DIU Student Portal

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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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APPROVAL

This Project/internship titled "**DIU STUDENT PORTAL**," submitted by Zaki Muzaheed, ID No: 142-15-4117 Puja Kundu, ID No: 142-15-3464, Md. Nazmul Hasan, ID No: 142-15-4124 to the Department of Computer Science and Engineering, Daffodil International University has been accepted as satisfactory for the partial **milit** ment of the requirements for the degree of B.Sc. in Computer Science and Engineering and approved as to its style and contents. The presentation has been held on 7th May 2018.

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DECLARATION

We hereby declare that, this project has been done by us under the supervision of **Mr. Soumik Das Bibon, 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

"DIU STUDENT PORTAL" is a web-based system which helps student to find their information which related to the university. In this system they will have their own profile, academic result history, their course(s) for each semester, their registered course(s), payment ledger, certificate collection form, teaching evaluation and many more. Besides there is an admin panel linked up with the system. In which admin or department or advisor can add student in the system database, upload students result, add course(s) for students, can view student's status. In this project we are introducing and focusing on two unique and important features. Those are (I) pre-registration; and (II) result. These two features are very much important for a student portal. We have tried our best to make the process easy and attractive for users. Teachers can use this report, among other tools, to begin dialog with their students about expectations for research assignments.

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CHAPTER 1

Introduction

1.1 Introduction

Nowadays, a perfect web page is a demand and need of everybody who connect with a particular organization. And because of it our work can be easier and also it will save our time.

This project "DIU Student Portal" will help all to collect any information and complete any process that is needed. This project is both for Admins and Students. Here we have many features as like exiting system, we have some different features which should be in a student portal. We also have Pre-registration system for student and Result System in a brief.

This project will help both admins and students and surely it will reduce some work pressure.

1.2 Motivation of work

Day by day we are working for an easy life. Moreover, we are trying to do a lot of work and gather a lot of information within a short time. And for this reason, day by day we are trying do so. In our project this is main concern that how our project can be more and more useful for those who have to use this.

So, we made "DIU Student Portal" where user can get every information that they need and they can complete some work that will be much easier by using this portal. It will be much more effective for the students. Our system can reduce problems students facing using the existing system.

1.3 Objectives

Our objectives are:

Admin and Student both can use this system.

➤ Only Admin can change and edit information that is needed and student can edit their own

profile.

> Pre-registration system with maintain the Pre-requisite System. It will also check any

drop/incomplete course (s). Students cannot take any courses without completing pre-

requisite and drop/incomplete course (s).

> Students will find their complete result in the "Result "section followed by their taken

course (s) and CGPA and SGPA will be there.

Easy to work without any trouble.

1.4 Expected Outcomes

Our main purpose of this project to develop the student portal with some new features and also

consist of a lot of information. We want to make sure that by this project Admins and Students

both will get satisfaction and it will give us a maintaining outcome that will help everyone and

consume the work pressure. In other side students can do their pre-registration on time with a

perfect sequence. And this will help students and admins both equally.

1.5 Report Layout

Chapter 1: Introduction

In this chapter we have discussed about the introduction, motivation, objectives and expected

outcome of the project. Later followed by the report lay out.

Chapter 2: Background

We discuss about the background circumstances of our project. We also talk about the related

works, comparison to other candidate systems, the scope of the problem and challenges of the

project.

2

Chapter 3: Requirement Specification

This chapter is all about the requirements like business process modeling, the requirement collection and analysis, the use case model of the project and their description, the logical data model and the design requirements.

Chapter 4: Design Specification

In this chapter all the designs of the project. Front-end design, back-end design, interaction design and UX and the implementation requirements.

Chapter 5: Implementation and Testing

This chapter contains the implementation of database, front-end designs, interactions, test implementation and the test results of the project.

Chapter 6: Conclusion and Future Scope

We discussed about the conclusion and the scope for further developments which pretty much derive about the project.

CHAPTER 2

Background

2.1 Introduction

This chapter will describe about existing Student portal that we have and it will discuss about which will differ our project from all of its existing feature. In this chapter we will also discuss about some limitations of existing system. And lastly will discuss about the chance of the problem and also the challenges of our project.

2.2 Related Works

In this chapter we will shortly describe about our existing portal. In existing portal, there are some features as follows:

- * Result
- Payment System
- Registered Course
- Drop Semester
- Edit Profile

Those are some features that we have in our existing portal. Those are also important for a student portal.

2.3 Comparative Studies

In the existing system students face some problems while registering course(s). They can take any course if they want. Though they know the sequence, they try to break it often. In our system they didn't get any chance to do that. Moreover, it will be beneficial for them. If they maintain the flow of course curriculum, it will help them in the long run. In the existing system students can just find

their semester grade points. If they want to collect their full result history, it can't be done. But in our system, they can easily find their full result history in detail.

2.4 Scope of the problem

We are mainly focusing to complete our project with some new features that will create the portal more and more useful to us and also it can reduce our work pressure and also can save our time. Though the existing system is very useful but the new feature can make student portal more useful. Pre-registration System is a unique feature that will remove a lot of registration problem and also it is time saving.

In our project we are strongly focusing how we can create a **pre-registration system** that can easily complete our registration system without any problem and also can maintain some rules. We are also trying to develop our result system in our project.

2.5 Challenges

Definitely, when someone start something have to face some obstacles and challenges. Thus, our project also has some challenges.

First of all, when we started to do it we face some problem because we are very new in this platform. We tried a lot, that we can make a best thing and it is also error free as much as we can. Adding multiple subjects in database as pre-requisite for registering a subject.

Chapter 3

Requirement Specification

3.1 Business Process Modeling

Business process modeling is mapping out regular business processes and finding ways to improve them. It is a part of the practice of business process management. Figure 3.1 shows the business process model of the system. (Dumas, 2013)

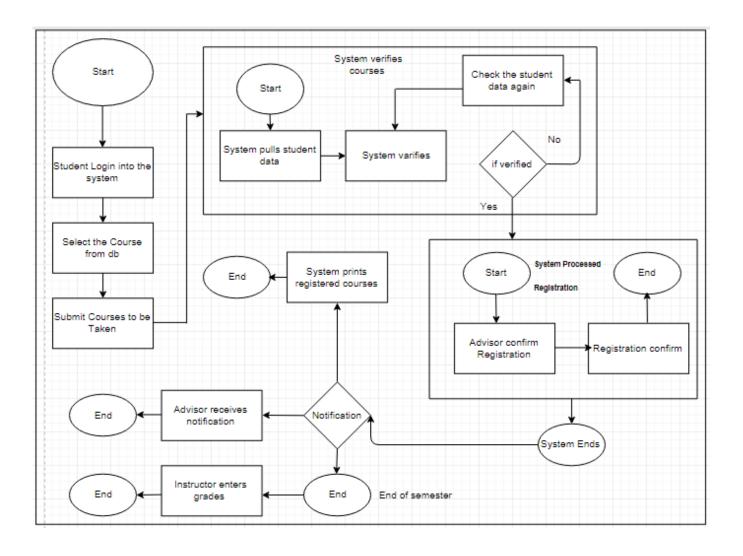


Fig 3.1: System flow chart

3.2 Requirement Collection and Analysis

For our project we collected some requirements which should be in a student portal. In all existing student portal system there are couple of functional requirements like user login, student profile, course registration, pre-registration, result, teaching evaluation and many more. (Bassanini, 1990)

All are same with our existing system except our unique feature "pre-registration" and "result".

Analysis

After analyzing all features, we add them into our project. In pre-registration students should take part when it is opened. It will open for students for a certain period by the respective department. After that students can go through it for their upcoming semester registration. It is like pre-booking for course(s). Students can only take those courses of which they had completed pre-requisite. They can't take any course(s) without completing pre-requisite. The system wouldn't let them to do so. (Bassanini, 1990)

About the result section, students will find their all courses result in a sequential form of their registration. By this they can easily find their weak result or their incomplete course(s), if any.

3.3 Use Case Modeling and Description

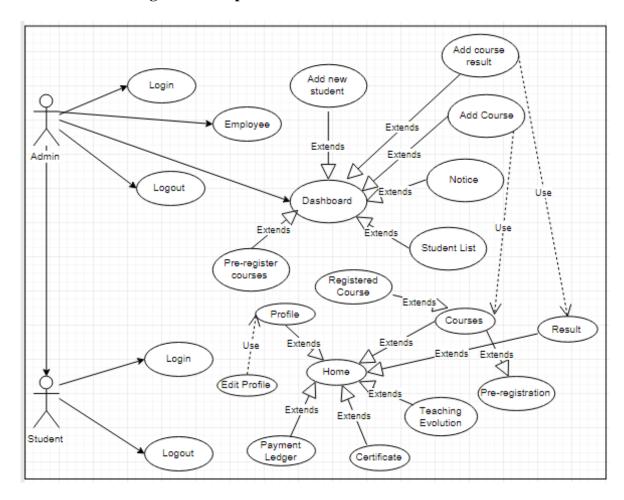


Fig 3.2: Use case model

Table 3.1: Use case description of Login

Use Case #01	Login	
Primary Actor	Admin	
Secondary Actor	Null	
Pre-condition	Employee	
Scenario	Enter valid email address	
2 CO A MI 2	Enter password	
Post-condition	Login successfully or failed	

Table 3.2: Use case description of Employee

Use Case #02	Employee	
Primary Actor	Admin	
Secondary Actor	Null	
Pre-condition	Null	
	Enter valid full name	
Scenario	Enter valid email address	
	Enter password minimum of 6 character	
Post-condition	Login successfully or failed	

Table 3.3: Use case description of Dashboard

Use Case #03	Dashboard	
Primary Actor	Admin	
Secondary Actor	Null	
Pre-condition	Login	
Scenario	 Add new student Add courses Add result View student list 	
Post-condition	Accessing successfully or failed	

Table 3.4: Use case description of Login

Use Case #04	Login	
Primary Actor	Student	
Secondary Actor	Null	
Pre-condition	Registration	
Scenario	Enter valid email address	
Section	Enter password	
Post-condition	Login successfully or failed	

Table 3.5: Use case description of Login

Use Case #05	Home	
Primary Actor	Student	
Secondary Actor	Null	
Pre-condition	Registration	
	View profile	
	Edit profile	
	View registered courses	
Scenario	Pre-registration	
	View result	
	View payment ledger	
	Teaching evolution	
Post-condition	Login successfully or failed	

3.4 Logical Data Model

Logical data model generally represents the structure of a domain of information. The logical model also reflects the semantics of the information context. As a database we use Firebase. The structure for the firebase is given in Figure 3.3 and 3.4.

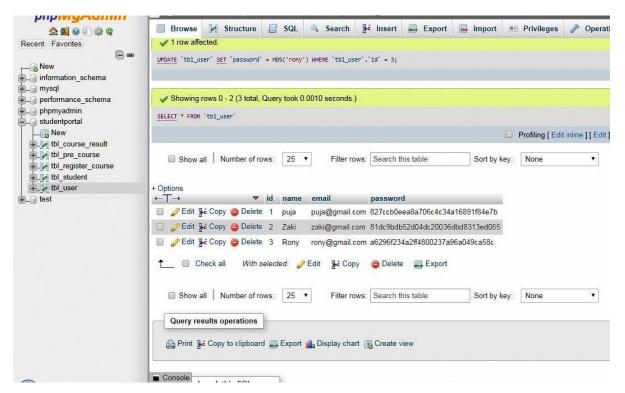


Fig 3.3: Logical Model

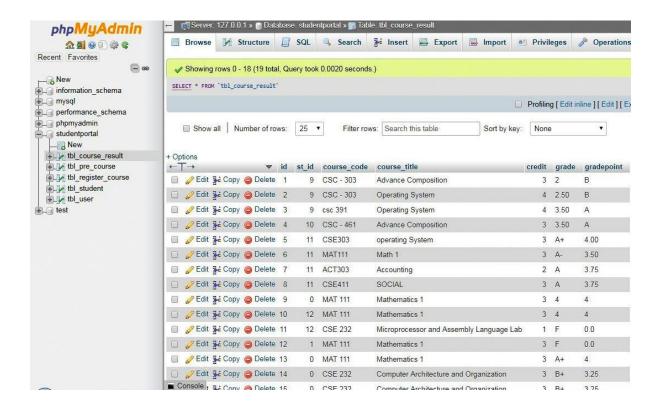


Fig 3.4: Logical Model

3.5 Design Requirements

Design requirements are one of the most important part for a system. To make it attractive for users it must be followed. Design of a student portal should be very interactive. When students use it, they can feel it's important. We make the UI attractive to make students attract to it.

- ❖ In our system we designed our login system very much secured and attractive.
- ❖ In the profile section students can add their own picture as a profile picture,
- ❖ In result section all results will arrange sequentially.
- ❖ In course registration, registered courses will appear one by one with full details.
- ❖ In pre-registration all fields are in a sequence form.
- ❖ In home students will find basic information's.

Chapter 4

Design Specification

4.1 Front-end Design

We use templates for front-end-design. We tried to make the front-end attractive so that students will enjoy when they use it.

Here are some screen shots of our front-end-design:



Fig 4.1: Student Login

In here student will login with their university ID and password given by their respective department. Later on, they can change the password.

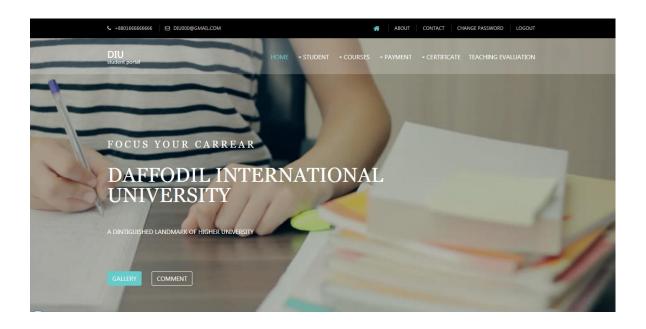


Fig 4.2: Home

This is the homepage for students. Student's can find all contents here which should be in a Student Portal.

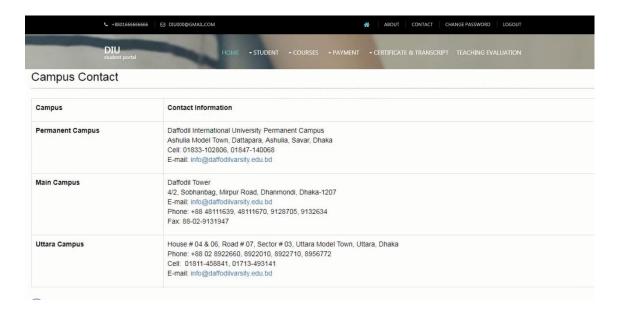


Fig 4.3: About

This is the about section. Where a user can find the contact information.

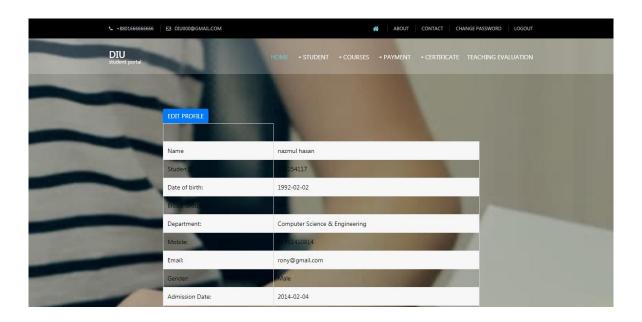


Fig 4.4: Student Profile

Students can see their profile using this section.

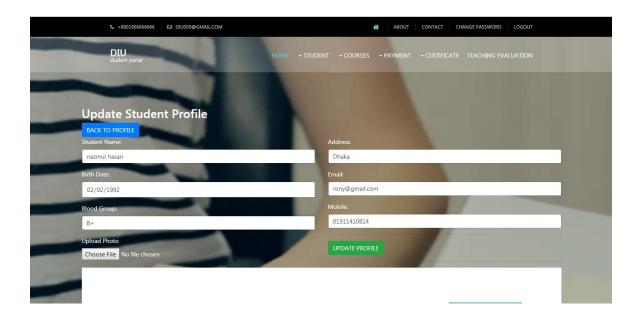


Fig: 4.5: Student Profile Update

Students can update their profile using this section.

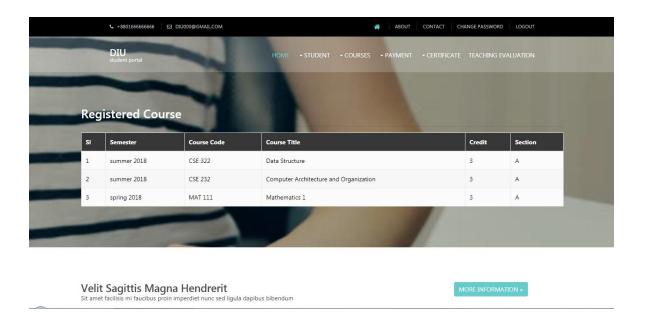


Fig 4.6: Registered Courses

In this section students will find their registered course(s) for the current semester.

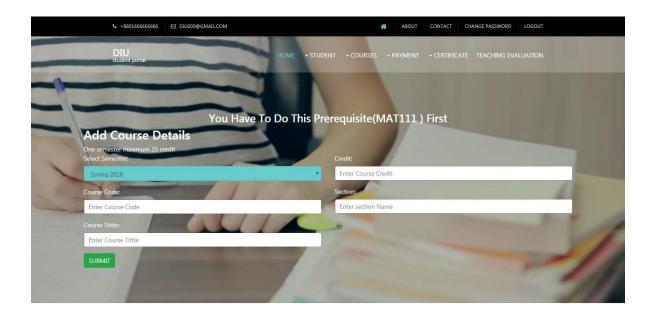


Fig 4.7: Pre-Registration

This is the main part of our project. In here, students will complete their pre-registration for a upcoming semester. This section will only appear in the time of pre-registration period. This

particular period will declare by the department(s). Student must go through this process for registering into an upcoming semester. After getting admitted into 1st semester student(s) will find their courses into **Registered Courses** section. And for an upcoming semester student will complete their pre-registration in the scheduled time given by the department. They can take course(s) which will advised for them by the department. But they need to be sure about pre-requisite of a course. If they haven't completed the pre-requisite the system will not let them to take that course. E.g.: MAT111 is pre-requisite for MAT211. If a student hasn't completed MAT111 he/she won't be able to take MAT211. Besides, if a student took a course by following the pre-requisite rule, but he/she can't complete that course for some reason. In that time, when final registration will appear his/her that incomplete course will automatically added to his/her registered courses. A student can withdraw a course or add a course in final registration through an application as per pre-requisite rule and availability of seats for that course. Final registration will have done by a coordinator or an advisor before a semester begins. After final registration students will not allow to add or drop any course(s).

In final registration coordinator or advisor will only mark in done. It'll reduce their work load and make the work easier than the existing registration processes

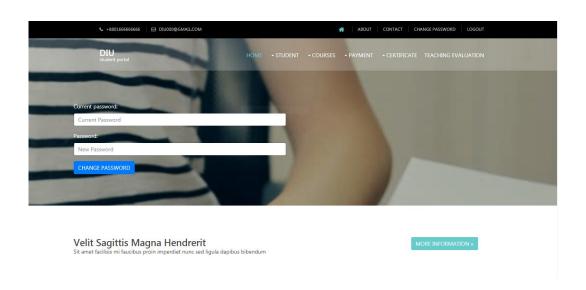


Fig 4.8: Password Change

Students can change their password from here. For the freshers, department will provide them a password. After getting it, they should change it as their own.



Fig 4.9: Admin Login

This is for an admin or a coordinator or an advisor. In a word, this part will handle by the department. Department will appoint coordinator or supervisor as an admin. It's login credentials will provide by the department.

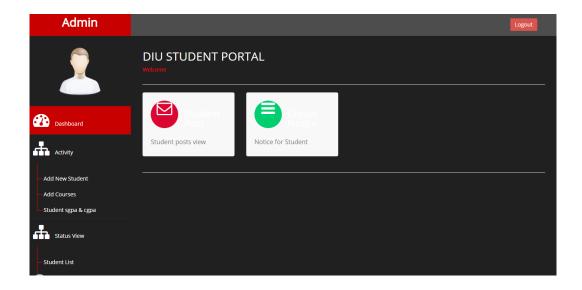


Fig 4.10: Dashboard

This is the homepage or dashboard of admin panel. Here an admin will find all necessary sections they need.

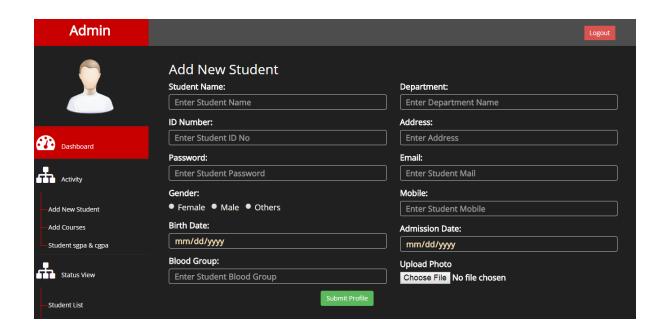


Fig 4.11: Add New Student

Here admin can add new students by completing this form.

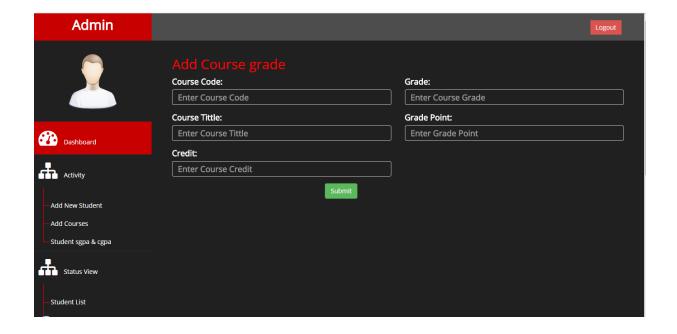


Fig 4.12: Add Course Grade

In this section admin can add course grades. Students can view it from their result section.

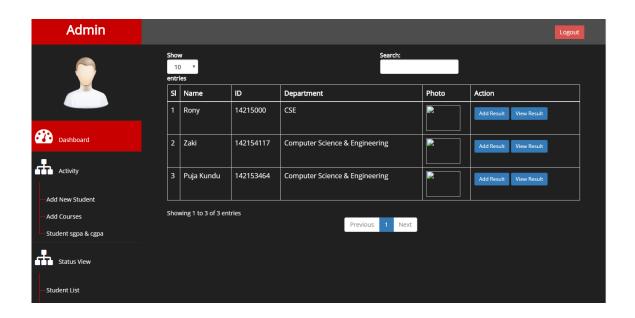


Fig 4.13: Add SGPA & CGPA

In this section admin can add students SGPA and CGPA. Students can view it from their result section.

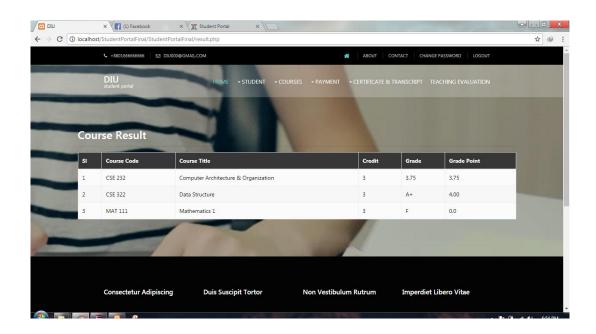


Fig 4.14: SGPA

Students can find their all result along with the courses in here.

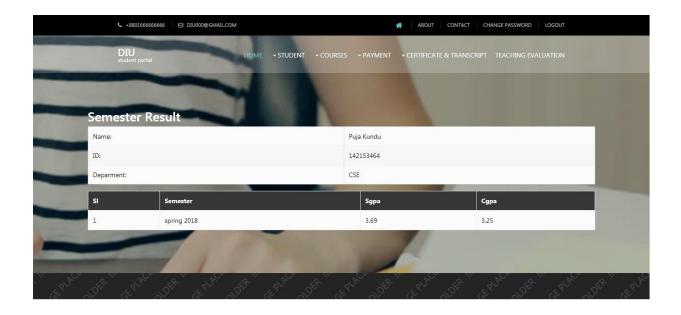


Fig 4.15: CGPA

Here students can see their CGPA.

4.2 Back-end Design

The Back-end design is the part that working behind of the project. The user can't see or notifying or the back-end part. There is only one-way user can interact with the app by front-end-design. And the user cannot see the back-end design and how this part is working.

We used php to built our back-end. By linking up all php files together our back-end design established. For back-end we have to use some databases like admin login database, courses database, student database.

We use XAMPP to connect the databases with php.

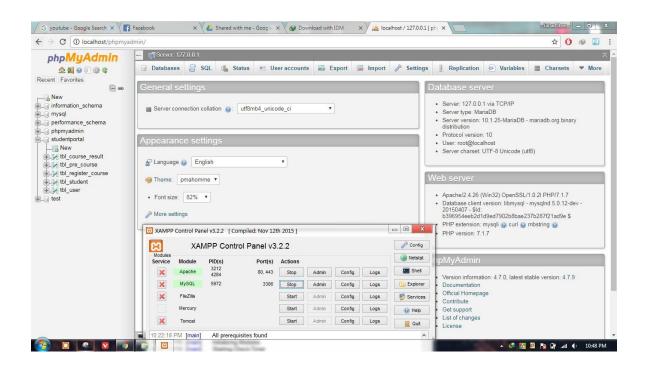


Fig 4.16: XAMPP connected

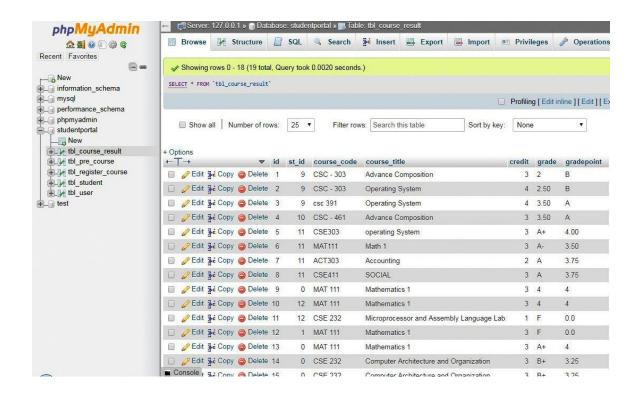


Fig 4.17: Course Database

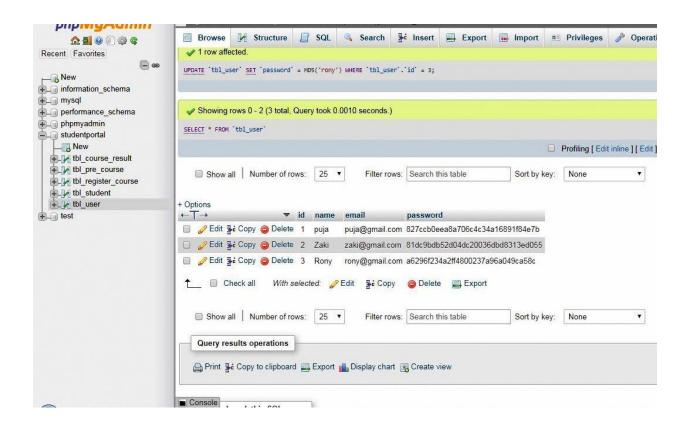


Fig 4.18: Admin Database

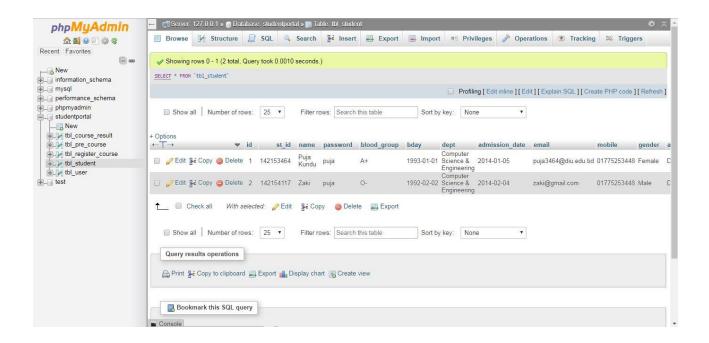


Fig 4.19: Student Database

4.3 Interaction Design and UX

Interaction design represents interaction between the user and the system. Interaction design considered the procedures such that the user issue space, processing the issues and discovering the outcomes. It also performs activities by the regarding outcomes about and take care of the issue in the system.

In our system for UX we have tried to give our user some great experiences by adding some new features. For better performance and experience for the user, we tried to keep our system simple and easier to use.

4.4 Implementation Requirements

Our project is a web-based project. We used some tools to implement it.

Tools list are given below:

- Template
- Text editor (Sublime text)
- XAMPP
- Web browser (Google Chrome)

Chapter 5

Implementation and Testing

5.1 Implementation of Database

In our project we used SQL server to implement our database. We have used five databases in our project.

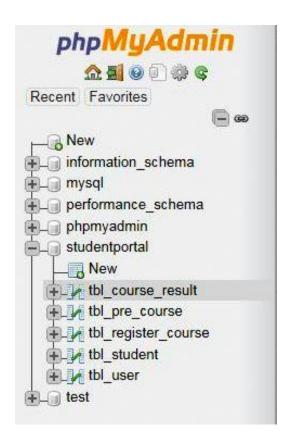


Fig 5.1: Database

5.2 Implementation of Front-end Design

In front-end design we used some templates and then we change it by our need with HTML and CSS. After that we link them with php code to implement the front-end.

5.3 Implementation of Interactions

Our primary users are students. For that purpose, we designed a login system for students, by which they can access the system.

The system needed an admin panel to make the system workable. The admin panel has all rights to add new students, add course(s), upload result, add course(s) in the database and many more

5.4 Testing Implementation

Testing implementation is process of testing the implementation of a system, where tester or system architect will see various cases and specification, is it implementable or it has limitations.

Table 5.1: Testing Implementation

Test Input	Expected Output	Actual Output	Result
Login	Blank or incorrect email or password	Showing a Warning that correct email or password must be entered.	Passed
Add Student (Admin)	All fields are filled by following department rule.	Student added successfully.	Passed
Add courses (Admin)	Add courses by following pre-requisite.	Course(s) added successful.	Passed
Add result (Admin)	Add result by following grade sheet.	Result uploaded.	Passed
Update profile (Student)	Fill-up all necessary fields.	Profile updated.	Passed
Change password (Student)	Password changed.	Password changed.	Passed
Pre-Registration (Student)	Check pre-requisite course(s).	Without completing pre- requisite, next course(s) can't be taken.	Passed

5.5 Test Results and Reports

Our testing was successfully completed by checking all the terms and possible areas of testing. Testing of students and admin panel is 100% successful.

Chapter 6

Conclusion and Future Scope

6.1 Discussion and Conclusion

DIU Student Portal provides easy, accurate and faster data access. This student portal system is helpful to perform and manage paperless work smoothly and reserve all data. This system stores the information of the users. This Student Portal System is that system which takes the students as main target and provides easy and faster services to students through an interface. It is a global platform for the user students.

In a word, this system is user friendly and 24 Hours accessible. It is a secure, faster and better communication system. This system saves our time and man power. We hope, if we work on this project to develop it will surely give us better output in future.

6.2 Future Scopes

Our aim is to provide services that are of interest to the students of DIU. If we enhance or develop our project, it will meet the following principal functional requirements:

Lost & found:

We will add a feature named "lost & found" so that users can post information on items which have been lost or found. Posted information can be both textual or multimedia in nature. And also, users will be able to communicate with the persons who have lost or found the items. Then the items will be matched with the given information of the lost items. It'll be very much transparent so that no one can accuse the authority after the ending of the process. There will be a certain duration for the notice. After that the property will be donated to the privileged.

Add Club & Society:

We will work on our project to add a feature named "Add Club & Society". Club Secretaries will be able to add new or existing clubs or society on this portal system. They can add, modify, delete or change their club\society and then new members will be able to register with the clubs or societies they want through this portal system.

Online Payment:

Will try our best to develop online payment system on this portal system. Online transaction will be handled by a third party (Accounts section). The website will offer a secure link to the payment page. If online payments are verified, the website will display confirmation and the users will get a transaction receipt. If the users want, they will be able to print or save the receipt.

Place Advertisement:

- ❖ Only registered users will be able to purchase advertising space on this system. Advertisement will be both textual and multimedia in nature. Before advertising user will first have to be 'registered' and provide appropriate details for registration. When the payment will be processed then the advertisements will be posted to the system.
- ❖ The advertisers will be able to add, modify, edit and delete their advertisements.
- ❖ Users will be able to purchase available items advertised on this system. The users will select items they wish to purchase and proceed to check out.
- ❖ Upon check out the users will be required to provide the necessary payment details for the transaction to be completed. The transaction will be processed through a third party-account section.

Social/Communication Forum:

This portal system will provide a platform for users to interconnect socially. The social forum will available for the registered users only. Users will be able to login to interconnect & exchange their personal ideas with their colleagues, discuss about current issues and other educational matters.

Event Management:

If we include this section on this portal system, this section will be used to announce social events and curricular activities which might be taking place on or off campus.

- Events notifications will only be posted by Event promoter or registered users and a certain fee will be applied.
- Event promoters will have to pay to place an advertisement for the events they will arrange for students such as student balls, adventure tours, sport events etc. on commission basis.
- ❖ Events ticket will be available for the users. Interested users will be able to buy tickets (if available) and payment will be done through this portal system.

DIU Hostel Management:

We will able to add "Diu Hostel Management" feature to this portal system. This will include the whole hostel management system like seat booking, seat discharging etc. If there is no available seat, then the user will get a message through this portal system. And when seats will be available the users will get notification.

Complaints about services:

If we work on this project we will be able to add this new feature. As a result, the students will be able to complain regarding efficiency of our services. Then proper steps can be taken regarding the problems.

Security Enhancement:

❖ We will also work for the enhancement of the security system of this portal system. As the system is globally accessible, so there is a chance to access by other persons having login ID and password.

So, we will try our best to add a feature named "Last Visited". As a result, the users will be able to see the time and date of last visiting. By this, the users will be confirmed about their access. If there happens any problem, the user will be able to change their password.

We will try our best for the further development of this student portal system.

References

- 1. DIU Student portal http://studentportal.diu.edu.bd/#/login .
- 2. Dumas, M., La Rosa, M., Mendling, J. and Reijers, H.A., 2013. Fundamentals of business process management (Vol. 1, p. 2). Heidelberg: Springer.
- 3. Bassanini, G., Di Stefano, F., Henry, P., Lunghi, G., Pulst, E. and Wolfram, G., 1990. Requirement Collection and Analysis. In Automatic Tools for Designing Office Information Systems (pp. 15-42). Springer, Berlin, Heidelberg.
- 4. https://www.slideshare.net/FrancisKeke/student-portal-analysis-implementation-66320204
- 5. https://www.leeds.ac.uk/portalproject/Documentation/Project%20Documentation/ComunicationPlanLog30.doc
- 6. https://www.scribd.com/presentation/142331829/Student-Portal-System
- 7. http://cse.final-year-projects.in/a/2229-development-of-a-student-database-management-system-for-a-university-in-mysql.html

Appendices

Appendix A: Project Reflection

The purpose of this appendix is about project reflection. From Spring 2017 semester we started our journey to make this project. The main feature of our project is pre-registration and result. Firstly, we build a model for our project then we implement our project step by step. After many hard work and spending a lot of time finally we were able to reach our goal.

Appendix B: Related Diagrams

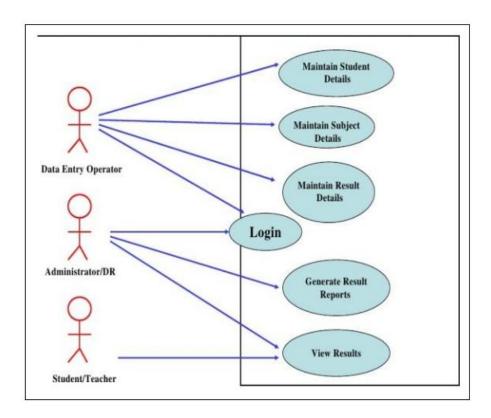


Fig 1: Appendix B

Plagiarism Report

Checked By: www.plagramme.com

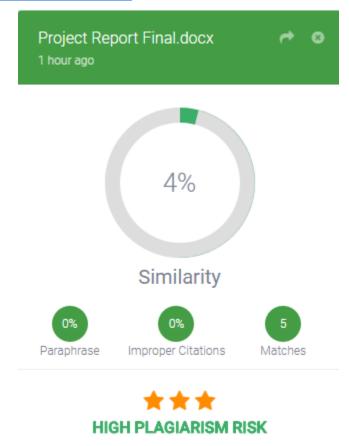


Figure: Plagiarism Report