



**Daffodil**  
*International*  
**University**

## **DIU Course Registration Portal**

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**Submitted by**

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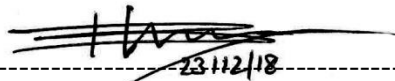
Daffodil International University

This Project report has been submitted in fulfillment of the requirements for the Degree  
of  
Bachelor of Science in Software Engineering.

## Letter of Approval

This **Project** titled “**DIU Course Registration Portal**”, submitted by **Sabbir Rahman, 151-35-889** to the Department of Software Engineering, Daffodil International University has been accepted as satisfactory for the partial fulfillment of the requirements for the degree of B.Sc in Software Engineering and approved as to its style and contents.

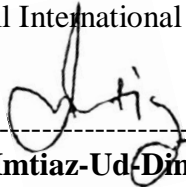
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# DECLARATION

I hereby declare that, this Project Report has been done by me under the supervision of Asif Khan Shakir, Lecturer, Department of Software Engineering, Faculty of Science and Information Technology, Daffodil International University. I also declare that this report nor any part of this report has been submitted elsewhere for award of any degree.

**Submitted by:**



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.....  
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## **ACKNOWLEDGMENT**

I would like to express my special thanks of gratitude to my teacher (Asif Khan Shakir) as well as our university who gave me the golden opportunity to do this wonderful project on the topic, which also helped me in doing a lot of Research and i came to know about so many new things. I am really thankful to them. Secondly i would also like to thank my parents and friends who helped me a lot in finalizing this project within the limited time frame.

## **Dedication**

At first I dedicate this work to Almighty Allah for His blessing that makes me possible to complete this successfully. I have not enough resource to make this project. And also I have no knowledge about excel file. How to import and export excel file. But I tried my level best to complete this project within time.

## **Abstract**

In every start of the semester students need to come to the university physically to register their online courses. Teacher also needs to come to the university to assign courses. But this system will solve this issue. In this system students can easily takes their semester wise courses. And their section will be auto assign by the system based on the students taken that course. Teacher will approve those courses that are taken by the students easily by searching. Finally an admin can easily view the report on how many students takes particular courses in every semester.

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## **Chapter 1.Introduction**

### **1.1. Project Overview**

DIU Course Registration Portal is a system where user can easily registered their online courses. So they don't need to come to the university to register their online courses.

### **1.2. The Purpose of the Project**

In this system students will registered their courses on a particular semester. A teacher will approve those courses. And finally an admin can see the report on how many students registered for courses in a particular semester.

#### 1.2.1. Background

In every start of the semester every student of our university come to the university physically to registered their courses. Teachers also come to the university to register student's courses. All have to wait for long time to register courses. This system will solve all types of users suffering.

#### 1.2.2. Benefits & Beneficiaries

Benefits of this system,

- Students can easily register their semester wise courses online.
- Teacher can easily approve Student's taken courses.
- Admin can easily see the report on how many students registered their courses on a particular semester.

#### 1.2.3. Goal Of The Project

To design and development of online course registration system for Daffodil International University.

### **1.3. Stakeholders**

There are three types of stockholders.

- Student
- Teacher
- Admin

### 1.4. Proposed System Model (Block Diagram)

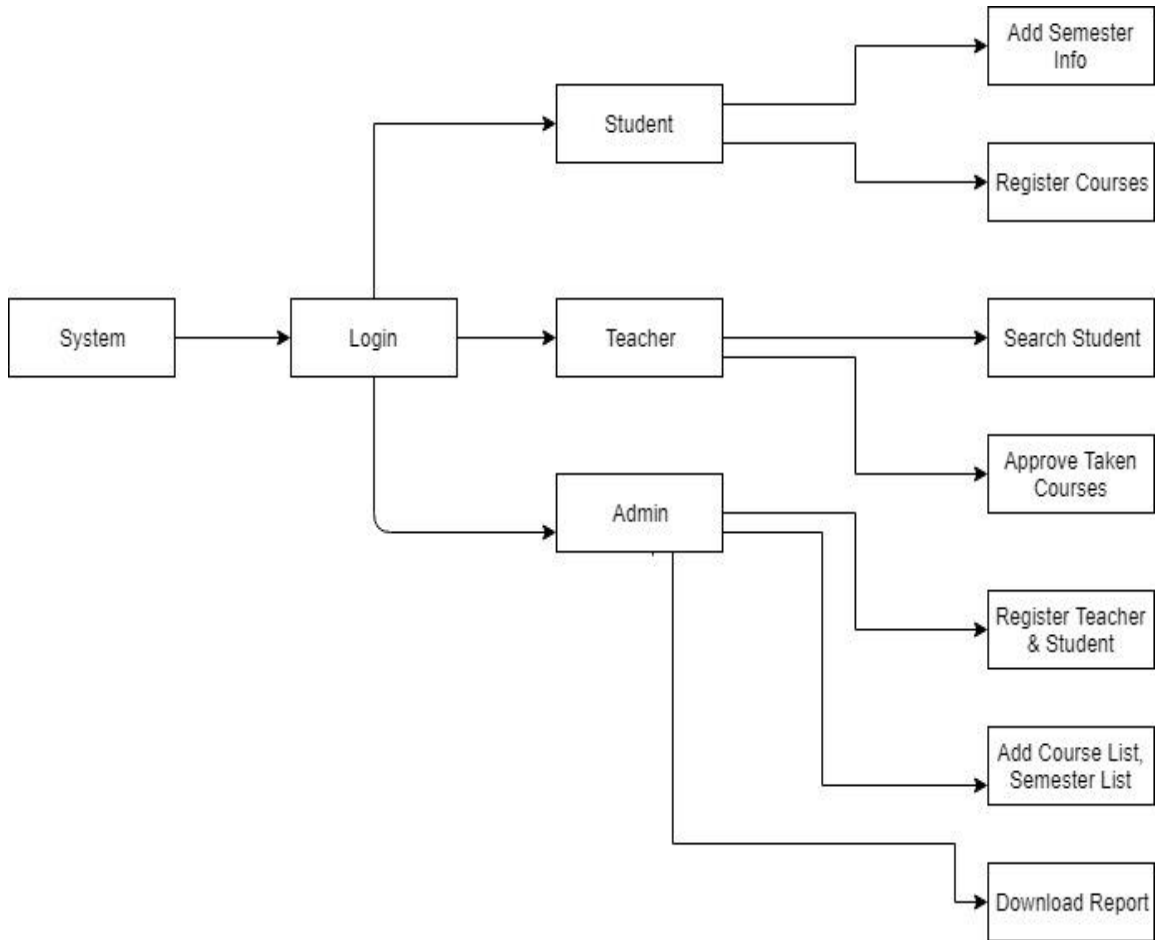


Fig-1: Block Diagram

### 1.5. Project Schedule

#### 1.5.1. Gantt chart

Task	Start Date	End Date	Status	July	August	September	October	November
Proposal	01-07-2018	10-07-2018	Compete					
Requirements	12-07-2018	29-07-2018	Compete					
Design	01-08-2018	30-08-2018	Compete					
Implementation	01-09-2018	30-10-2018	Compete					
Testing	01-11-2018	16-11-2018	Compete					

Table-1: Gantt chart

## **Chapter 2. Software Requirement Specifications**

### **2.1. Functional Requirements**

- System should have authentication process.
- System should have Semester Add function.
- System should have Course Add Function.
- System should have an option for excel file upload.
- System should have an option for generate report.
- System should have Semester & Course Registration option.
- Maximum 4 courses can be taken on this system.
- Teacher should change/delete student's taken courses
- Teacher must be approved student's course registration.
- Student & Teacher registration process can be done by only Admin.
- System should have a delete taken course functionality for student.

### **2.2. Non Functional Requirements**

- Only DIU students can be accessed on this system.
- System should have an option for changing password.
- Student's default password should be student's id.
- Section should be auto added by the system.
- Maximum 40 students can be added on a section.
- System should be user friendly.

## Chapter 3. System Analysis and Design

### 3.1. Use Case Diagram

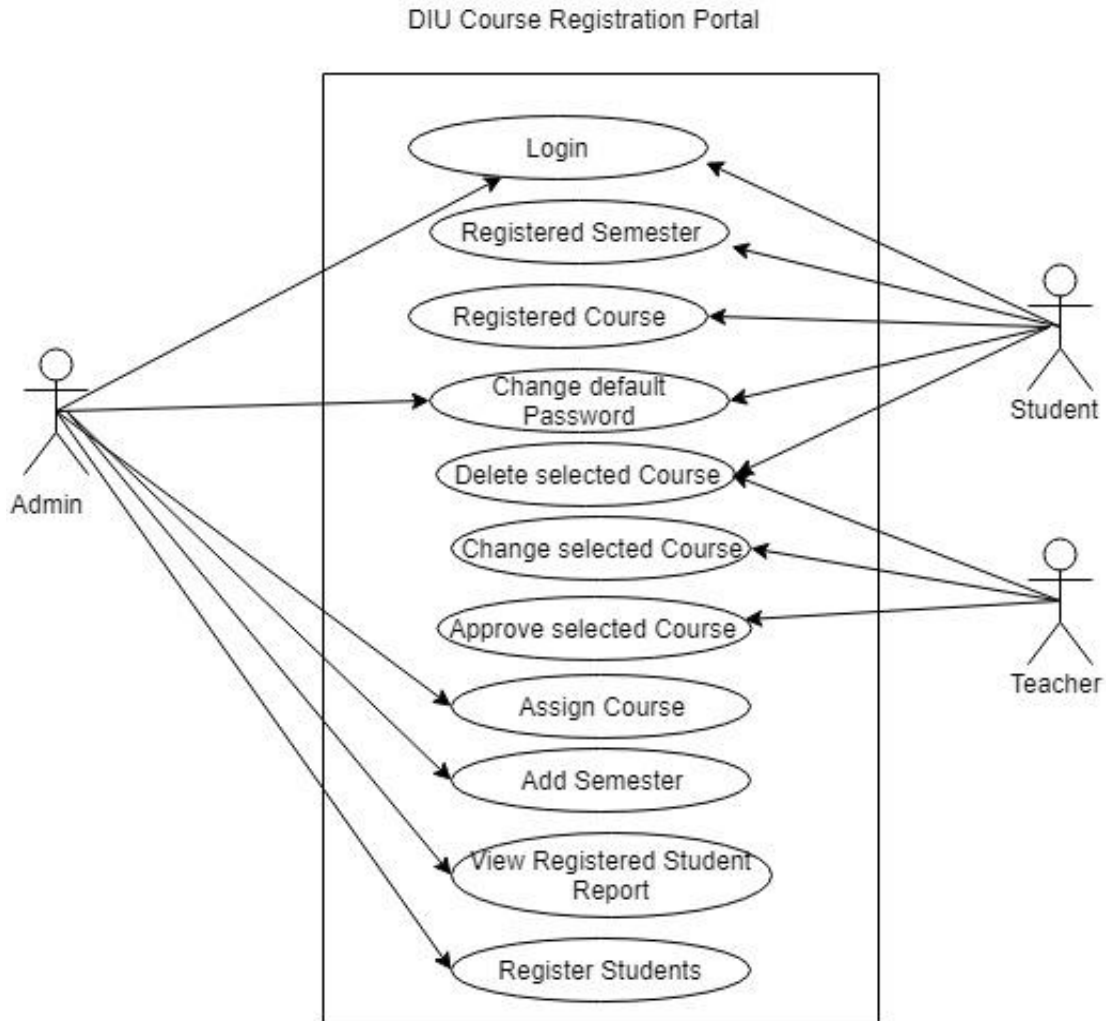


Fig-2: Use Case Diagram

### 3.2. Use Case Description

There are three types of user for this system. They are Student, Teacher & Admin. All types of user first login to access this system. Student will register semester first with proper semester info. Then register their courses for that semester. Teacher can delete those courses if students take another course which cannot be taken on that semester. Finally Teacher can approve those courses. An admin can register teacher & Students. And also view report.

### 3.3. Activity Diagram

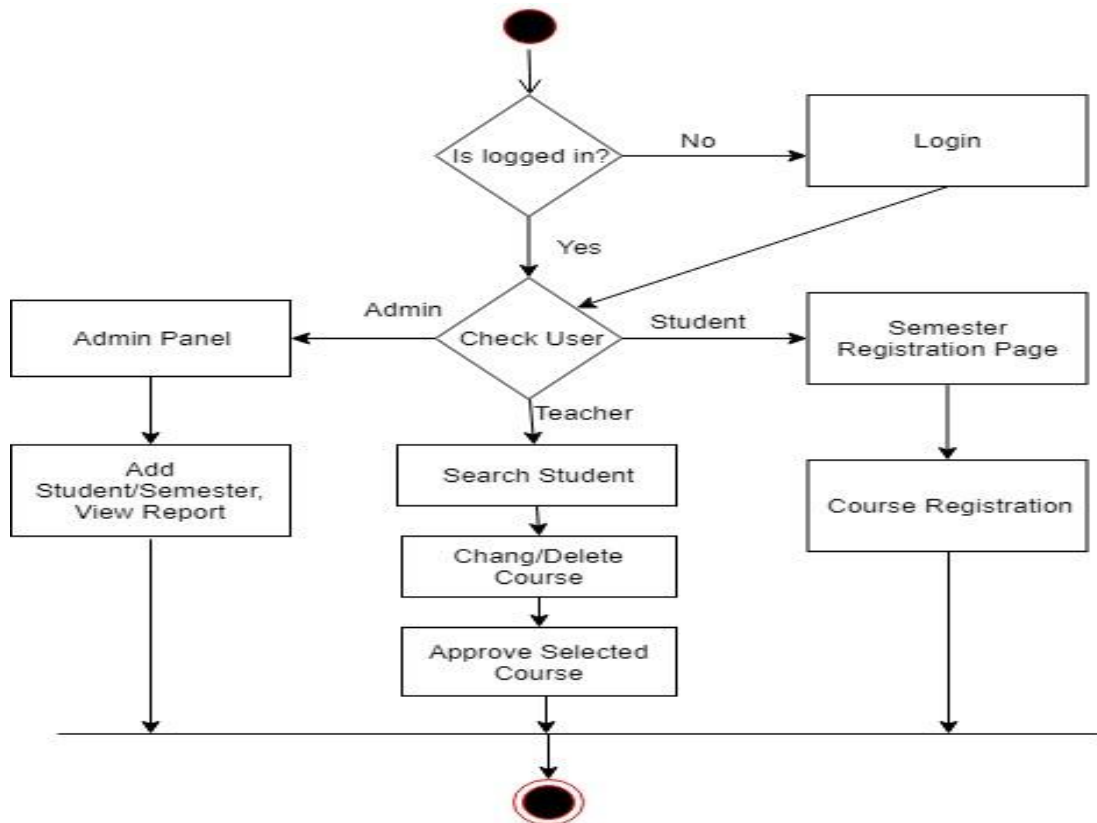


Fig-3: Activity Diagram

### 3.4. Sequence Diagram

#### 3.4.1. Sequence Diagram for Student

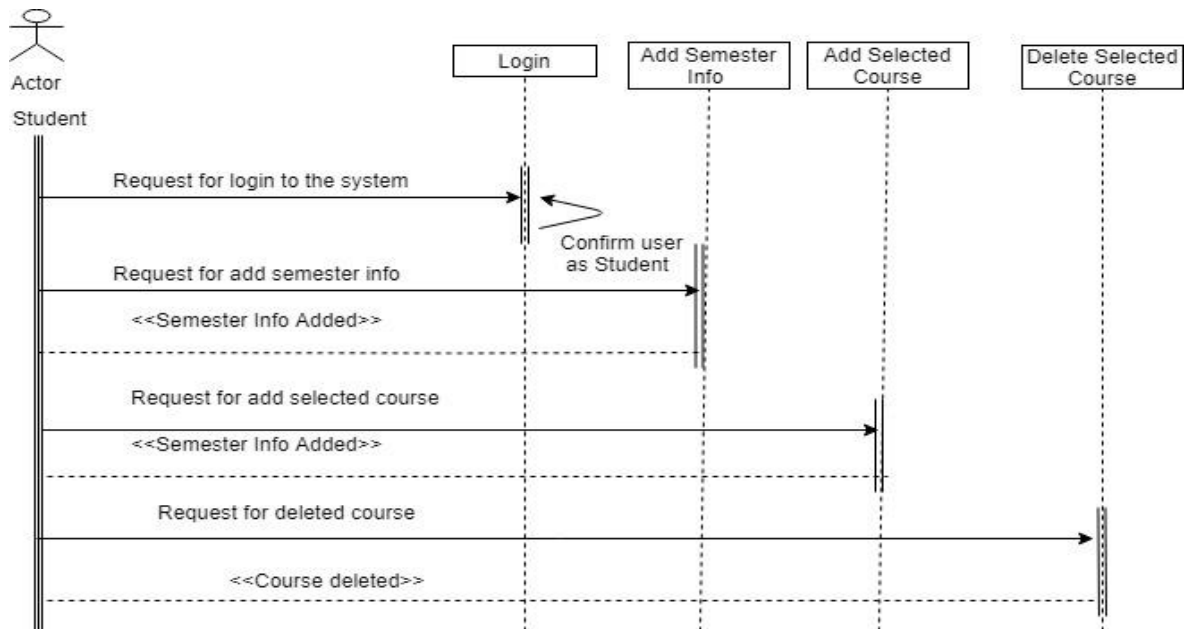


Fig-4: Sequence Diagram (Student)

### 3.4.2. Sequence Diagram for Teacher

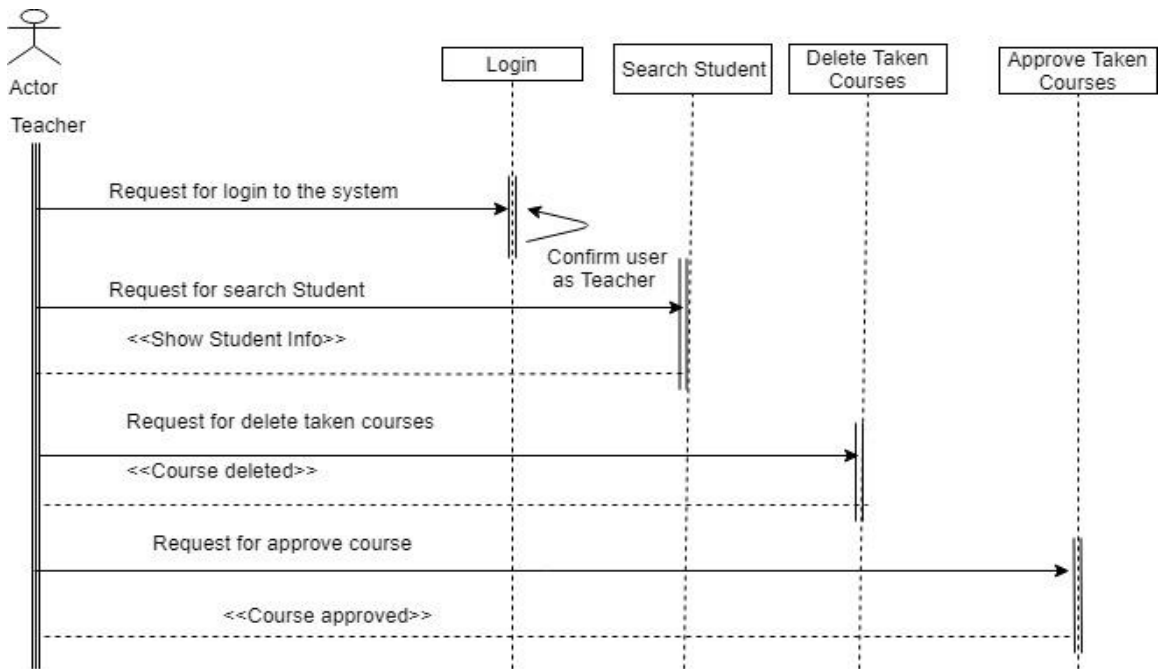


Fig-5: Sequence Diagram (Teacher)

### 3.4.3. Sequence Diagram for Admin

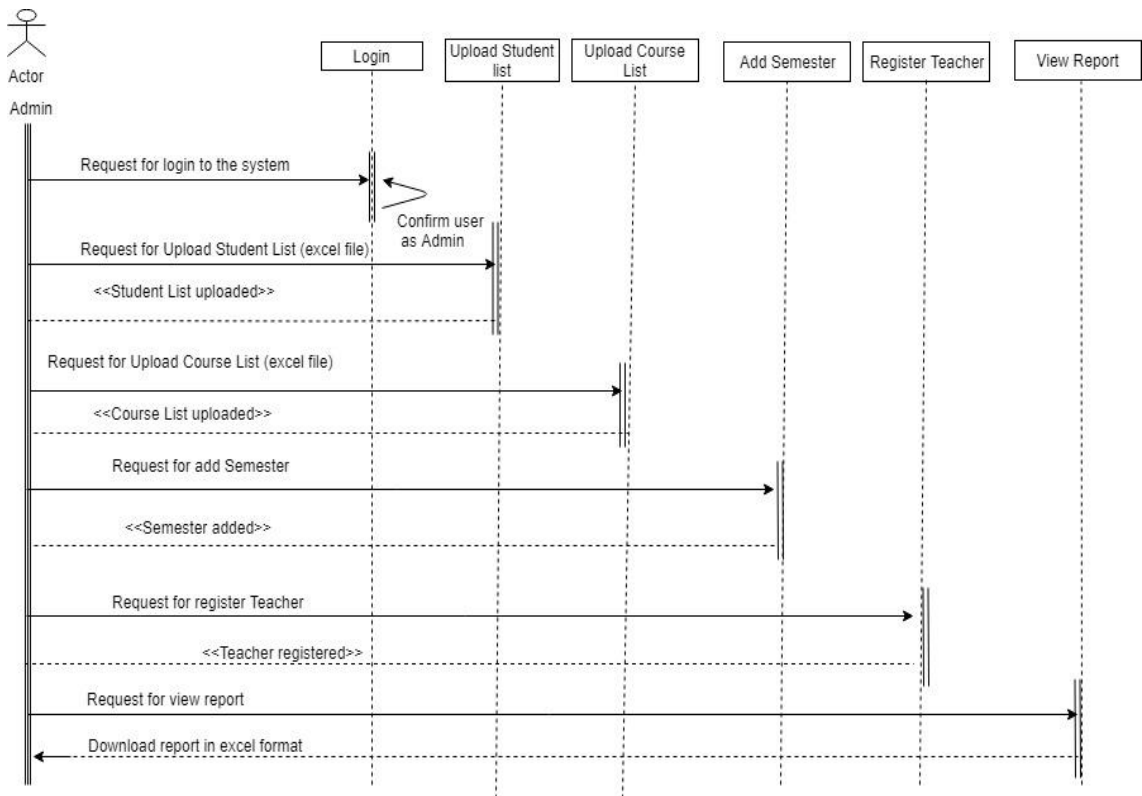


Fig-6: Sequence Diagram (Admin)

### 3.5.Data Flow Diagram (Level 0)

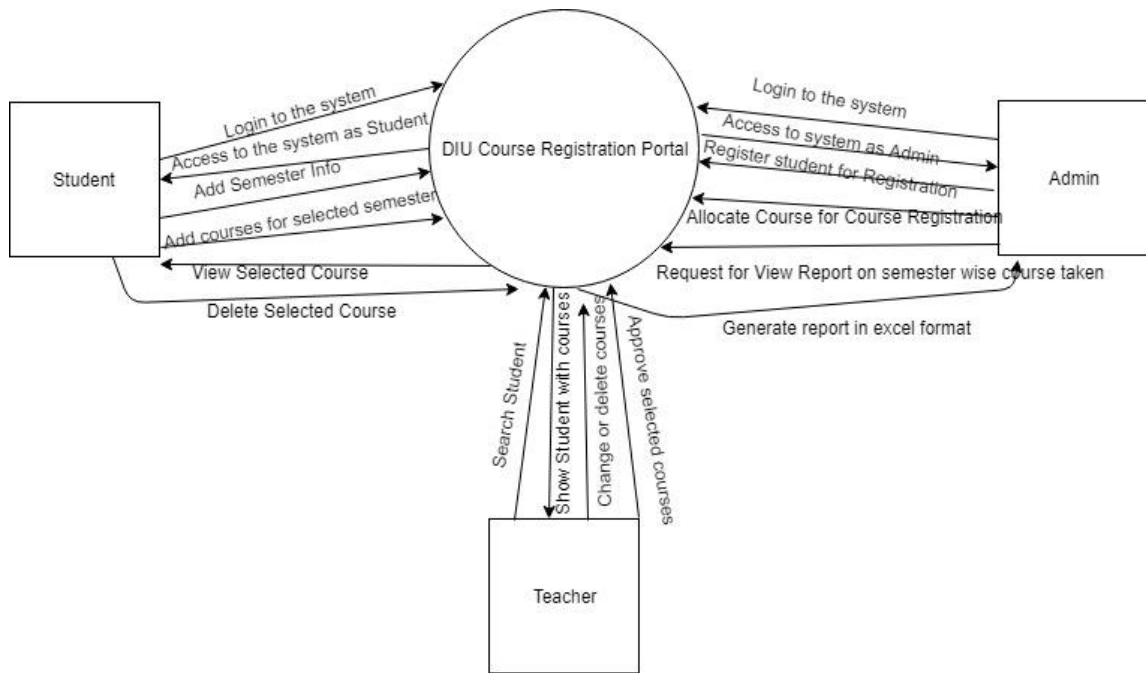


Fig-7: DFD Level 0

### 3.6.Data Flow Diagram (Level 1)

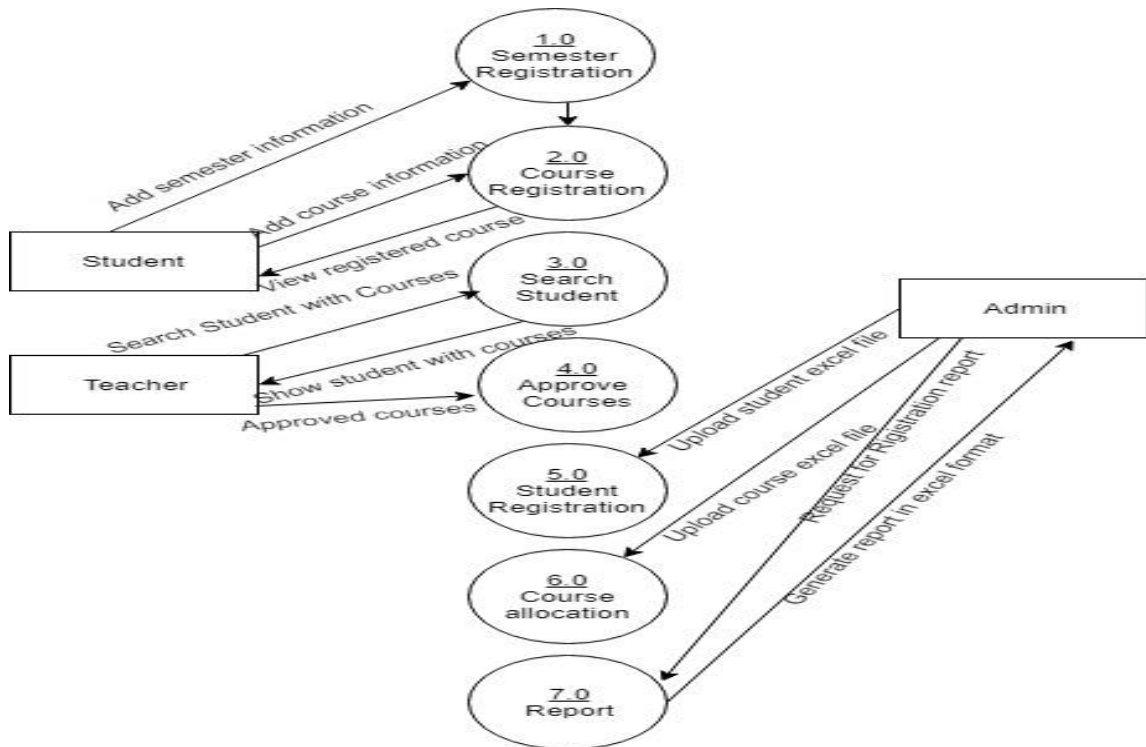


Fig-8: DFD Level 1



## Chapter 4.Design and Development

### 4.1. Entity Relationship Diagram

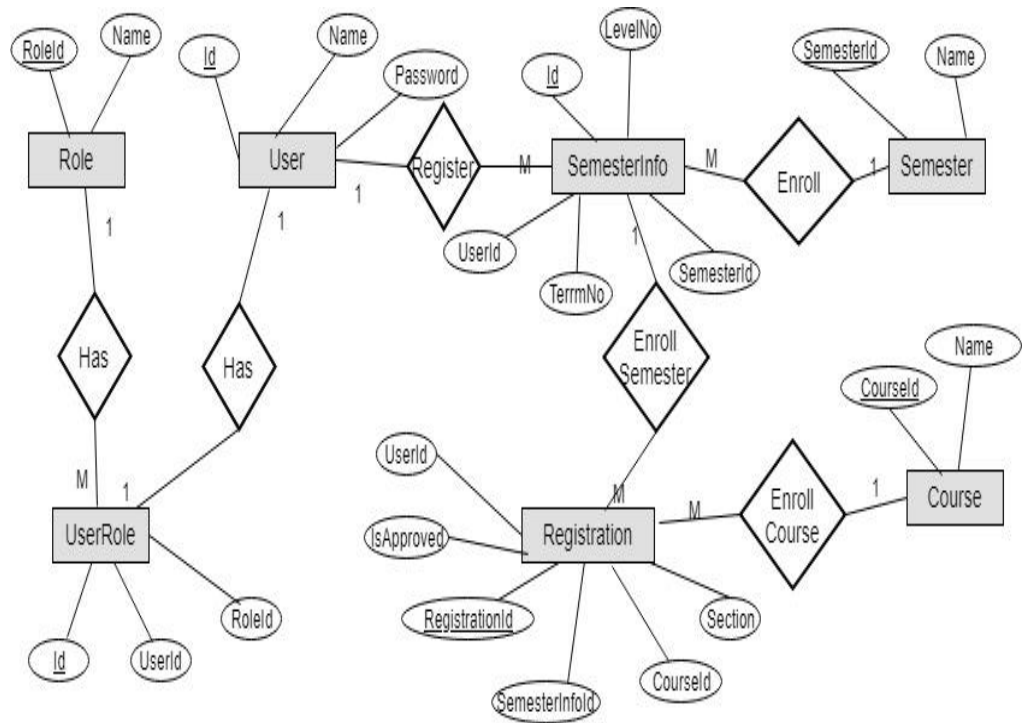


Fig-9: Entity Relationship Diagram

### 4.2. Class Diagram

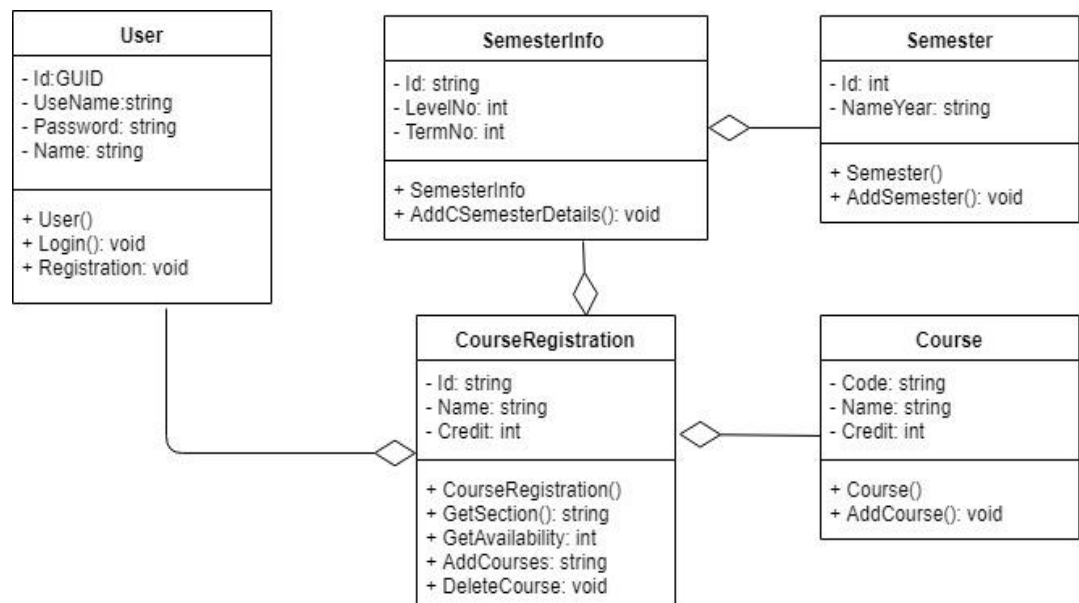


Fig-10: Class Diagram

### 4.3. Database Schema Diagram

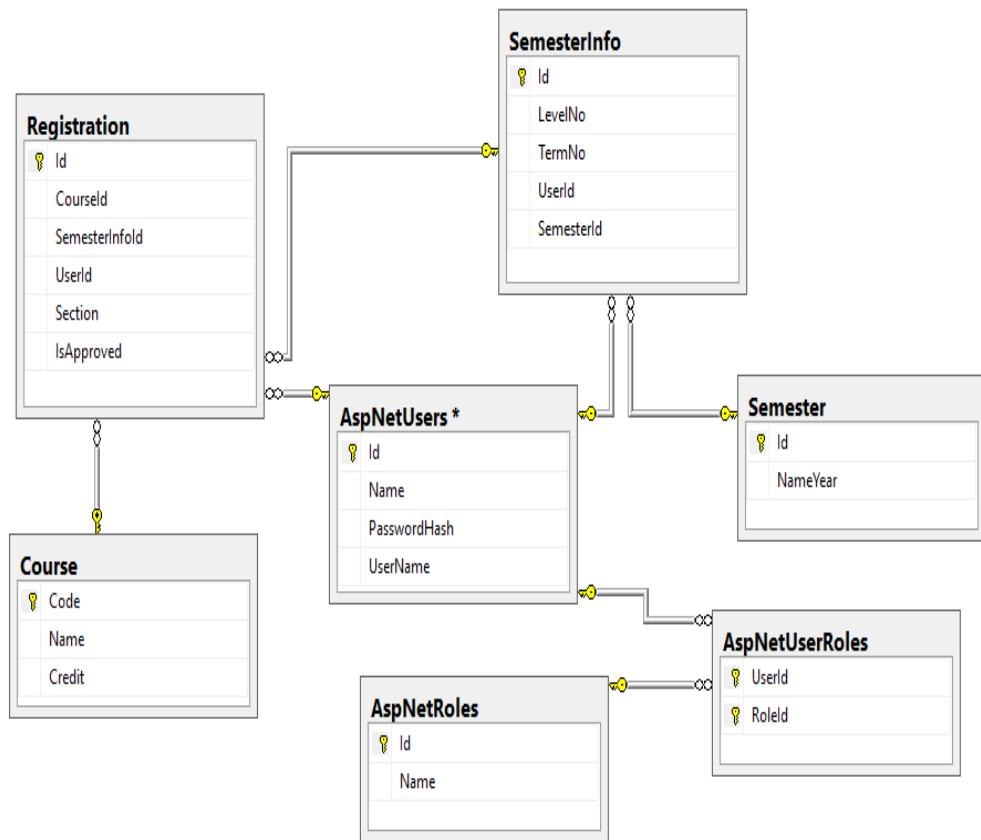


Fig-11: Database Schema Diagram

### 4.4. Development Tools & Technology

#### 4.4.1. Front End Technology

Front end technology for this system,

- HTML 5,
- CSS 3,
- Bootstrap 3
- AngularJS

#### 4.4.2. Back End Technology

Back end technology for this system.

- ASP .NET Web API
- MSSQL Server

#### 4.4.3. Implementation Tools & Platforms

- Microsoft Visual Studio 2017
- Microsoft SQL Server Management Studio 2014
- .NET Runtimes.

## Chapter 5. System Testing

### 5.1. Test Cases

Test Case ID: TC_1	Test Design by: Sabbir Rahman
Test Priority: High	Test Design Date: 06/11/2018
Module Name: Login	Test Execute by: Sabbir Rahan
Description: Test login process of DIU Course Registration Portal	Test Execute Date: 10/11/2018

Precondition: User must be registered already Dependencies:

Input correct ID & password.

Step	Test Cases	Test Data	Expected Result	P/F	Actual Result
01	Enter empty value for user ID & password		Display error message	Pass	Display error message
02	Enter correct value for user ID & password	ID & password	Accept	Pass	Accept
03	Enter wrong value for user ID & password	ID & password	Display error message	Pass	Display error message
04	After giving correct input click login button		Clicking on login button directed on another page	Pass	Clicking on login button directed on another page

Table-2: Test Case 1

Test Case ID: TC_2	Test Design by: Sabbir Rahman
Test Priority: High	Test Design Date: 07/11/2018
Module Name: Course Registration	Test Execute by: Sabbir Rahman
Description: Test the registration Course process	Test Execute Date: 10.11/2018

Precondition: User must be logged in as Student

Dependencies: Get required information for Adding Course from semester info.

Step	Test Cases	Test Data	Expected Result	P/F	Actual Result
01	Click add button Without adding course		Display error message	Pass	Display error message
02	Click add button After adding course		Add course in the list	Pass	Add course in the list
Test Case ID: TC_3			Test Design by: Sabbir Rahman		
Test Priority: High			Test Design Date: 08/11/2018		
Module Name: Add Course List, Student List, Semester			Test Execute by: Sabbir Rahman		
Description: Test the registration Course process			Test Execute Date: 10.09.2018		

Table-3: Test Case 2

Precondition: User must be logged in as Admin

Dependencies: Need Student & Course Excel file to complete.

Step	Test Cases	Test Data	Expected Result	P/F	Actual Result
01	Click add button Without adding course List (Excel file)		Display error message	Pass	Display error message
02	Click add button After adding course List		Add Course List.	Pass	Add Course list
03	Click add button Without adding student List (Excel file)		Display error message	Pass	Display error message
04	Click add button After adding student List		Add Student List.	Pass	Add Student list
05	Click add button Without adding semester name		Display error message	Pass	Display error message
06	Click add button After adding Semester name		Add Semester	Pass	Add Semester

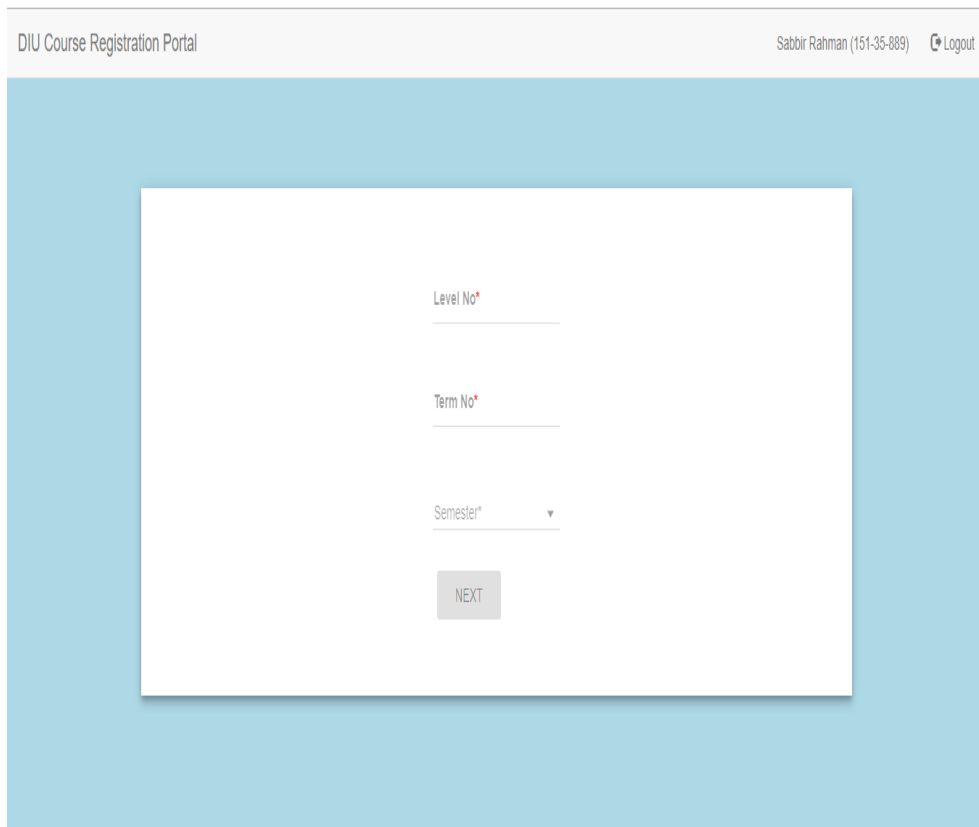
Table-4: Test Case 3

## Chapter 6. User Manual

### 6.1. User Manual (Student)

To use this system as a Student,

- Click on the login button from the navigation bar.
- Enter your student ID and Password. Hints: Your id is your password. Example: If your student id is: 151-35-889. Then your password should be: 151-35-889. Don't worry. You can change your password by your own way.
- After successfully login, a form will be come. Fill up the form by entering your Level No, Term No & also the semester name that you want to take course.
- After completing this form click on the next button. Then you will get course taking form.
- Just enter the course code that you want to take. And then click on the add button. By this way you can add maximum 4 courses in a semester.
- To change your password, just click on the name from the navigation bar. A form will be come. Fill up the form by entering your old password. Then new password & confirm new password. Then press the save button. If all is ok. Then you will redirect to login page. Then login with your new password to check.



The screenshot displays the 'DIU Course Registration Portal' interface. At the top left, the text 'DIU Course Registration Portal' is visible. At the top right, the user's name 'Sabbir Rahman (151-35-889)' and a 'Logout' link are shown. The main content area features a white form with three input fields: 'Level No\*' (text input), 'Term No\*' (text input), and 'Semester\*' (dropdown menu). Below these fields is a grey 'NEXT' button.

The screenshot displays a web interface for course registration. At the top, there is a header with the text "DIU Course Registration Portal" on the left and "Sabbir Rahman (151-35-889) Logout" on the right. Below the header is a large light blue rectangular area containing a white search form. The form has two input fields: "Course" with a placeholder "Type Course Code" and "Section" which is currently empty. To the right of these fields is a green button labeled "ADD". Below the form, the text "--:Selected Course:--" is displayed. At the bottom of the form area, there is a table header with four columns: "Course Code", "Course Name", "Credit", and "Section".

## 6.2. User Manual (Teacher)

To use this system as a Teacher,

- Click on the login button from the navigation bar.
- Enter admin ID & Password
- After successfully login, Teacher panel will be come.
- Here you will see a search option to search student.
- Type student id & select semester then press the search button.
- Then Student Information will come. You will see the taken courses list.
- You can modify/ delete courses.
- Finally click the approve button to approve this student for that semester.
- To change Teacher password, just click on the name from the navigation bar. A form will be come. Fill up the form by entering your

old password. Then new password & confirm new password. Then press the save button. If all is ok. Then you will redirect to login page. Then login with your new password to check.

DIU Course Registration Portal Asif Khan Shakir (151358855) Logout

## Teacher Panel

151-35-889 Fall2018 SEARCH

Name: Sabbir Rahman  
 ID: 151-35-889  
 Level: 1  
 Term: 3

--:Selected Course:--

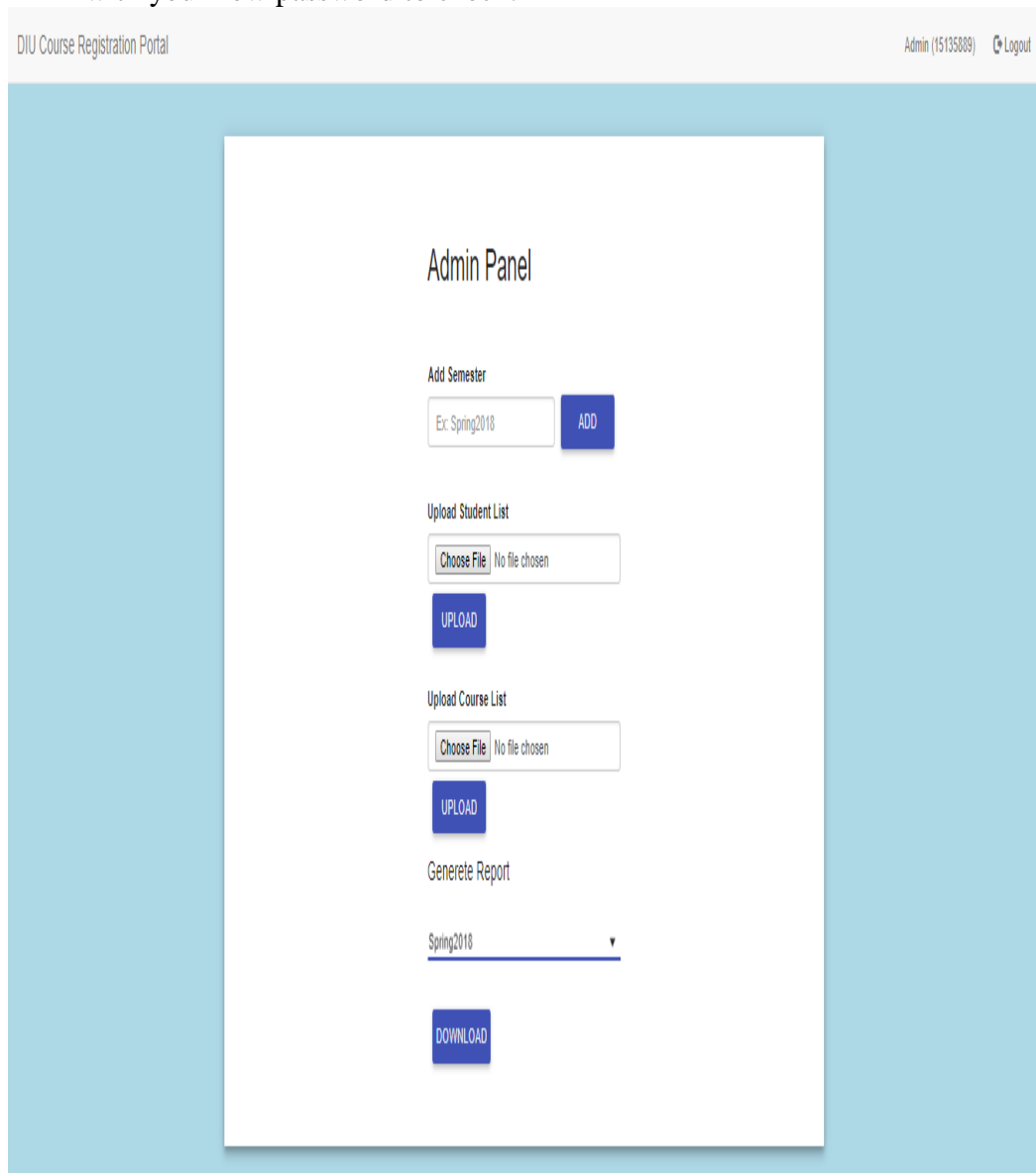
Course Code	Course Name	Credit	Section	Status
SWE231	Software Engineering Project-I	3	A	Not Approved <span style="margin-left: 10px;">Delete</span> <span style="margin-left: 10px;">Approve</span>
SE111	Computer Fundamentals THEORY	3	A	Not Approved <span style="margin-left: 10px;">Delete</span> <span style="margin-left: 10px;">Approve</span>
SE112	Computer Fundamentals LAB	1	A	Approved
SWE232	Operating System With Lab	4	A	Approved

### 6.3. User Manual (Admin)

To use this system as an Admin,

- Click on the login button from the navigation bar.
- Enter admin ID & Password
- After successfully login, Admin panel will be come.
- You will see an input form for adding semester. If you want to add semester to take course registration then fill up the form. Otherwise don't need to fill up.
- There you will also see a Student list & a Course list uploading option. If you want to add students or courses then upload there. You can upload only Excel file.

- Here you will see a Teacher registration option. Click on the button. A new page will come to register teacher. Enter teacher ID and name and password to register.
- From the bottom of the admin panel page, you will see a generate report option with a drop down list. If you want to see how many students take courses on a particular semester then click one option from the drop down list and press Download button.
- After pressing the download button, an excel file will be downloaded. Then open the excel file and see the report.
- To change Admin password, just click on the name from the navigation bar. A form will be come. Fill up the form by entering your old password. Then new password & confirm new password. Then press the save button. If all is ok. Then you will redirect to login page. Then login with your new password to check.





## **Chapter 7. Project Summary**

### **7.1. Critical Evolution**

I didn't get enough time to complete this project. And also I did not have enough resources. But I tried my best to complete this project.

### **7.2. Limitations**

Here are some limitations for this system,

- Only DIU student can access this system. Other university students cannot use this system.
- There is no course assign part for teacher.
- If teacher approved a course. Then this cannot be undone.

### **7.3. Obstacles & Achievements**

I didn't get enough resources to make this project. And I didn't have enough knowledge about how to work with excel file. But for this project I tried to learn about excel. How to import excel file & how to generate data in excel format.

### **7.4. Future Scope**

Future scope for this system,

- Add course assign feature for teacher.
- Add auto routine part based on the course registration by the student

## **Conclusions**

DIU Course Registration Portal is a system where all type of user cans easily doing their task online. Student easily takes their course on a particular semester. Teacher will approve those courses for every individual student. And finally admin will see the report based on the taken courses by the student.

## Appendices

### **Appendix A: Admin will see the report.**

After taking courses by the students in a semester. Admin can easily see the report on a particular semester in excel format.

### **Appendix B: Students default password should be their student ID.**

This system is developed only for the DIU students. So that an admin can only register students. For that reason admin set default password for every student's registration. So that students can easily remember/guess their password. Don't worry students can change their password after access to the system.

## References

1. <https://daffodilvarsity.edu.bd>
2. <http://studentportal.diu.edu.bd>