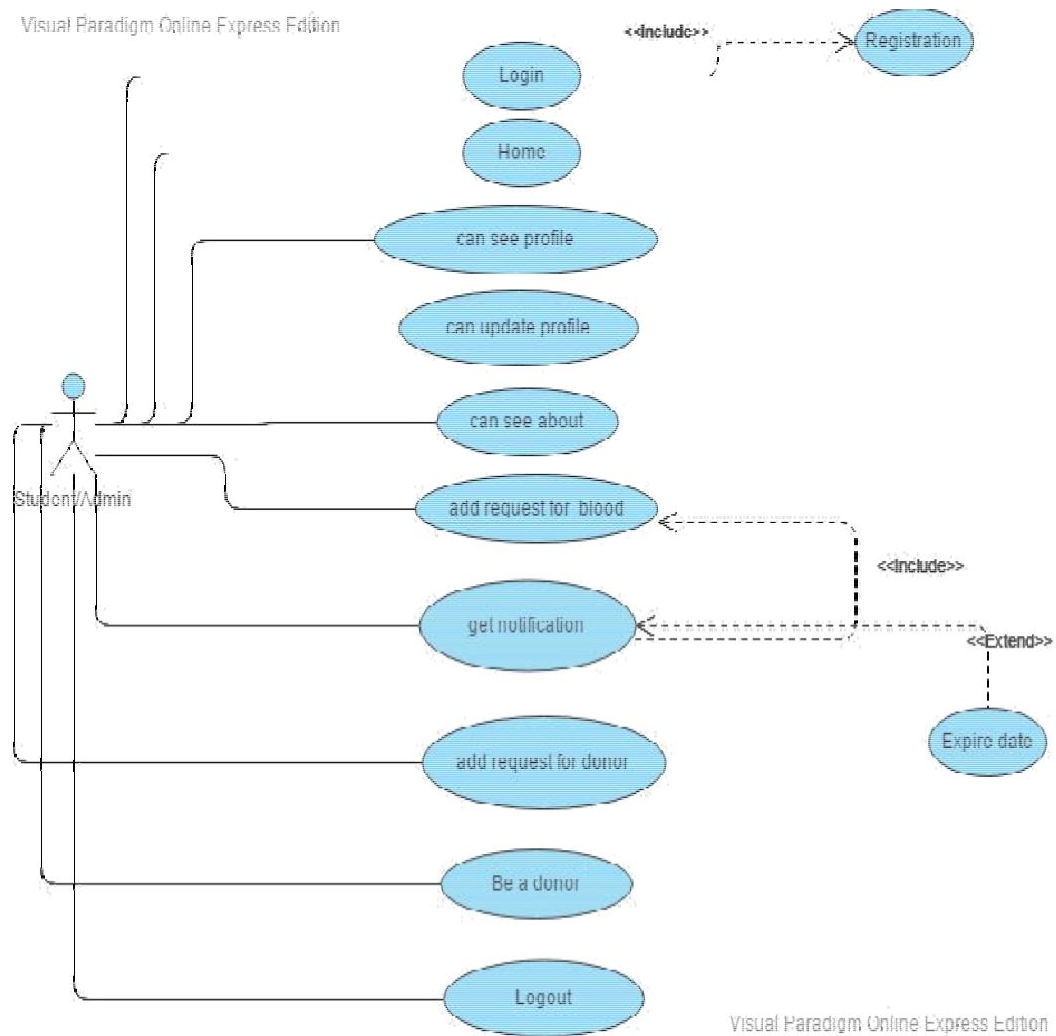


Figure 4.1.4: Use case model of Blood Bank.

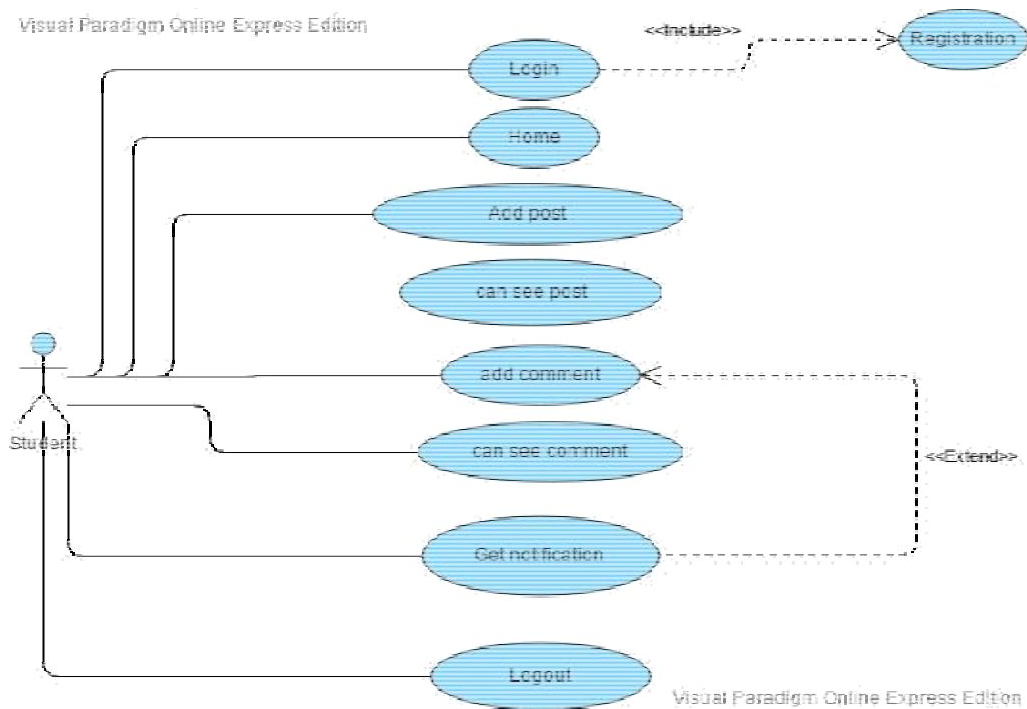


Figure 4.1.5: Use case model of Notice Board.

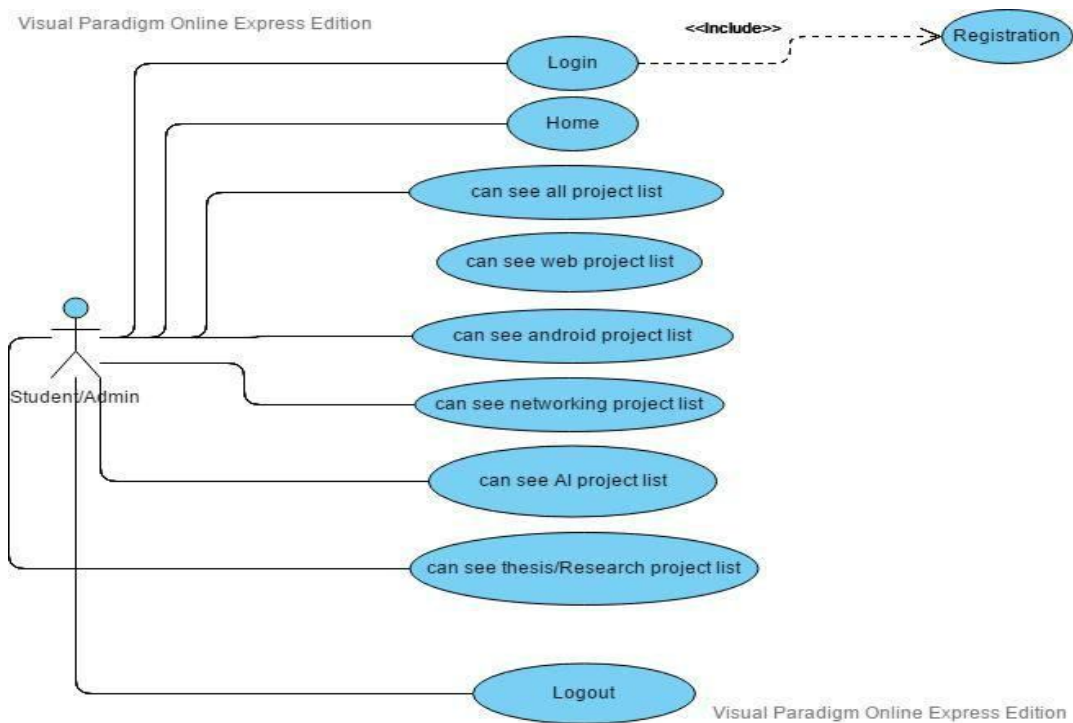


Figure 4.1.6: Use case model of Previous project List.

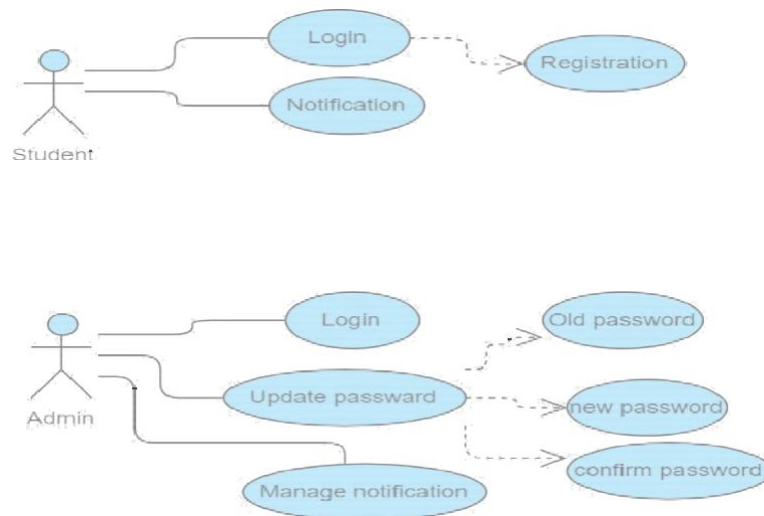


Figure 4.1.7: Use case model of Accounts Information (both student and admin side).

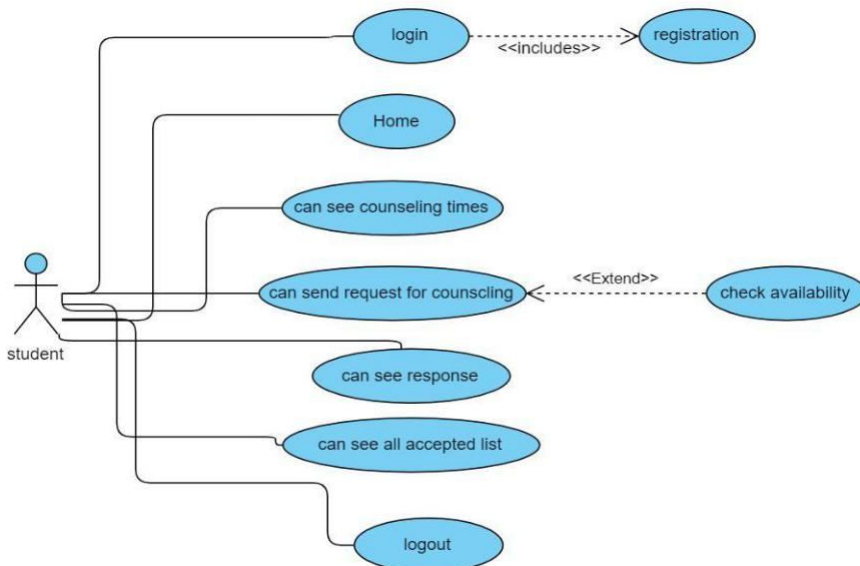


Figure 4.1.8: Use case model of Counseling Management system (student side).

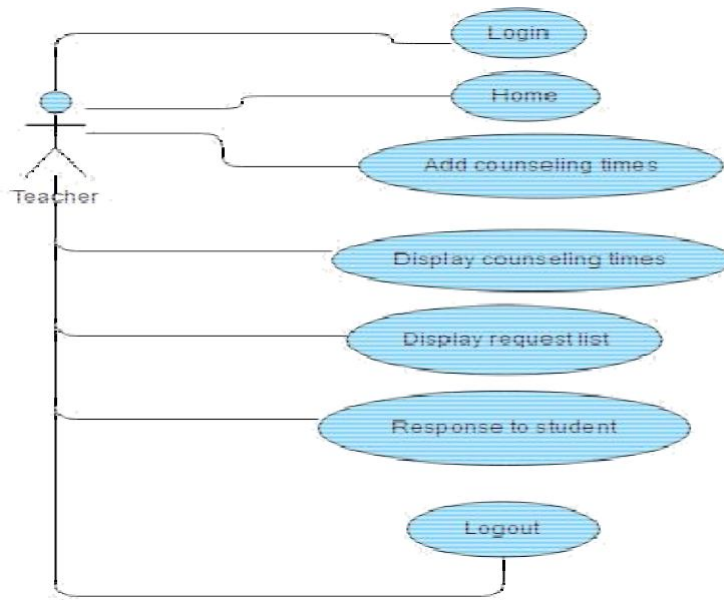


Figure 4.1.9: Use case model of Counseling Management system (teacher side).

4.2 System Context Diagram

This following model which is a context diagram is represents the process of our system step by step. The diagram of this system is given below:



Figure 4.2.1: Context diagram of entire system

4.3 E-R diagram

E-R diagram means entity relationship diagram which can describe our whole system in a structural way. In our system there are five database for “Counseling Management System “, “Library Management System”, “Notice Board”, “Blood Bank” and “Accounts Information”. The E-R diagrams of this system are given below:

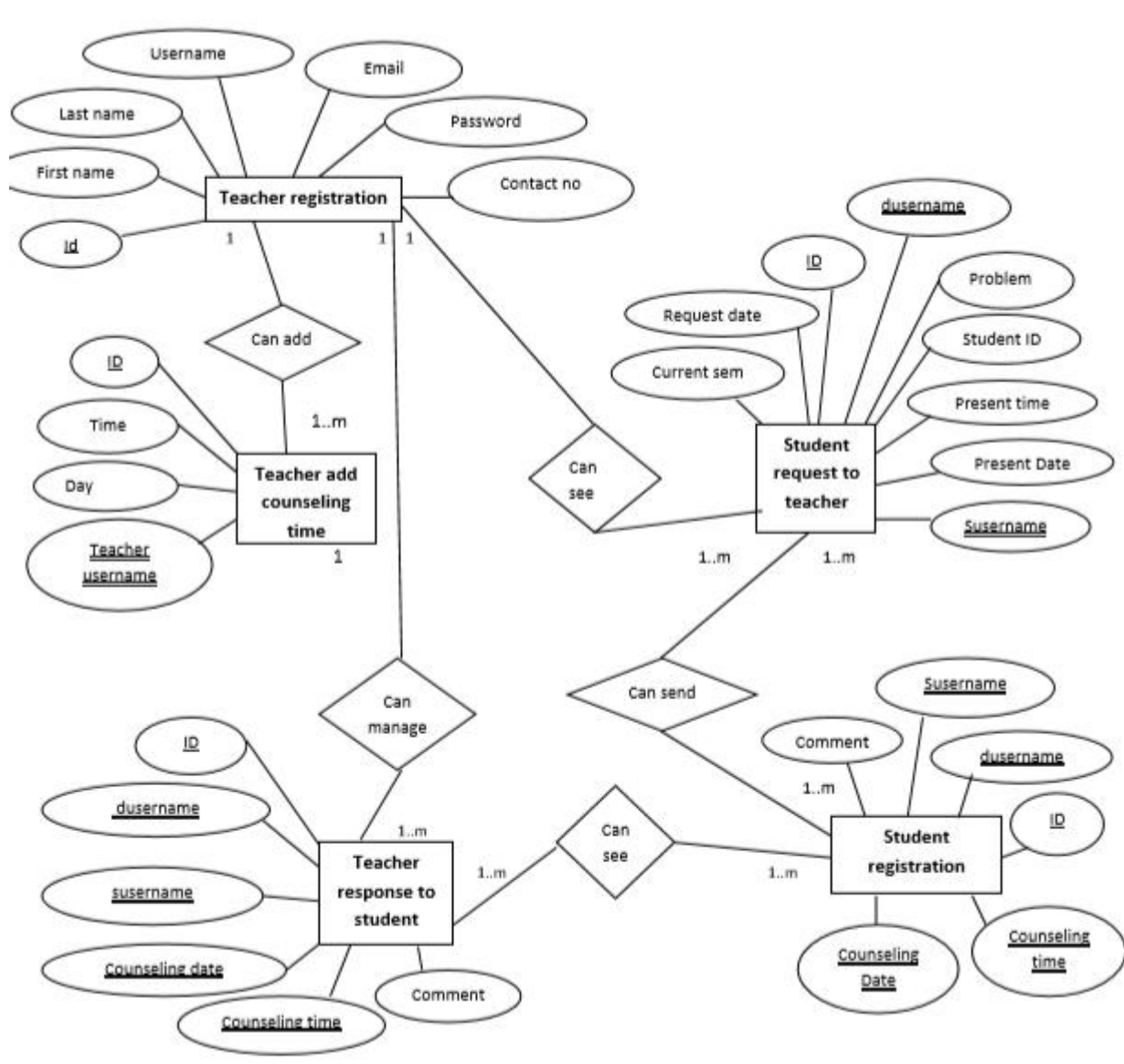


Figure 4.3.1: E-R diagram of Counseling Management System.

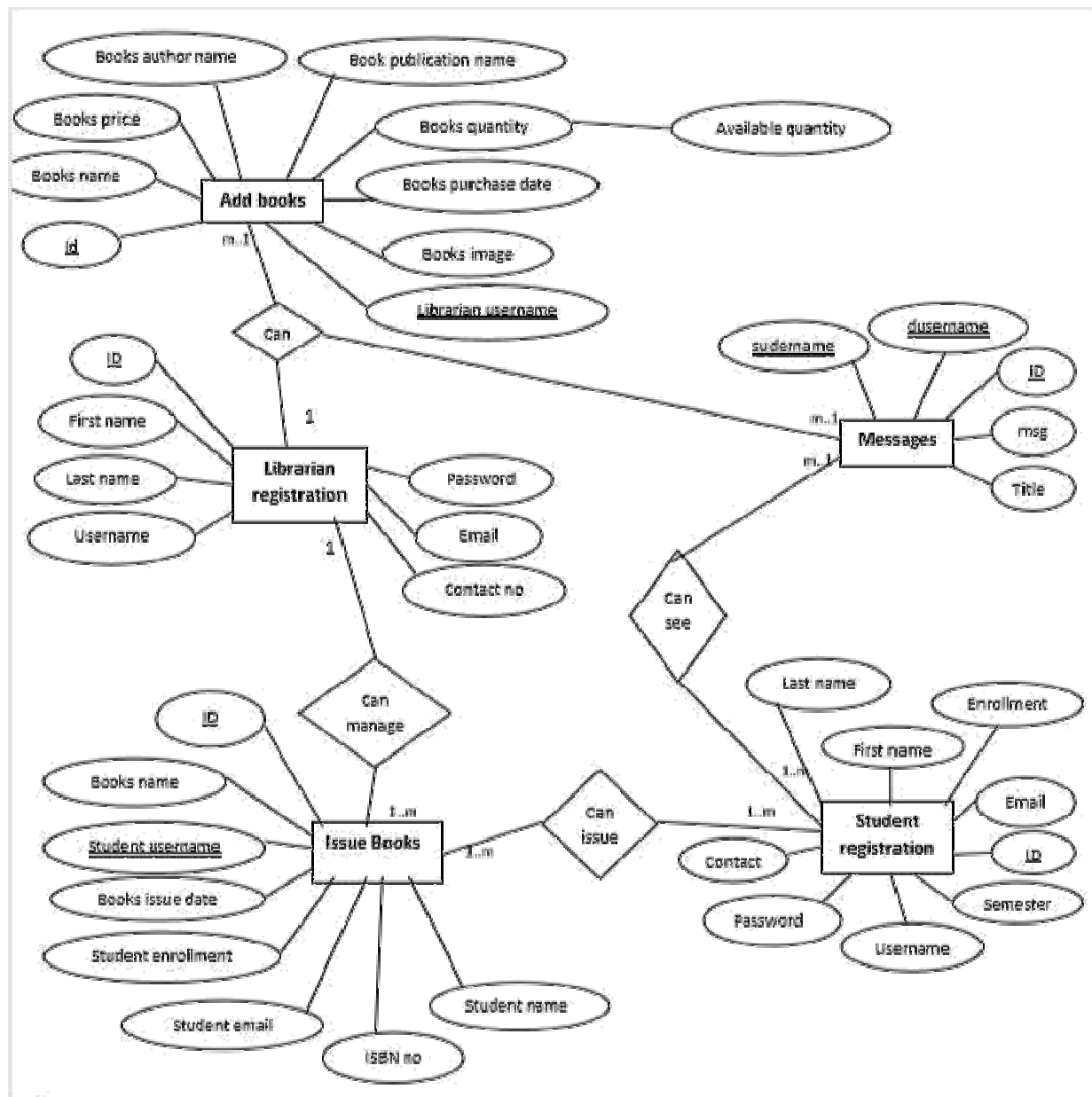


Figure 4.3.2: E-R diagram of Library Management System.



Figure 4.3.3: E-R diagram of Notice Board.

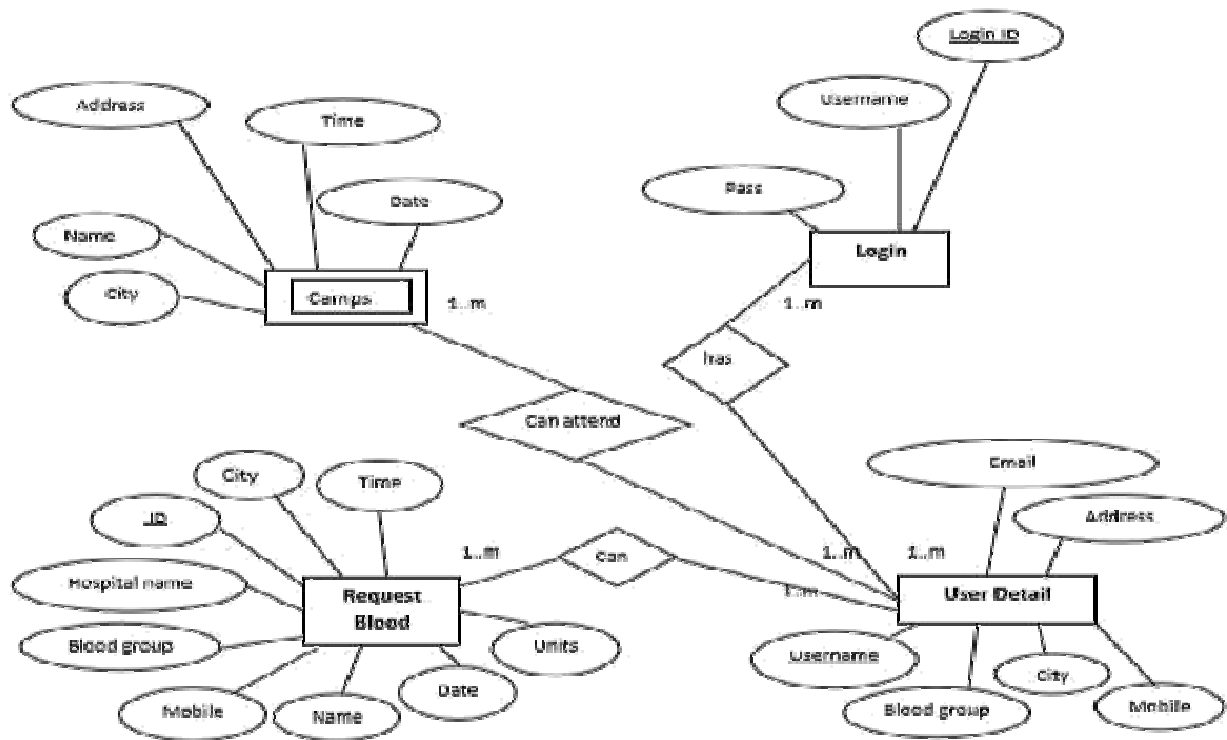


Figure 4.3.4: E-R diagram of Blood Bank.

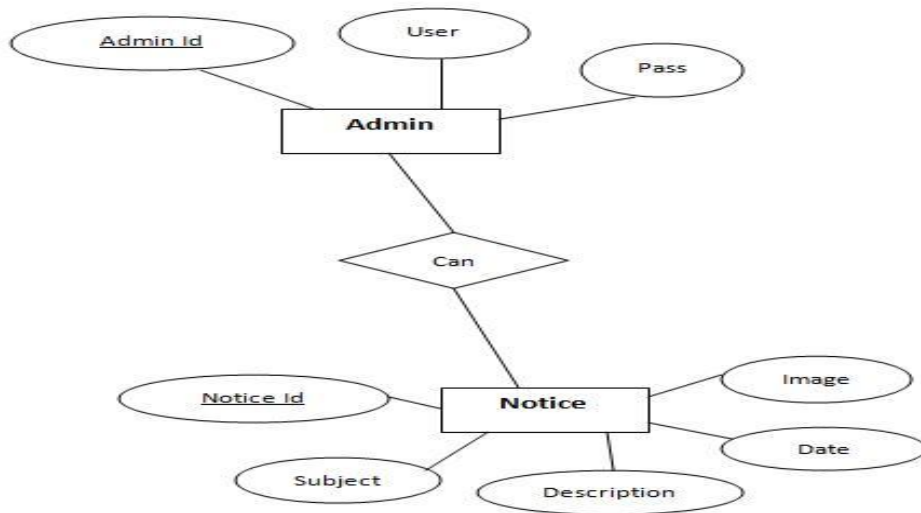


Figure 4.3.5: E-R diagram of Accounts Information.

CHAPTER 5

DESIGN SPECIFICATION

5.1 Front-End Design:

Front-end design is a very important part of a website that created by the special language like HTML, CSS, and presentational JavaScript. It makes up the user interface very appropriately. The measurement of Performance is measured by concerned with the remuneration time, proper use of HTML, CSS, and JavaScript. It ensures that this site opens up fast. The front ends developer keeps some points on their mind that utilizing available tools and techniques to attain the goals. There are several tools and platforms like Notepad++, Atom that can be used to develop the front end design, and understanding which tools are suitable for specific task which marks the difference between developing a hacked site or scalable site. We used different languages like HTML, CSS, JavaScript and Bootstrap to implement our project.

HTML: The Meaning of HTML is Hyper Text Markup Language. The backbone of any website development process is HTML, without it a web page doesn't exist. The meaning of Hypertext is that text will link, ranked hyperlinks and embedded on it. When any user clicks on a site that has a hypertext, it will fetch another web page appropriately. A markup language indicates and considers that text can be converted into images, tables, links, and other representations. It is the proper way of html code that provides an overall framework of how the site will be looked.

CSS: The Meaning of CSS is Cascading Style Sheets. The presentation view of a site to have its own unique look, CSS can control it perfectly. CSS done this work by maintaining style sheets which placed on top of other style rules and are triggered based on other inputs. It will be depend on such as device screen size and resolution. The using of CSS are three types which are inside head tag, inside body tag and external style sheet.

JavaScript: JavaScript is a programming language which is event-based that can be used to transform a static HTML page into a dynamic page. The uses of JavaScript code are the Document Object Model (DOM), which is provide by HTML, that manipulates a web page in a way that response to events, like user input. We used many techniques called AJAX, it can be

also actively recuperates content from the web by JavaScript code and also made react on server side events as well as, by adding a true dynamic behavior to web page experience.

Bootstrap: Bootstrap is a special type of framework that helps to design websites faster and easier. We can also make our website responsive using Bootstrap. It can allow HTML and CSS based design for typography, forms, buttons, tables, navigation, carousels slider, etc. It also give support to a website for JavaScript plugins. When we want to Create a page layouts, we needs a good grid. Bootstrap has this benefit that it provides one of the best responsive, grid systems. It's really easy to use and if we need to work through columns, then we're in right place.

Ongoing/ Upcoming Camps

Name Of Camp	Address	City	Time	Date
DIU	Sector:6 Road:1 Uttara	Dhaka	2:00 pm	7-8-2019

Figure 5.1.1: Camps page of Blood Bank

[HOME](#) [CAMPS](#) [PROFILE](#) [NOTIFICATION \(1 \)](#) [ABOUT](#)

Donate Blood Save a Life

Blood is universally recognized as the most precious elements that sustain life. It saves innumerable lives across the world in a variety of condition. The need of blood is great- on any given day, approximately 39,000 units of Red blood cells are needed. More than 29 million units of blood component are transfused every year. Donate Blood Despite the increase in the number of donors, blood remains in short supply during emergencies, mainly attributed to lack of information and accessibility. We positively believe this tool can overcome most of these challenges by effectively connecting the blood donors with blood recipients.

The need of blood

Blood is composed of the following living cells which support and maintain our body tissues:Red blood cells,which are filled with hemoglobin and carry oxygen from our lungs to the rest of our bodies.White cells,which defend against infection.Platelets,which helps blood to clot when injuries occurs.

Blood Tips

Additional tips for the day of your donation:
Drink an extra 16 oz. of water (or other nonalcoholic drink) before your appointment.
Eat a healthy meal, avoiding fatty foods like hamburgers, fries or ice cream.
Wear a shirt with sleeves that you can roll up above your elbows

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Figure 5.1.2: About page of Blood Bank

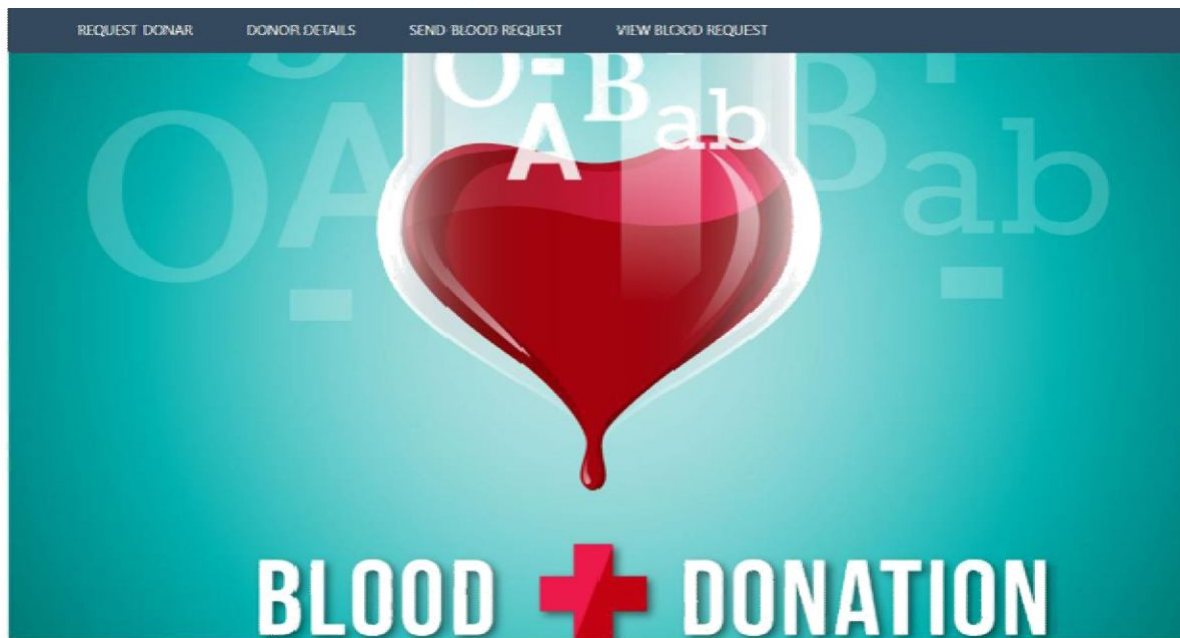


Figure 5.1.3: Profile page of Blood Bank

Blood Request

Name

Blood Group

Mobile

City

Hospital

Units

Figure 5.1.4: Request Blood page of Blood Bank.

Donar Lists					
<i>User name</i>	<i>Email</i>	<i>Mobile Number</i>	<i>Address</i>	<i>City</i>	<i>Blood Group</i>
Afroja Khanam	afroja15-707@diu.edu.bd	01928181429	gazipur	Dhaka	O+ve
rumka	urnik006@gmail.com	01981223424	gazipur	Dhaka	O+ve
urni	urnik006@gmail.com	01981223424	gazipur	Dhaka	O+ve

Figure 5.1.5: Donor List page of Blood Bank.

Blood Request Lists					
<i>Name</i>	<i>City</i>	<i>Blood Group</i>	<i>Hospital</i>	<i>Mobile Number</i>	<i>Units</i>
Afroja Khanam	Dhaka	O+ve	uttara hospital	01928181429	1

Figure 5.1.6: Blood Request page of Blood Bank.

Donor Registration

Name:

Email:

Mobile Number:

Address:

City:

Blood Group:

Figure 5.1.7: Donor Registration page of Blood Bank.

Library Management System

User Registration Form

FirstName
LastName
Username
Password
email
contact
SEM
Enrollment No

Register

Figure 5.2.1: User Registration page of Library Management system.

Library Management System

User Login Form

asha
....

Login Here Signup Here

Figure 4.2.2: User Login page of Library Management system.

Library Management System

All Books Information



Book Name: Mathematics For Computer Science
Available Books: 12



Book Name: Art Of Living
Available Books: 17





Figure 5.2.3: Display and search Books page of Library Management system(student panel).[5] .

Welcome To Library Management System

History Of My Issued And Returned Books(Here all previous records are also included)

student Name	Books Name	Books Issued Date	Books Return Date
Asha Akter	C programming and problem solving	18-10-19	
Asha Akter	Art Of Living	10-10-19	
rimy	Art Of Living	20-10-19	28-10-2019

Figure 5.2.4: My issued and returned booklist page of Library Management system(student panel).

Library Management System		
Messages from librarian		
Name of Librarian	Title	Message
asha akter	hello	please return the book on time.
asha akter	hgyftf	uguyfthfy

Figure 5.2.5: Messages from librarian page of Library Management system(student panel).[5]

Library Management System				
Expired List With Fine				
Student Username	Book Name	Book issue date	Time Delay(day)	Fine(taka)
rimy	C programming and problem solving	18-10-19	25	250
rimy	Art Of Living	10-10-19	33	330
Library Management System				

Figure 5.2.6: Expired Book page of Library Management system(student panel).

Library Management System

Librarian Login Form

Enter username....

Enter Password....

[Login Here](#) [Signup Here](#)

Figure 5.2.7: Librarian Login page of Library Management system(librarian panel).

[Choose File](#) No file chosen

Books Name:
Books Name

Books Author Name:
Books Author Name

Books Publication Name:
Books Publication Name

Books Purchase Date:
Books Purchase Date

Books Price:
Books Price

Books Quantity:
Books Quantity

Available Quantity:
Available Quantity

[Insert books details](#)

Figure 5.2.8: Add books page of Library Management system(librarian panel).[5]

Welcome To
Library Management System

Display Books Detail

Please Enter books Name ...

Search Book

Image	Name	Author Name	Publication Name	Purchase Date	Books Price	Quantity	Available Books	Delete Books
	Mathematics For Computer Science	HJ Hudak	Hudak publication	01-09-2017	4\$	15	12	Delete Book
	Art Of Living	Norman Vincent Peale	Peale publication	09-09-2009	3\$	20	17	Delete Book
	Database Management System	Raghu Ramkrishnan	Johanesa Gretke	01-09-2017	6\$	17	16	Delete Book

Figure 5.2.9: All Books info page of Library Management system(librarian panel).[5]

Library Management System

Issue Books For Students

Enter StudentID:

Enter Student ID..... Search

Student Name:

Enter Student Name...

ISBN Number of Book:

Enter ISBN Number...

Student Email:

Enter Student Email...

Select Book:

Mathematics For Computer Science

Books Issue Date:

19-11-19

Issue books

Figure 5.2.10: Issue Books for student page of Library Management system(librarian panel).

Library Management System

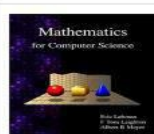
Student List Of Borrowed Books

Student ID	Student Name	ISBN Number of Books	Student Email	Student Username	Book Name	Issue Date	Books Return Date
161-15-684	Asha Akter	8738642736	asha@gmail.com	rimy	C programming and problem solving	18-10-19	
161	yang	6454635	yang@gmail.com	yang	Mathematics For Computer Science	18-10-19	
161-15-684	Asha Akter	47376573	asha@gmail.com	rimy	Art Of Living	10-10-19	
161-15-684	rimy	7673357	fti	rimy	Art Of Living	20-10-19	28-10-2019

Figure 5.2.11: Student list of Borrowed books page of Library Management system(librarian panel).

Library Management System

Student list who issued books

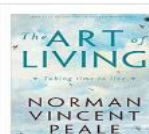


Book Name: Mathematics For Computer Science

Total Books: 15

Available Books: 12

Click here for: [Student Issued List For This Book](#)



Book Name: Art Of Living

Total Books: 20

Available Books: 17

Click here for: [Student Issued List For This Book](#)



Book Name: Database Management System

Total Books: 17



Book Name: Java Seventh Edition

Total Books: 25

Activate V
Go to Setting

Figure 5.2.12: Student record for particular books page of Library Management system(librarian panel).[5]

Library Management System

Return Books

Enter Student ID:

student ID	student name	Books name	ISBN Number of Books	Return books
161-15-684	Asha Akter	C programming and problem solving	8738542736	Return Book
161-15-684	Asha Akter	Art Of Living	47376573	Return Book

Figure 5.2.13: Return Book page of Library Management system(librarian panel).

Library Management System

Send message to Student

Select Student:

rimy(161-15-684)
▼

Enter Title:

Please Enter Title....

Enter Message:

Figure 5.2.14: Send Message page of Library Management system(librarian panel).[5]

Library Management System

Expired List With Fine

Student Username	Book Name	Book Issue date	Time Delay(day)	Fine(taka)
rimy	C programming and problem solving	18-10-19	25	250
yaag	Mathematics For Computer Science	18-10-19	25	250
rimy	Art Of Living	10-10-19	33	330

Library Management System

Figure 5.2.15: Expired List page of Library Management system (librarian panel).



Figure 5.3.1: Home page of previous project List.

All Projects List			
Daffodil International University(Uttara Campus)			
Project Number	Title	Category	Department
P-0001	Inventory and pawnshop management system	Web Application	CSE
P-0002	Virtual class management system	Web Application	CSE
P-0003	Development of a Kiosk for Blood Bank	Android Application	CSE

Figure 5.3.2: All project list page from previous project List.

Web Based Projects List			
Daffodil International University(Uttara Campus)			
Project Number	Title	Category	Department
P-0001	Inventory and pawnshop management system	blank	CSE
P-0002	Virtual class management system	Web Application	CSE
P-00010	Hospital management system	Web Application	CSE
P-00013	A dynamic web site for District-Wise Information System of Bangladesh	Web Application	CSE

Figure 5.3.3: Web based project list page from Previous project List.

Android Based Projects List			
Daffodil International University(Uttara Campus)			
Project Number	Title	Category	Department
P-0003	Development of a Kiosk for Blood Bank	Android Application	CSE
P-0006	Online student accommodation information system	Android Application	CSE
P-0007	Online reading and examination system for BCS	Android Application	CSE
P-00012	Inventory and sales management system using mobile	Android Application	CSE

Figure 5.3.4: Android based project list page from previous project List.

AI Based Project Lists			
Daffodil International University(Uttara Campus)			
Project Number	Title	Category	Department
P-00016	Development of morphological component for machine translation dictionary of bengali and english language	AI Based	CSE
P-00034	A new technique of Hospital management system using natural language processing	AI Based	CSE
P-00047	Automation of car heal	AI Based	CSE
P-00090	Intelligent computer accessories sales and management system	AI Based	CSE
P-00095	An improved approach to boost	AI Based	CSE

Figure 5.3.5: AI based project list page from previous project List.

Networking Projects List			
Daffodil International University(Uttara Campus)			
Project Number	Title	Category	Department
P-0004	Cell design and frequency planning of a universal mobile telephone system (UMTS) for Dhaka	Networking	CSE
P-0005	A review on routing protocols for wireless sensor	Networking	CSE
P-0009	A distributed algorithm for maintaining a ring structure	Networking	CSE
P-00011	Designing a mobility based video telephony in mobile	Networking	CSE
P-00026	A review of time synchronization protocols in wireless sensor networks	Networking	CSE

Figure 5.3.6: Networking project list page from previous project List.

Research/thesis Lists			
Daffodil International University(Uttara Campus)			
Project Number	Title	Category	Department
P-0008	A comprehensive study on wide area network at Dhaka	thesis/Research	CSE
P-00015	A comparative study and analysis of different routing protocols and implementation in the context of Modern Network Design	thesis/Research	CSE
P-00028	Problems and prospects of SME development in Bangladesh	thesis/Research	CSE
P-00029	Design and simulation of an elevator system of a two storied building	thesis/Research	CSE
P-00030	An engineering view of business process as an area out using software system	thesis/Research	CSE

Figure 5.3.7:Research/thesis based project list page from previous project List.

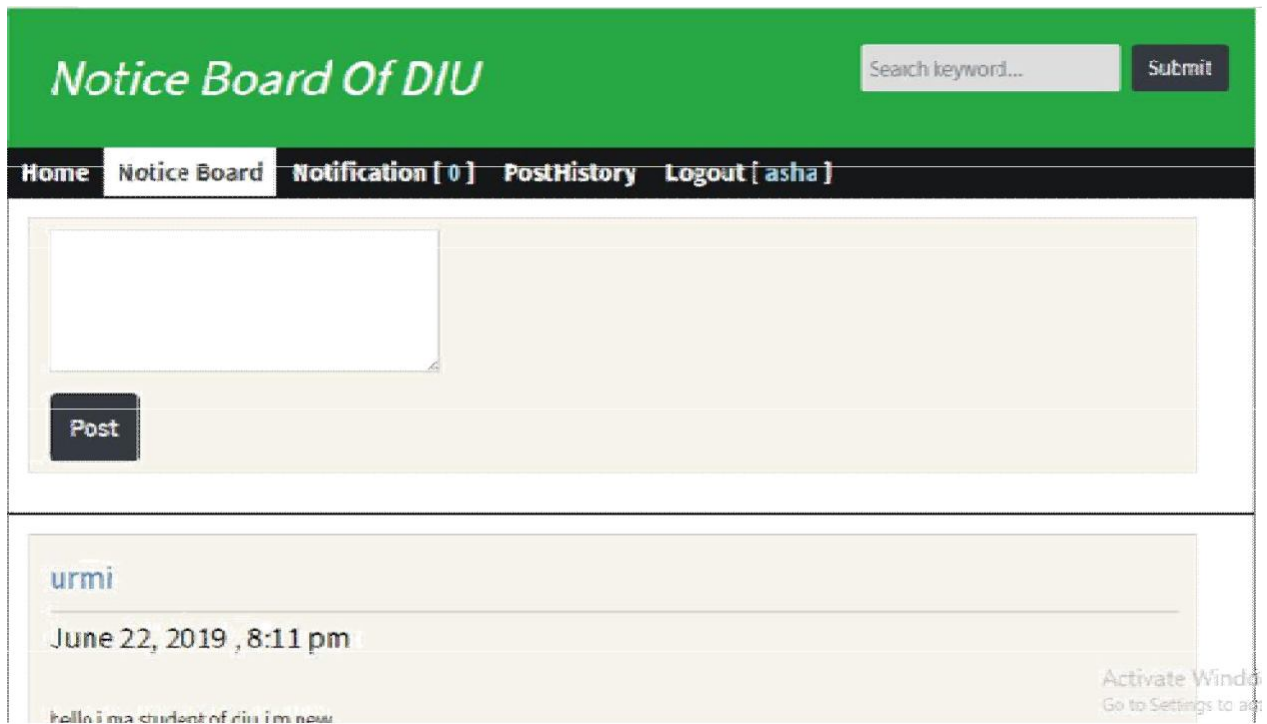


Figure 5.4.1: Home page of Notice board.[6]

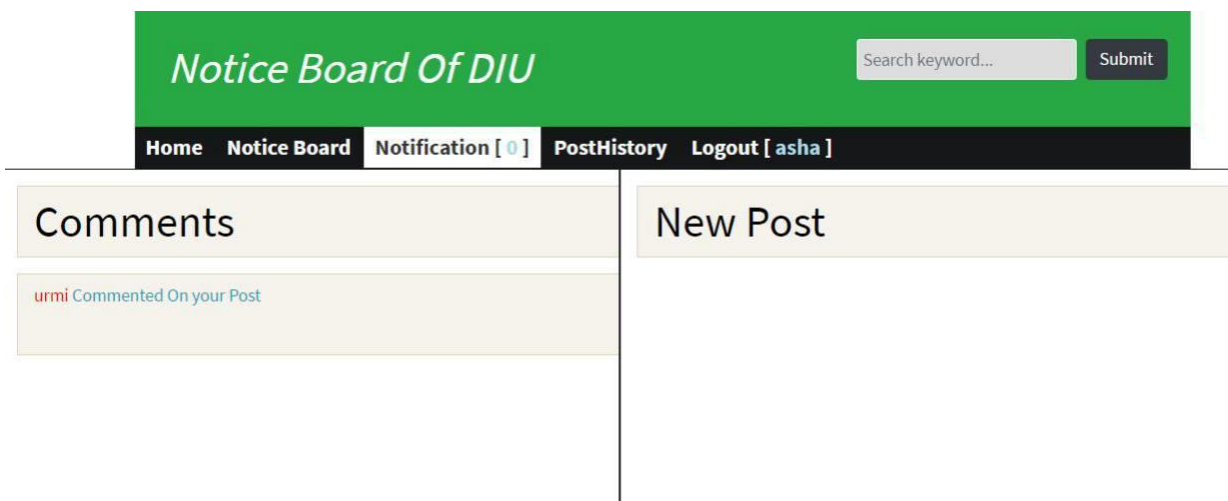


Figure 5.4.2: Notification page of Notice board.[6]

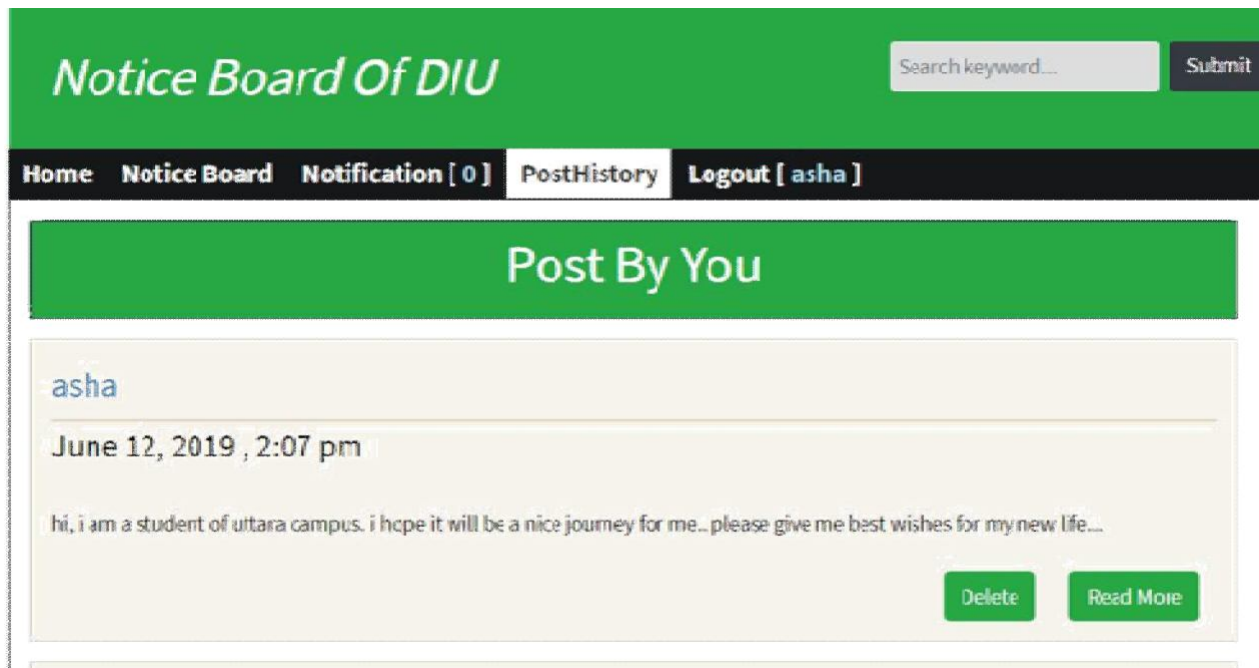


Figure 5.4.3: Post History page of Notice board. [6]

Home

Notification (0)

Admin

Notice

All Notice

Sr.No	Subject	Details	Date and Time
1	Followup	Show	2019-09-25 23:23:07
2	efjsdh	Show	2019-07-28 18:29:25

Figure 5.6.1: Notification page of Accounts information.



Figure 5.6.2: Show details page of Accounts information.

Please Sign In

Login

Figure 5.6.3: Admin login page of Accounts information.

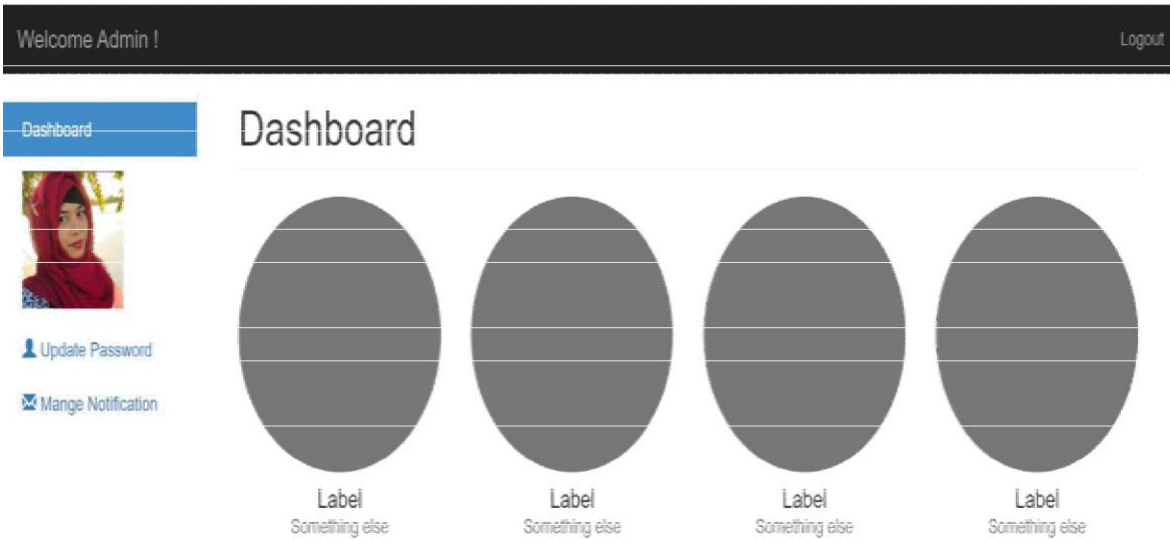


Figure 5.6.4: Admin home page of online account information.

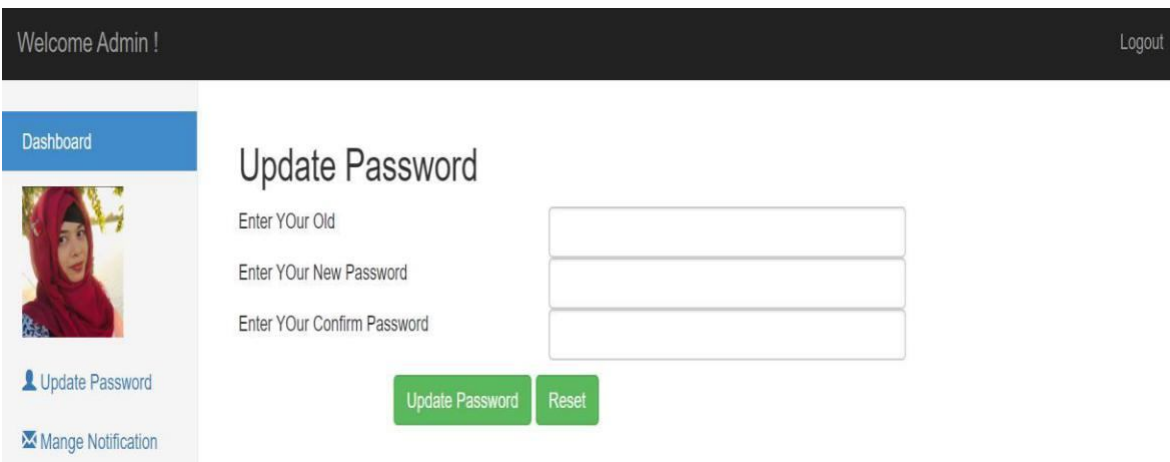


Figure 5.6.5: Admin update password page of online account information.

Welcome Admin !
Logout

Dashboard



Update Password
Mange Notification

All Notice

[Add New notice](#)

Sr.No	Subject	Details	Date	Delete	Update
1	hi	Show	2019-09-25 21:16:26		
2	hi	Show	2019-07-28 18:29:25		
3	hello	Show	2019-07-24 16:33:03		

Figure 5.6.6: Admin manage notification page of online account information.

Welcome Admin !
Logout

Dashboard



Update Password
Mange Notification

Add New Notice

Enter Subject

Upload image

Choose File
No file chosen

Enter Details

Add New Notice
Reset

Figure 5.6.7: Admin add new notice page of online account information.

5.2 Back-End Design

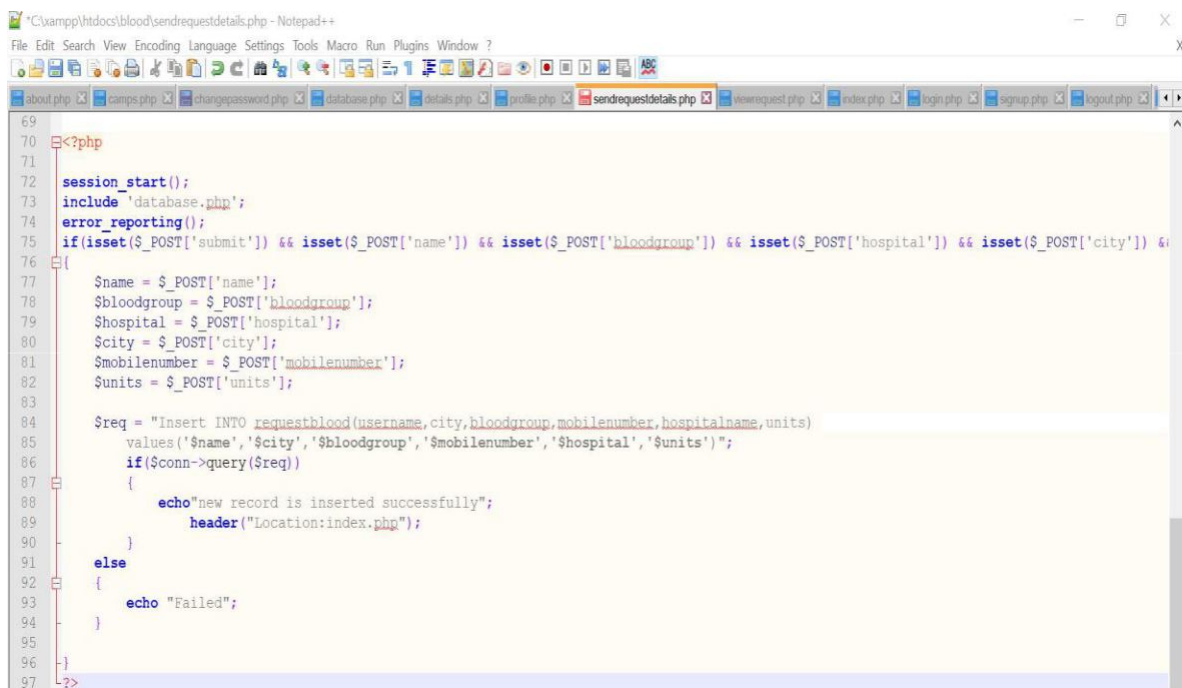
For the back-end design and development we used PHP. The meaning of PHP is Hypertext Preprocessor. PHP is a language of an open source, server-side, scripting language used for the development of web applications. The meaning of scripting language is, a program that is script-based and written for the automatic tasks. Mysqli database is one of extension of PHP. Its meaning is that having the main API options for connect the database and have power to use transactional supports etc.

PHP is used for the connection and passing data

PHP is used for the creation of the logical part

PHP is used for user verification and approval also

PHP is used for login, signup, logout, forms etc logical part



```
69
70 <?php
71
72 session_start();
73 include 'database.php';
74 error_reporting();
75 if(isset($_POST['submit']) && isset($_POST['name']) && isset($_POST['bloodgroup']) && isset($_POST['hospital']) && isset($_POST['city']) &&
76 {
77     $name = $_POST['name'];
78     $bloodgroup = $_POST['bloodgroup'];
79     $hospital = $_POST['hospital'];
80     $city = $_POST['city'];
81     $mobilenumber = $_POST['mobilenumber'];
82     $units = $_POST['units'];
83
84     $req = "Insert INTO requestblood(username,city,bloodgroup,mobilenumber,hospitalname,units)
85     values('$name','$city','$bloodgroup','$mobilenumber','$hospital','$units')";
86     if($conn->query($req))
87     {
88         echo "new record is inserted successfully";
89         header("Location:index.php");
90     }
91     else
92     {
93         echo "Failed";
94     }
95 }
96
97
```

Figure 5.7.1: Pattern of PHP code in this system.

4.3 Interaction Modeling and UX

Interaction design maintains some conditions. Only admin can directly operate and communicate with database. Admin have some special power compared to user. By fill up many kinds of form or registration, data will be stored into database.

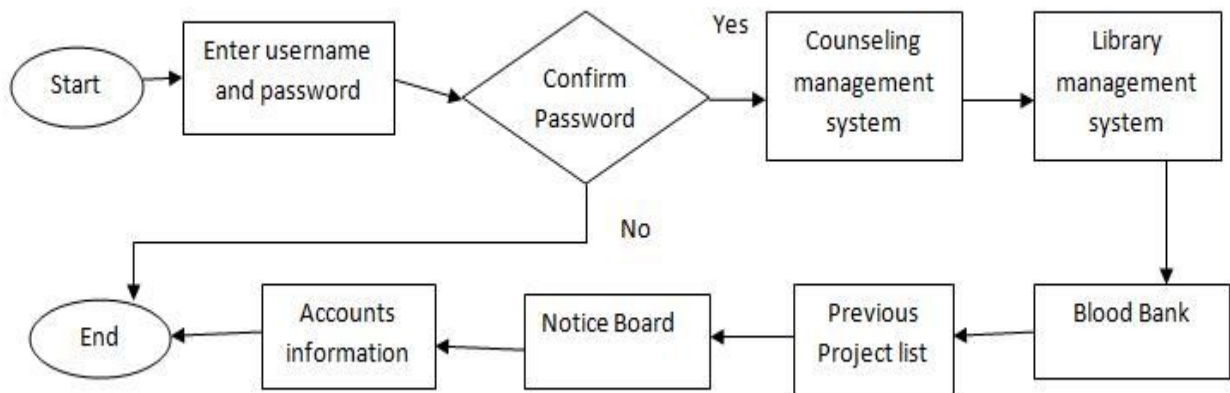


Figure 5.8.1: Interaction Design and UX for User.

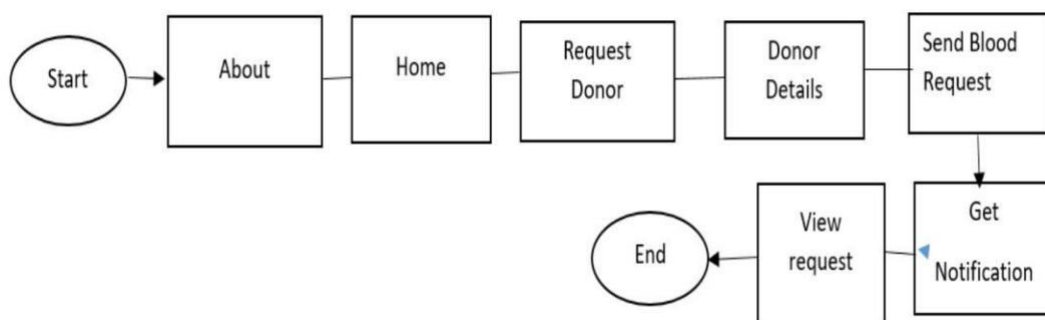


Figure 5.8.2: Interaction Design and UX of User for Blood Bank.

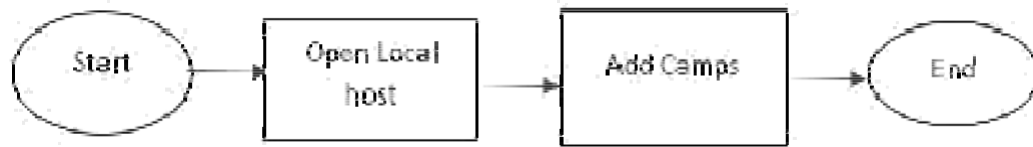


Figure 5.8.3: Interaction Design and UX of Admin for Blood Bank

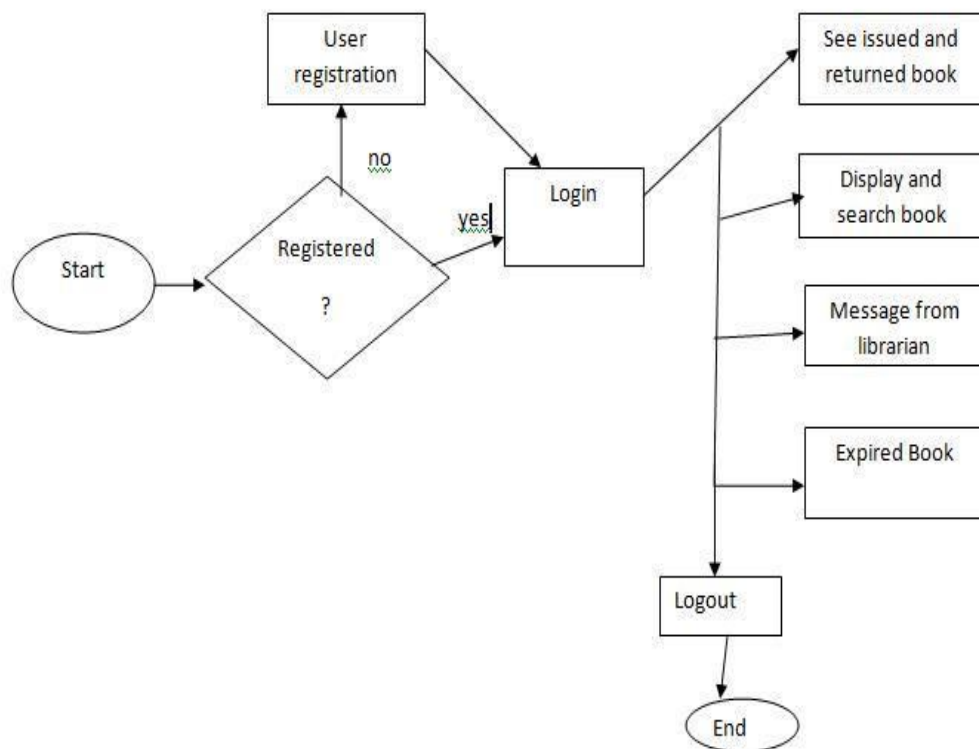


Figure 5.8.4: Interaction Design and UX for library management system(student side).

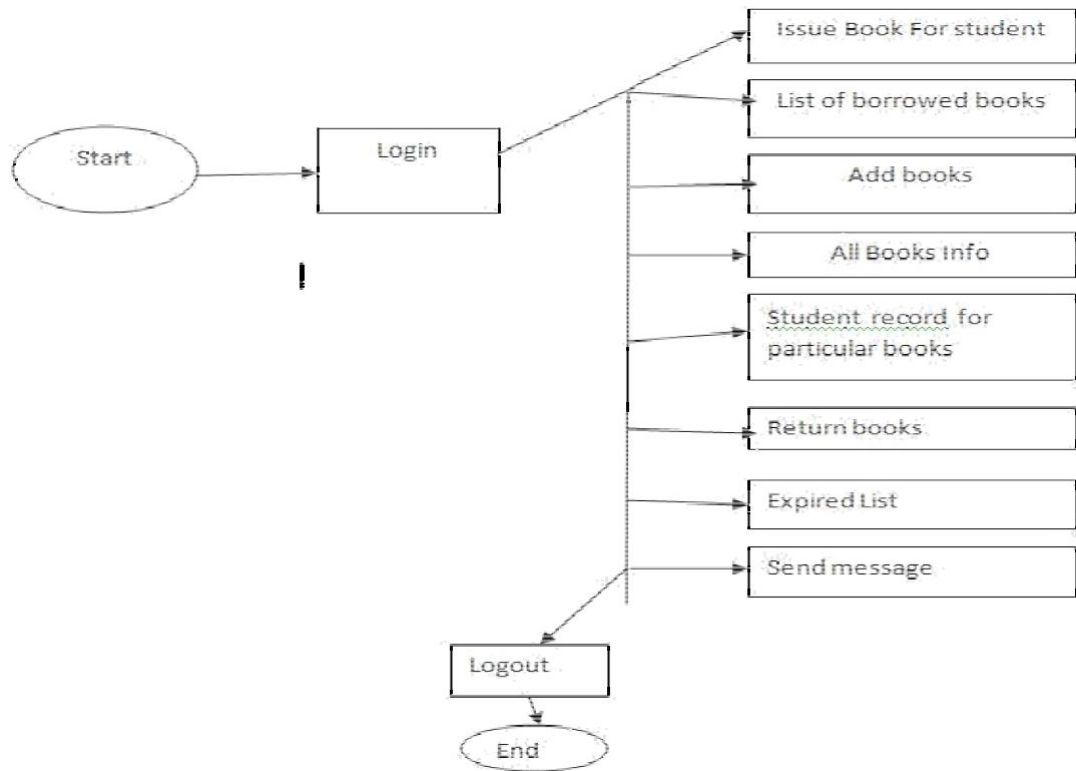


Figure 5.8.5: Interaction Design and UX for library management system(librarian side).

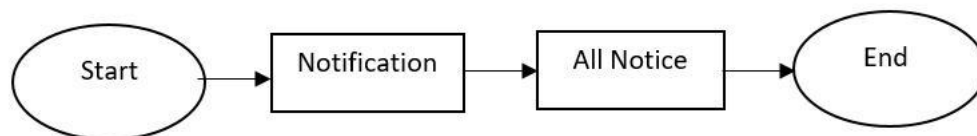


Figure 5.8.6: Interaction Design and UX of Notice Board (student side).

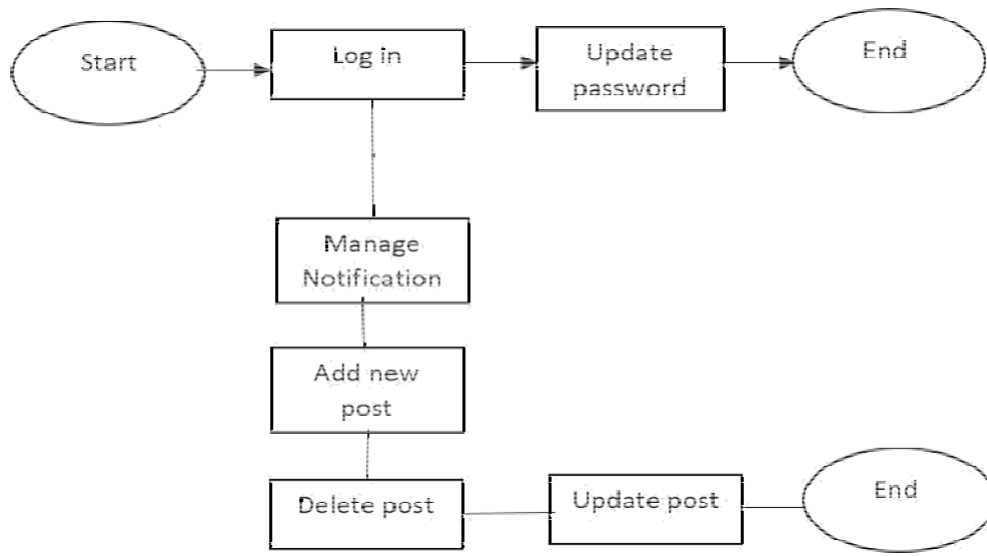


Figure 5.8.7: Interaction Design and UX of Notice Board (Admin side).

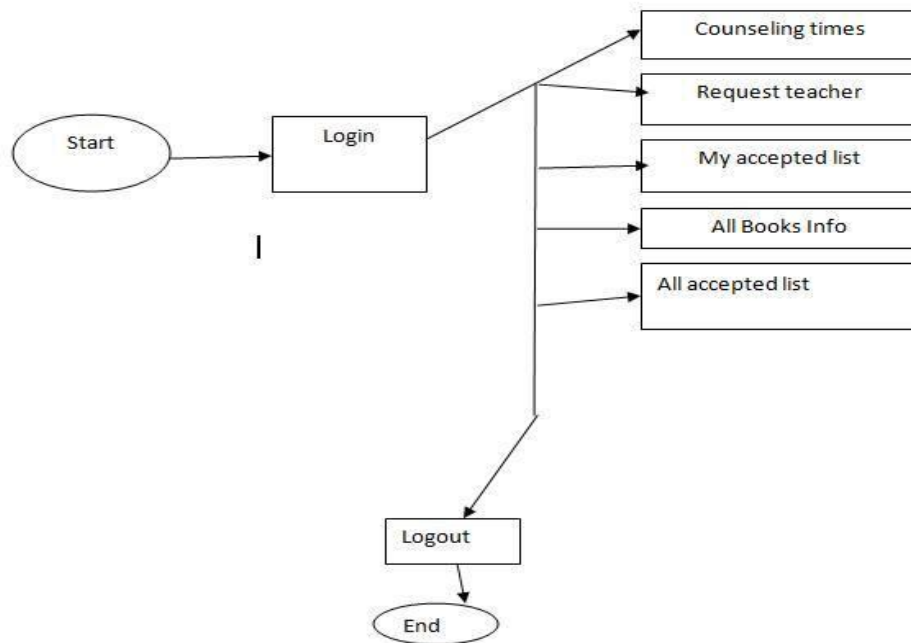


Figure 5.8.8: Interaction Design and UX of Counseling Management System (Admin side).

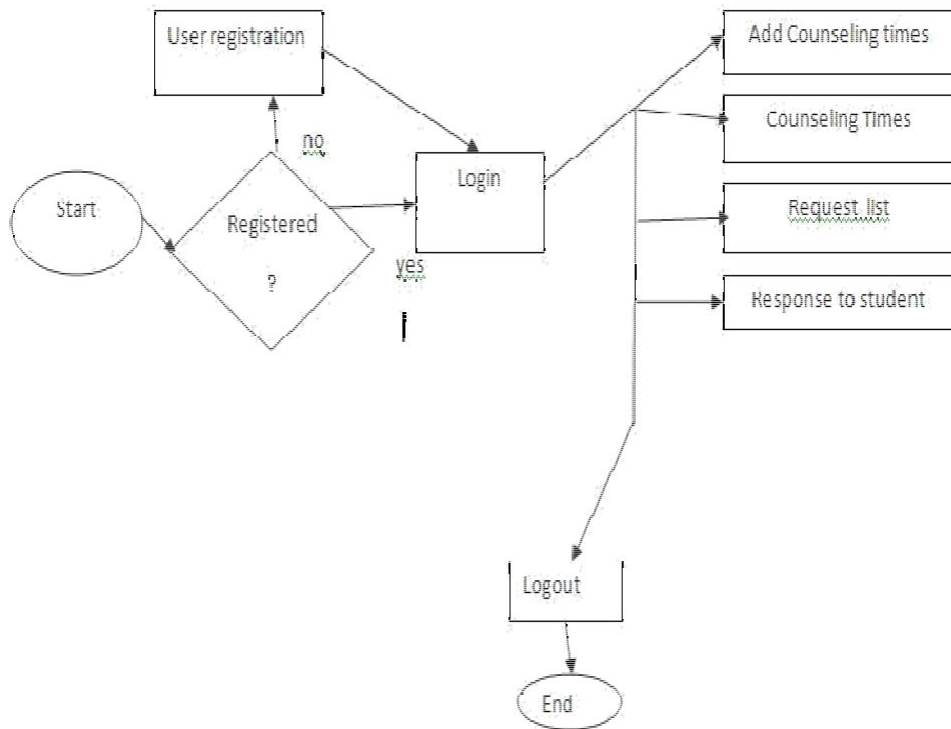


Figure 5.8.9: Interaction Design and UX of Counseling Management System (student side).

4.4 Implementation Requirements:

To make our project more demanding we building up this system like we utilized some unique virtual environment. Here we use local server XAMPP. We use Mysqli database and PHP for back end development and design. Different types of languages we use in our application like HTML, CSS, JavaScript and Bootstrap for front-end design and development. This program sticks up for this system for run appropriately and easily by utilizing the languages of HTML, CSS, and JavaScript. In future we will be more experienced and can gather more knowledge and we keep updating our website. So we can say that in future the improvement of this project will be more interesting and updating.

CHAPTER 6

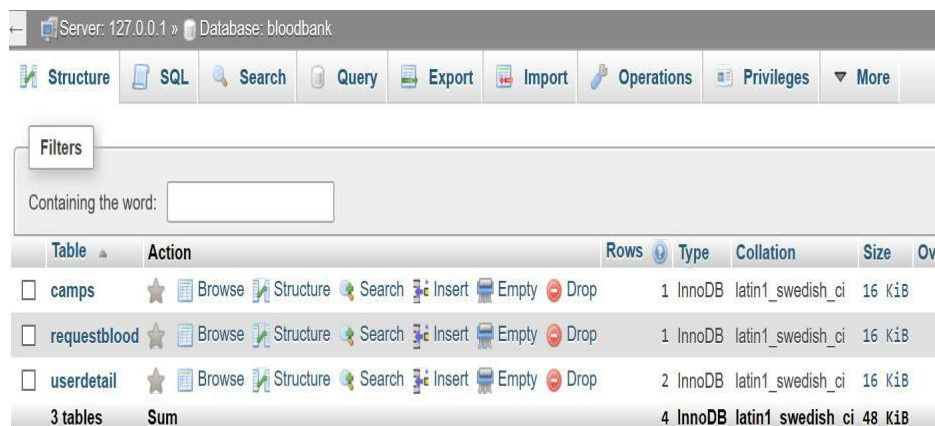
IMPLEMENTATION AND TESTING

6.1 Implementation of database:

Database is actually the central part of this project. So maintenance database is very important and major part of our system. There are many database are popular worldwide. But we only select MySQL and PDO. MySQL is an open-source for anyone. So we select MySQL. MySQL is also select by many popular websites for it user friendliness, including Facebook, Twitter etc. PDO support many database like MYSQLI and others.

Now we discuss about database section in our project:

Database of blood bank management system is blood bank



The screenshot shows the MySQL database structure for a database named 'bloodbank' on a server at 127.0.0.1. The interface includes a top menu bar with options like Structure, SQL, Search, Query, Export, Import, Operations, Privileges, and More. Below the menu is a 'Filters' section with a search box. The main area displays a table of database structures with columns: Table, Action, Rows, Type, Collation, Size, and Over. The table lists three tables: 'camps', 'requestblood', and 'userdetail'. Each table has a 'Browse' icon, a 'Structure' icon, a 'Search' icon, an 'Insert' icon, an 'Empty' icon, and a 'Drop' icon. The 'camps' and 'requestblood' tables have 1 row, while 'userdetail' has 2 rows. All tables are InnoDB with latin1_swedish_ci collation and a size of 16 KiB. A summary row at the bottom shows '3 tables' with a total of 4 rows and a size of 48 KiB.

Table	Action	Rows	Type	Collation	Size	Over
☐ camps	★ Browse Structure Search Insert Empty Drop	1	InnoDB	latin1_swedish_ci	16 KiB	
☐ requestblood	★ Browse Structure Search Insert Empty Drop	1	InnoDB	latin1_swedish_ci	16 KiB	
☐ userdetail	★ Browse Structure Search Insert Empty Drop	2	InnoDB	latin1_swedish_ci	16 KiB	
3 tables	Sum	4	InnoDB	latin1_swedish_ci	48 KiB	

Figure 6.1.1: Database structure of Blood Bank

Server: 127.0.0.1 » Database: duu

Structure SQL Search Query Export Import Operations Privileges More

Filters

Containing the word:

Table	Action	Rows	Type	Collation	Size
☐ comment_tbl	★ Browse Structure Search Insert Empty Drop	2	MyISAM	utf8_general_ci	2.3 KiB
☐ post_activity_tbl	★ Browse Structure Search Insert Empty Drop	20	MyISAM	utf8_general_ci	2.3 KiB
☐ post_tbl	★ Browse Structure Search Insert Empty Drop	1	MyISAM	utf8_general_ci	2.3 KiB
☐ student_tbl	★ Browse Structure Search Insert Empty Drop	3	MyISAM	utf8_general_ci	2.2 KiB
4 tables	Sum	26	InnoDB	latin1_swedish_ci	9 KiB

Figure 6.1.2Database structure of central login and Notice board.

Table	Action
☐ shuva_add_counselling_time	★ Browse
☐ shuva_registration	★ Browse
☐ student_registration	★ Browse
☐ student_request_to_teacher	★ Browse
☐ teacher_response_to_student	★ Browse
5 tables	Sum

Figure 6.1.3Database structure of counseling management system.

Table	Action
☐ add_books	★ Browse ↗ Str
☐ issue_books	★ Browse ↗ Str
☐ librarian_registration	★ Browse ↗ Str
☐ messages	★ Browse ↗ Str
☐ student_registration	★ Browse ↗ Str
5 tables	Sum

Figure 6.1.4: Database structure of library management system.

Table	Action
☐ admin	★ Browse ↗ Structu
☐ notice	★ Browse ↗ Structu
2 tables	Sum

Figure 6.1.5: Database structure of Accounts information.

6.2 Implementation of Front-End Design

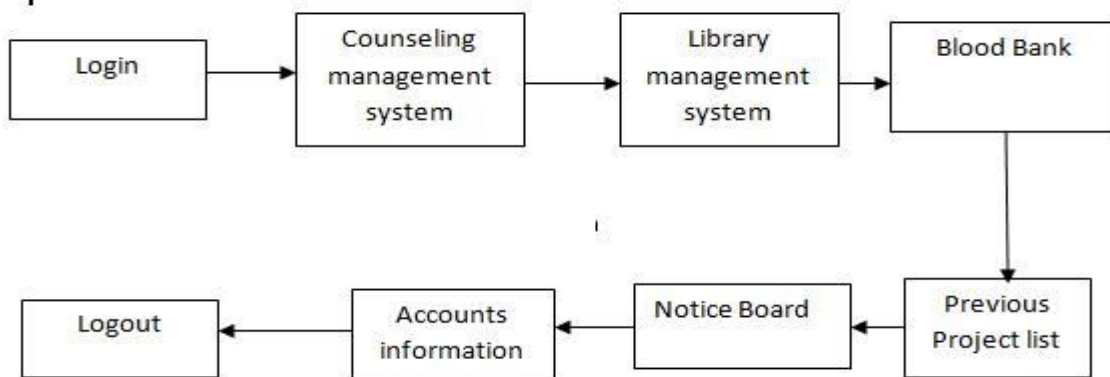


Figure 6.2.1: Helpline For utara Campus.

6.3 Implementation of Interaction

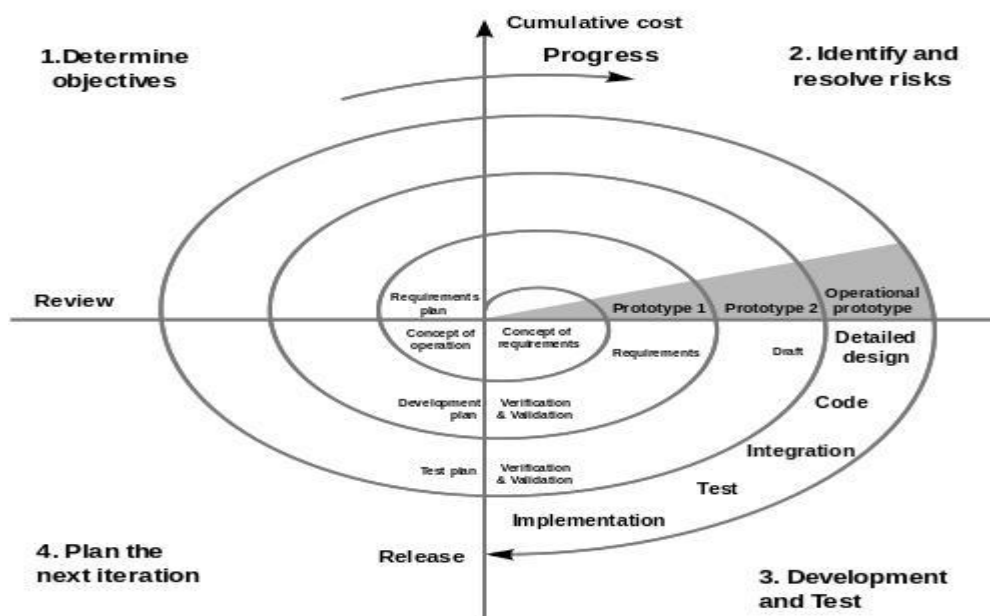
Implementation of interaction is very important for any project development. Because of our project is a web based project, so we have to work with a lot of data. Many resources are used for this purpose. Mysqli and PDO are select for our database. Large part of our project is related with data passing. So we take care of this implementation part very sincerely.

6.4 Testing and Implementation

Implementation is putting an action for the project. Before we implementation, we take care about the plan and objective of our project.

Testing all of the plan and objective, developing the plan is called implementation testing.

We used spiral model in our project. Because of the good features of the model we choose it. This model gives solution similarly to the other model. And deal with many problems easily



6.4.1 Figure: Testing model of Helpline For Uttara Campus.[8]

Planning: Think about the objectives

Risk Analysis of the Model: Firstly analysis the risk, any think about the alternative solution.

Development of spiral model: development and testing the problem

Assessment of spiral model: User evaluation is the main think

CHAPTER 7

CONCLUSION AND FUTURE SCOPE

7.1 Conclusion:

Our web based application has been successfully and appropriately implemented. For implementing our application, we examine our application with many types of browsers and devices. We saw that our application operate properly and give value appropriately. The application interface is very user-friendly and any user can easily co-operate with it. We hope that this application will be more beneficial and more preferable. The user interface of our application is very simple, well organized and not looking like a complex one. The user can easily cooperate with it and hope that they will be benefitted. We tried my best for best results and keep it acceptable by user.

7.2 Limitation

- Security system is not too good
- Database management is complicated
- Lack of unique features
- System configure is not well organized

7.3 Scope of developments For Future:

We completed the whole work very sincerely and we keep continuing this project in future to be developed by day by day.

- Implement a suitable framework to improve our user interface more effectively.
- Add Artificial Intelligence for better scope.
- Add more powerful and upgraded features.
- Add more unique features which will be very beneficial for our university.
- Improve the security system more efficiently.

Add more logical tasks for students which will be more benefited

Add some interesting features that students will be showed more engagement toward this application

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