

**DIU DEFENSE: ONLINE PLATFORM FOR DIU FINAL YEAR
PROJECT/RESEARCH/INTERNSHIP.**

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/internship titled **DIU DEFENSE: ONLINE PLATFORM FOR DIU FINAL YEAR PROJECT/RESEARCH/INTERNSHIP**, submitted by Md. Anower Hossain, ID No: 161-15-7077 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 B.Sc. in Computer Science and Engineering and approved as to its style and contents. The presentation has been held on 5th December, 2019.

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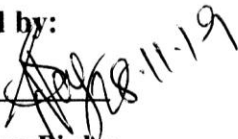
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DECLARATION

We hereby declare that this project has been done by under the supervision of **Subrata Nag Pinku, 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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 11-19

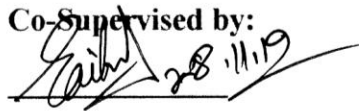
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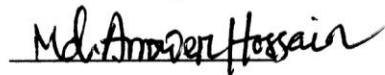
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We would like to thank our entire course mate in Daffodil International University, who took part in this discuss while completing the course work.

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

ABSTRACT

The main purpose of the project DIU DEFENSE: ONLINE PLATFORM FOR DIU FINAL YEAR PROJECT/RESEARCH/INTERNSHIP is to maintain all the information of Final Year Project in one place which is web based. Varsity authority, Faculty members, Students all are able to use this platform/web application very frequently. Selecting Supervisor, Instructions, process, registration, login, admin / supervisor/ student different portal for final year project all are included to this project. Student can read instructions, choose their supervisors to their related fields, receive mails from this website and don't need to visit another website. On the other hand Supervisor can see students who applied and choose them, they can review their follow ups, can add progress & comments, delete if needed. Admin/ Varsity authority can add or delete supervisors if any changes needed. To complete this project I have used HTML, CSS, JAVASCRIPT, JQUERY, PHP, BOOTSTRAP, MYSQL (database). PHP & JAVASCRIPT is used to develop all the application needed here. HTML, CSS, BOOTSTRAP is used to make this application user friendly and good comparison to this digital web world. After implementing, the application is tested in different stages and it successfully works as a new prototype of online base final year project system.

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CHAPTER 1

INTRODUCTION

1.1 Introduction

DIU DEFENSE is improved web based project which helps both students and supervisors final year project experiences. I mean the application is basically for Final Year Project of DIU. Main goal of the project is to do all the works based on final year project. Students need to select supervisors for their final year project, as same as varsity authority need to assign supervisors to their perspective field to do all work related to final year project and supervisors also need to communicate with their students, verify their progress of final year project and so on. All the requirements is now on this project “DIU DEFENSE”.

1.2 Motivation

If I explain how I motivated for doing this project then first of all I want to tell that I was so disappointed when I selected my supervisor. I choose another supervisor based on my field on the title defense registration, but I didn't get my expected supervisor. There are some more student like me. So after discussing with my supervisor & co-supervisor I decided to implement this project for selecting supervisor and all the work for the Final Year Project. It is helpful for both of students and Supervisors. It is also easier to find supervisor and choose by their field. After finishing my project it can be our varsities official web application or it is the concept of doing the same as I do. I believe that the project is very much helpful to the students and faculty and varsity authority as my expectation.

1.3 Objective

Objective of this web application is mentioned bellow:

- Main objective of this project is to do all the work of final year project in one platform.
- Title defense online registration

- Student can select supervisors by choosing field
- All the instructions, Process of title defense, pre-defense, final defense are in one place.
- This web application can reduce time of students and supervisors.
- Supervisors can view and write progress output and comment on each phase and follow ups.
- Fully developed and final year project difficulty reduced.

1.4 Expected Outcome

The purpose of the project is to reduce difficulties and more effective communications between supervisors and students and selection of supervisors by the choice of students. It gives the perfect defense system or applications for the varsity authority for Final Year Project, research or internship.

CHAPTER 2

BACKGROUND

2.1: Introduction

Our system will be a site that can be worked by PC, cell phones, tablet and so forth. Diverse client will have unique and secure profile. In the advanced age we are finding online task every time. Our task will help individuals to interface with new styles of DIU DEFENSE and addition learning from it. Our venture prepared them as a significant level ace.

2.2: Related Works

We have Research a lot of archives related with this Project. I took help to build this web application from our universities project/internship committee, CSE DIU website. We have checked the functionalities how to work with it appropriately. This application is profoundly decorated with functionalities.

2.2.1: Normal highlights of these application are:

- One stop Information
- Supervisors Den

There are no online registration or dynamic options on this site. This is only for registration & defense information. I follow the rules regulations but my project is fully dynamic. It is an application.

2.2.1.1: One Stop Information

Here included all the information related to CSE students final year project like:

- Team formation
- Phases
- Defense



Welcome to the Official Site of Project/Internship Committee of CSE, DIU

Daffodil International University (DIU) is one of the renowned universities of Bangladesh. Department of Computer Science and Engineering (CSE) is one of the most important organ of this university. All the final year students have to do a mandatory year-long development project, research project or internship. For the ease of students to find necessary information about Final Year Project or Internship, this repository is created.

About the Project/Internship Committee

Project/Internship Committee is a dedicated committee accompanied by four faculty members from CSE department. This committee actively performs starting from the title defense, carried through the follow-ups till the Final Defense. The each and every tasks performed by the committee is concerned and advised by the Honorable Head of the Department, Prof. Dr. Syed Akhter Hossain. The

①



ONE STOP INSTRUCTIONS

In the Department of Computer Science and Engineering (CSE) of Daffodil International University (DIU), final year students are involved in development projects, research projects or internship works. There is no bindings for students so far in choosing any of the above mentioned area to complete the six credit requirements.

Semester-wise Project Timeline

For Day Shift Students

Level 3 Term 3 (Pre-phase I)	Level 4 Term 1 (Pre-phase II)	Level 4 Term 2 (Phase I)	Level 4 Term 3 (Phase II)	After Semester Final
Title Defense (Before Midterm)	Follow-up 1 (Before Midterm)	Follow-up 1 (Before Midterm)	Follow-up 1 (Before Midterm)	
+	+	+	+	Final Defense

①

Figure 2.2: One Stop Information

2.2.1.2: Supervisor's Den

The information about supervisor's and their field is assigned here. We can only see and download some information.

The screenshot displays the 'Supervisor's Den' page on the Daffodil International University website. The page header includes the university logo and navigation links: Project/Internship Committee, CSE, DIU, Home, One Stop Instructions, Supervisor's Den, Title Defense Registration, Notice Board, Downloads, and More. The main content area is titled 'Research and Development Wise Faculty List' and contains a table with two columns: 'Research Area' and 'Faculty Initials'.

Research Area	Faculty Initials
Machine Learning & Deep Learning	SAH, SRH, MTH, ZH, SR, SL, RR, SBS, NN, AR, AAM, NJ, DMR, SI, FH, MRH, MOT, SNP, AAH, IF, MMM, RS, MR, ANM, SM, MRA, THT, FA, UD, MRK, RUH, MAH, SDB, SAB, MMR-C, FSN, SMAH, MMM, NSA, FL-C, AHN, MRN, EKM, MSS, AKMM, AA-C, MMH, ATP, LR, WRB, MJ
Image Processing & Signal Processing	MJ, MTH, NS, MZB, TA, ZZ, ANM, UH, AR, FL, AAM, NJ, SI, IF, MRA, RAH, SZ, RUH, MMR-C, MHK

Below the first table is a link for 'Supervisor List Fall 2019'. The second screenshot shows the 'Supervisor List for Final Year Project/Internship Fall 2019' table, which lists faculty members by name and initials, along with their designations.

Sl No.	Name & Initials	Designation
1	Dr. Syed Akhter Hossain (SAH)	Professor & Head
2	Dr. Sheak Rashed Haider Noori (SRH)	Associate Professor & Associate Head
3	Professor Dr. Md. Ismail Jabiullah (MI)	Professor
4	Mr. Narayan Ranjan Chakraborty (NRC)	Assistant Professor
5	Ms. Nazman Nessa Moon (NNM)	Assistant Professor
6	Mr. Gazi Zahiral Islam (GZI)	Assistant Professor
7	Md. Tarek Habib (MTH)	Assistant Professor
8	Md. Zahid Hasan (ZH)	Assistant Professor
9	Ms. Subhenur Latif (SL)	Assistant Professor
10	Mr. Md. Sadekur Rahman (SR)	Assistant Professor
11	Mr. Abdus Sattar (AS)	Assistant Professor
12	Fahad Faisal (FF)	Assistant Professor

Figure 2.3: Supervisor's Den

2.3 Comparative Studies

My executed application is unique in relation to the current application. Without enlistment client can see the Information and supervisor list. All verified enlisted individuals will get the chance to interface with their supervisor through this application. This Application will advise significant mail, comment, progress of task and report by email notice to the client. Administrator can Send emails from this application to students.

2.4: Challenges

- Admin have to add supervisors individually with their photo
- Supervisor can see their students after login
- Supervisor sends their opinion of progress through Single Student view page.
- Student have to agree the cancellation of supervisor.

2.5 Project Schedule/ Gantt Chart

- The Gantt chart of my project is given below:
- Development Phase
- Within 120 days
- Requirement gathering
- Analysis
- Design
- Coding
- Testing
- Implementation
- Documentation

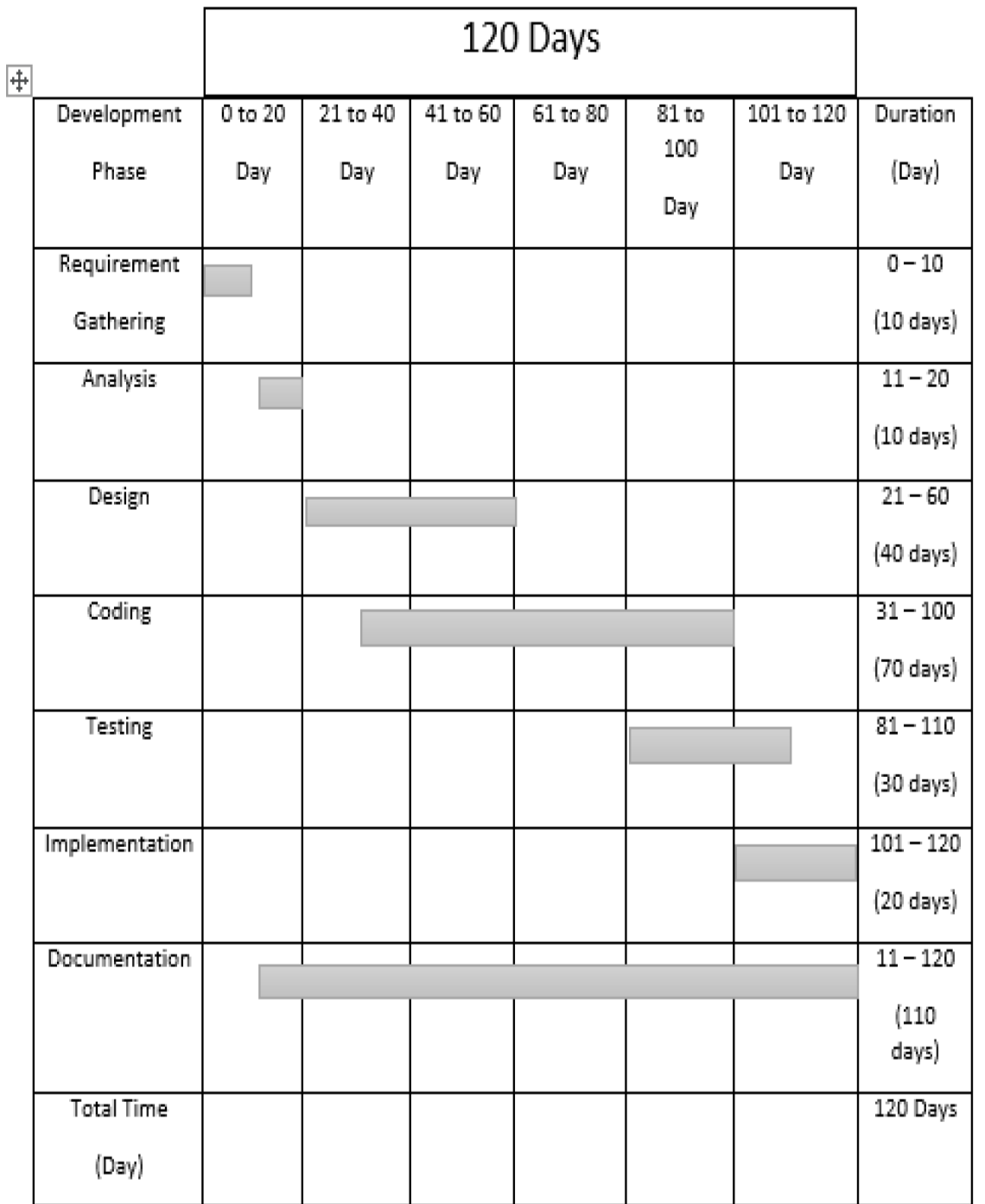


Figure 2.4: Gantt chart

CHAPTER 3

REQUIREMENT SPECIFICATION

3.1 Business Process Modeling

Business procedure illustrating, habitually called process displaying, is the efficient depiction or portrayal of an association's business structures.

Close by business process exposure, process exhibiting is for the most part observed as an essential fragment in productive business process organization (BPM). It is used to depict an affiliation's present systems to make a benchmark for procedure changes and to plot future structures with those overhauls joined. Procedure exhibiting routinely uses Business Process Modeling Notation (BPMN), a standard technique for portraying structures with flowchart-like outlines that can be easily grasped by both IT and business chiefs.

3.2 Requirement Collection and Analysis:

Here certain necessities are given that collected when Implementation of programming or the information accumulations. The requirement accumulations are given underneath:

- Need User's Information's
- To view information's, no need to login but other dynamic field need login approval.
- To view users, need login authentication
- Registration need for connect with supervisor
- Choice of supervisor is personal
- Must need a valid email
- Needed to be assigned as a supervisor to edit progress report.
- Needed to be a registered user to see the progress report

3.3: Requirements

1. Programming Languages such as HTML, CSS, Java Script, jQuery, PHP, Bootstrap etc

2. MySQL Database

I use MySQL for storing data and management.

3. Valid email format

3.4: Use Case Diagram

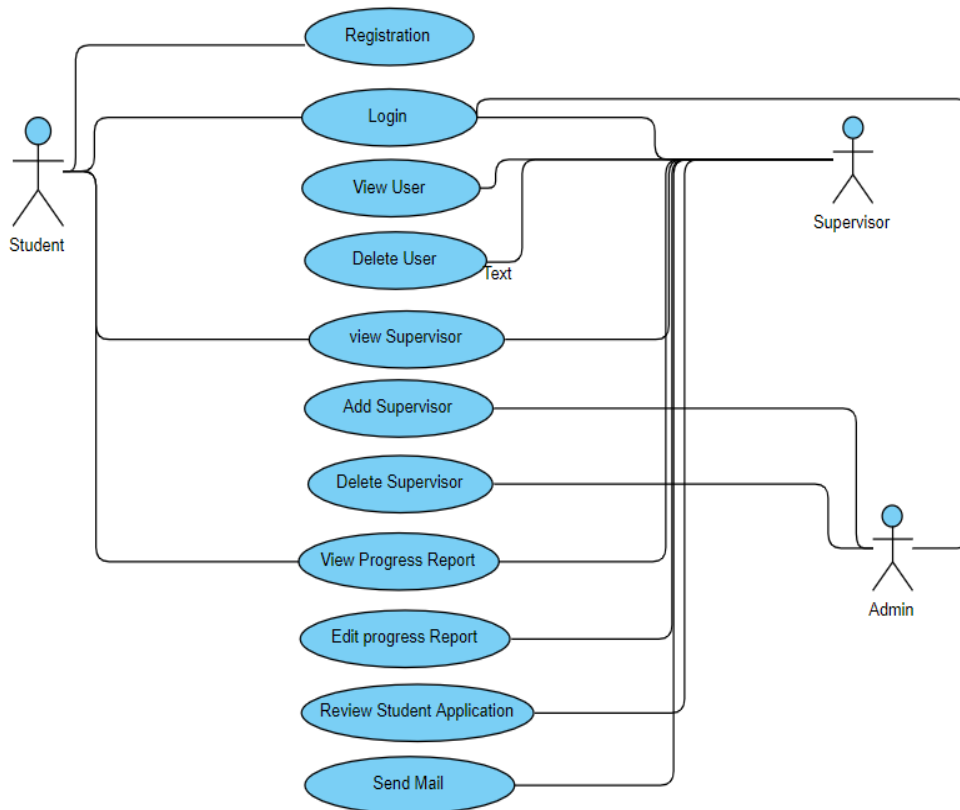


Figure 3.1: Use case diagram

3.5: Detailed Of Use Case

Table 3.1: Use case of Registration form.

Use Case #01	Register
Primary Actor	User,
Secondary Actor	Admin
Pre-Condition	Go to the website
Scenario	<ol style="list-style-type: none">1. Varsity Id2. Name3. Email4. Password5. Supervisor ID6. Co-Supervisor ID7. Department8. Faculty9. Phone no
Post-Condition	1. Registration Successfully done or not

Table 3.2: Login form Use Case

Use Case #02	Login
Primary Actor	User, Supervisor, Admin
Secondary Actor	Admin
Pre-Condition	Complete registration before

Scenario	<ol style="list-style-type: none"> 1. Choose User or Supervisor 2. Enter registered valid email address. 3. Enter registered password. 4. Click the “Login” button.
Post-Condition	<ol style="list-style-type: none"> 1. Login Successful or fails 2. Display index page

Table 3.3: Use Case view User

Use Case #03	View Users
Primary Actor	Supervisor
Secondary Actor	Admin
Pre-Condition	Complete login before
Scenario	<ol style="list-style-type: none"> 1. ID 2. Name 3. Email 4. Department 5. Phone
Post-Condition	<ol style="list-style-type: none"> 1. Display users page 2. Logout Button

Table 3.4: Use Case Delete User

Use Case #04	Delete Users
Primary Actor	Supervisor
Secondary Actor	Admin
Pre-Condition	Complete login before
Scenario	Delete user Modal (Are You Sure!)
Post-Condition	<ol style="list-style-type: none"> 1. Display users page 2. Delete Button

Table 3.5: Use Case View Supervisor

Use Case #05	View Supervisor
Primary Actor	User, Supervisor
Secondary Actor	Admin
Pre-Condition	Go to the website
Scenario	<ol style="list-style-type: none"> 1. Category of Supervisor 2. Individual Information
Post-Condition	<ol style="list-style-type: none"> 1. Display Home page 2. Filter option by field

Table 3.6: Use Case Add Supervisor

Use Case #04	Add Supervisor
Primary Actor	Admin
Secondary Actor	Admin
Pre-Condition	Complete login before
Scenario	<ol style="list-style-type: none"> 1. Supervisor Name 2. Supervisor Email 3. Employee ID 4. Field 5. Phone no 6. Role 7. Photo
Post-Condition	Add in View Supervisor Page

Table 3.7: Use Case Delete Supervisor

Use Case #04	Delete Supervisor
Primary Actor	Admin
Secondary Actor	Admin
Pre-Condition	Seelect Delete Button
Scenario	Are You Sure?
Post-Condition	<ol style="list-style-type: none"> 1. Remove from Database 2. Remove from Page

Table 3.8: Use Case View Progress Report

Use Case #04	View Progress Report
Primary Actor	User, Supervisor
Secondary Actor	Admin
Pre-Condition	From view user Page
Scenario	<ol style="list-style-type: none"> 1. Title 2. Follow ups 3. Date 4. Progress 5. Comment
Post-Condition	<ol style="list-style-type: none"> 1. Display Team Member 2. Display progress report form

Table 3.9: Use Case Edit Progress Report

Use Case #04	Edit Progress Report
Primary Actor	Supervisor
Secondary Actor	Admin
Pre-Condition	Click Edit Button from view progress report page
Scenario	<ol style="list-style-type: none"> 1. Title 2. Follow ups 3. Date 4. Progress 5. Comment
Post-Condition	<ol style="list-style-type: none"> 1. Display Team Member 2. Display progress report form input field

Table 3.10: Use Case Review Student Application

Use Case #04	Review Student Application
Primary Actor	Supervisor
Secondary Actor	Admin
Pre-Condition	From Users Page
Scenario	<ol style="list-style-type: none"> 1. ID 2. Name 3. Email 4. Department 5. Phone
Post-Condition	<ol style="list-style-type: none"> 1. View user page

Table 3.11: Use Case Send mail

Use Case #04	Send mail
Primary Actor	Supervisor
Secondary Actor	Admin
Pre-Condition	From View users page
Scenario	<ol style="list-style-type: none"> 1. ID 2. Name 3. Email 4. Department 5. Phone
Post-Condition	Mail Sent or unsend

CHAPTER 4

DESIGN SPECIFICATION

4.1 Front-end Design:

HTML: Hyper Text Markup Language.

I utilize the (HTML) Hyper Text Markup Language for front-end plan. HTML is one of the most famous structure plan languages for view the website page. I manufacture the website page block by this language. For speaking to HTML I utilize the different labels of HTML5. I likewise utilize the primary approval/validation of HTML.

CSS: Cascading Style Sheet.

CSS is utilized for the front end structure. CSS speak to that how to HTML view on the page, for example, content, media and so forth. CSS can control different site pages for this web application CSS gives appealing design. I utilize the CSS3 property to modify text dimension, cushioning, edge, outskirt and control everywhere throughout the style in our project. CSS: Cascading Style Sheet.

BOOTSTRAP:

Bootstrap is one of the most remarkable systems in this world. For design a responsive site it is perhaps the most ideal ways. To make our project easy to use I utilize the most recent version Bootstrap4. By utilizing this structure our project can be shown appealingly any sorts of device example: larger screen, little screen, medium screen and additional little screen.

4.2 Back-end Design

PHP: Hypertext Preprocessor.

PHP was made by Rasmus Lerdorf in 1995. PHP is a prevalent server website scripting language that initially intended for web advancement. PHP utilized for making site dynamic. DIU DEFENSE essentially represents hypertext preprocessor. PHP created this task dynamic each pages. It very well may be connected in HTML and run on a web server.

For run PHP code we have to design PHP and server on our PC. PHP underpins all sort of web server and all working framework. The included of PHP make our undertaking increasingly secure, for example, enrollment structure approval we make it verified by PHP. It has many default work that make our task effectively for all the coherent activity we use it, for example, input taking, refreshing and so on. It is open source language.

JAVA SCRIPT:

Java Script is an Object oriented programming language. It executes in HTML an incorporated on a program. Java content includes intelligent highlights the site and updates content, sight and sound progressively. Java Script add intelligence to sites. Java Script contain extraordinary instruments and incredible online help. By utilizing java Script make graphic, animations and HTML canvas.

4.3 Interaction Design and UX

Dashboard Design:

- In database show registered user list.
- Admin can very easily delete, update, Add user role.
- Admin can remove client and update data.
- Admin can view and erase post

4.4 Implementation Requirements

To execute application each web application has the usage requirements. In my project I likewise utilized some usage necessities.

Requirements:

1. Utilized programming language, for example, HTML, CSS, PHP, Java Script, jQuery, Bootstrap and so on.
2. Utilizing MySQL database I use MySQL for database the executives and store data.
3. A valid email or other information.
4. By the client data I can advise client to gives significant data.
5. For utilize our application need a phone or pc and internet additionally need a browser for interface our application.

CHAPTER 5

IMPLEMENTATION AND TESTING

5.1: Implementation of database

The execution of the database is put away of client data of this venture and other task relative information put away in the database system such as project admin information, user information, or other db related information.

In this project database Users, single users, progress, comment, progress test is my database tables.

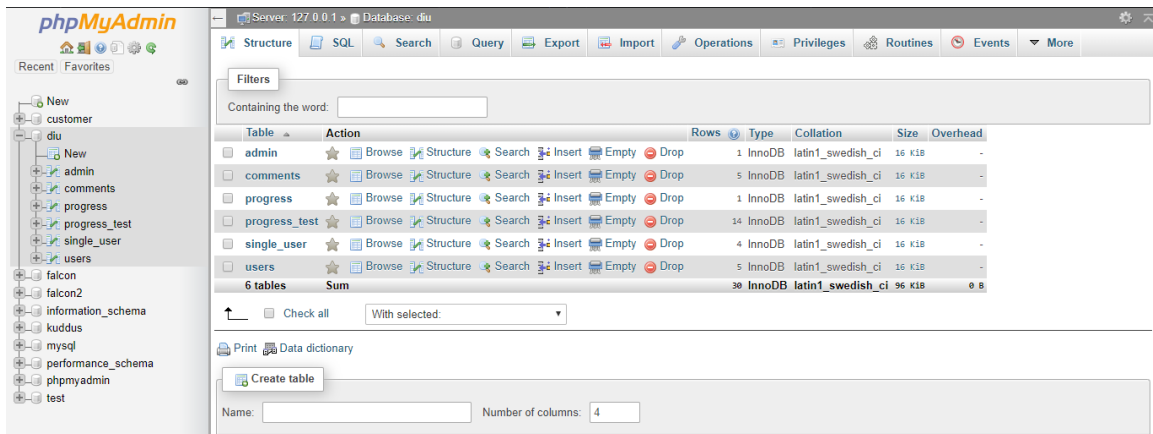


Figure 5.1: DIU DEFENSE database (MySQL)

5.1.1: User Table of Database

In user table, all information about users are stored. When a user register for title defense then user have to submit ID, Name, email, Password, supervisor, co –supervisor, department, faculty, phone etc fields.

After registering into database, Student can bypass the login check form. After login, user can participate all work required login.

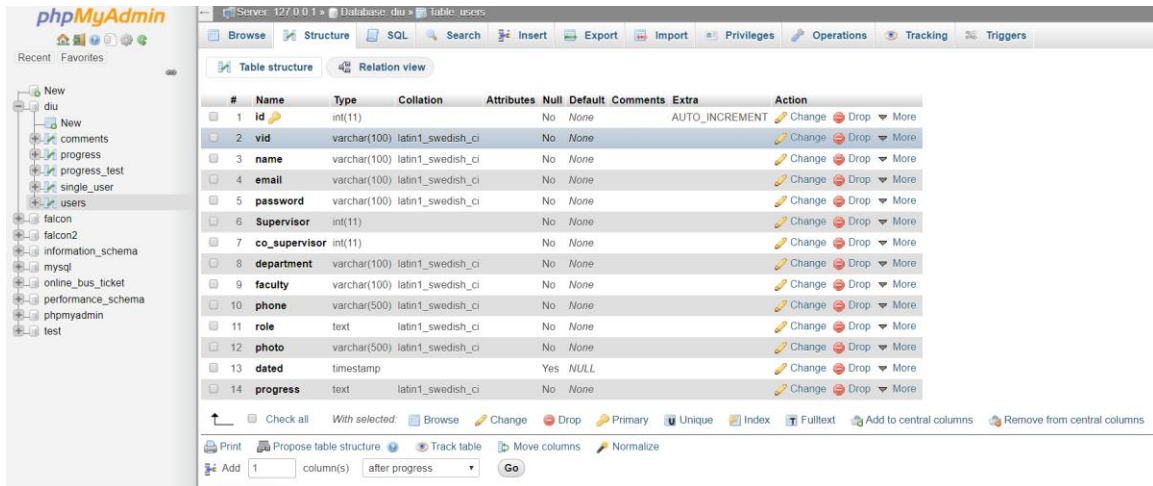


Figure 5.2: user database (MySQL)

5.1.2: Supervisor Database table

Admin can add supervisor only. Supervisor table only access able to the Supervisors only. Admin delete supervisor too. Name, Email, Employee id, field, phone, role, photo are the fields in supervisor Database. Only added supervisor can see users and see that users only who select him as a supervisor.

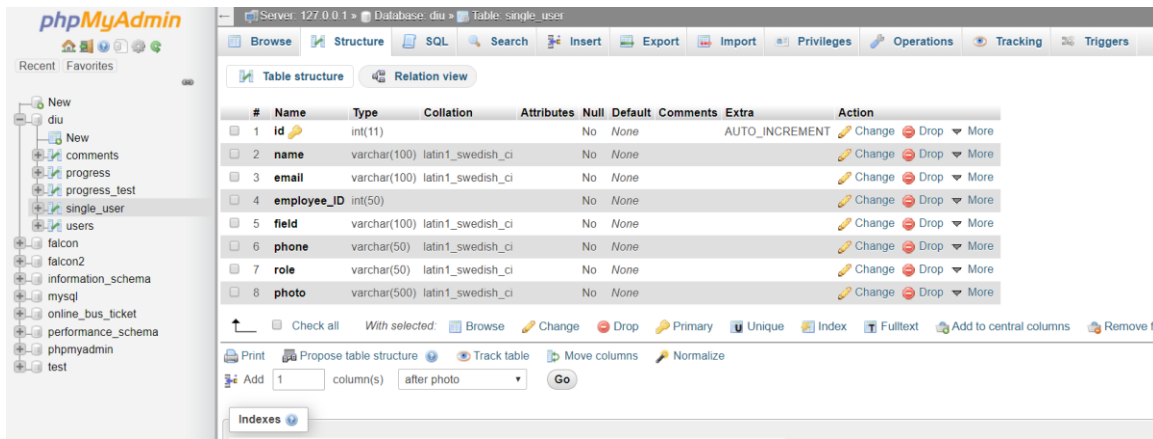


Figure 5.3: Supervisor database (MySQL)

5.1.3: Admin Database table

- Admin can add supervisor only.
- Admin can delete supervisor

Database table fields for admin tables are:

Name, email, employee_ID, field, phone,role and photo.

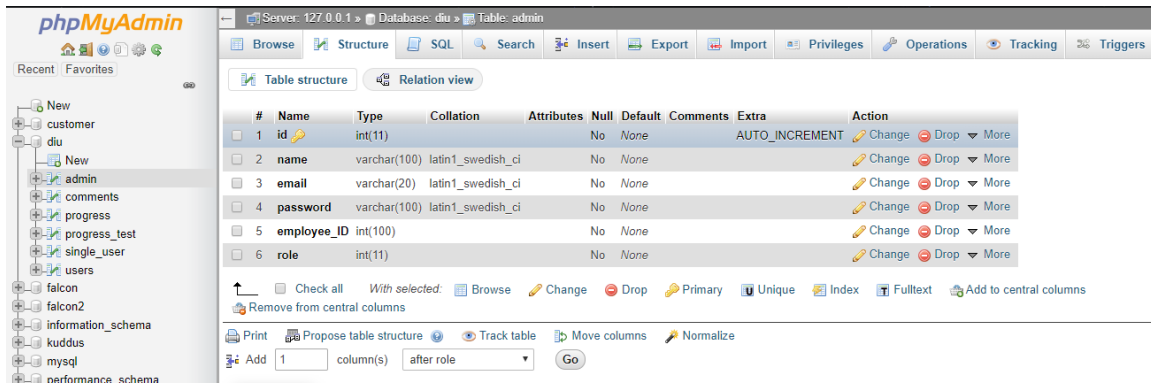


Figure 5.4: Admin database (MySQL)

5.2: Implementation of Front-end Design

The front end design is one of the principle parts of a web application in the event that the front end execution isn't more easy to use, at that point a client isn't fulfilled. In my project, we have attempted to alluring front-end design and usage. We use HTML5, css3, and java script for front-end configuration that is improve our task view and better UI. We generally attempt to make easy to understand plan for this venture on account of all client can utilize it effectively and it is easy to utilize.

5.2.1: Normal highlights of these application are:

- Register as a Student for Title Defense
- Login as a Supervisor
- Login as a User
- Login as a Admin
- Add or Delete Supervisor (for admin only)
- View registered Students
- Category wise Supervisor List
- Single Supervisor View
- Title-Defense, Pre-Defense, Final-Defense information
- Download final year report related Information's.

5.2.1.1: Register as a Student for Title Defense

The register is kept up with a Data Processing System. Any Student can enlist in this System. The login of register data necessitates that every client enters the characterized usernames and passwords.

The accompanying information is gone into the register, as relevant:

- Varsity Id
- Name
- Email
- Password
- Supervisor ID
- Co-Supervisor ID
- Department
- Faculty
- Phone no

The image shows a web browser window displaying the 'Registration Form' for Daffodil International University. On the left is a dark blue sidebar with the university's logo and a list of navigation links: HOME, INSTRUCTIONS, TITLE DEFENSE, SUPERVISOR, NOTICE, and SIGN IN. The main content area is white and contains a form with a teal header. The form has the following fields: 'Enter your ID', 'Enter your name', 'Enter your email', 'Enter your password', 'Enter Supervisor ID', 'Enter Co-Supervisor ID', 'Enter your Department', 'Enter your faculty', and 'Enter your phone-no'. At the bottom of the form is a file upload section with a 'Choose File' button and the text 'No file chosen'. A teal 'submit' button is positioned at the bottom right of the form.

Figure 5.5: Student Registration Demo

5.2.1.2: Login as a Supervisor

The login of register information requires that each Supervisor enters the described usernames and passwords saved in Database.

The accompanying information is gone into the register, as relevant:

- Select Role (Supervisor)
- Email
- Password

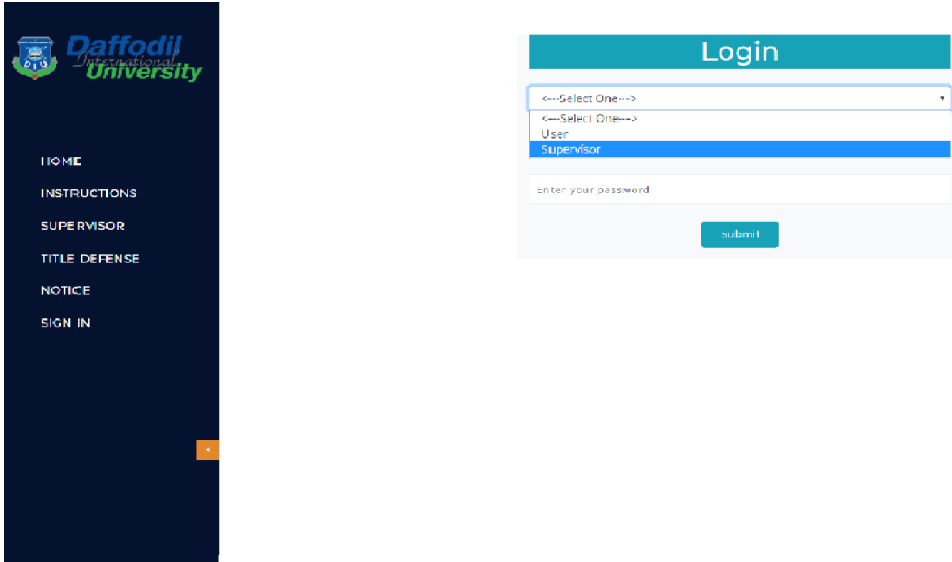


Figure 5.5: Supervisor Login demo

5.2.1.3: Login as a user

The login of register information requires that each Student enters the described usernames and passwords saved in Database.

The accompanying information is gone into the register, as relevant:

- Select Role (User)
- Email
- Password

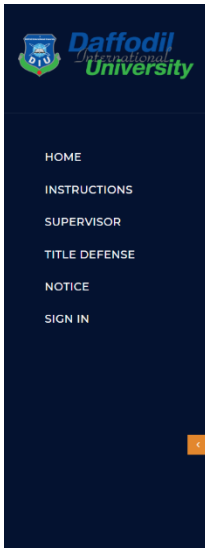
A login form titled "Login" with a teal header. It contains a dropdown menu with "Supervisor" selected, a text input field for "Enter your password", and a teal "submit" button. The dropdown menu is open, showing "User" and "Supervisor" as options.

Figure 5.7: login as a user demo

5.2.1.4: Login as an Admin

A screenshot of a web browser showing the login form for an admin. The browser address bar shows "localhost/FinalProject/login2.php". The login form has a teal header "Login", a dropdown menu with "Admin" selected, text input fields for "Enter your email" and "Enter your password", a teal "Login" button, and a link "visit site" with the text "> Not an Admin? Visit user page". The navigation menu from Figure 5.7 is visible on the left side of the page.

Figure 5.8: Login as an admin

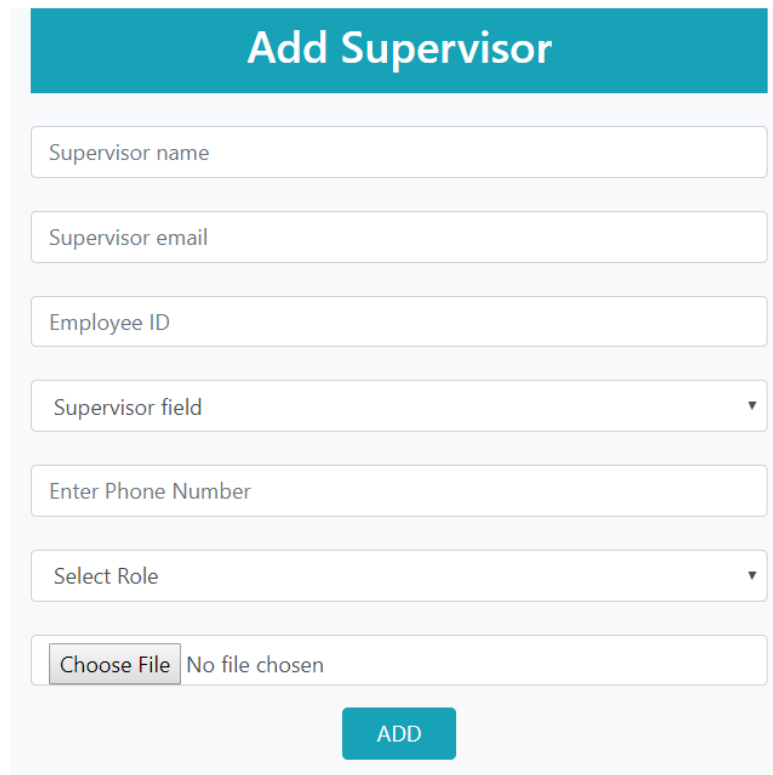
- Without admin login user or supervisor can not access the feature add or delete supervisor.
- Without login user can visit site and collect data about Defense and phases.

5.2.1.4.1: Add Supervisor (for admin only)

Add Supervisor can only be access able to Admin or varsity authority. Student or Supervisor have no access to this button **Add Supervisor**.

The accompanying information is gone into the register, as relevant:

- Supervisor Name
- Supervisor Email
- Employee ID
- Supervisor's Field
- Phone No
- Role
- Photo Field



The image shows a web form titled "Add Supervisor". The form contains the following fields from top to bottom: a text input for "Supervisor name", a text input for "Supervisor email", a text input for "Employee ID", a dropdown menu for "Supervisor field", a text input for "Enter Phone Number", a dropdown menu for "Select Role", and a file upload field with a "Choose File" button and the text "No file chosen". At the bottom of the form is a teal "ADD" button.

Figure 5.9: Add Supervisor demo

5.2.1.4.2: Delete Supervisor (for admin only)

Delete Supervisor must be get to ready to Admin or varsity authority. Student or Supervisor have no entrance to this field **Delete Supervisor**.

The accompanying information is gone into the register, as relevant :

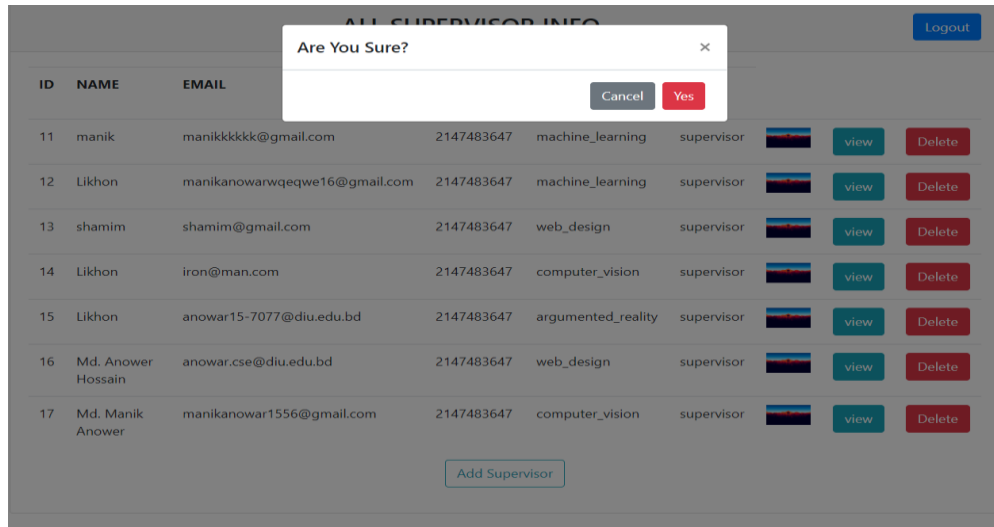


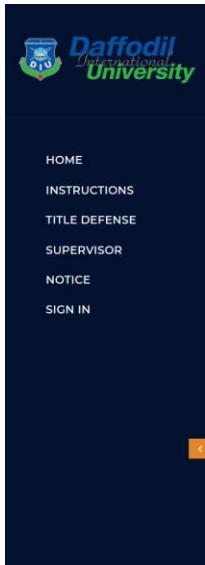
Figure 5.10: Delete Supervisor demo

5.2.1.5: View Registered Student

Registered Student can only viewable to Students Selected Supervisors. Not more than 40 student can register under one supervisor.

Fields that entered into database and supervisor's only see:

- Student Id
- Name
- Email
- Department
- Phone no

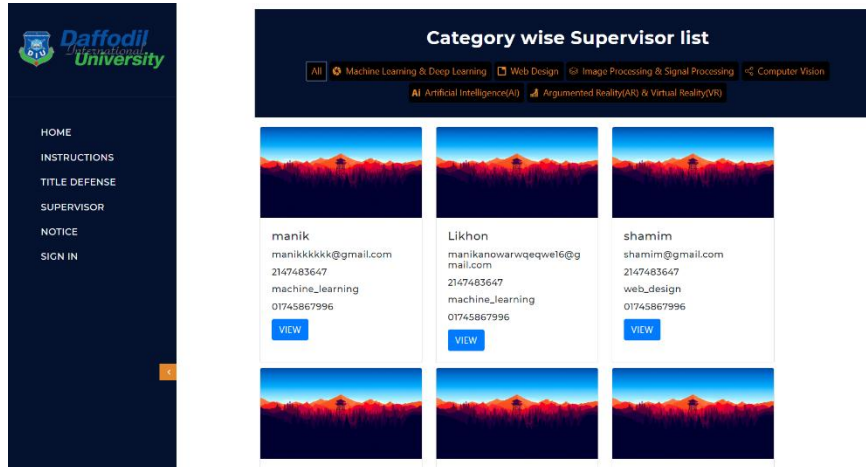


ALL USERS INFO							Logout
#	ID	NAME	EMAIL	DEPARTMENT	PHONE	ACTION	
1	1	manik	manikanowar164@gmail.com	Bsc in CSE	01745867996	view	Delete
2	161-15-7077	manik	manikanowar16@gmail.com	Bsc in CSE	01745867996	view	Delete
3	161-15-7077	Md. Anower Hossain	anowar15-7077@diu.edu.bd	Bsc in CSE	01745867996	view	Delete

Figure 5.11: Users View demo

5.2.1.6: Category Wise Supervisor List

This Field I categorize Supervisors by their field such as, Machine Learning, Web

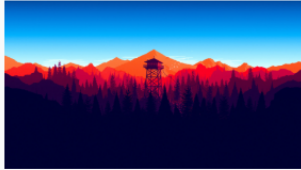


Applications, image processing, AR & VR and other category that our varsity provide.

Figure 5.12: Category Wise Supervisor list demo

5.2.1.7: Single Supervisor View

Single Supervisor can be visible after clicking VIEW button. Supervisors Information also visible to index page. But after clicking this button it will redirect to single

Supervisors Information	
NAME	Md. Anower Hossain
EMAIL	anowar.cse@diu.edu.bd
EMPLOYEE ID	2147483647
FIELD	web_design
PHOTO	

supervisor view page like the figure 2.8.

Figure 5.13: Single Supervisor View demo

5.2.1.8: Title-Defense, Pre-Defense and Final-Defense Information

The whole information about Title-Defense, Pre-Defense and Final-Defense are added to index page where a Student, supervisor and admin all are able to see the information's.

Demo images is given below:

- Title Defense instruction

ABOUT DIU DEFENSE
Welcome to the Official Site of Project/Internship Committee of CSE, DIU

Final Year Internshi

Daffodil International University (DIU) is one of the renowned universities of Bangladesh. Department of Computer Science and Engineering (CSE) is one of the most important organ of this university. All the final year students have to do a mandatory year-long development project, research project or internship. For the ease of students to find necessary information about Final Year Project or Internship, this repository is created.

About the Project/Internship Committee :

Project/Internship Committee is a dedicated committee accompanied by four faculty members from CSE department. This committee actively performs starting from the title defense, carried through the follow-ups till the Final Defense. The each and every tasks performed by the committee is concerned and advised by the Honorable Head of the Department, Prof. Dr. Syed Akhter Hossain. The contact information about the members of this committee could be found in the Contact Information tab. In the Department of Computer Science and Engineering (CSE) of Daffodil International University (DIU), final year students are involved in development projects, research projects or internship works. There is no bindings for students so far in choosing any of the above mentioned area to complete the six credit requirements.

[Download Required Info](#)

Figure 5.14: demo of Instructions

Semester wise PROJECT timeline

For **Day shift students**, projects or internship will continue starting from L3-T3 and end after completion of L4-T4, without exceptions.

For **Evening shift students**, projects or internship will continue starting from 7th Semester and end after completion of 9th Semester, without exceptions.

Therefore, if you are a L3-T2 (Day) or 6th Semester (Evening) student, start planning for your project ideas, team members and so on.

For Day Shift

Level 3 Term 3 (Pre-phase I)	Level 4 Term 1 (Pre-phase II)	Level 4 Term 2 (Phase I)	Level 4 Term 3 (Phase II)	After Semester Final
Title Defense (Before Midterm) + One Follow- up (Before Semester Final)	Follow-up 1 (Before Midterm) + Follow-up 2 (Before Semester Final)	Follow-up 1 (Before Midterm) + Follow-up 2 (Before Semester Final)	Follow-up 1 (Before Midterm) + Pre-Defense (Before Semester Final)	Final Defense

For Evening Shift

7 th Semester (Pre-phase)	8 th Semester (Phase I)	9 th Semester (Phase II)	After Semester Final
Title Defense (Before Midterm) + One Follow- up (Before Semester Final)	Follow-up 1 (Before Midterm) + Follow-up 2 (Before Semester Final)	Follow-up 1 (Before Midterm) + Pre-defense (Before Semester Final)	Final Defense

Figure 5.15: demo of Instructions

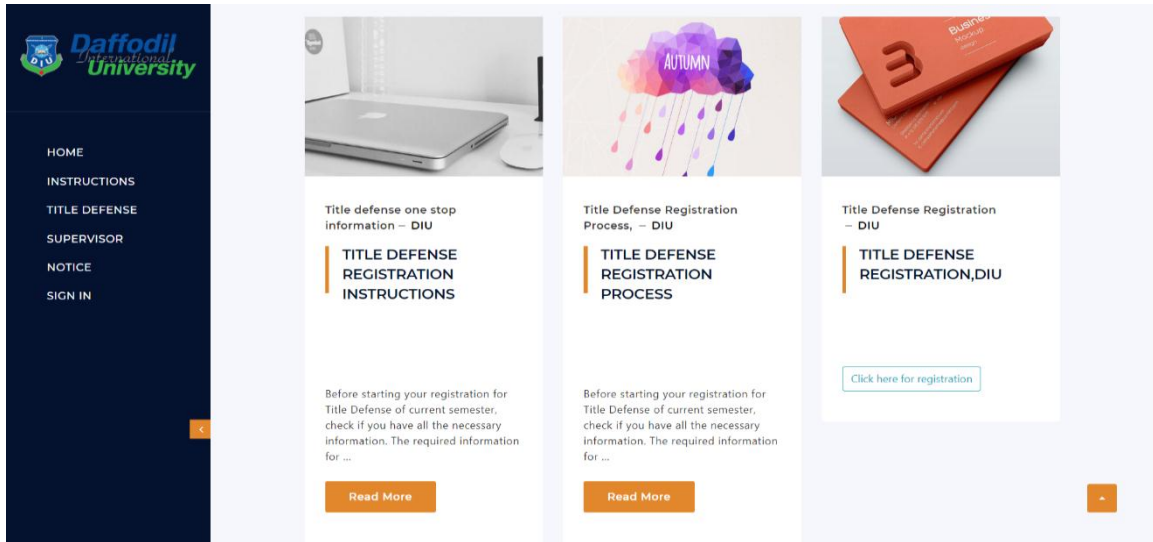


Figure 5.16: Category of Instructions

Title defense one stop information – DIU

TITLE DEFENSE REGISTRATION INSTRUCTIONS

Before starting your registration for Title Defense of current semester, check if you have all the necessary information. The required information for successful registration you will need:

1. Your team information (Team members ID, name, DIU email address, Phone Number)
2. Your tentative title
3. Your preferred choice (Development Project/ Research Project/ Internship)
4. Your preferred area of interest (In development projects: Android, iOS Mobile Application development, Web Solutions, JAVA Applications, Game Development etc. In research projects: Data Mining, Big Data, Cloud Computing, Human Computer Interaction, Natural Language Processing, Machine Learning, Internet of Things (IoT), Networking, Robotics, Bioinformatics, Software Engineering, Embedded Systems, Image Processing, Pattern Recognition etc.)
5. Your preferred choice of Supervisors. You can give choice of maximum three (3) supervisors. Make sure your area of interest

Figure 5.17.1: Registration Instructions

Your final year project or internship starts with the mandatory Title Defense. Title defense is the defense where each team have to present their project idea.

Title Defense Presentation focuses on:

1. Project/Internship Title,
2. Project Type (Development, Research or Internship),
3. Motivation of the project,
4. Objectives of the project and
5. Expected Outcome from this proposed project.

For Title Defense presentation, you have to create a Google Site for your team. The Google Site must have the above mentioned topics including your team information (Team Name, Members Name, ID) and Supervisor, Co-supervisors Information (Name and Designation).

For Title Defense presentation, you have to create a Google Site for your team. The Google Site must have the above mentioned topics including your team information (Team Name, Members Name, ID) and Supervisor, Co-supervisors Information (Name and Designation).

[Click here for current Supervisor](#)

Figure 5.18.2: Registration Instructions

TITLE DEFENSE REGISTRATION PROCESS

Only one member from each team should fill up this form. Multiple submission are strictly not encouraged.

Firstly, You have to put your team information (No of Students, Shift and Choice of Project/Internship). **Secondly**, you have to provide all the members Student ID, Name, DIU Email Address and Phone Number. Thirdly, you have to provide a tentative title and your area of interest. The "Tentative Title" should be understandable with the "Area of Interest". If you don't find your area in the list choose "Others" option and name the area. **Finally**, you have to provide three choices of your preferred Supervisor. **It is not guaranteed that your first choice of supervisor will be assigned.** Assigning supervisor is subject to the rules and regulations set by the project/internship committee.

Stepping to the registration :

First Step:

1. Choose No of Students in your team. According to the rules, maximum 3 member teams are allowed. (If you want to make a team having 4 members you have to proceed with a "Formal Application to the Head of The Department" and have to fill up a different form which is available in CSE department. If you have an approved application (approved by Head of the Department), then you don't have to submit this registration.
2. Choose your shift (Day or Evening). Day shift Students cannot merge a team with Evening Shift students and vice versa.

Stepping to the registration :

First Step:

1. Choose No of Students in your team. According to the rules, maximum 3 member teams are allowed. (If you want to make a team having 4 members you have to proceed with a "Formal Application to the Head of The Department" and have to fill up a different form which is available in CSE department. If you have an approved application (approved by Head of the Department), then you don't have to submit this registration.
2. Choose your shift (Day or Evening). Day shift Students cannot merge a team with Evening Shift students and vice versa.
3. Choose your choice (Project or Internship). Choosing "Project" will include development project and research project both.

Second Step:

1. Provide your team members Student ID, Name, DIU Email Address and Phone Number. All the fields are mandatory to be filled.

Third Step:

1. Provide a Tentative Title and Area of Interest. You can change your tentative title after assigning a supervisor consulting with him/her, But you cannot change your area of interest after assigning a supervisor to your team.

fourth Step:

1. Provide Three (3) supervisors name and Initial. Select your preferred supervisor initial from the drop-down list. Choices are based on your priority.

[Click here for current Supervisor list](#)

Figure 5.19: Title defense registration process

The image shows a web portal for Daffodil International University with a dark blue sidebar on the left containing navigation links: HOME, INSTRUCTIONS, TITLE DEFENSE, SUPERVISOR, NOTICE, and SIGN IN. The main content area is divided into three sections:

"Pre-Phase I"

As mentioned above the main task as a final year student is to do registration properly and attend the title defense. For day-shift students (L3-T3), they have to attend the title defense in pre-phase I. For evening-shift students (7th Semester), they have to attend the title defense on their pre-phase as they have only one semester for pre-phase.

Steps to attend the Title Defense :

1. Complete Title Defense Registration Online.
2. A supervisor and a co-supervisor will be assigned by the project/internship committee
3. Contact with your supervisor and consult about your project idea and preparation of title defense
4. Attend the Title Defense.
5. Get the result of Title Defense from your supervisor.

For each above mentioned steps, you will get formal emails from project/internship committee. If you are not getting any email, check if your email is properly added in the studentcse@diu.edu.bd, Contact CSE office for further query regarding email issues.

After successful completion of title defense, in pre-phase I you have to attend another follow-up presentation in front of your supervisor. After title defense all the follow-ups until the phase-II will be managed and instructed by supervisors.

"Pre-Phase II"

Pre-phase II is only for day-shift students (L4-T1). In this semester you have to face two follow-ups (one before midterm and one before semester final) and show your progress in project. All the follow-ups are managed and instructed by supervisors. Contact your supervisor to know the date of follow-ups.

Project/internship committee will circulate notice emails to each supervisor and project teams about the follow-up dates.

Follow-ups

Follow-ups are for demonstrating progress done in the project so far. Both development work and report completion progress should be presented in front of supervisor.

"Phase I"

In phase I, both day-shift (L4-T2) and evening-shift (8th Semester) students have to be involved in final year project. In this semester you have to complete the following tasks.

Follow-ups Follow-ups are for demonstrating progress done in the project so far. Both development work and report completion progress should be presented in front of supervisor.

1. Follow-Up 1
2. Follow-Up 2

Follow-ups will be completed as instructed by supervisor in the same fashion it is done in pre-phases.

Figure 5.20: Pre-phase and Phase I information's

Daffodil International University

- HOME
- INSTRUCTIONS
- TITLE DEFENSE
- SUPERVISOR
- NOTICE
- SIGN IN

"Phase II"

In phase II, both day-shift (14-13) and evening-shift (9th Semester) students have to be involved in final year project. In this semester you have to complete the following tasks.

Follow-ups Follow-ups are for demonstrating progress done in the project so far. Both development work and report completion progress should be presented in front of supervisor.

1. Follow-Up 1
2. Pre-defense

Follow-up 1 will be completed as instructed by supervisor in the same fashion it is done in previous phases. There will be no second follow-up in phase II, but you have to face the pre-defense.

"PRE-DEFENSE"

Pre-defense is considered to be trail of final defense and all the senior faculty members are considered to be the judge of pre-defense. Pre-defense presentation is a pre-requisite to face the final defense, thus it is mandatory. For pre-defense you have to complete the following task.

Steps of to attend Pre-defense

1. Complete all the follow-ups in previous phases.
2. Consult with the supervisor to send your team information to the project/internship committee within the deadline.
3. Get instructions from project/internship committee through email.

"FINAL-DEFENSE"

Final defense is the last and final presentation you have to face to defend your final year project, research or internship works. This is called defense as you have to defend each and every issues (requirement analysis, project planning, implementations, testing, validation, verification, version control, report writing, synchronization between development work and report). Usually the most senior faculties are considered to become the judge of final defense and additionally there must be one or more external faculties from other universities.

Steps to attend the Final Defense

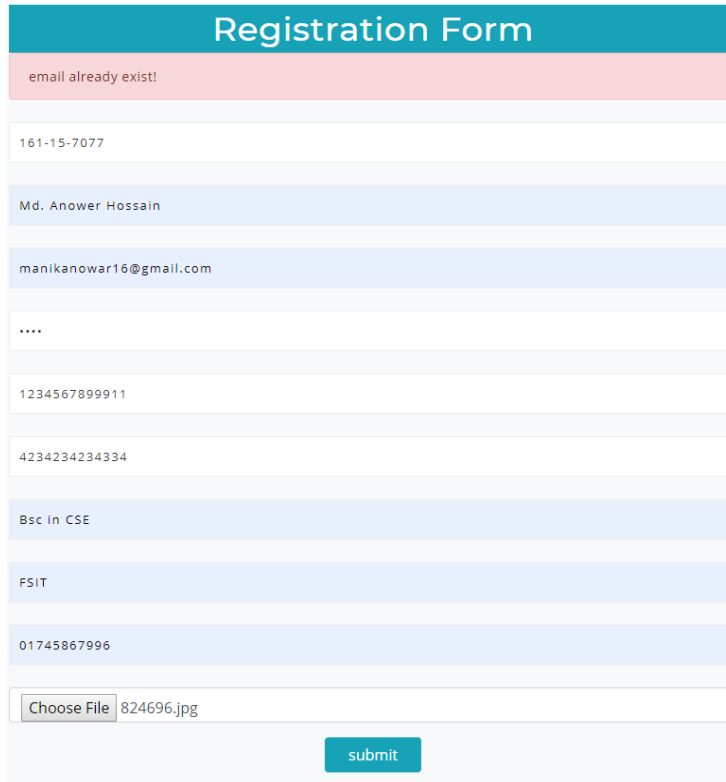
1. Attend the pre-defense successfully.
2. Consult with supervisor and do modifications as mentioned by the pre-defense judges.
3. Get instructions from project/internship committee through email.
4. Attend the Final Defense presentation with your project Google Site, printed report, screen-cast videos and other necessary documents as instructed in the email.
5. Get the result from the Exam Controller office.

Pre-defense are usually arranged before semester final of each semester. For notifications about project pre-defense find notices in Notice Board.

Figure 5.21: Phase II, Pre-Defense and Final-Defense Information's.

5.3 Testing Implementation

Testing, implementation is a significant procedure of a web effective web application and it is the procedure of an activity of the defined arrangement. In this project, I'm trying different procedure of our application. Presently I see some testing implementation results in this project.



The image shows a web registration form with a teal header titled "Registration Form". Below the header, a pink error message reads "email already exist!". The form contains several input fields with the following values: a phone number "161-15-7077", a name "Md. Anower Hossain", an email address "manikanowar16@gmail.com", a password field with four dots "....", a numeric field "1234567899911", another numeric field "4234234234334", a degree "Bsc in CSE", a department "FSIT", and a phone number "01745867996". At the bottom, there is a file upload field showing "Choose File" and "824696.jpg", and a teal "submit" button.

Figure 5.22: Existing email check

To register, an user must input a valid email and unique email id for create a new profile.

The image shows a login form with a teal header containing the word "Login". Below the header is a pink error message box that says "Email or password wrong!!!". Underneath the error message is a dropdown menu with the text "<---Select One--->". Below the dropdown are two text input fields: "Enter your email" and "Enter your password". At the bottom of the form is a teal button labeled "submit".

Figure 5.23: Login check

To login, user/supervisor have to input registered email and password. Without registered email or password they will not able to use features.

5.4: Test Results and Reports:

Table 5.1: Test Case Table for Registration.

Test Case	Test Input	Expected Output	Actual Output	Result	Tested On
1.Display The application pages	Tested browsers- ❖ Firefox ❖ Google Chrome ❖ Opera	To display the Pages successfully	Displayed the pages successfully	Passed	30-10-19

2.Email	Blank and Incorrect email	Email or password wrong !!!	Showed the Warning	Passed	30-10-19
3.Password	Blank and Incorrect Password	Email or password wrong!!!	Showed the Warning	Passed	30-10-19
4.Registration	Without Registration	To restrict to access the progress report	Imposed the restriction	Passed	30-10-19

Table 5.2: Test Case Table for “view progress”

Test Case	Test Input	Expected Output	Actual Output	Result	Tested On
1. Edit user progress	Input Progress and comment	Updated result show in Single user page	Updated result showed	Passed	31-10-19
2. Delete User	Delete Button click	Deleted Successfully.	Delete from page	Passed	31-10-19

Table 5.3: Test Case Table for “Add Supervisor”

Test Case	Test Input	Expected Output	Actual Output	Result	Tested On
1. Add Supervisor	Input name, email, employee id, field, phone, role	Successfully registered	Updated result showed Successfully	Passed	31-10-19
2. Delete Supervisor	Delete Button click	Deleted Successfully.	Delete from page	Passed	31-10-19

CHAPTER 6

CONCLUSION AND FUTURE SCOPE

6.1 Discussion and Conclusion

The application has been successfully completed. Consequent to partner with the application through the SQL server general features and functionalities work fine. This present application's work procedure and responsive arrangement is anything but difficult to utilize. We have encouraged and took exercises to develop this application considering the way that various Organizations require this system in their regular errands. This endeavor is inferred for portraying all of the features and procedure that were taken after while working up the application. This chronicle especially says the focal points of the endeavor how it was made, the basic essential, and various features and functionalities of the endeavor and the frameworks followed in achieving these objectives.

6.2 Scope for Further Developments

- Our central goal is to make this application for all stage like Windows, IOS, and Android.
- Our application's information needs more storage in future, so we will include this with bigger database framework, for example, Oracle Database.
- We will add increasingly propel highlights to make it progressively powerful to fulfill bigger associations and make this application trusted by them and confirmed.

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