

**Development of DIU Counselling Hour Management System
BY**

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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 “**Development of Counselling Hour Management System of DIU**”, submitted by Atik Hasan, ID No: 152-15-551 and Md Ahad Kabir, ID No: 152-15-556 and Md Sazzad Hossain Hasnat, ID No: 152-15-549 to the 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 Bachelor of Science in Computer Science and Engineering and approved as to its style and contents. The presentation has been held on 06 April 2019.

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DECLARATION

We hereby declare that, this project has been done by us under the supervision of **Md. Tanvir Rahman, Lecturer, Department of CSE** 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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ABSTRACT

Daffodil International University is a renowned and top leading university in Bangladesh. In this university there are a lot of students are studying and has huge number of faculty members. These faculty members are often very busy with their research, classwork and other academic activities. As the number of students are very high, the counselling hour of those teachers are not utilized properly. Students have to come to the respective faculty members in order to have a counselling for particular thing, this can be research or any other thing. Some of the students don't have any idea about available counselling hour for a particular teacher. An application to maintain the counselling hour of faculty member can help. The teachers can have an idea about with how many students he has to stay in a particular counselling hour, on the other hand students can request for a predefined slot in order to sit with the faculty member. Our project "Counselling Hour Management System of DIU" can help both ends teachers and also students in these matters.

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CHAPTER 1: INTRODUCTION

1.1 Introduction

This project is developed for DIU students for their counselling time managing problem. Students can check faculty members scheduled time. Student can take appointment on available slots just by a click. Student will get reminder on his nearest appointment. Student can also view Faculty Member's profile, see their publications and research interests.

1.2 Motivation

In Daffodil International University, Teacher teaches students to gain knowledge about academic and also extra-curriculum activities. In a classroom, there are so many students are attending. Sometimes students cannot understand whole thing or part of a topic that is taught in class room. Students also faces problems on project or thesis meetup with their supervisors. For this reason, students' need flexible counselling time. But the problem is that most of the students are not aware of the teacher's counselling hour so that they don't get proper counselling. So we are developing a system named "DIU Counselling Hour Management System" where student will be easily aware of the counselling time of the teachers and they can book an appointment on particular date and time by just a click without any trouble.

1.3 Objectives

- Managing the counselling hour of faculty members very flexibly.
- Easily finding counselling hour of specific faculty members.
- Easily finding information of faculty members and their research interests.
- Request for appointment to the faculty members at their counselling hour.
- Sending reminder to the faculty members when new appointment is requested.
- Sending reminder to the students when appointment is approved/cancelled and before 30 minutes.
- Viewing student information and their skills and interests.
- Building the teacher student communication more than ever.
- Making Daffodil International University digital and smarter.

The main objective of the project is on DIU Advising Time Schedule System is to manage the schedule of teacher advising time.

1.4 Expected Outcome

We are developing this system with eye catching design to make counselling hour management of faculty members from analog to digital, from offline to online.

Students can search for specific faculty members on specific date and book an appointment in available slots. There will be no trouble from now for both students and faculty members for counselling and time management. Lastly teachers and students can communicate with each other through this system.

CHAPTER 2: BACKGROUND

2.1 Introduction

Counselling is an important part of education, where students can discuss, solve their problems through counselling with their teachers. Daffodil International University has a large number of students enrolled in different programs and it is increasing. For this large number of students, it is difficult for faculty members to manage their counselling hour. Most of the students face problem finding proper counselling time. For this reason, we are developing a dynamic application about counselling hour management of Daffodil International University.

This system has three types of users.

- Admin
- Faculty
- Student

First of all, a student must be logged in. Student can search faculty member. Then student can check the teacher advising time slot. If teacher have specific advising time is available, student must have to apply an appointment for getting teacher advising time. Student also can write short description in his appointment. System then check teacher advising available time. If teacher have slot time, then system send a confirmation email to the student. If teacher have not any slot time, then system cancelled student appointment apply. Student can also be get notified if his appointment time is at close. In this system teacher can set his advising time slot and also can edit his slot time. Student and teacher also see appointment history. In our system teacher have a profile. Teacher can edit, delete and also update his information. An admin has access of all things. Admin can add teacher information. Admin can also send confirmation mail to student for his appointment. Admin can also edit, delete, and update information. Admin can add also schedule time for faculty. Admin can add semester, time slots.

2.2 Related Work

In the field of market there is a lot of similar work have been done in different sectors. In different sectors, we can see some systems that have been created by some organizations. Just as like we can see renown hospitals and also corporate offices where they have appointment system. We can give an example: In Square hospital, there have appointment system. By getting appointment, people can meet specialized doctor.

2.3 Comparative Studies:

Purpose: In Daffodil International University, students are facing problem in counselling hour. Students goes to counselling but sometimes they are not able to get teacher counselling hour. This problem occurs when teacher is busy with another student or teacher are busy in another work. This problem also occurs because some students do not aware of the teacher counselling hour time. So our purpose is to build a system where student should get proper counselling hour and they can be aware of teacher counselling hour.

Design/Methodology/Approach: Our work is presented through the survey of the teachers and students. By getting depth interview of teachers and students and also finding academic difficulties we identified the features.

Originality/Value: Our project is very much valuable special for students and faculty members. Daffodil International University administration can be used our project for their academic facilities. Our project is compatible for academics and administrative.

2.4 Scope of the problem:

If we can implement this system for the counselling hour management of Daffodil International University, the present trouble of managing the counselling hour for both Students and Faculty Member will be easy and flexible. Moreover, Daffodil International University will be more digital implementing the offline system totally in online.

2.5 Challenges:

Now-a-days students are using smartphones mostly. Our project is developed with web based application. This is not a mobile based application. So we are interested to develop this project in mobile application. In future we have a plan to develop this project in Android application. So students and teachers should easily use this system in their smartphones.

Chapter 3: Requirement Specification

3.1 Business Process Model:

A business process modelling is where new business processes are created and it is shown in diagram statement. In statement, this business process is drawn in graph, Gantt chart and also in flow-charts.

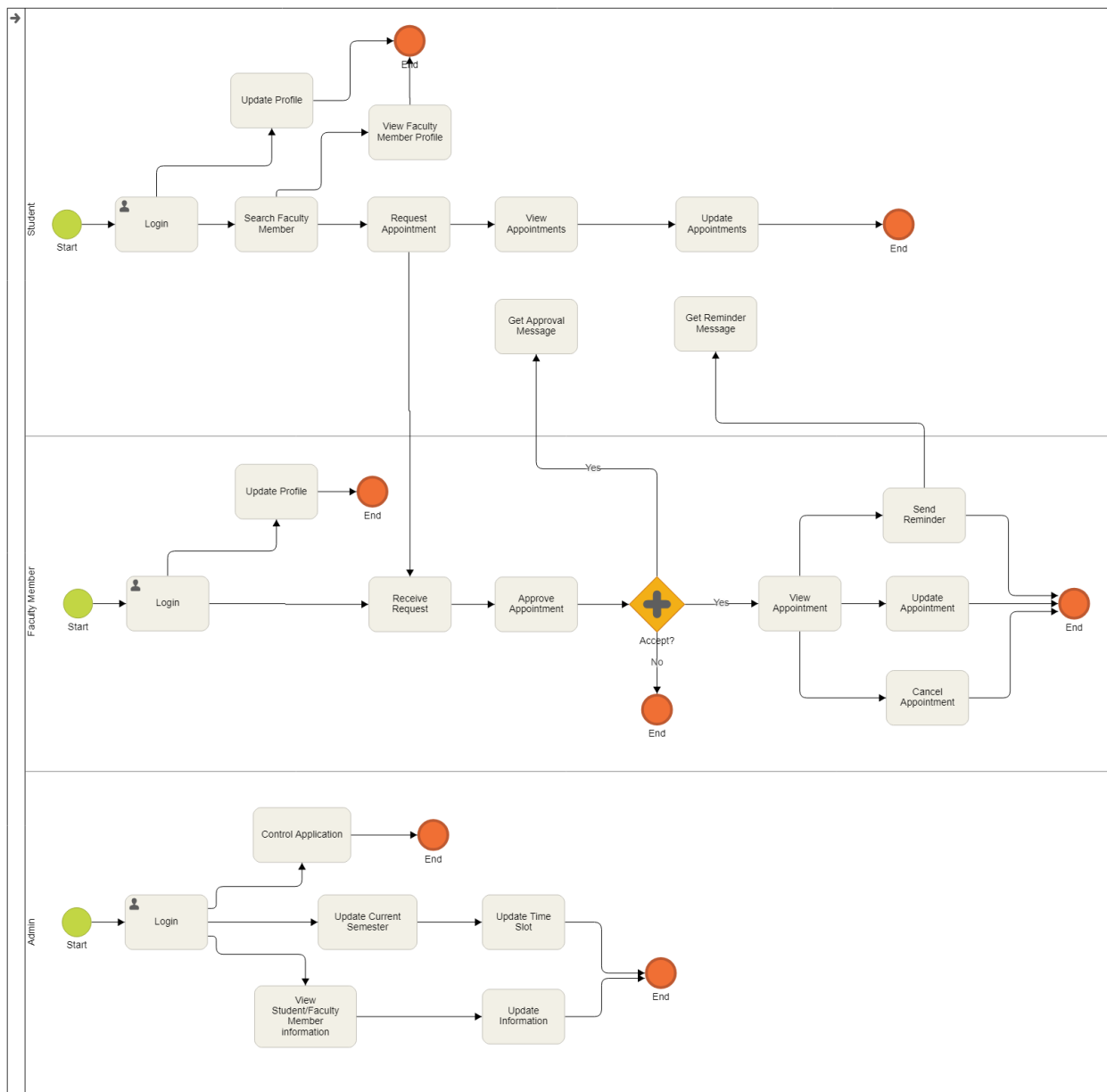


Figure 3.1: Business Process Model

3.2 Requirement Collection and Analysis:

Our project is DIU Counselling Time Schedule System. Following to the requirement this project is originate and developed. In a system requirement is categorized into two types that is Software and Hardware requirements.

3.2.1 Admin Requirement:

In this system admin is an important actor. Admin controls the system. Admin will update the current semester and add time slot at the beginning of each semester. Admin can add or update the list of Faculties and Departments. Admin can also view information of faculty members and students and do necessary information update on demand. Admin can monitor the appointments generate reports.

3.2.2 Faculty Member Requirement:

To access the system every Faculty Member has to register first and login. To update the counselling hour for current semester Faculty members can go to “Counselling Hour” section specified at the navigation bar. In the home page of the Faculty Member module, Appointments taken today are shown. All appointments are shown at “Appointments” section. Faculty Member can accept or decline any appointment requested by the students. They can also cancel appointments on their emergency or unavailability. Faculty Member can send reminder to the students once they accept the appointments. They can add research interests and portfolio in their profile.

3.2.3 Student Requirement

To access system as a student, every student has to be registered and log in. To request an appointment student has to click “Create Appointment” button from Student home page. Today’s appointments are shown in homepage and all appointments are shown in “Appointments” section. To create appointment with a faculty member on a specific date, student has to select Faculty Member, Date, Time for the appointment. There is also an option for telling reason for the appointment. Student can update and cancel the appointments taken by them. There is an option called “Faculty Members” in the navigation bar to view the information and research interests of respective Faculty Member. They can also send appointment request directly from the profile of the Faculty Member.

3.2.4 Technical and Legal Requirement:

The system should be design as to ensure that they continue to work efficiency that the observation with relevant legislation and to check that they are safe guarded from threats such as virus and hackers. The requirements are listed below:

- Data protection facilities and Security data transmission facilities.
- Protection facilities against hacker and cracker and Protection against virus.
- Protection Faculty Member and Student Data From Hacker

3.2.5 Requirements Components:

By completing this project, we require hardware and software components that is given below.

3.2.5.1 Hardware Requirement:

We need internet connection and minimum one computer to carry out this project.

Table 3.2.5.1: Hardware Requirement

Processor	Intel Pentium Dual Core or above
Motherboard	Any
Ram	512 or more
Hard Disk	50GB
Monitor	Any color monitor
Keyboard	Any
Mouse	Any

3.2.5.2 Software Requirement

Table 3.2.5.2: Software Requirement

Software	Usage
Windows xp,7,8,9,10 operating system	
Browser	Google Chrome, Mozilla Firefox, Internet Explorer and any browsing web that justify JS, JQuery.

3.3 Use Case Modelling and Description:

Relationship and interaction between various types of users and the system in happened in a Use case model. In a use case model, by interacting user and application we can get solution for a problem

3.3.1 Use Case Model:

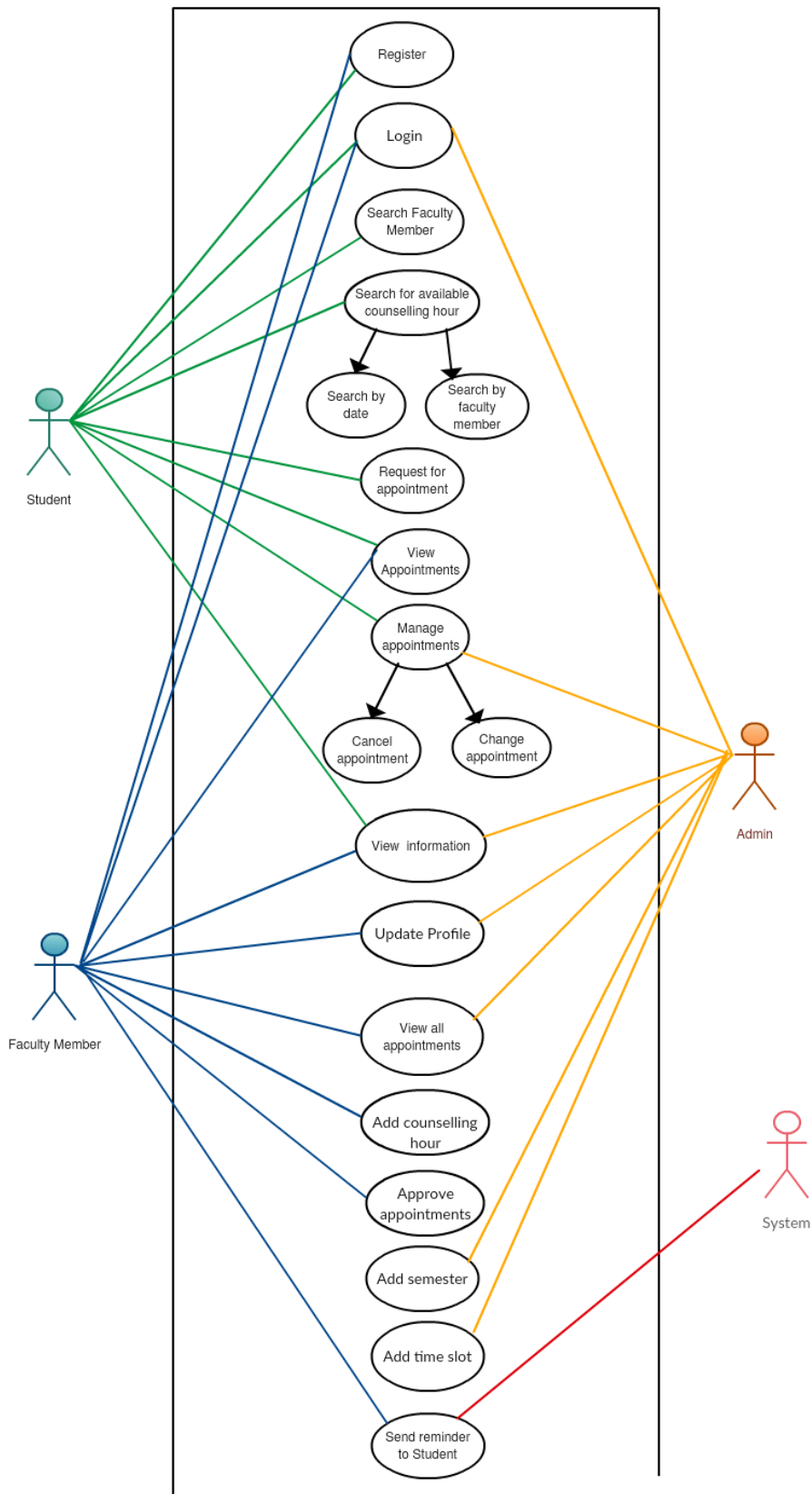


Figure 3.3.1: Use Case Model

3.3.2 Use Case Description:

Table 3.3.3: Use Case for Register

Case Statement Id	1
Case Statement Name:	Register
Created By:	Ahad Kabir
Date Of Creation:	15-03-19
Description:	This use case, User registers. Student and teacher can register successfully.
Primary Actor:	Faculty Member, Student
Secondary Actor:	None
Precondition	None
Post condition	By registering, system will display register page.

Table 3.3.4: Use Case for Log In

Case Statement Id:	2
Case Statement Name:	Log In
Created By:	Ahad Kabir
Date Of Creation:	15-03-19
Description:	This use case, User log in the system. Admin, teacher and student can log in the page and also see other pages.
Primary Actor:	Admin, Faculty Member, Student
Secondary Actor:	None
Precondition	User must be registered to log in the system.
Post condition	None

Table 3.3.5: Use Case for Search Faculty

Case Statement Id:	3
Case Statement Name:	Search Faculty
Created By:	Ahad Kabir
Date Of Creation:	15-03-19
Description:	This use case, User searches. Admin and student can easily search specific faculty member.
Primary Actor:	Admin, Student
Secondary Actor:	None
Precondition	None
Post condition	None

Table 3.3.6: Use Case for Request Appointment

Case Statement Id:	4
Case Statement Name:	Request an Appointment
Created By:	Ahad Kabir
Date Of Creation:	15-03-19
Description:	This use case, User is booking an appointment. The only student can book an appointment whenever he needed.
Primary Actor:	Student
Secondary Actor:	None
Precondition	Student must be logged in to book an appointment.
Post condition	None

Table 3.3.7: Use Case for View Appointment

Case Statement Id:	5
Case Statement Name:	View Appointments
Created By:	Ahad Kabir
Date Of Creation:	15-03-19
Description:	This use case, User sees all his appointment list. Student and Faculty can see his appointment history on this page.
Primary Actor:	Student, Faculty Member
Secondary Actor:	None
Precondition	Student and the teacher must be logged in to sees his appointment history.
Post condition	None

Table 3.3.8: Use Case for Cancel Appointment

Case Statement Id:	6
Case Statement Name:	Cancel Appointments
Created By:	Ahad Kabir
Date Of Creation:	15-03-19
Description:	This use case, User cancels his appointment. Student and Teacher can cancel his appointment on this page.
Primary Actor:	Student, Faculty Member
Secondary Actor:	None
Precondition	Student and the teacher must be logged in and it should be valid appointment.
Post condition	None

Table 3.3.9: Use Case for Student Information

Case Statement Id:	7
Case Statement Name:	View Student Information
Created By:	Ahad Kabir
Date Of Creation:	15-03-19
Description:	This use case, User sees the information. Teacher and Admin can see student information on this page.
Primary Actor:	Faculty Member, Admin
Secondary Actor:	None
Precondition	Admin and the teacher must be logged in.
Post condition	None

Table 3.3.10: Use Case for Reminder to Student

Case Statement Id:	8
Case Statement Name:	Send Reminder to Student
Created By:	Ahad Kabir
Date Of Creation:	15-03-19
Description:	This use case, Faculty member can send reminder to the student.
Primary Actor:	Faculty Member
Secondary Actor:	None
Precondition	The teacher must be logged in and student appointment must be approved.
Post condition	None

Table 3.3.11: Use case for Add Counselling Hour

Case Statement Id:	10
Case Statement Name:	Add Counselling Hour
Created By:	Ahad Kabir
Date Of Creation:	15-03-19
Description:	This use case, Faculty member can add schedule time.
Primary Actor:	Faculty Member
Secondary Actor:	None
Precondition	Teacher must be logged in.
Post condition	None

Table 3.3.12: Use Case for Approve appointment

Case Statement Id:	11
Case Statement Name:	Approved Appointment
Created By:	Ahad Kabir
Date Of Creation:	15-03-19
Description:	This use case, Faculty member approves student appointment.
Primary Actor:	Faculty Member
Secondary Actor:	None
Precondition	Teacher must be logged in and the student must have pending appointment.
Post condition	None

Table 3.3.13: Use Case for Update counselling hour

Case Statement Id:	12
Case Statement Name:	Update Counselling Time
Created By:	Ahad Kabir
Date Of Creation:	15-03-19
Description:	This use case, Faculty member can update his counselling time.
Primary Actor:	Faculty Member
Secondary Actor:	None
Precondition	Faculty Member must be logged in.
Post condition	None

Table 3.3.14: Use Case for Update profile

Case Statement Id:	13
Case Statement Name:	Update Profile
Created By:	Ahad Kabir
Date Of Creation:	15-03-19
Description:	This use case, User updates his profile. Teacher and student can update his profile information.
Primary Actor:	Faculty Member, Student
Secondary Actor:	None
Precondition	Faculty member and the student must be logged in to update his profile.
Post condition	None

Table 3.3.15: Use Case for Add Semester

Case Statement Id:	14
Case Statement Name:	Add Semester
Created By:	Ahad Kabir
Date Of Creation:	15-03-19
Description:	This use case, Admin can add semester.
Primary Actor:	Admin
Secondary Actor:	None
Precondition	Admin must be logged in the system.
Post condition	None

Table 3.3.16: Use Case for Update Information

Case Statement Id:	15
Case Statement Name:	Update Information
Created By:	Ahad Kabir
Date Of Creation:	15-03-19
Description:	This use case, Admin update both teacher and the student profile information.
Primary Actor:	Admin
Secondary Actor:	None
Precondition	Admin must be logged in the system.
Post condition	None

Table 3.3.17: Use Case for Control System

Case Statement Id:	16
Case Statement Name:	Control System
Created By:	Ahad Kabir
Date Of Creation:	15-03-19
Description:	This use case, Admin updates current semester, add time slots for semester, slider image.
Primary Actor:	Admin
Secondary Actor:	None
Precondition	Admin must be logged in the system.
Post condition	None

3.4 Logical Data Model:

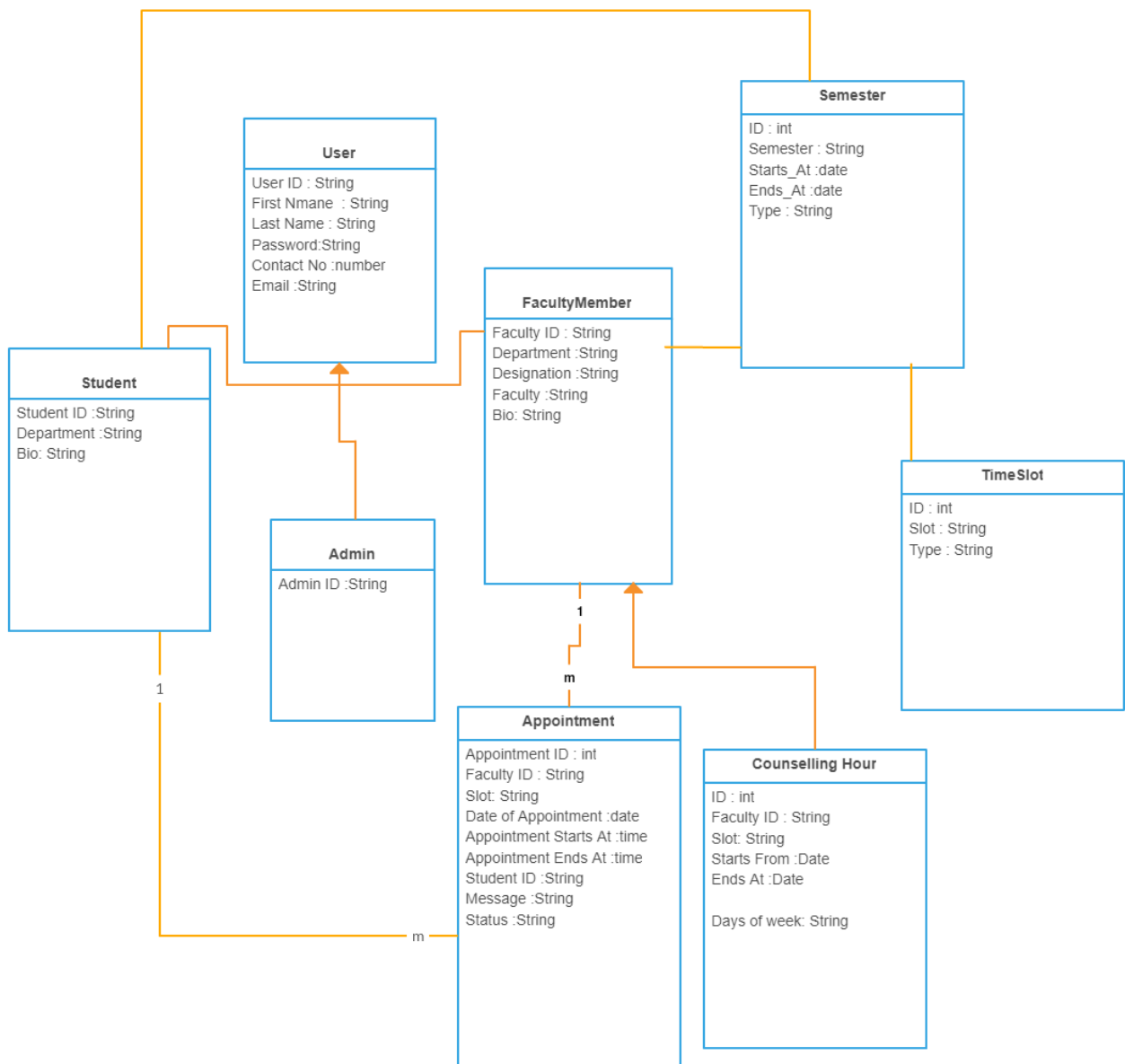


Figure 3.4: Logical Data Model

3.5 Design Requirements:

3.5.1 Student Requirements

- Search Faculty Member
- View profile of Faculty Member
- Search for available counselling hour of specific Faculty Member
- View Appointments
- Appointments Management
- Profile Management

3.5.2 Faculty Member Requirements

- Approval of Appointments
- View profile of Students
- Scheduling of Counselling Hour
- View Appointments
- Appointments Management
- Profile Management
- Sending Reminder to Students

3.5.2 Admin Requirements

- Update Current Semester
- Add Time Slots
- View and update Information of Faculty Members
- View and update Information of Students
- Profile Management

Chapter 4: Design Specification

4.1 Front-end Design:

For completing front-end development of the project, we used three primary languages, frameworks and also some libraries.

- HTML
- CSS
- Bootstrap
- JavaScript
- Libraries like JQuery, Ajax

4.1.1 Hypertext Markup Language

HTML[1] stands for Hypertext Markup Language. It allows the user to create and structure sections, paragraphs, headings, links, and block quotes web pages and applications. HTML is not a programming language, meaning it doesn't have the ability to create dynamic functionality. Instead, it makes it possible to organize and format documents. When working with HTML, we use simple code structures (tags and attributes) to mark up a website page. For example, we can create a paragraph by placing the enclosed text within a starting `<p>` and closing `</p>` tag.

4.1.2 Cascading Style Sheet

Cascading Style Sheets, fondly referred to as CSS[2], is a simple design language intended to simplify the process of making web pages presentable. CSS handles the look and feel part of a web page. Using CSS, you can control the color of the text, the style of fonts, the spacing between paragraphs, how columns are sized and laid out, what background images or colors are used, layout designs, variations in display for different devices and screen sizes as well as a variety of other effects.

4.1.3 JavaScript

JavaScript[3] is a dynamic computer programming language. It is lightweight and most commonly used as a part of web pages, whose implementations allow client-side script to interact with the user and make dynamic pages. It is an interpreted programming language with object-oriented capabilities. JavaScript can be implemented using JavaScript statements that are placed within the `<script>... </script>` HTML tags in a web page. The `<script>` tag alerts the browser program to start interpreting all the text between these tags as a script.

4.2 Back-End Design:

We used some primary languages, frameworks in back-end design to develop the project.

- Server-side language: PHP
- Database tool: MySQL server
- Framework: Laravel

4.2.1 PHP: Hypertext Preprocessor

PHP[4] is an interactive, and a powerful language for the server scripting. PHP is used to create dynamic web pages. PHP is a widely-used, free to use, has largest developer community. It is very flexible and has many innovative features. All PHP features and updates are available free of charge.

4.2.2 Laravel

Laravel[5] is a free, open-source PHP web framework intended for the development of architectural model–view–controller (MVC) web applications.

Some of Laravel's features are:

- Modular packaging system with dedicated dependency manager.
- Different ways to access relational databases through routing.
- Utilities that help with application deployment and maintenance.
- Easy authentication by providing a simple, easy to use interface and much more.

4.2.3 MySQL

MySQL[6] name is a combination of My and SQL, MySQL. MySQL is a database management system that enables you to manage relational databases. It is Oracle-backed open source software. Compared to other database software such as Oracle Database or Microsoft SQL Server, MySQL is pretty easy to master. MySQL can run on various UNIX, Linux, Windows, etc. platforms. You can install it on a server or even on a desktop. Furthermore, MySQL is reliable, scalable, and faster.

Chapter 5: Implementation and Testing

5.1 Implementation of Database:

Implementing or deploying the database is the process of installing, configuring and customizing database software, running, testing, integrating with applications. Its various stages and processes are the following

5.1.2 Entity Relationship Diagram

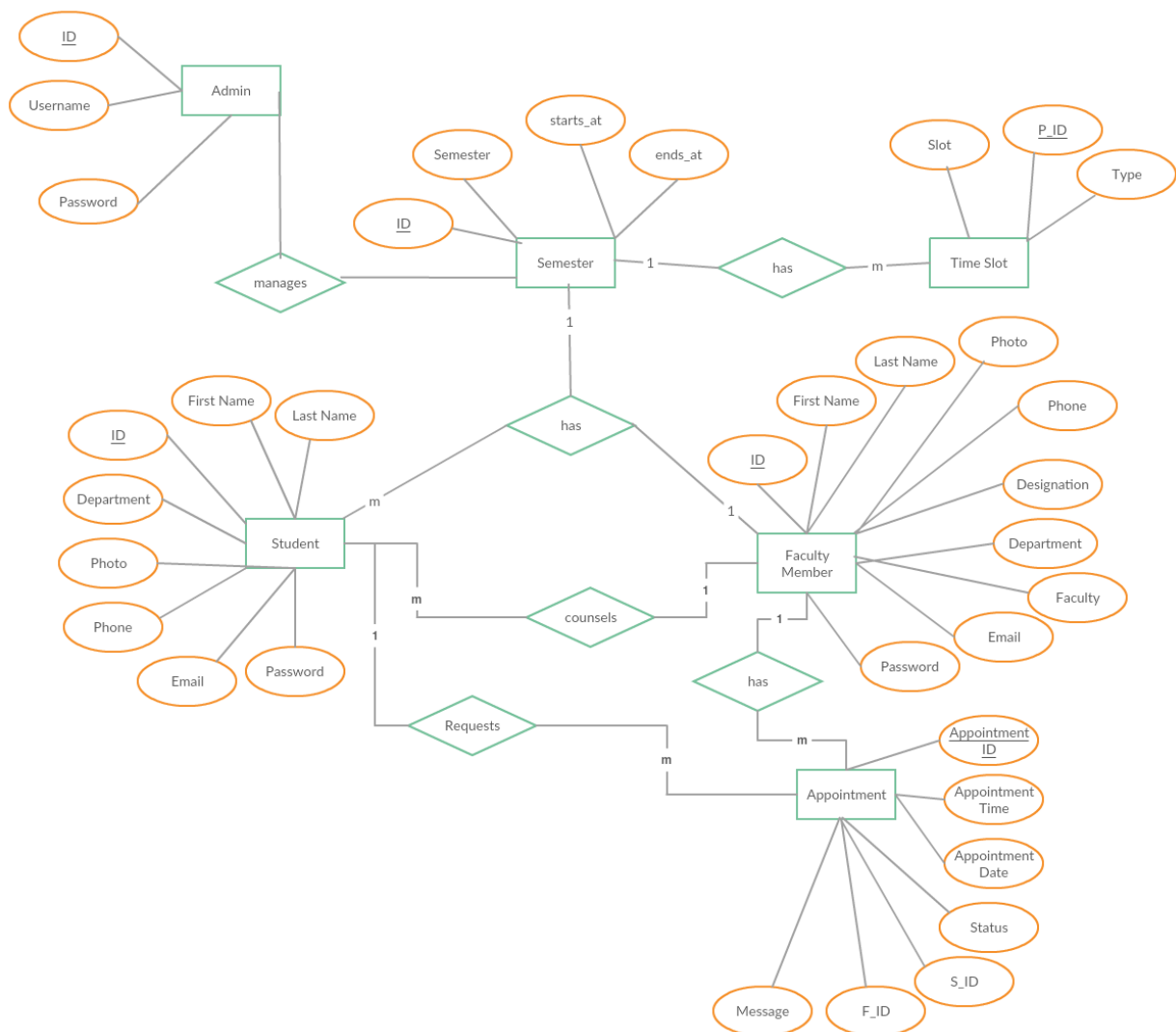


Figure 5.1.2: Entity Relationship Diagram

5.2 Implementation of Front-end Design:

Improvement of the customer side of WA is called front-end advancement and frontend (FE) itself is then comprehended as each substance client can see and can connect within a program. It's typically a blend of Hypertext Markup Language (HTML), Cascading Style Sheet (CSS) and JavaScript (JS). Each of these dialects is deciphered and controlled by an internet browser that creates a website page -interface client can cooperate with. The site is called the set of all accessible pages.

5.2.1 Site Home Page

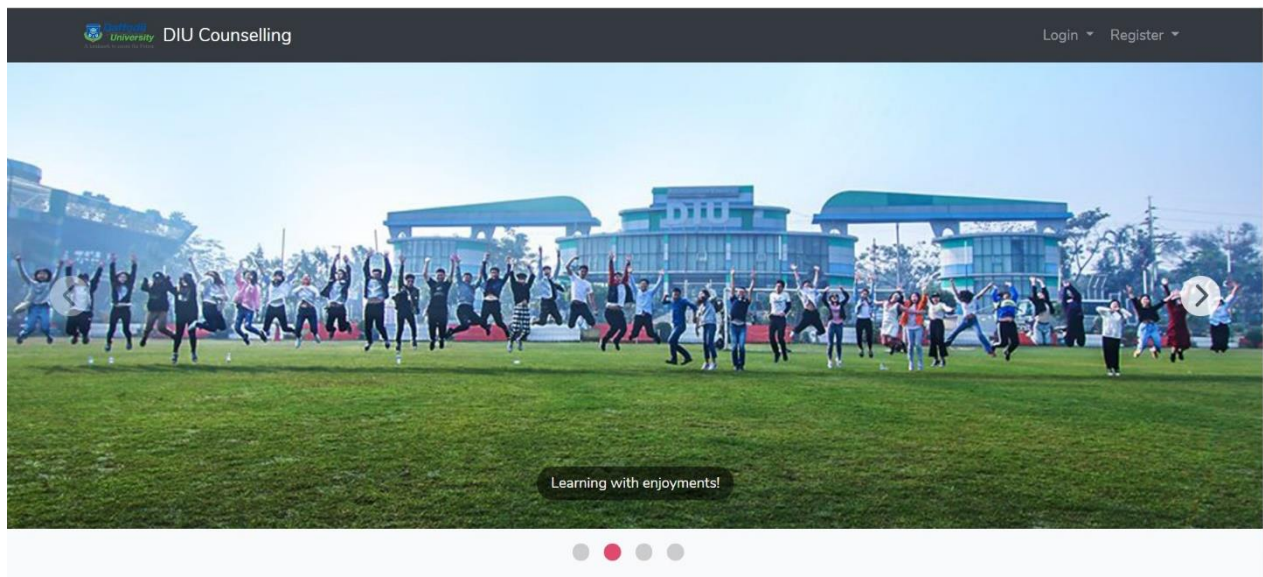
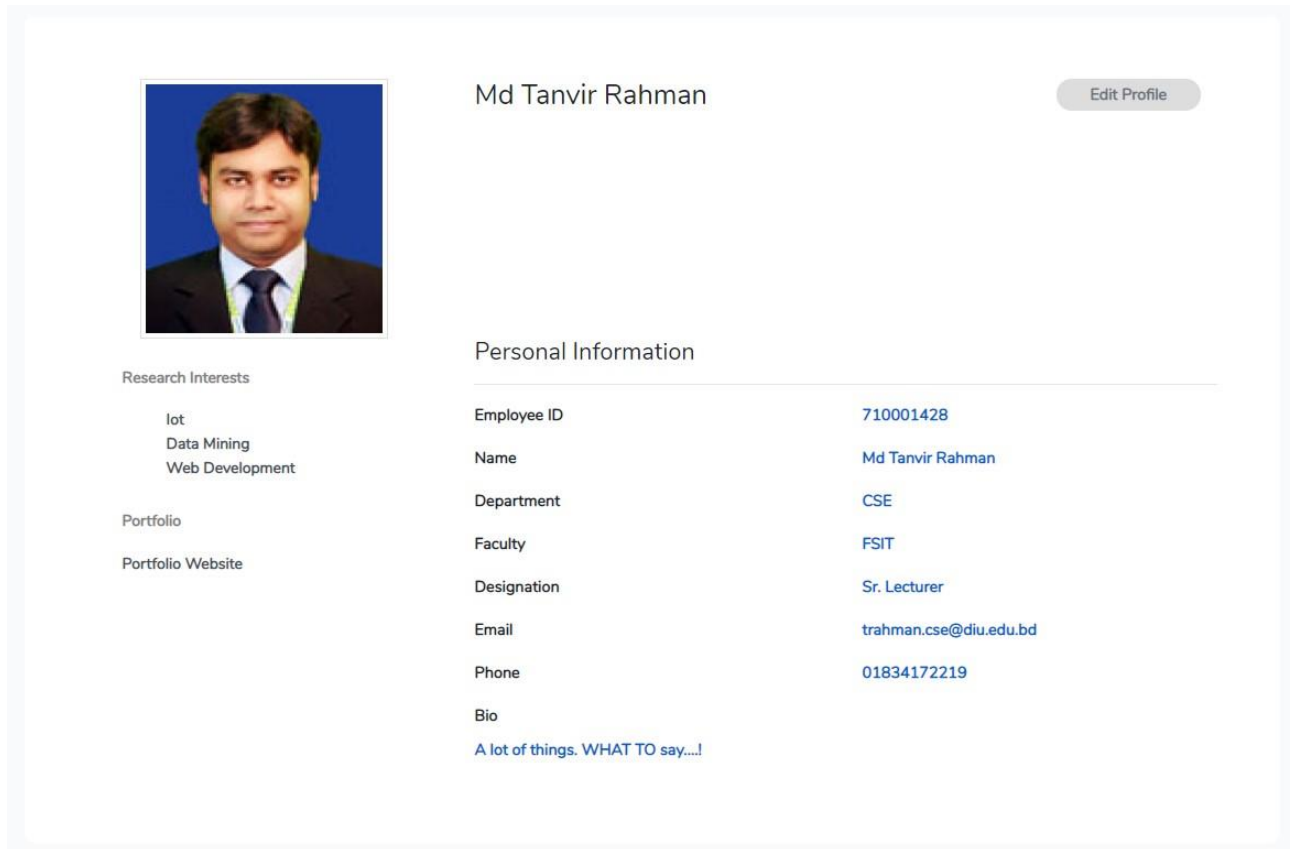


Figure 5.2.1 Home Page View for all User

5.2.2 Profile Page of Faculty Member



The screenshot displays a faculty member's profile page. On the left, there is a profile picture of Md Tanvir Rahman, a man with dark hair wearing a suit and tie. Below the photo are sections for 'Research Interests' (IoT, Data Mining, Web Development), 'Portfolio', and 'Portfolio Website'. To the right of the photo, the name 'Md Tanvir Rahman' is displayed, with an 'Edit Profile' button in the top right corner. Below the name is a 'Personal Information' section containing a table of details.

Employee ID	710001428
Name	Md Tanvir Rahman
Department	CSE
Faculty	FSIT
Designation	Sr. Lecturer
Email	trahman.cse@diu.edu.bd
Phone	01834172219
Bio	A lot of things. WHAT TO say...!

Figure 5.2.2 Profile Page View for Faculty Member

5.2.3 Profile Edit page of Faculty Member

Update Personal Information

Employee ID
710001428

Name
Md Tanvir Rahman

Faculty
FSIT

Department
CSE

Designation
Sr. Lecturer

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Phone
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Bio
A lot of things. WHAT TO say...!

Research Interests (separate with comma
' ')
lot, Data Mining, Web Development

Portfolio Site (with https://)
https://sites.google.com/view/trbdddii

Change Photo

Save Changes

Figure 5.2.3 Profile Page Edit View for Faculty Member

5.2.4 Counselling Hour of Faculty Member

Semester: Spring 2019

Time	SAT	SUN	MON	TUE	WED	THU	FRI
08:30 AM - 10:00 AM	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
10:00 AM - 11:30 AM	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
11:30 AM - 01:00 PM	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
01:00 PM - 02:30 PM	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
02:30 PM - 04:00 PM	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
04:00 PM - 05:30 PM	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

[Submit](#)

Figure 5.2.4 Counselling Hour Update View for Faculty Member

5.2.5 Todays Appointment of Faculty Member

Todays Appointments


	AHAD KABIR ✉ ahad15-556@diu.edu.bd.com ☎ 01674582934	📅 2019-04-05 🕒 10:40 AM - 11:00 AM	Data Communication Counselling	APPROVED
				🔔 Send Reminder

Figure 5.2.5 Todays Appointment View for Faculty Member

5.2.6 Appointments of Faculty Member

The screenshot displays the 'Appointments Page View for Faculty Member'. At the top, there are six summary cards for appointment statuses: Total (8), Pending (1), Approved (2), Completed (0), Incomplete (3), and Cancelled (2). Below this is a table titled 'All Appointments' with four rows of appointment details.

Name	Contact	Date	Time	Topic	Status	Actions
AHAD KABIR	ahad15-556@diu.edu.bd.com 01674582934	2019-04-05	10:40 AM - 11:00 AM	Data Communication Counselling	APPROVED	Status, Send Reminder, Cancel
ATIK HASAN	atik15-551@diu.edu.bd.com 01779916797	2019-04-10	11:30 AM - 12:00 PM	About Final year project discussion	APPROVED	Status, Send Reminder, Cancel
ATIK HASAN	atik15-551@diu.edu.bd.com 01779916797	2019-04-06	08:30 AM - 08:40 AM		PENDING	Accept, Deny
ATIK HASAN	atik15-551@diu.edu.bd.com 01779916797	2019-04-03	10:01 AM - 11:30 AM		CANCELLED	

Figure 5.2.6 Appointments Page View for Faculty Member

5.2.7 Appointments of Student

The screenshot displays the 'Appointments Page View for Student'. At the top, there are six summary cards for appointment statuses: Total (7), Pending (1), Approved (1), Completed (0), Incomplete (3), and Cancelled (2). Below this is a table titled 'All Appointments' with three rows of appointment details for MD TANVIR RAHMAN. A 'Create Appointment' button is visible in the top right corner of the table area.

Name	Contact	Date	Time	Topic	Status	Actions
MD TANVIR RAHMAN	trahman.cse@diu.edu.bd 01834172219	2019-04-10	11:30 AM - 12:00 PM	About Final year project discussion	APPROVED	Edit, Cancel
MD TANVIR RAHMAN	trahman.cse@diu.edu.bd 01834172219	2019-04-06	08:30 AM - 08:40 AM		PENDING	Edit, Cancel
MD TANVIR RAHMAN	trahman.cse@diu.edu.bd 01834172219	2019-04-03	10:01 AM - 11:30 AM		CANCELLED	

Figure 5.2.7 Appointments Page View for Student

5.2.8 Search Faculty Member

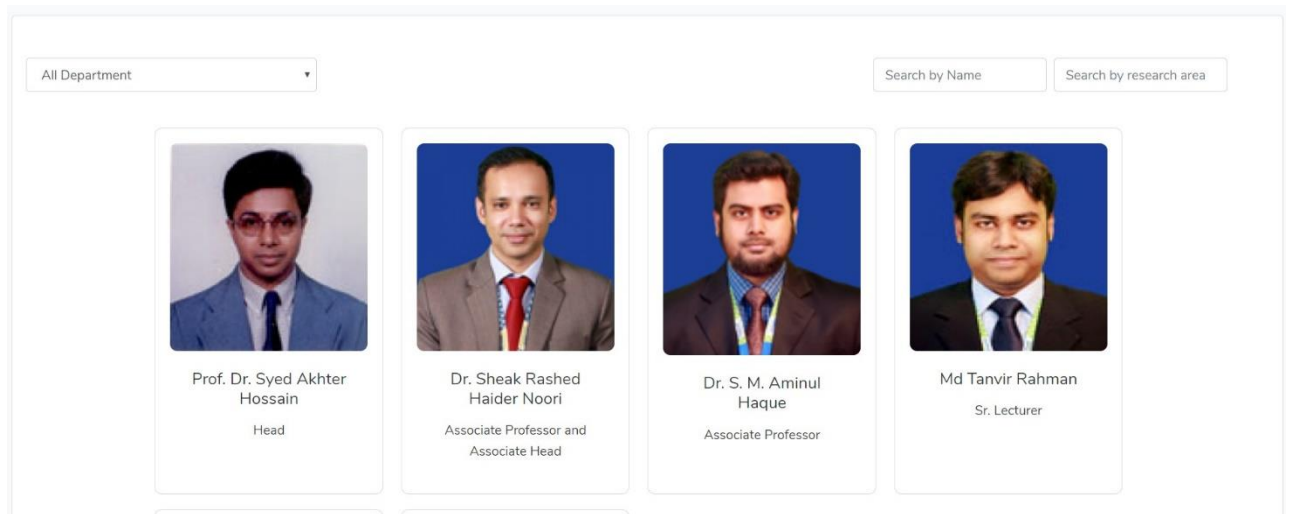


Figure 5.2.8: Search Faculty Member Page View for Student

5.2.9 Request Appointment

The screenshot shows the 'Request Appointment' page. On the left is a form titled 'Add Appointment' with the following fields:

- Department Name ***: CSE
- Faculty Name ***: Md Tanvir Rahman
- Appointment Date ***: 2019-04-06
- Time Slot ***: 08:30 AM - 10:00 AM (2 Slots available)
- Starting Time ***: 09:30 AM
- Ending Time ***: 09:45 AM
- Problem**: About Final year project

At the bottom of the form is a 'Submit' button. On the right is a section titled 'Have a good day!' with a table showing the 'Counselling hour of Md Tanvir Rahman'.

Time	SAT	SUN	MON	TUE	WED	THU	FRI
08:30 AM-10:00 AM	✓	✗	✗	✗	✗	✓	✗
10:00 AM-11:30 AM	✓	✗	✗	✗	✓	✓	✗
11:30 AM-01:00 PM	✗	✓	✗	✗	✓	✗	✗
01:00 PM-02:30 PM	✗	✓	✗	✓	✗	✗	✗
02:30 PM-04:00 PM	✗	✗	✓	✓	✗	✗	✗
04:00 PM-05:30 PM	✗	✗	✓	✗	✗	✗	✗

Below the table, it says 'Appointments taken at slot 08:30 AM - 10:00 AM' with a list item: 08:30 AM - 08:40 AM.

Figure 5.2.9: Request Appointment Page View for Student

5.2.10 Edit Appointment

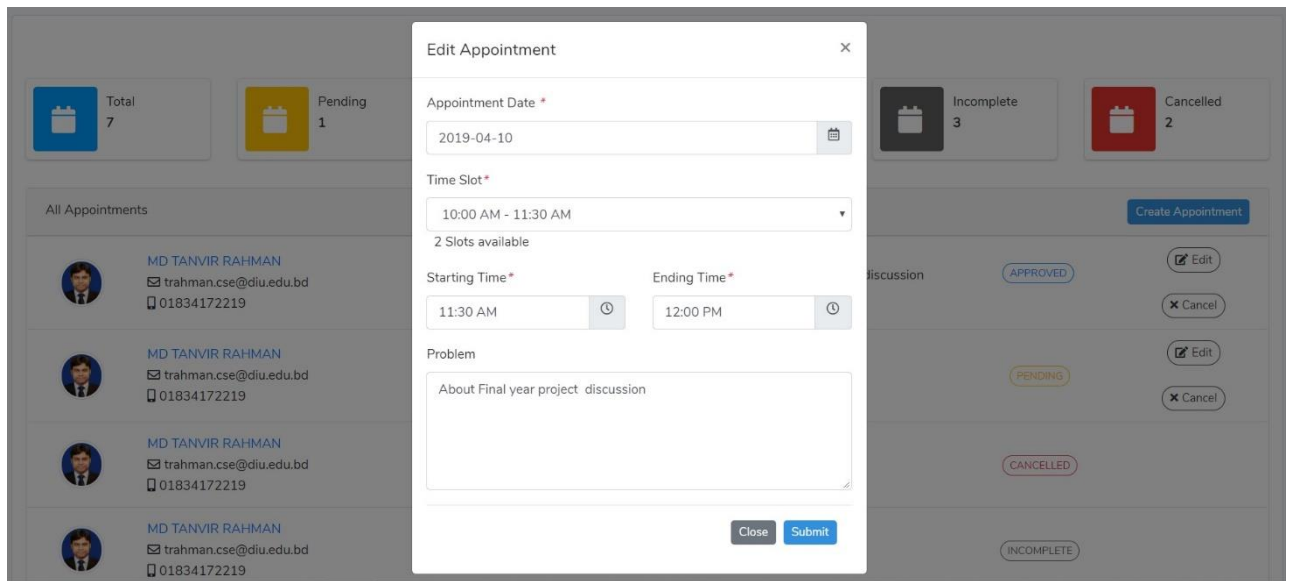


Figure 5.2.10: Edit Appointment View for Student

5.3 Implementation of Interaction

The most important part of the software development is the implementation of the software design in the code and form design. This is the application's development phase. Codes are written in this phase and the necessary requirements for building the software are assembled. There is a gigantic requirement for individual frameworks, setting delicate assistance. The paper talks with exceptional spotlight on the UI about improving such an emotionally supportive network.

5.4 Testing Implementation

5.4.1 System Testing

System testing is performed on the system to test that each system unit or module works as desired. System testing provides insights into system flaws and features that are not visible at the beginning to normal users. The primary focus of system testing is to test the total system whether or not it is performing as expected.

5.4.2 Functional Testing

Functional testing is also known as black box testing. In this project, this type of tests is also carried out. Here we are testing our program's functionality. Each function is identified, listed and tested to check if the desired output is produced.

5.4.3 User Acceptance Testing

User acceptance tests are known as beta tests, which are used to locate errors in the design of a website. Without any problems, the user used the application. The usefulness testing takes place at the center and end of the design process. When problems are detected, gradual changes are made to the website design.

5.4.4 Test Results and Report

The system's performance was close to the expected outcome. The improvement was made in modules throughout this structure. Each module has been executed and tested independently. The whole framework was coordinated by joining each module to work as a whole. The whole framework was tried and confirmed ok at the end of the combination.

Chapter 6: Conclusion and Future Scope

6.1 Discussion and Conclusion

DIU Counselling Hour Management System is a dynamic website. In DIU, huge number of students are admitting here. There are also huge number of faculty member who are teaching the student. To maintain the counselling hour our application can be used with too many benefits. DIU Counselling Hour Management System maintains counselling time very precisely. By using this application, Student and faculty member won't face further problem of managing counselling time. Student can request for appointment for a specific faculty member on specific date. Faculty member can approve student appointments if his time slot is available for the day. Finally, we want our user to be satisfied by using our developed project. At this stage, this project is still under development and will be improved with many new features and functionalities.

6.2 Scope for Further Developments

In future we have many plans for our project. Firstly, in future we want to develop this project in android version to reaches out more Students. By doing all evaluation if Users want more features, we will be adding new features to make our application very attractive. A wonderful mobile application will be developed to make this application more engaging to the students and Faculty Members. In future we are planning to design new UI/UX to make our website very eye catching and smooth. In future we want to promote this project globally.

References:

- [1]. <https://www.hostinger.com/tutorials/what-is-html>
- [2]. https://www.tutorialspoint.com/css/what_is_css.htm
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- [4]. <https://php.net>
- [5]. <https://laravel.com>
- [6]. <http://www.mysqltutorial.org/what-is-mysql/>