# A web application for Daffodil Alumni

BY

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

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DAFFODIL INTERNATIONAL UNIVERSITY

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# APPROVAL

This Project titled "**A web application for Daffodil Alumni**", submitted by **Md. Monimul Haque, Id: 161-15-7235** to the Department of Computer science & 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 & Engineering and approved as to its style and contents. The presentation has been held on – January, 13-2024.

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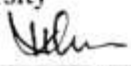

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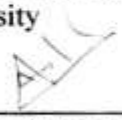

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## DECLARATION

We hereby declare that, this project has been done by us under the supervision of, **Ms. Most. Hasna Hena, Assistant Professor, Department of CSE,** Daffodil International University. We also declare that neither this project nor any part of this project has been submitted elsewhere for the award of any degree or diploma.

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We would like to express my heartiest gratitude to **Dr. Sheak Rashed Haider Noori** , **Head, Department of CSE,** for his kind help to finish my project and also to other faculty members and the staff of the CSE department of Daffodil International University.

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 complete results that back up my proposal for "A web application for DIU Alumni" may be seen here. In this article, the techniques utilized to transform the idea into a working website are discussed in depth. This project has made use of the Alumni & Admin Dashboard modules. This effort is important for students, alumni, and universities alike since it aims to create an online database for alumni. A web-based platform, the Daffodil Alumni Management System is available from any location in the world. Authorized alumni can use the website to view information about any graduates. The Alumni Management Database may use this system as a management tool to handle alumni activities such as events, job notifications, and posts on different themes. The system administrator has the ability to validate the alumni registration data. After verifying the alumni's details, the administrator can also utilize the app to confirm them. The Alumni Web Portal offers an event gallery where users may showcase the event activities. Using the app, alumni and administrators may talk about employment openings that could be helpful to incoming grads. After the administrator has established the event and verified it, alumni are welcome to attend. Using this web-based application is simple. A PHP web application, JS, Ajax, CSS style pages, and an HTML front end have all been used in combination with a reliable MYSQL database server using XAMMP. No costly software or computer components are required to set up our online application; all you need is a desktop computer and internet access.

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# CHAPTER 1

# Introduction

## 1.1 Introduction

An application that shows the relationships and interactions between other applications is called a system. Computers' "System" page contains programs, programming connections, and tools for system administration. Although context affects how "system" is defined, the basic idea is always the same. The "A web application for Daffodil Alumni" offers a complete foundation by integrating many technologies. The framework's several components implement the parameters established for each system under study. There are several systems in each module.

The Daffodil Alumni Management System, an automated web application, assists students and alumni in setting up suitable channels of engagement. When other graduates submit job notifications, it will be beneficial to all of them. Alumni will be motivated by reading posts from other domains. Additionally, this system will offer event management services. With the help of the event management module, alumni may easily plan any kind of gathering, share event moments and activities, and oversee events. This website will make it easy to manage all alumni through the verification, creation, deactivation, and designation of alumni as system administrators processes. An interface for creating events, providing details about what happened during them, and enabling the administrator to share event images will also be provided. It will also provide a front-end and admin interface for posting job vacancies and transferring knowledge with ease. A user interface that is both practical and easy to use will be available to all users.

## 1.2 Motivation

The goal of developing a Daffodil alumni system is to strengthen and deepen the link between schools and universities and their former students. This system aims to speed up communication by providing a single platform for alumni to connect and

talk about possibilities. It also gives institutions the ability to leverage this network for mentorship, career assistance, and fundraising. A web-based solution that can be easily controlled at Centralized Database is the one that was recommended [1]. There are automatic processes across numerous of the current alumni management systems, however they are updated at the database level, such in Excel sheets and Access from Microsoft. We have noticed that an event management feature is absent from a large number of alumni websites. Alumni cannot submit jobs using the existing system. The vast part of the website does not allow alumni to engage with one another in ways like exchanging event data, making postings on different areas of expertise, posting employment alerts, or building profiles. This system will provide 24/7 support and all of its features.

## 1.3 Objectives

The project's goals are to provide a management system for Daffodil Alumni. The following are some of the project's goals:

- Establishing an online community to bridge the gap between all previous pupils.
- To provide system accessibility and data security for alumni.
- To provide a mechanism for creating events, sharing activities, and sharing event photos.
- To encourage graduates to share their knowledge in a variety of fields.
- To help alumni verify all alumni, job notifications, and posts.
- To help the administrator activate and deactivate any alumni.
- To enable alumni searches after logging in.
- To incorporate every search engine in the system.
- Add the system's post and comments.

## 1.4 Methodology

A daffodil alumni management system's feature selection process include determining the essential features required to efficiently manage alumni

connections, improve participation, and streamline operations. Administrators, alumni, and other users participate in workshops, questionnaires, and interviews to first collect stakeholder requirements. Analytics for monitoring engagement, communication tools, event management, and alumni data management are usually important aspects. The demands of the user may also determine the priority of more complex features like job advertising, mentorship matching, and donation monitoring. A feasibility analysis is carried out to evaluate technical requirements with the business objectives after prospective features have been discovered. User input and prototyping aid in honing the chosen features, guaranteeing that the system is intuitive to use and meets its main goals. The ultimate choice strikes a balance between future expansion and scalability. Standard elements like sign-up, login, and alumni search functionality are included on the majority of alumni websites. A sufficient event management system is absent from most websites. This daffodil alumni site now has features that let the administrator to create events, oversee event operations, and distribute event images. Photos from events may also be posted by alumni. Most websites don't have an alumni profile page; instead, alumni information is manually entered. The daffodil alumni sites are now free of this issue. Most websites do not let former students to post job vacancies or inspirational information pieces. The Daffodil alumni urge alumni to submit job announcements and motivational posts. The frontend's time and place filters make it simple to filter this content. On the Daffodil alumni site, you may view alumni profile information and search for alumni, just as on other alumni sites.

### 1.5 Expected Outcome

The project is expected to provide the following outcomes:

- Future events will be shown on the user home page in a carousel.
- Every knowledge exchange and job alert will be shown on the dashboard.
- You may get job ads and view all job notifications on certain pages.
- Each piece of information sharing has its own page.

- There is a page with event images and activities.
- Any user can leave a comment on a post.
- The login and sign-up pages for administrators and alumni are distinct.
- The administrator may view all of the alumni's information.
- Alumni from other colleges will also be appointed as administrators.
- All alumni posts and knowledge exchanges will be examined by the administrator.
- The alumni will initially register for the system, and when the administrator has confirmed their identification, they are going to be able to log in.
- After successfully logging in, alumni may create their own profiles and view other alumni's information.
- Alumni can submit their comments and different job notifications after successfully logging in.
- Among other filters, a date filter can be applied by the user to any post.

### 1.6 Organization of the report

The following format is used to give the project report:

- Chapter 1 provides a brief description of the project, outlining its objectives, background, mission, and expected outcomes.
- Chapter 2 presents the project's goals, issues, and background information.
- Project methodology is defined in Chapter 3, which also includes use cases, data flows, and sequence diagrams. This section contains a full explanation of the whole design and approach.
- Chapter 4 presents the experimental findings, performance evaluation, and outcomes discussion. A few test photographs are included in this part to aid in the project's implementation. This section finishes with an analysis of the applications of the parking system.

- The research was summarized in Chapters 5 and 6, together with Engineering Standards and Design Challenges, standard compliance, financial analysis, engineering challenge, information on next activities, and a question on the findings. An allowed example is provided in this chapter to demonstrate if the provided report meets all standards. Effects on the Environment and the Collaborative Group: This chapter concludes by outlining the shortcomings in my present endeavors that may affect future workers with similar objectives.
- Chapter 6 introduces the conclusion and future scope.

# CHAPTER 2

# Background

## 2.1 Introduction

This system was developed as a web-based app for the Daffodil Alumni Management System Technologies to assist with communication and track alumni activity. Using the correct login credentials, users can access the web-based system from any location in the world. The final user's experience will be enhanced by this. Thanks to this approach, alumni will have a platform to share their thoughts through entries that are approved by the supervisor. It also allows alumni to create and submit their events, experiences, and activities to the system. Additionally, alumni may share any job ad with other alumni via their account.

## 2.2 Literature Review

The primary distinction between my applications and those of other alumni portals that are comparable to mine on the internet is that the former do not provide event administration or the distribution of event images or activities. Furthermore, alumni are not using the platform to share job notifications. There are several websites where grads may search for details about other graduates.

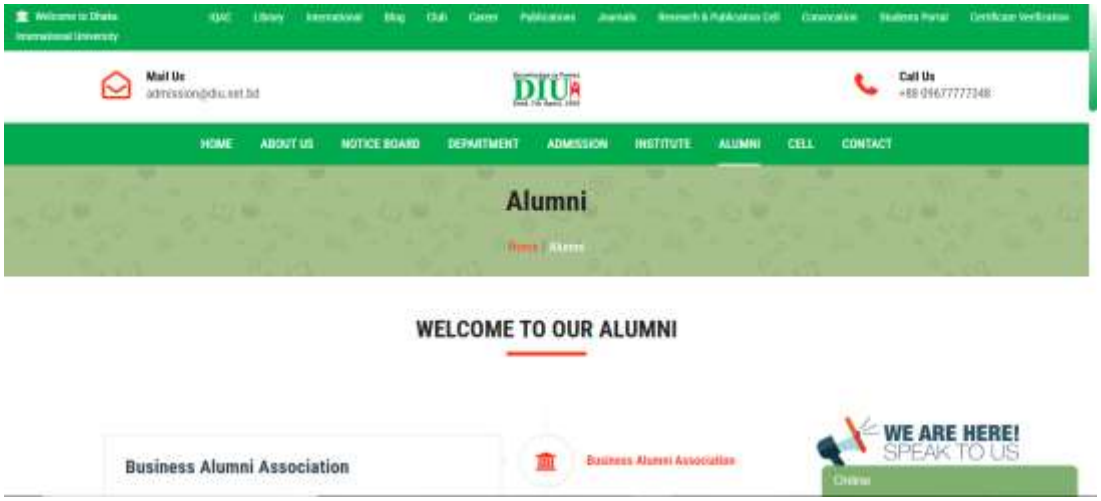



Figure 2.1: Dhaka International University Alumni

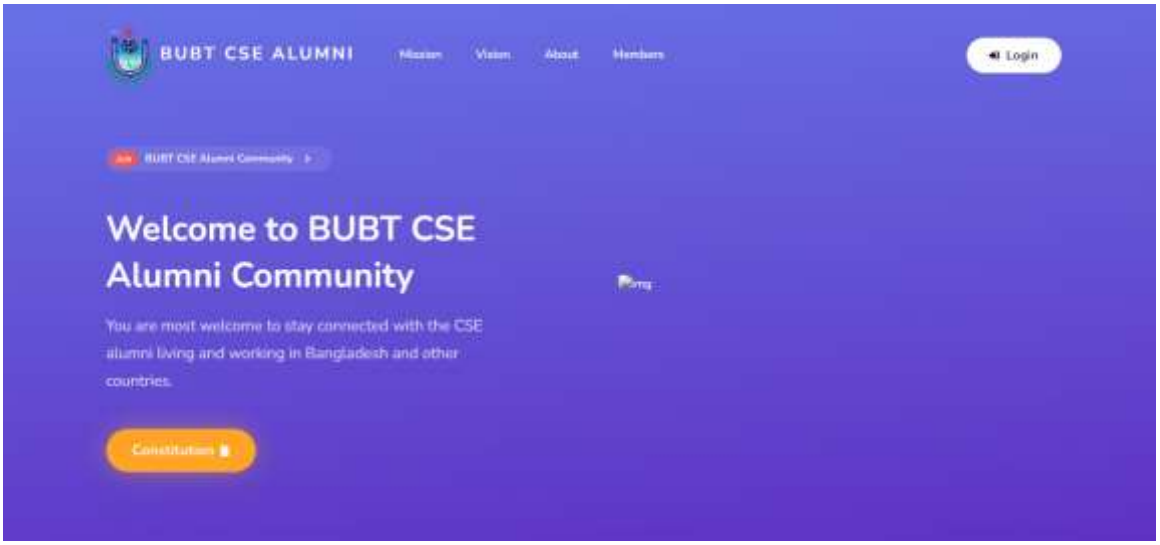



Figure 2.2: BUBT Alumni

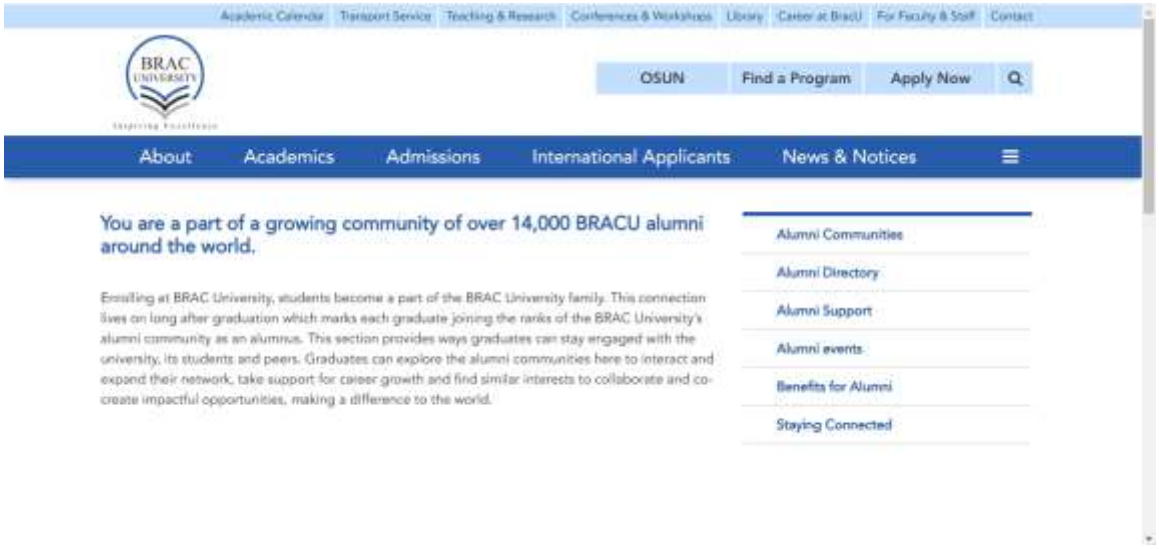



Figure 2.3: Brac University Alumni

My alumni system has a number of elements that are also accessible on other alumni websites. Finding alumni information is made easy by the alumni search function on each webpage. The majority of the websites are user-friendly. I also designed the system to be easy to use.

- **HTML:** HTML and other markup languages can be used to generate web pages. Web browsers can view and comprehend HTML files. HTML components provide the foundation of every website. makes it possible to use

HTML elements and images, allowing you to produce interesting content. It can also generate titles, links, chapters, quotations, and lists in [3].

- **CSS:** By altering the fonts, colors, and layouts on our homepage, we may better tailor the content. This enhances our website's coherence and visual attractiveness. As a result, the website appears more inviting. In [3]

- **PHP**: An open-source programming language. This allows us to create dynamic websites. MySQL-generated databases may be connected to PHP-powered webpages. This programming language is popular. In [2]

- **MySQL Database**: MySQL is a popular open-source database. The MySQL database is defined by its durability, performance, and usefulness. This is used to create well-known web programs like Facebook, YouTube, Twitter, Yahoo, and Facebook. In [2]

- **JavaScript:** One of the most widely used programming languages at the moment is JavaScript. JavaScript is another language we use for web development. In this method, a layer of common web technology is established.[3]

- **Bootstrap 4:** Bootstrap 4.0 is the most recent version. You can create responsive websites with the HTML, CSS, and JavaScript components you require with Bootstrap 4. I consequently created accounts for users on my website.[4]

### 2.2.1 Similar applications

On a few of websites, I have observed a lack of interaction between students and alumni. Most alumni websites just provide membership support; they don't allow you to post event images or job notifications. On many alumni websites, there are communication gaps between students and alumni. These websites are useful for alumni to save information and communicate with one another. Most websites do not let graduates exchange data regarding job openings or build profiles. Most websites don't have a system for managing events that would make it easy for alumni to connect during the event. This alumni website allows for the sharing of event images and activities. Among many other things, it lets you easily access event data and analyze any events.

## 2.3 Gap Analysis

Table 2.1: Gap analysis

| Features | Harvard Alumni | Stanford Alumni | Oxford Alumni | MIT Alumni | UC Berkeley Alumni | Columbia Alumni | Cambridge Alumni | Yale Alumni | Michigan Alumni | Princeton Alumni | Proposed System |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Alumni Profile Creation | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes |
| Networking Opportunities | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes |
| Job Board | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes |
| Event Management & RSVP | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes |
| Fundraising & Donations | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes | No |
| Mentoring Programs | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes |

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Alumni Directory | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes | No |
| Alumni Recognition | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes |
| Content Sharing | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes | yes |
| Volunteering Opportunities | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes | No |

## 2.4 Summary

All of the earlier research done in this field is included in this chapter. They provide an example of the variety that results from their refinement of this research subject in the next section. The most recent discussion focused on the primary difficulties or barriers to this investigation. This chapter discusses the difficulties encountered throughout the project's development and contains sections on pertinent research summaries and studies.

# CHAPTER 3

# Research Methodology

## 3.1 Methodology/Requirement Analysis & Design Specification

The significance of requirement creation and system design must be taken into account in any software design. It provides an example of how to create any program, even pre-existing software. Instead than focusing on precise execution when expressing needs, the item requires safety emphasizes the necessity of standard language communication. That is precisely the goal of the framework records. In particular, the item fundamentals for developing programming tackles the results of the necessity's evaluation and presents the project's needs as a work in progress. It may be produced in many different forms, including the crucial one that fits like a violin, even though it is frequently built as a capture [1].

### 3.1.1 Overview

The first step in the development process was creating the system architecture. Finding the components and how they interact was one aspect of this. Scalability, security, and reliability were given top priority in the system infrastructure's architecture. It meant separating the user interface from database management and product back-end features. The design also incorporated the required security features to ensure secure transactions and protect student information.

For the Daffodil Alumni project, the Iterative Procedure Model was chosen as the concept since it provides a flexible and dynamic approach to software development. Because this method divides the creation process into iterative cycles, it enables continuous system development and refinement. At each iteration, specific applications are reviewed and improved to make Daffodil Alumni flexible enough to meet evolving user demands and the area of alumni communication.

Regular feedback loops are essential to the success of this approach, which integrates feedback from users, alumni, and system evaluations. With iterative processes,

features and functionalities may be added and changed gradually, one step at a time. This flexibility is crucial for Daffodil alumni management system app as user needs and effective support methods may evolve over time. The iterative process paradigm embraces the concept of continual improvement. It ensures that Daffodil Alumni will consistently lead the way in terms of response, efficacy, and user experience. Building on the knowledge gained from previous cycles, the model seamlessly integrates with the dynamic nature of alumni data, allowing the application to adapt to changing requirements and take into consideration the latest advancements in communication among all Daffodil department alumni. This approach ensures that Daffodil Alumni evolves into a useful and intelligent platform over time, improving users' capacity to interact with alumni. The two components use my website. These individuals are both users and administrators. Each system user can do a variety of tasks. Table 4.1 displays a summary of each user's accomplished tasks.

Table 3.1: Modules descriptions

| Actuators | Functions |
|---|---|
| ADMIN | ● Admin dashboard.<br>● Log in and out.<br>● Admin can add gallery, course list, Alumi list, jobs, events, Posts.<br>● Admin can edit gallery, course list, Alumi list, jobs, events, Posts.<br>● Can edit website images, system name by admin.<br>● Users have been “verified” or “unverified” alumni account by admin.<br>● Users have been removed and also be make an admin.<br>● Search option of each portion. |

| ALUMNI/ USER | • Alumni dashboard.<br>• Log in and out.<br>• Update account<br>• Alumni registration and wait for the account verified.<br>• Can view upcoming events, post, gallery, job posts etc.<br>• Alumni can add post, job posts after account verified & login.<br>• Alumni user can view all the registered alumni details.<br>• Alumni can search everything. |
|---|---|

### 3.1.2 Proposed Methodology

Developing the system architecture was the initial stage of the development process. One part of this was figuring out the parts and how they work together. The architecture of the system infrastructure prioritized scalability, security, and dependability. It required keeping database administration and product back-end functionalities separate from the user interface. The necessary security mechanisms were also included in the design to guarantee safe transactions and safeguard student data.


Figure 3.1: Diagram of Business Process Model

You can respond swiftly to shifting market conditions and demands when you plan with flexibility. Comprehensive problem solutions are ensured by cross-functional coordination, and ongoing backlog reduction adapts to changing project priorities. Regular customer participation, including input sessions and user testing, helps ensure that the project stays in line with user expectations.

### 3.1.3 Functional & Nonfunctional requirements

As needed by the system, both functional and non-functional data must be managed in order to gather requirements. Before a website is constructed, its layout, design, and content must all be considered. Users of websites and applications will also value the flexibility to manage and alter every single page and symbol. A system's requirements, which outline its characteristics, features, and other elements, are essential to maintaining its worth and use for users. Once the requirements are clear, developers may begin working on additional technical responsibilities including building the framework, testing it, executing it, and operating it. Both functional and non-functional factors must be considered in the system requirements for each individual system. The functional demands are the "visible" aspects of the user.

Prerequisites that outline what the infrastructure must do, such security, reliability, and maintenance, are not valid.

**Tools for Project Development Requirements:**

- The back-end development for this project will be done using the PHP framework.
- The project's data will be managed and stored in the MySQL database.
- Its Visual Studio Code IDE will be used to carry out the project development process.

### ➢ Hardware Requirements

Table 3.2: Hardware Requirements Table

| | |
|---|---|
| Processor | Intel core i5 Processor |
| Motherboard | Dell OptiPlex 3050 Motherboard |
| RAM | 8GB |
| Internet Card | Any kind of internet card |
| Graphics Card | Any |
| Hard Disk | Minimum 100GB |

### ➢ Software Requirements

Table 3.3: Software Requirements Table

| | |
|---|---|
| Visual Studio Code | Minimum 1.0.0 |
| Operating System | Windows 10 |
| Browser | Google Chrome, Mozilla Firefox |
| Database | MySQL |
| Server | XAMPP |

- **Functional Requirements**
- **Admin**
  - Admin dashboard.
  - Log in and out.
  - Admin can add gallery, course list, Alumni list, jobs, events, Posts.
  - Admin can edit gallery, course list, Alumni list, jobs, events, Posts.
  - Can edit website images, system name by admin.
  - Users have been "verified" or "unverified" alumni account by admin.
  - Users have been removed and also be make an admin.
  - Search option of each portion.

- **Alumni/User**
  - Alumni dashboard.
  - Log in and out.
  - Update account
  - Alumni registration and wait for the account verified.
  - Can view upcoming events, post, gallery, job posts etc.
  - Alumni can add post, job posts after account verified & login.
  - Alumni user can view all the registered alumni details.
  - Alumni can search everything.

- **Non-Functional Requirements**

- **Security**

All users on the system have accounts, and only those who have been granted permission and a password are able to access the system. The passwords are encrypted using PHP and JavaScript.

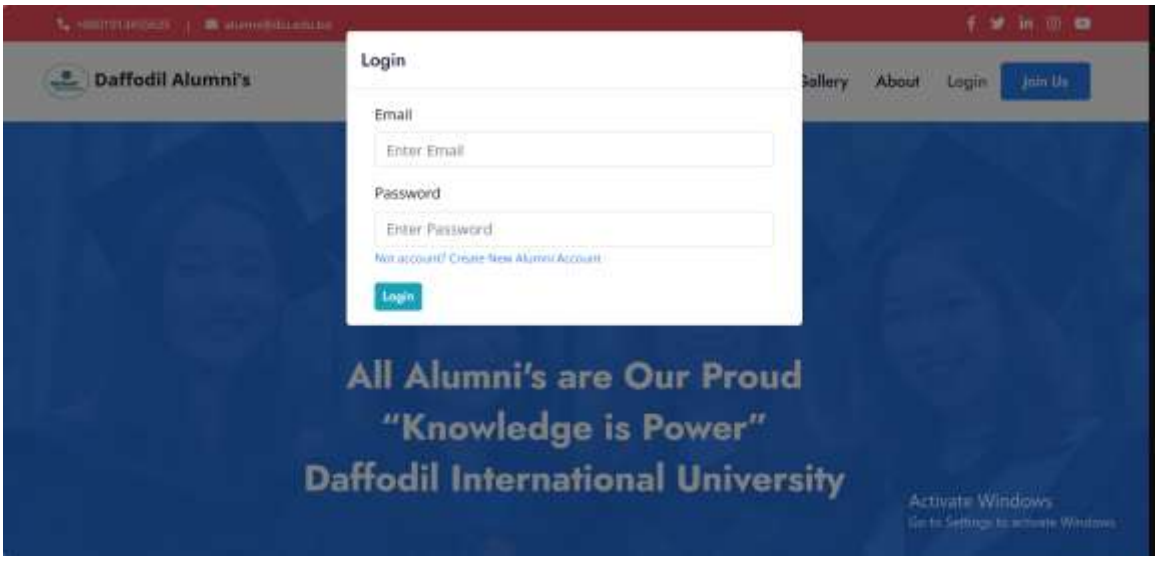



Fig 3.2: User Login Interfaces

- **Performance**

It is easy to update and maintain records.

- **Availability**

All users need to access the system at any time and from any location is a computer with an Internet connection. Internet Explorer, Mozilla, Opera, and Chrome are among the web browsers that the system works with.

- **User Friendly**

The technology features an intuitive user interface and is quite intriguing.

### 3.1.4 Use Case Diagram

This section evaluates both functional and non-functional demands using use-case diagrams and use-case data. Activity schematics and data flow diagrams are used to better analyze the connections between the activities.

In this part, both functional and non-functional needs are analyzed using use-case data and diagrams.

**Admin:**

After login in, the administrator may perform the following actions:

- Admin can add gallery, course list, Alumni list, jobs, events, Posts.
- Admin can edit gallery, course list, Alumni list, jobs, events, Posts.
- Can edit website images, system name by admin.
- Users have been “verified” or “unverified” alumni account by admin.
- Users have been removed and also be make an admin.
- Search option of each portion.

**User:**

After login in, the user may perform the following actions:

- Alumni registration and wait for the account verified.
- Update account.
- Can view upcoming events, post, gallery, job posts etc.
- Alumni can add post, job posts after account verified & login.
- Alumni user can view all the registered alumni details.
- Alumni can search everything.

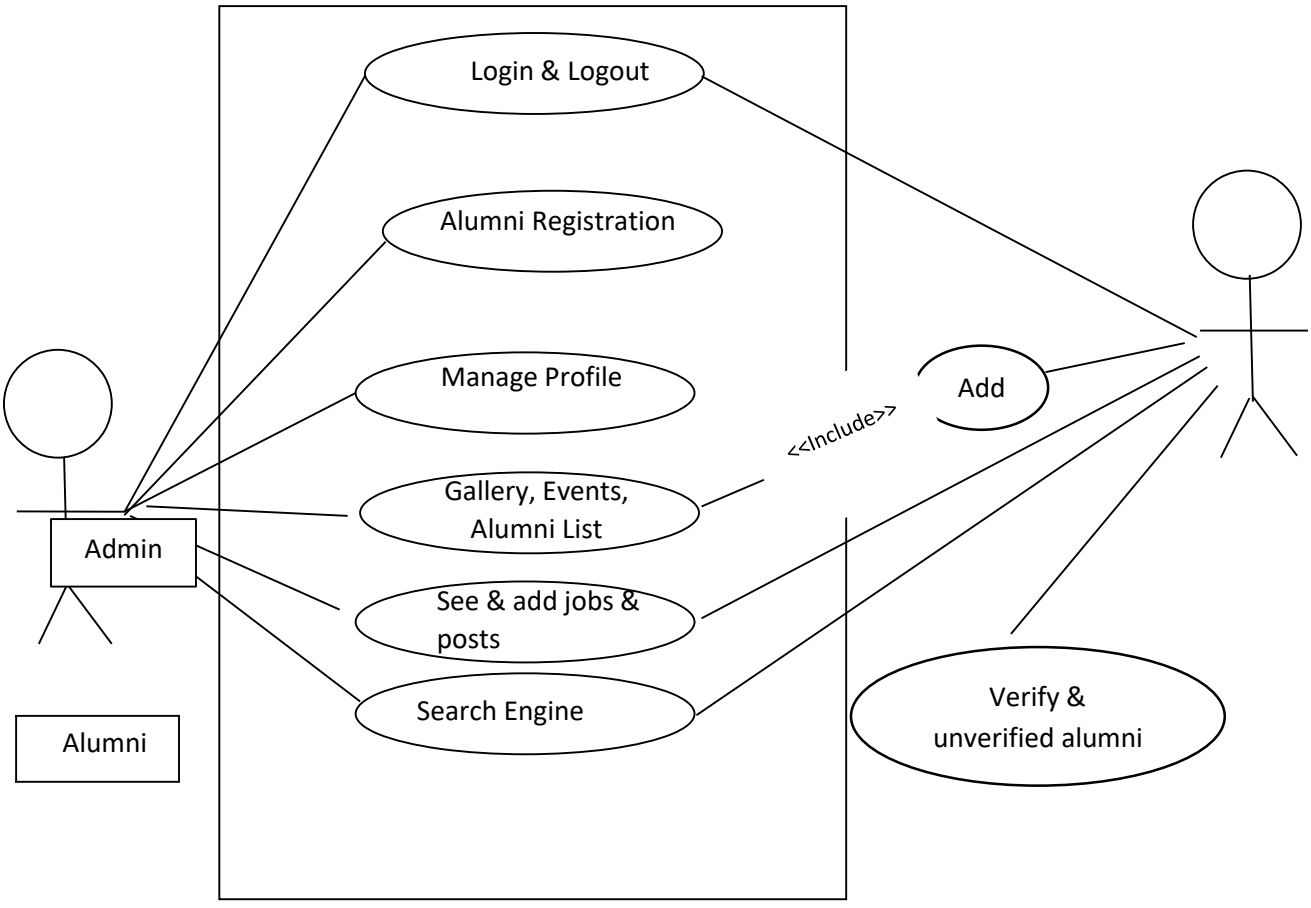



Fig 3.3: Use case Diagram

### 3.1.5 Activity Diagram

The activity diagram describes the dynamic behavior of the system. It demonstrates the transmission of messages between tasks. Additionally discussed are the concurrent, branched, and parallel flows of the system.

The pictures below display the Daffodil Alumni activity diagram.

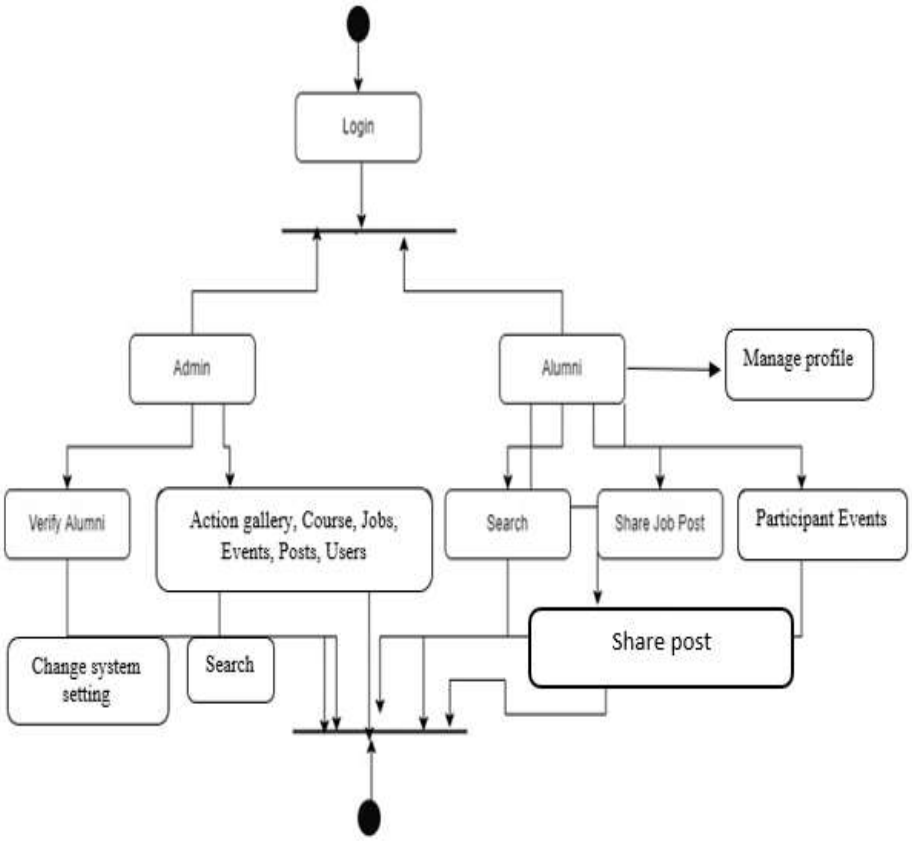



Fig 3.4: Activity Diagram

### 3.1.6 Class Diagram

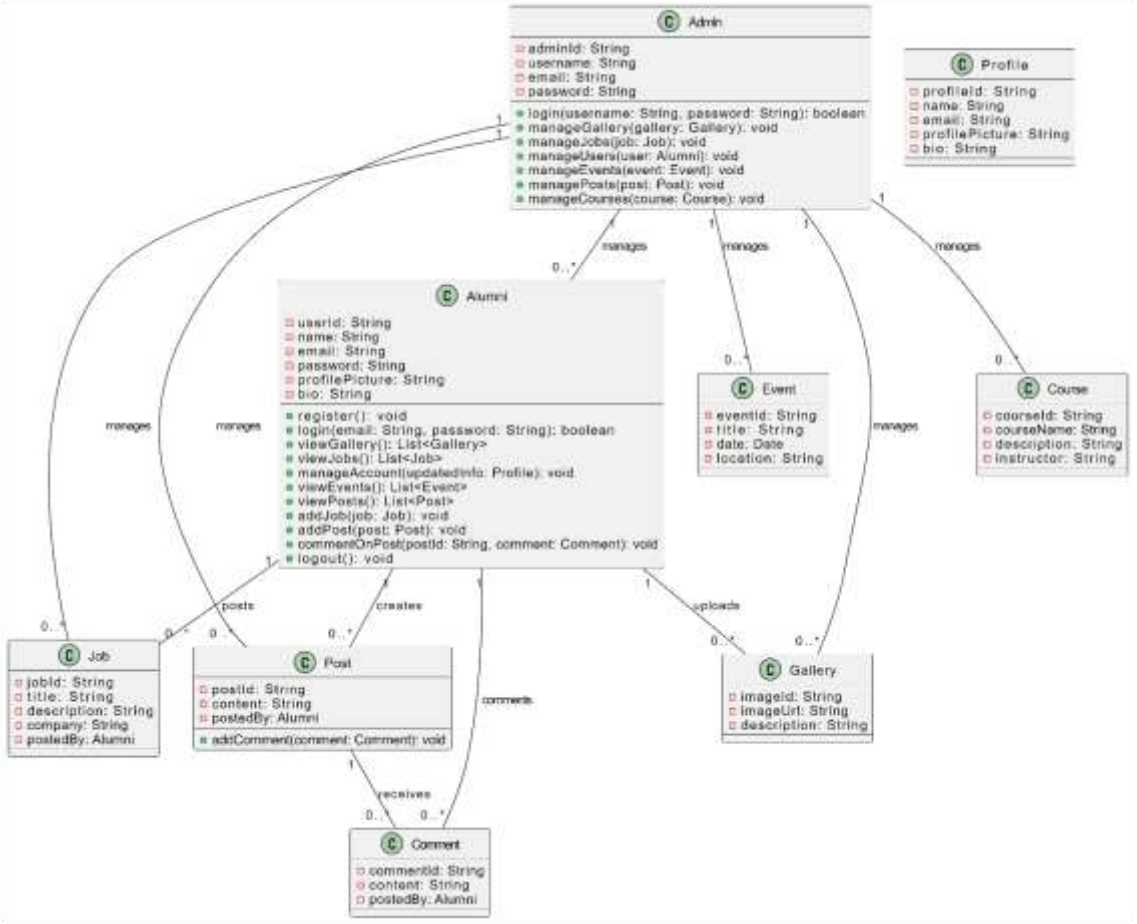



Fig 3.5: Class Diagram

### 3.1.7 Sequence Diagram

Sequence diagrams are occasionally used to describe diagrams that show how discussions are conducted. They are able to illustrate the order of exchanges and show how objects interact with one another by using the vertical axis of the graphic.

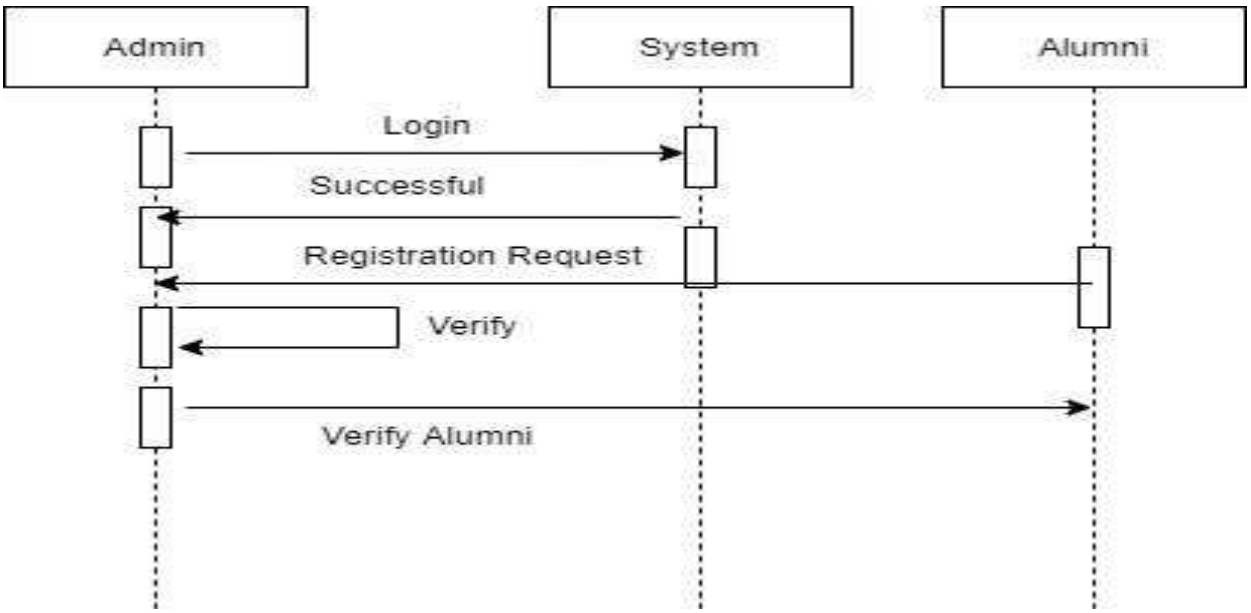



Fig 3.6: Alumni Verification Sequence Diagram.

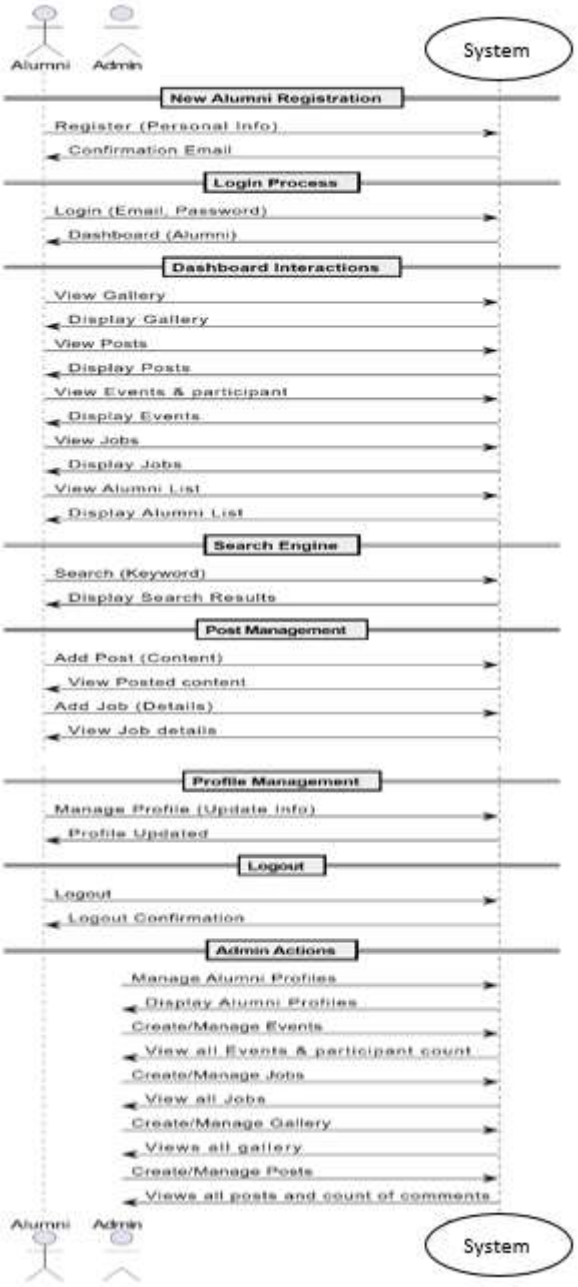



Fig 3.7: Overall Sequence diagram

## 3.2 Detailed methodology and Design

Standard elements like sign-up, login, and alumni search functionality are included on the majority of alumni websites. A sufficient event management system is absent from most websites. This daffodil alumni site now has features that let the administrator to create events, oversee event operations, and distribute event images. Photos from events may also be posted by alumni. Most websites don't have

an alumni profile page; instead, alumni information is manually entered. The daffodil alumni sites are now free of this issue. Most websites do not let former students to post job vacancies or inspirational information pieces. A daffodil alumni management system's feature selection process include determining the essential features required to efficiently manage alumni connections, improve participation, and streamline operations. Administrators, alumni, and other users participate in workshops, questionnaires, and interviews to first collect stakeholder requirements. Analytics for monitoring engagement, communication tools, event management, and alumni data management are usually important aspects. The demands of the user may also determine the priority of more complex features like job advertising, mentorship matching, and donation monitoring. A feasibility analysis is carried out to evaluate technical requirements with the business objectives after prospective features have been discovered. User input and prototyping aid in honing the chosen features, guaranteeing that the system is intuitive to use and meets its main goals. The ultimate choice strikes a balance between future expansion and scalability.

The Daffodil alumni urge alumni to submit job announcements and motivational posts. The frontend's time and place filters make it simple to filter this content. On the Daffodil alumni site, you may view alumni profile information and search for alumni, just as on other alumni sites.

- **Daffodil Alumni for Admin**

The administrator will oversee and plan all activity in this module pertaining to Daffodil alumni. Additionally, the administrator has the ability to add, remove, and alter any system that alumni users may access. He certifies or confirmed alumni user and add gallery with all items. Every event connected to this Daffodil alumni management system must be maintained by the administrator.

- Admin login, logout.
- Admin can add gallery, course list, Alumni list, jobs, events, Posts.
- Can edit website images, system name by admin.

- Users have been verified or unverified alumni account.
- Users have been removed and also be make an admin
- **Daffodil Alumni for Alumni/Users**

Clients linked to that specific time slot will keep up-to-date records on every instance in this module. After making an account on the app, he was able to obtain his user ID and password. Once their login credentials have been entered, they can authenticate at their convenience.

- Users can log in & logout.
- Alumni registration and wait for the account verified.
- Can view upcoming events, post, gallery, job posts etc.
- Alumni can add post, job posts after account verified & login.

## 3.3 Project Plan

Table 3.3: Total project plan & time estimate

| Sl. No. | Next Task | Estimate completion time (MM-YY) |
|---|---|---|
| 1 | Project Initial planning | 07-24 |
| 2 | Analysis requirements of the project. | 08-24 |
| 3 | Apply back end, database and front end design to create web design. | 09-24 |
| 4 | Web application testing and evaluation. | 10-24 |
| 5 | Report writing | 11-24 |

## 3.4 Task Allocation

| Tasks | Weeks | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 |
| Project Initial planning | | | | | | | | | | | | | | | | | | |
| Analysis requirements of the project. | | | | | | | | | | | | | | | | | | |
| Back end, database and front end design. | | | | | | | | | | | | | | | | | | |
| Testing and evaluation. | | | | | | | | | | | | | | | | | | |
| Report writing | | | | | | | | | | | | | | | | | | |

| | |
|---|---|
| Estimated Work Period | |
| Actual Work Period | |

## 3.5 Summary

In addition to defining project methodology, this chapter includes use cases, data flows, and sequence diagrams. This section contains a full explanation of the whole design and approach. We used a range of approaches, such as use case diagrams, data flow diagrams, sequence diagrams, and activity diagrams, to examine the linkage and behavior of the activities after talking about the system overall, its users, and the functional and non-functional demands. This chapter will provide a detailed explanation of the system's structure and users. The functional and non-functional requests that were obtained through a range of methods, such as online surveys, face-to-face conversations, and idea sharing, are then provided. Once the most important requests were identified, requirement analysis was carried out using a variety of methods, such as use-case, sequence, and activity diagrams.

# CHAPTER 4

# Implementation & Results

## 4.1 Environment Setup

An application or piece of software used for task and application administration, research, and organizing is called a product development tool. To work on this site, we employed the following tools:

- Apache Server
- MySQL Workbench
- PHP Strom IDE
- Browser.

| Client slide | Server side |
|---|---|
| Html, CSS, JavaScript, Bootstrap, Ajax | PHP, MySQL, XAMPP |

The accompanying is used to determine the programming needs. As development went on, we managed the web stage. We wish to support a cross-stage application as well as an online platform. We would require HTML5, CSS3, JavaScript, and Ajax for the front end. Our aim is accomplished via the usage of AJAX innovation, PHP, and MySQL. As a neighboring worker, XAMPP is also necessary in this case. As the code editorial manager, we would require a top-notch word processor.

### 4.1.1 Front End Design Implementation

The front-end design of Daffodil Alumni has been carefully constructed to provide an intuitive user interface and encourage a positive user experience. Accessibility, empathy, and simplicity of use are prioritized in the design concepts to help users who are facing a wide range of communication difficulties among graduates. The bare minimum for the front-end design is as follows:

**User-Centric Interface:**

- Its straightforward and uncomplicated design, along with its calming color palette, produce an aesthetically tranquil setting.
- With the use of simple navigation features like thoughtfully positioned buttons and instructions, users are easily led through the conversation flow.

Responsive Design

- Daffodil Alumni has a responsive design approach, guaranteeing compatibility across several devices, including PCs, tablets, and smartphones.
- The responsive layout adapts to different screen sizes, providing an equivalent pleasant experience.

Consistency:

- Maintain the same look and feel across all of your pages to provide a smooth user experience.

Accessibility:

- Verify that the design conforms with accessibility guidelines to guarantee that people with disabilities may utilize it.

### 4.1.3 Back End Design Implementation

The webpage for Daffodil alumni is divided into two categories. The first is the front end, where former students may register for events, edit their profiles, discuss job openings, and more. Comprising the second component, the administrative part is responsible for managing alumni availability, events, job listings, knowledge sharing, and other matters.

The Daffodil alumni's backend was developed using the PHP framework. The admin and frontend portions of the application are separated into two parts. PHP was used to develop both components, which run on different ports and make use of JavaScript and Ajax.

For location and flexible applications, our system makes use of a MySQL database. We leverage a central knowledge base that provides location and application. It includes every piece of data in the system. For testing purposes, I have added a large number of records to the users table to confirm the accuracy and security of the system. Additionally, utilizing bulk data, I was able to correctly add and remove every piece of data from other people's databases.

Technology Used for this project:

- PHP
- JavaScript
- Ajax

### 4.1.4 Design and Implementation of Databases

A data set is an organized collection of data. The information is frequently arranged to make reference to it essential by organizing the fundamental components of reality. The information gathered is intended to help this MySQL-powered website get better. MySQL serves as the organizational framework for a social database. When starting a project, choosing an information foundation is essential—even more essential than picking anything else. We like MySQL because it is the greatest information foundation for us for a number of reasons. The following explains these points. The MySQL database has the intelligence to store any information that is required. It will allow you to quickly save and retrieve information, and several users may practice it at the same time.

- MySQL's database interaction capabilities are highly advantageous for both small and big applications.
- MySQL supports the SQL standard.
- There are no limitations on its use or download.

| | Table | Action | Rows | Type | Collation | Size | Overhe |
|---|---|---|---|---|---|---|---|
| ☐ | alumnus_bio | Browse Structure Search Insert Empty Drop | 1 | InnoDB | utf8mb4_general_ci | 16.0 KiB | |
| ☐ | careers | Browse Structure Search Insert Empty Drop | 1 | InnoDB | utf8mb4_general_ci | 16.0 KiB | |
| ☐ | courses | Browse Structure Search Insert Empty Drop | 1 | InnoDB | utf8mb4_general_ci | 16.0 KiB | |
| ☐ | events | Browse Structure Search Insert Empty Drop | 1 | InnoDB | utf8mb4_general_ci | 16.0 KiB | |
| ☐ | event_commits | Browse Structure Search Insert Empty Drop | 0 | InnoDB | utf8mb4_general_ci | 16.0 KiB | |
| ☐ | forum_topics | Browse Structure Search Insert Empty Drop | 2 | InnoDB | utf8mb4_general_ci | 16.0 KiB | |
| ☐ | gallery | Browse Structure Search Insert Empty Drop | 3 | InnoDB | utf8mb4_general_ci | 16.0 KiB | |
| ☐ | system_settings | Browse Structure Search Insert Empty Drop | 1 | InnoDB | utf8mb4_general_ci | 16.0 KiB | |
| ☐ | users | Browse Structure Search Insert Empty Drop | 2 | InnoDB | utf8mb4_general_ci | 16.0 KiB | |
| | 9 tables | Sum | 12 | InnoDB | latin1_swedish_ci | 144.0 KiB | 0 |

Fig 4.1: Database scheme

## 4.2 Testing & Evaluation/ Performance

### 4.2.1 Description of System

According to Blew, the next phase of execution, which follows the extension of the data systems system, entails a number of strategies and initiatives for the development of the website and mobile application. The design of a website is done with HTML, while the style defining is done with CSS. JavaScript, MySQL, and sophisticated user connections were then utilized to create these websites. PHP was eventually used to administer the website's databases and content. The panorama ultimately appeared on the internet.

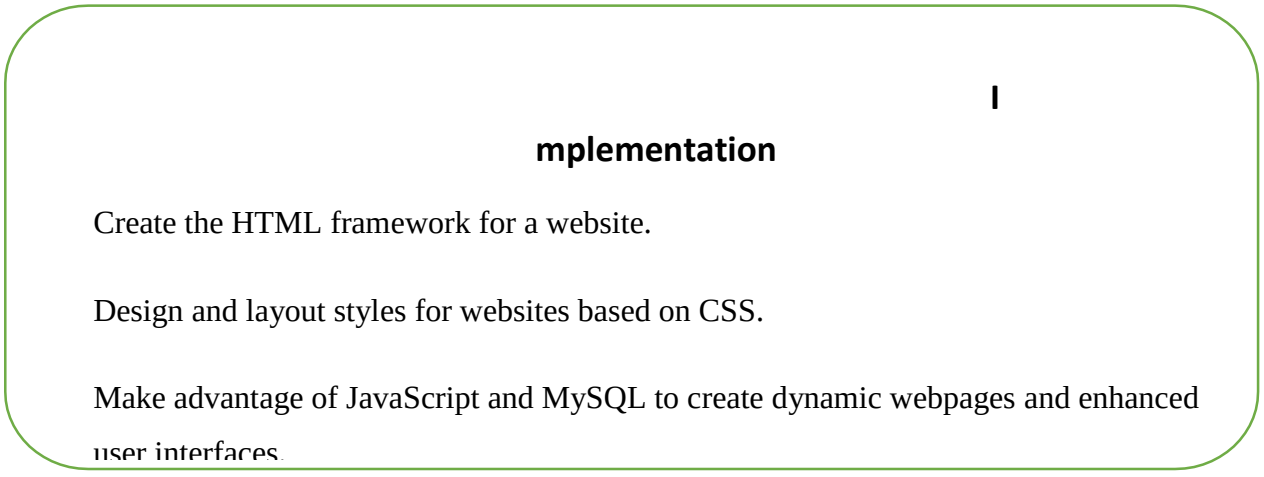



Fig 4.2: Implementation Phase of activity

### 4.2.2 Testing Implementation

During development, advanced testing and quality control techniques are employed to identify and address any possible problems or defects. Tests for user acceptability, efficacy, and usability were conducted. One of the goals of security testing was to find and address vulnerabilities. After consulting with administrators and stakeholders, the required changes were implemented to offer a reliable, high-quality system.

- **Unit Testing**

When performing unit tests, test each module independently while integrating the framework as a whole. Since the software's architecture is the smallest part of each module, unit testing helps focus verification efforts there. It's also known as module testing. Every system module is looked at separately. Additionally, make sure that every browser can use this approach.

- **Validation Testing**

Software testing uses validation and verification procedures to make sure a system meets requirements and performs as intended. Another name for it might be software quality assurance.

- **Integration Testing**

Integration testing addresses the issues around the two inspection and program development concerns. A number of high-order benchmarks are done after software integration. The main objective of this testing technique is to use unit-tested modules to build a program structure that complies with design criteria.

- **Test Results and Reports**

Table 4.1: Test Case

| Case Id | CASE NAME | Expected Result | Actual Result | Result (Pass/Fail) |
|---|---|---|---|---|
| 1 | Registration Form | All the field must be required for filled | Images field have been unfilled after registration | Fail |
| 1 | Email | Incorrect or empty names will result in a notice being shown. | Incorrect or empty names will result in a notice being shown. | Pass |
| 2 | Password | A notification will appear if the password is invalid or empty. | A notification will appear if the password is invalid or empty. | Pass |
| 3 | Verify account | If account isn't verified, then show "Your account not yet verified" | Show the message "Your account not yet verified" | Pass |
| 4 | Manage account | Update alumni profile with all required field. | Update profile successfully | Pass |
| 5 | Add jobs and Posts as alumni | Individual alumni can share jobs & posts. | Add jobs & post successfully by alumni | Pass |
| 6 | Upcoming events | Alumni can participant at events | Yes, user can participant at events | pass |

| | | | | |
|---|---|---|---|---|
| 7 | Admin panel | Admin can action of Gallery, jobs, posts, events. | All the action done by admin | Pass |
| 8 | Alumni verified by Admin | Admin verified & unverified alumni account | Successfully done | Pass |
| 9 | Manage user by admin | Admin can edit or delete or add new users | Successfully done | Pass |

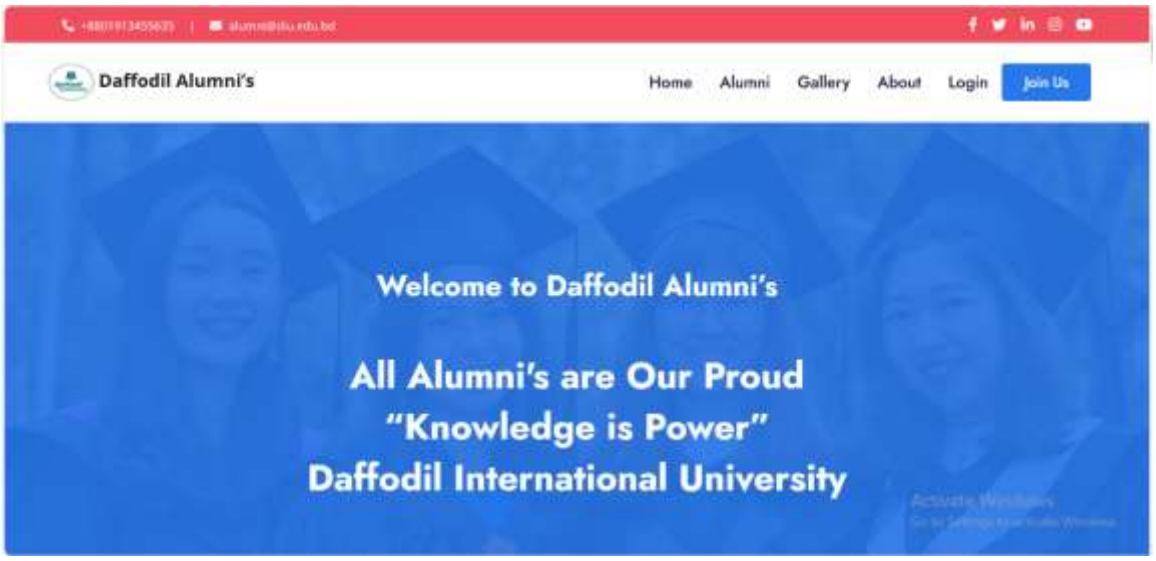
## 4.3 Result & Discussion

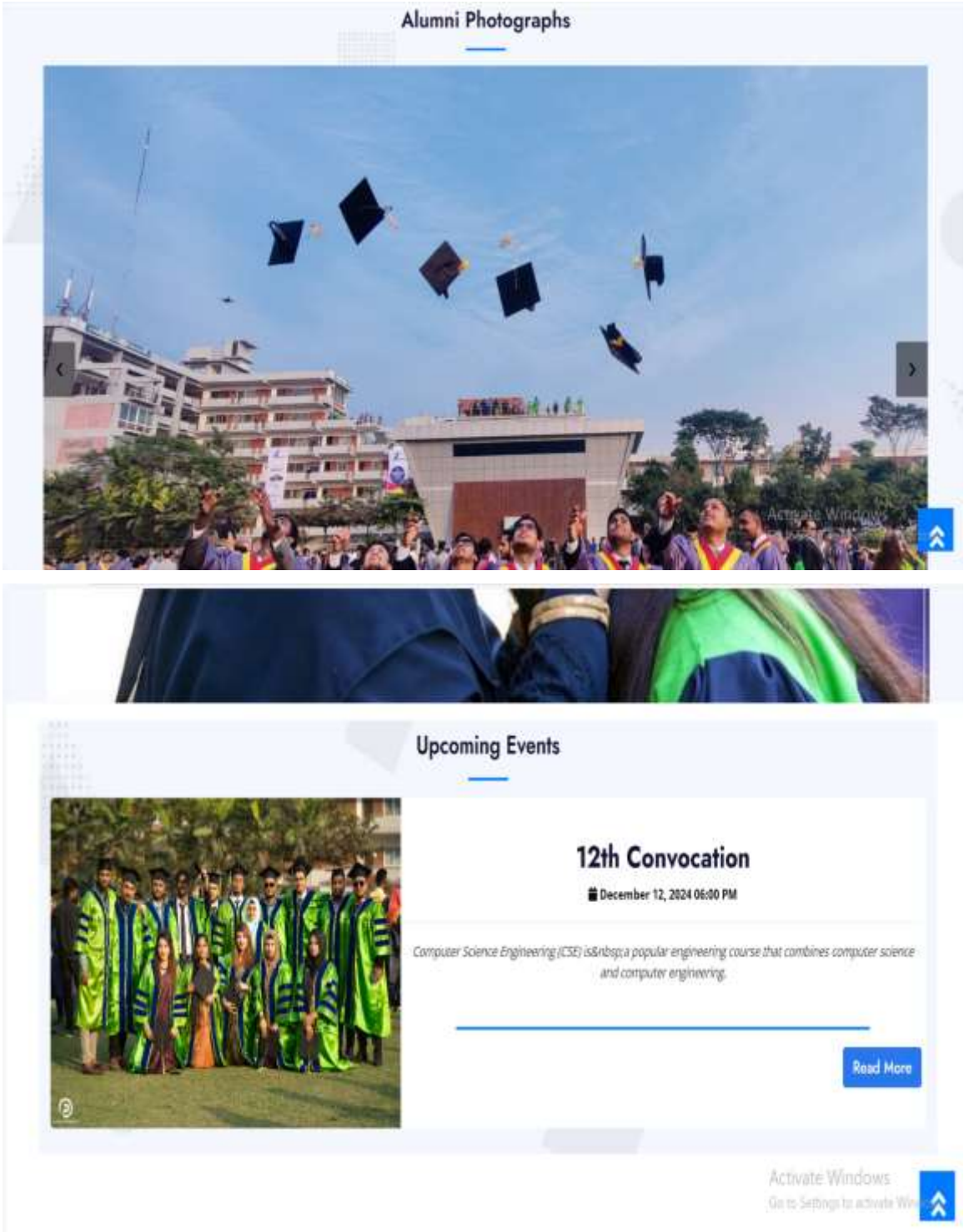
During this phase of research, we determine the requirements of the project and the most effective strategy for improving the system's performance. We also define the prerequisites for system installation to help them assess the availability of trained workers. This system was built using web extension techniques (HTML, CSS, JavaScript, Boostrap4), which gave us the opportunity to build the UI/UX features as well as the software, tables, panels, and colors. Like this:

- Provide a system that is easy to use.
- Simplify the memory's layout.
- You may optimize your website's user experience by carefully choosing the colors you employ.
- We will then utilize PHP and the MySQL database management system to view websites and safeguard user data in a MySQL database.

### 4.3.1 All User Interfaces

#### 4.3.1.1 Interfaces for Users


Daffodil Alumni's
Home
Alumni
Gallery
About
Login
Join Us
Welcome to Daffodil Alumni's
All Alumni's are Our Proud
"Knowledge is Power"
Daffodil International University


Alumni Photographs
Upcoming Events
12th Convocation
December 12, 2024 06:00 PM
Computer Science Engineering (CSE) is a popular engineering course that combines computer science and computer engineering.
Read More
Activate Windows

# All DIU Student & Alumni about their information?

Daffodil International University (DIU) alumni are a diverse and accomplished group of individuals who have graduated from this renowned private university in Dhaka, Bangladesh. With a strong foundation in various academic disciplines, DIU alumni have made significant contributions to their respective fields, including business, technology, engineering, healthcare, education, and the arts.

### About DIU

The queue of achievements of DIU is a significant one. The university endeavors for excellence since its commencement in 2002.

### About Alumni

The alumni network plays a vital role in the university's growth by fostering collaboration, offering mentorship to current students, and creating professional opportunities. The Daffodil International University

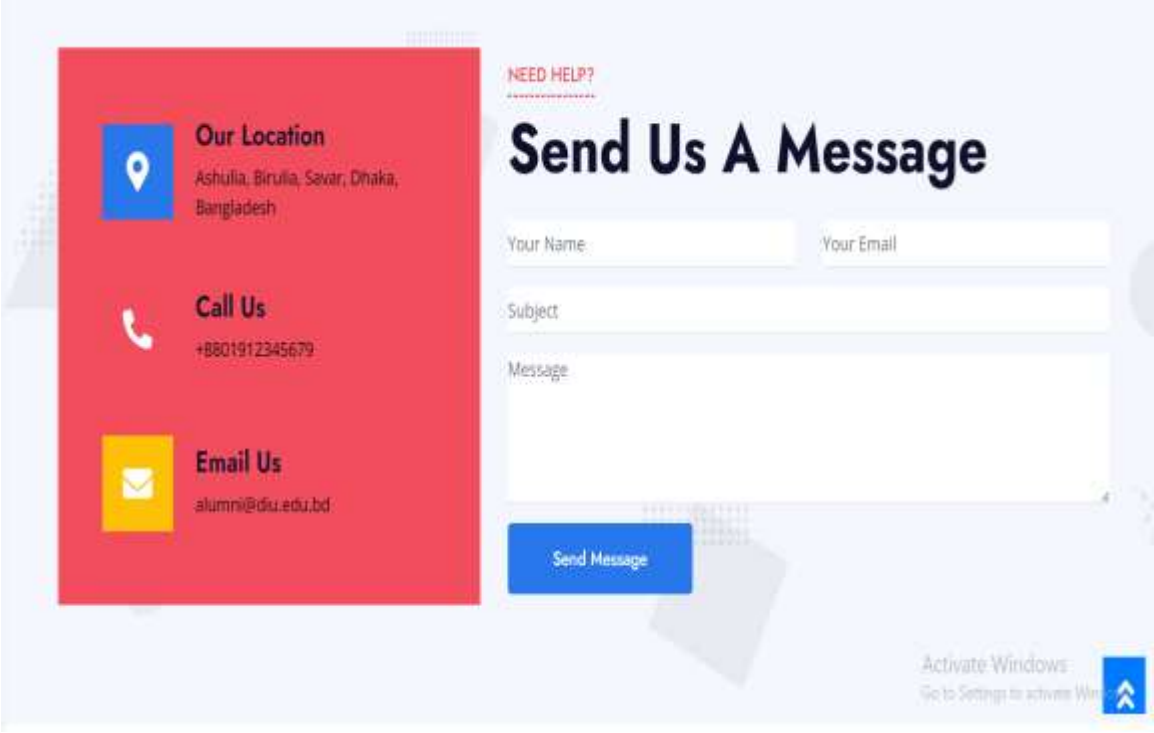
## Our Proud Alumni

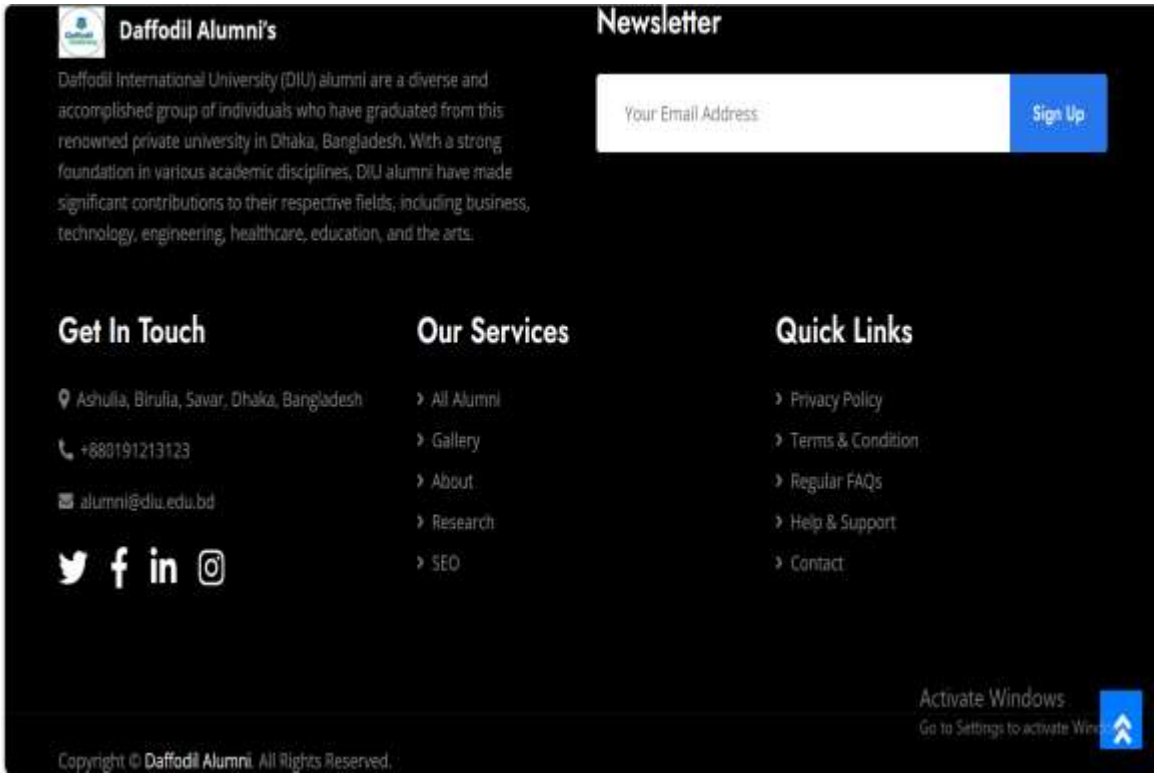
**Md. Shofiul Alam**
Founder & CEO, Belancer
Dept: BBA

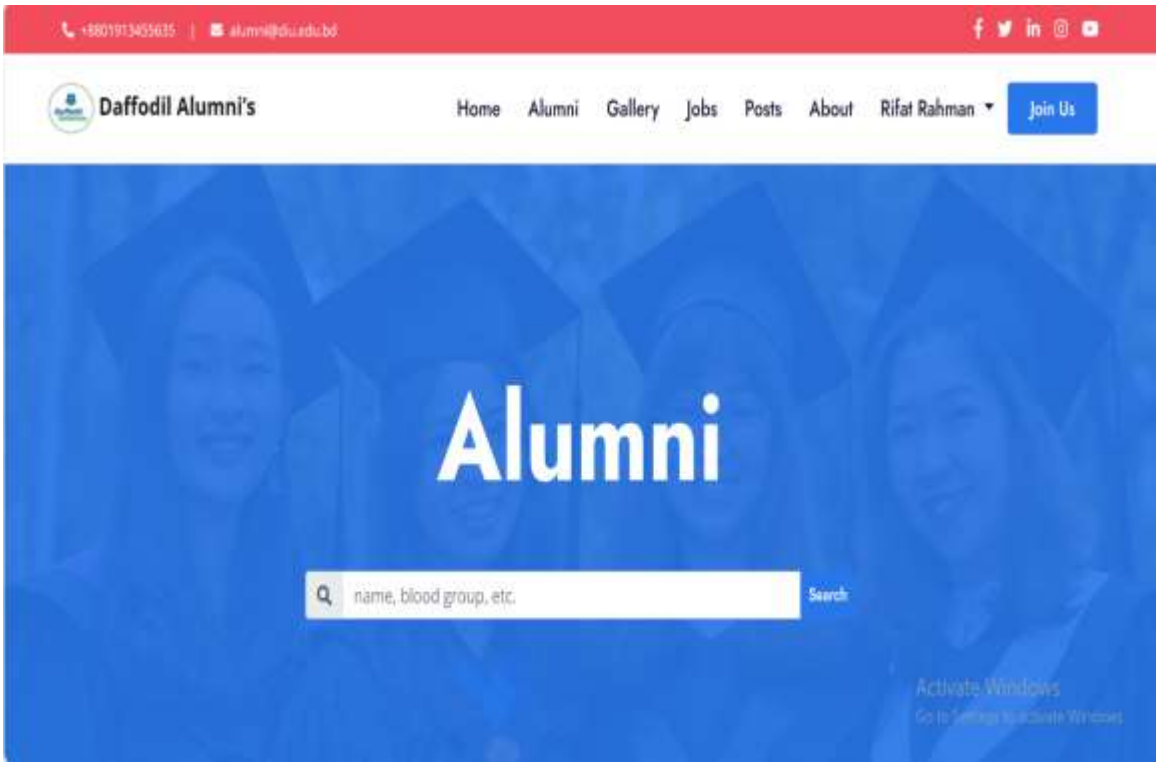
**Md. Ejaj-Ur-Rahaman**
Assistant Professor, DIU
Dept: BBA

**Subhenur Latif**
Assistant Professor, CSE, DIU
Dept: CSE

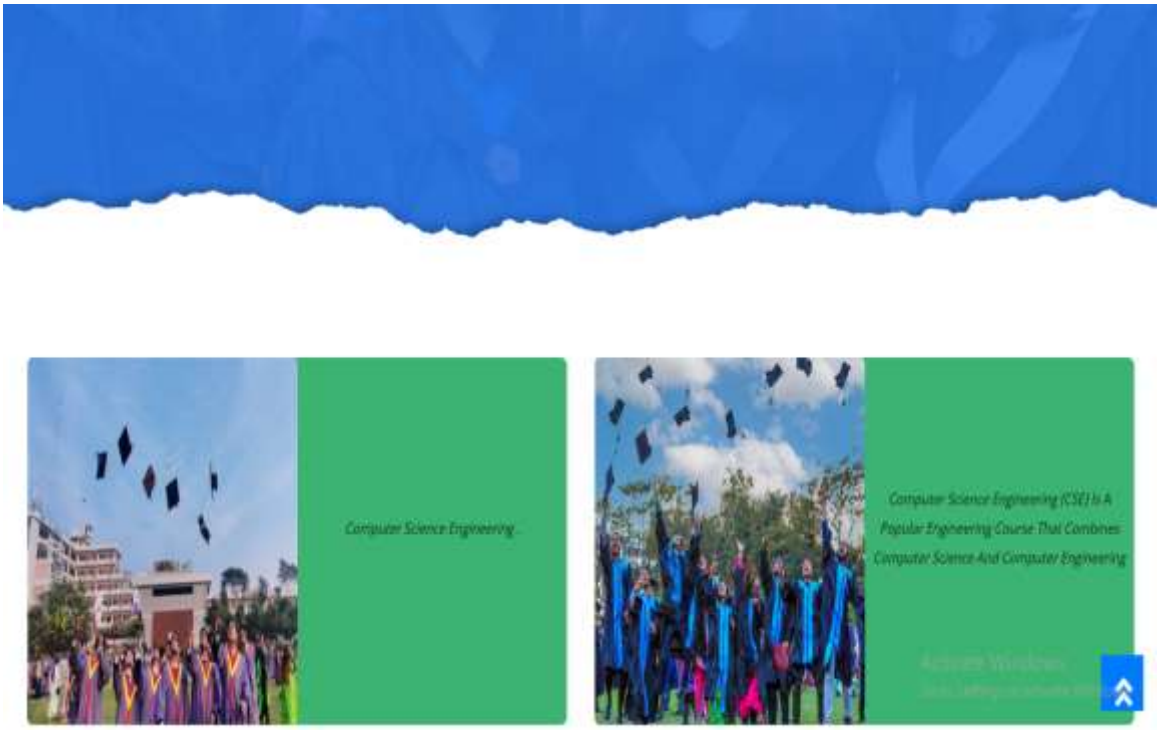
**Sumon Mozumder**
Assistant Professor, TE, DIU
Dept: TE


Our Location
Ashulia, Birulia, Savar, Dhaka, Bangladesh
Call Us
+8801912345679
Email Us
alumni@diu.edu.bd
NEED HELP?
Send Us A Message
Your Name
Your Email
Subject
Message
Send Message
Activate Windows

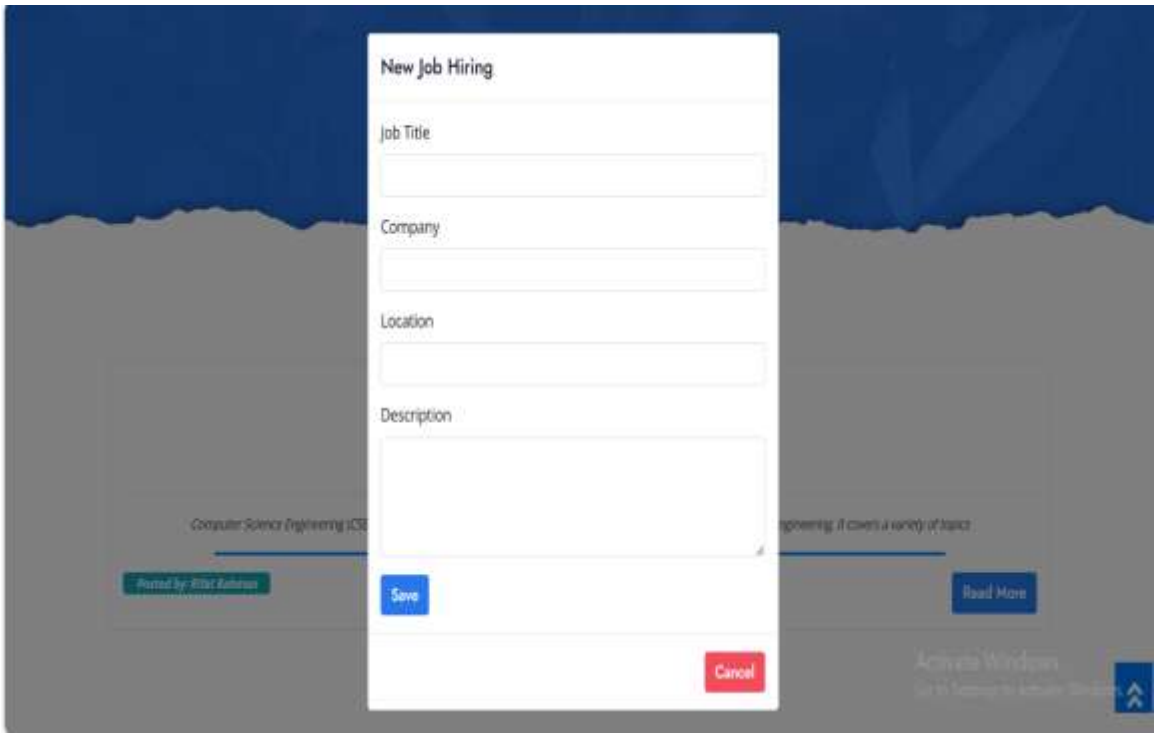

Daffodil Alumni's
Daffodil International University (DIU) alumni are a diverse and accomplished group of individuals who have graduated from this renowned private university in Dhaka, Bangladesh. With a strong foundation in various academic disciplines, DIU alumni have made significant contributions to their respective fields, including business, technology, engineering, healthcare, education, and the arts.
Newsletter
Your Email Address
Sign Up
Get In Touch
Ashulia, Birulia, Savar, Dhaka, Bangladesh
+880191213123
alumni@diu.edu.bd
Our Services
All Alumni
Gallery
About
Research
SEO
Quick Links
Privacy Policy
Terms & Condition
Regular FAQs
Help & Support
Contact
Activate Windows
Copyright © Daffodil Alumni. All Rights Reserved.


Daffodil Alumni's
Home
Alumni
Gallery
Jobs
Posts
About
Rifat Rahman
Join Us
Alumni
name, blood group, etc.
Search

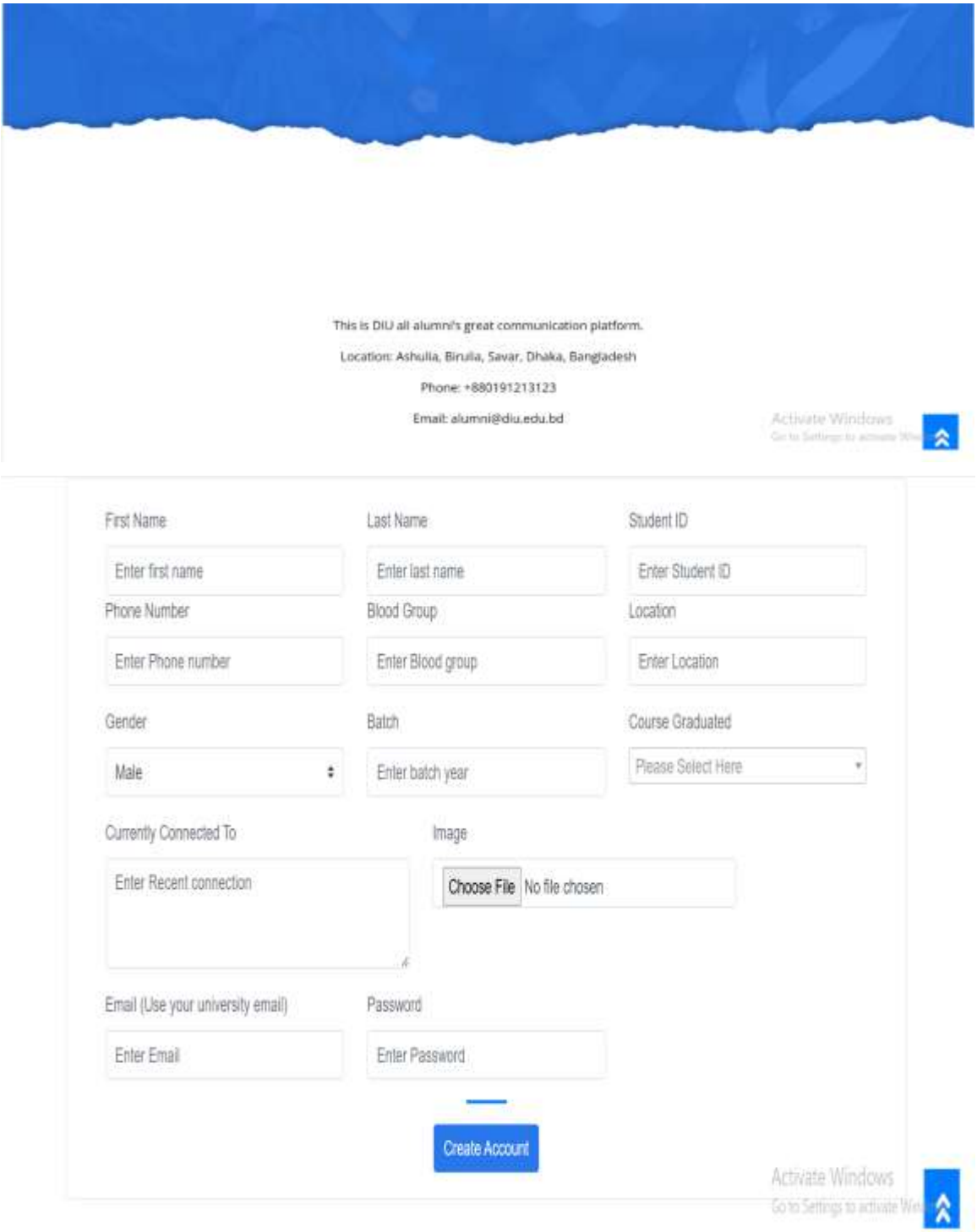

Rifat Rahman
Email: rifat@diu.edu.bd
Phone: 191234567
Batch: 2023
Student ID: 171-15-2345
Dept.: CSE
Blood Group: A+
Location: Dhaka
Currently working in/as Job


Computer Science Engineering...
Computer Science Engineering (CSE) Is A Popular Engineering Course That Combines Computer Science And Computer Engineering


Alumni's Jobs Post
Filter
Search
+ Post a Job Opportunity
Software Engineer
IT Solution BD
Dhaka.


New Job Hiring
Job Title
Company
Location
Description
Save
Cancel
Read More


Daffodil Alumni's
Home
Alumni
Gallery
Jobs
Posts
About
Rifat Rahman
Join Us
Alumni's Posts


This is DIU all alumni's great communication platform.
Location: Ashulia, Birulia, Savar, Dhaka, Bangladesh
Phone: +880191213123
Email: alumni@diu.edu.bd
First Name
Enter first name
Last Name
Enter last name
Student ID
Enter Student ID
Phone Number
Enter Phone number
Blood Group
Enter Blood group
Location
Enter Location
Gender
Male
Batch
Enter batch year
Course Graduated
Please Select Here
Currently Connected To
Enter Recent connection
Image
Choose File
No file chosen
Email (Use your university email)
Enter Email
Password
Enter Password
Create Account

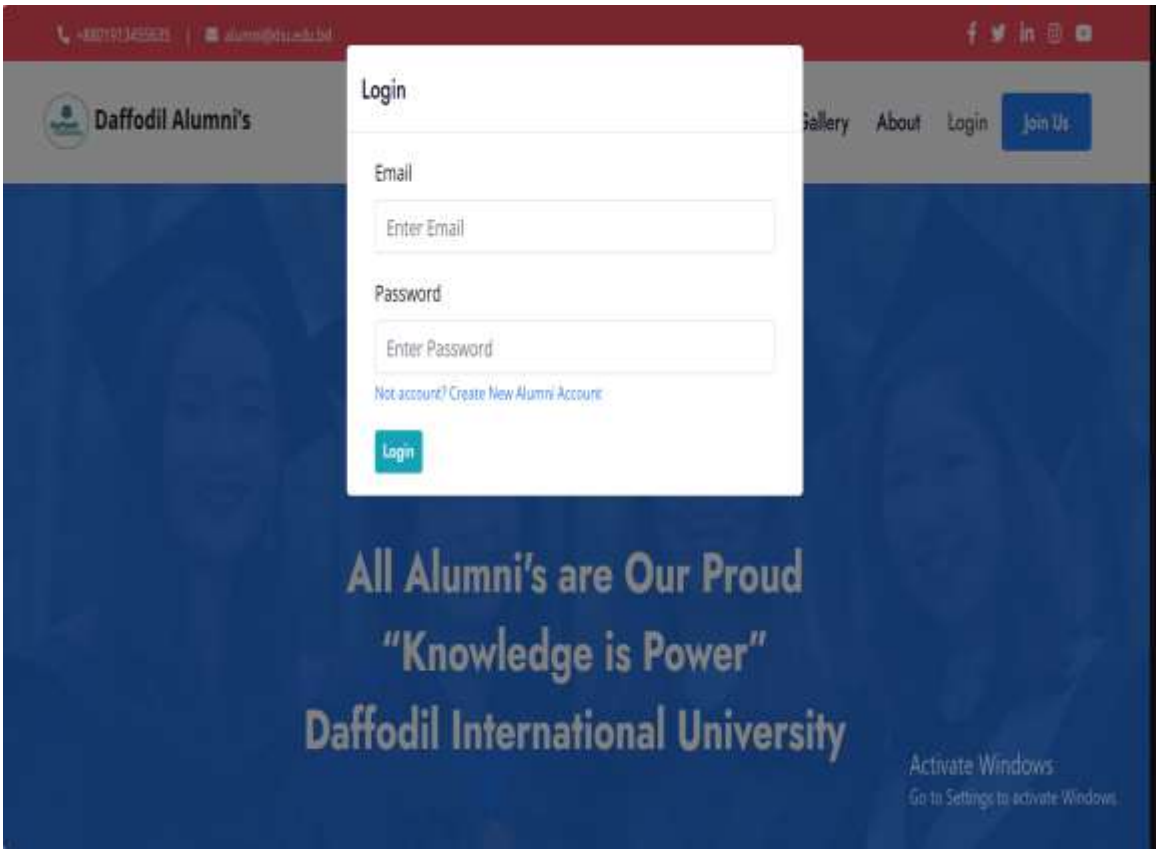
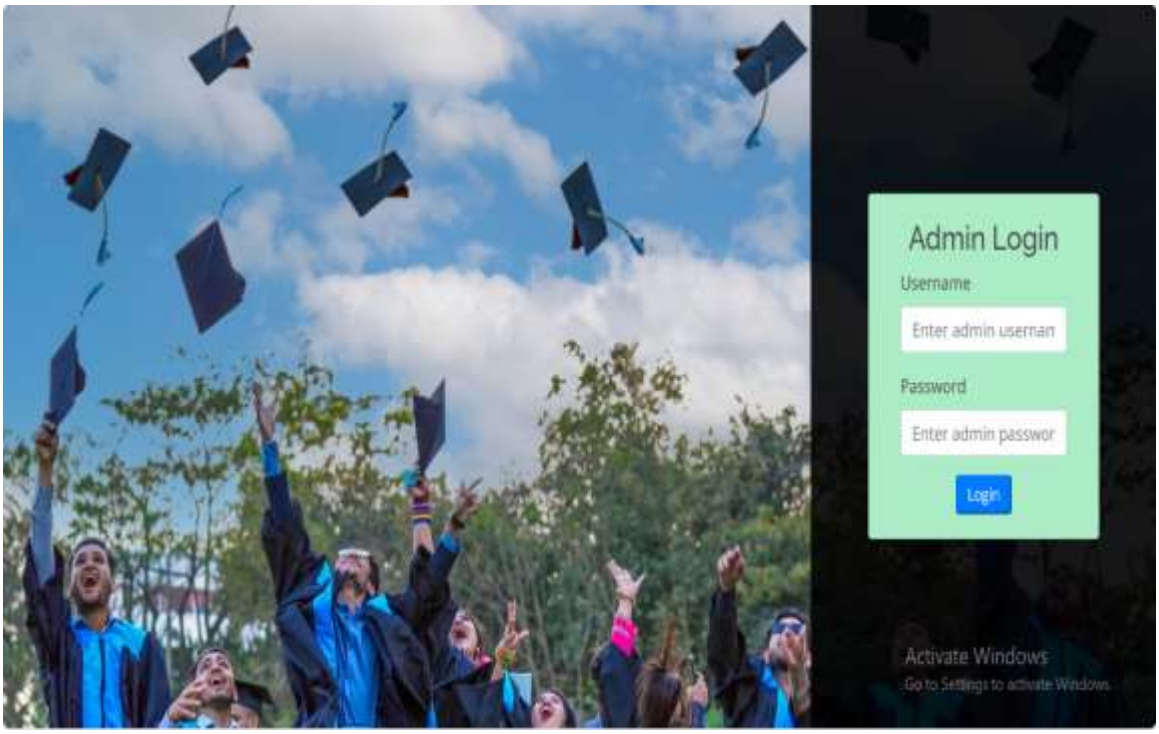




Fig 4.3: Alumni dashboard

#### 4.3.1.2 Interfaces for Admin



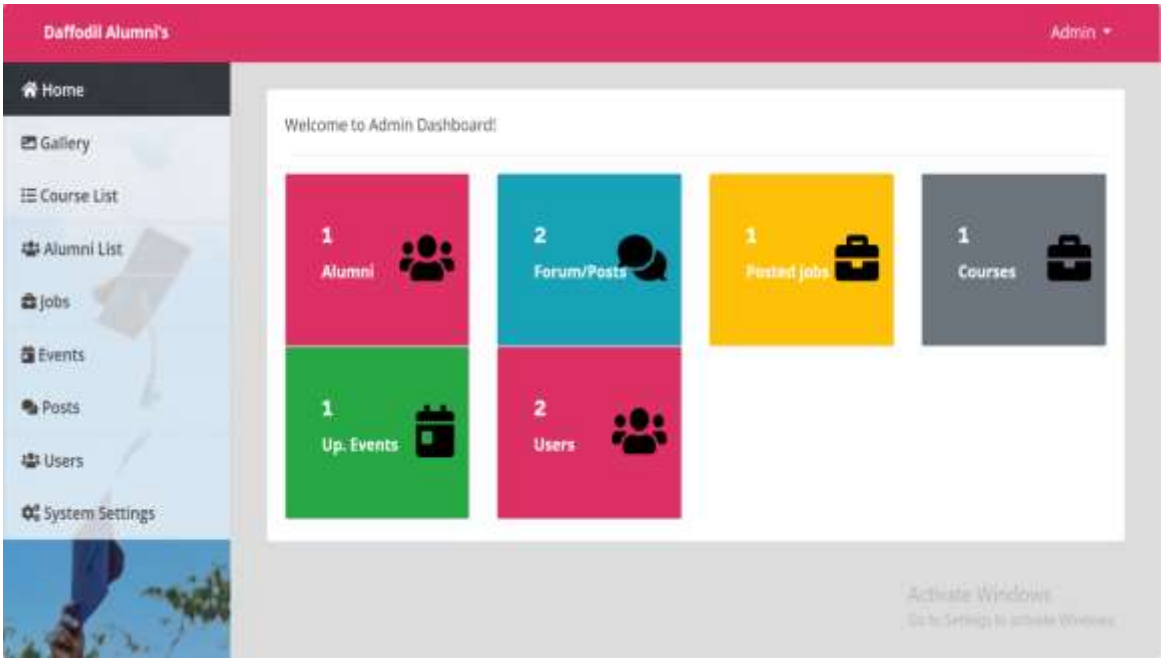




Fig 4.4: Admin dashboard

### 4.3.2 SWOT Analysis

The project "Daffodil Alumni's" possibilities, weaknesses, threats, and strengths are evaluated using an internal and external SWOT analysis. SWOT analysis provides information for strategic preparation and choice-making by emphasizing project-controllable and non-controllable elements.

**Strength:**

- Centralized Information Management: By consolidating all alumni data into a single platform, this method simplifies information administration, updating, and retrieval.
- Better Communication: Effectively distributes emails, bulletins, and notifications to keep alumni informed and engaged.
- Simplified Event Management: Facilitates the planning, coordination, and execution of alumni activities, such as networking events, seminars, and reunions.
- Collaboration and Networking: Creates a productive alumni community by providing a venue for graduates to interact, network, and collaborate on personal and professional challenges.

**Weakness:**

- Data security and privacy: Without taking the necessary safeguards to prevent breaches and unauthorized access, handling sensitive personal data may be costly and challenging.
- User Adoption and Training: Reluctance to change may affect adoption rates, and staff members and alumni may need training to use the system effectively.
- Maintenance and Support Expenses: Ongoing maintenance, technical assistance, and upgrades can be resource-intensive and call for extra money.
- Data correctness: Although it might be challenging to maintain, the system needs accurate and full data input in order to generate high-quality outcomes.

Opportunities:

- Improved Alumni Engagement: More interactive features and tailored communications can lead to a stronger alumni network and more alumni participation.
- Improved Fundraising Capabilities: Better donation tracking and communication can help support focused fundraising initiatives and larger monetary contributions.
- More Professional Development Services: Including extras like workshops for professional development, career guidance, and mentoring programs for recent grads may be quite beneficial.
- Global Network Extension: An institution may expand its global network and provide opportunities for international collaboration by connecting with alumni throughout the world.

Threats:

- Cybersecurity Risks: The institution's reputation might be harmed and personal data compromised by hackers.
- Technological Obsolescence: Because technology is advancing so quickly, a system may become outdated if it is not regularly updated and improved.
- Issues with User involvement: Staff members' or alumni's ineffective use of the system or low involvement may restrict its effectiveness and benefits.
- Compliance and Legal Risks: There might be penalties and other legal repercussions for breaking data protection rules (such the CCPA and GDPR).

## 4.4 Summary

We examined the linkage and behavior of the activities using a range of approaches, such as users/ alumni and admin, after talking about the system overall, its users, and the functional and non-functional demands.

# CHAPTER 5

# Engineering Standards and Design Challenges

## 5.1 Compliance with the standards

An alumni management web application's development and upkeep depend heavily on ensuring adherence to pertinent standards. To guarantee the safe processing of personal data, the system must abide by recognized data protection and privacy legislation, such as the General Data Protection Regulation, which is applicable for users in the EU or comparable laws in other areas. In order to guarantee that all graduates, including those with impairments can effectively navigate and engage with the platform, the online application must also adhere to accessibility standards, such as the online Content Accessibility Guidelines. In order to prevent against vulnerabilities and preserve user data, the system should also adhere to best practices regarding secure software development, such as the principles provided by the Open Web Application Security Project. The alumni management system may offer a safe, welcoming, and easy-to-use experience by following these guidelines.

### 5.1.1 Software standards

- Guard against weaknesses and guarantee the protection of your data.
- Observe OWASP principles, such as avoiding XSS and SQL injection.
- To ensure safe data transfer, use encryption (such as TLS/SSL).
- Put strong permission and authentication in place (e.g., OAuth 2.0, JWT).

  Perform routine penetration tests and security audits.

### 5.1.2 Hardware standards

- Make that the necessary performance standards are met by the hardware components.
- Observe CPU speed and core capacity specifications.
- Support RAM size for the best possible program performance.

- For graphics-intensive projects (like gaming or machine learning), make sure GPU standards are met.

## 5.2 Impact of Society, Environment & Sustainability

### 5.2.1 Impact of Life

A well-designed web application for an alumni management system may have a significant impact as it encourages sustained involvement and fortifies the bond between former students and their alma mater. The system promotes enduring relationships and increases alumni engagement by giving them a single platform to network, exchange job prospects, and help build their communities. Additionally, by monitoring donations, planning events, and compiling insightful data on alumni interests and career advancement, the app can help the school. In the end, this fosters a climate that benefits both the school and its alumni, guaranteeing ongoing assistance, guidance, and cooperation for many years to come.

### 5.2.2 Impact of Society & Environment

An alumni management system online application has a beneficial impact on society and the environment in addition to personal relationships. Through alumni socializing, the system may establish a potent platform for social transformation, where former students engage together on projects that tackle global issues including poverty alleviation, healthcare, education, and sustainability. Alumni can use their knowledge and talents to teach younger generations, fund community-based initiatives, and promote socially beneficial philanthropic endeavors. By planning virtual events, eliminating the need for in-person travel, and motivating alumni to adopt eco-friendly behaviors, the app may also advance environmental sustainability. Overall, the system may promote a culture of giving back and shared responsibility while acting as a catalyst for environmental stewardship and societal advancement.

### 5.2.3 Ethical Aspects

When creating and running a web application for an alumni management system, ethical concerns are essential, especially when it comes to data protection, security, and transparency. Alumni's personal information, including as contact information, employment histories, and contributions of money, must be collected, kept, and shared only with their express agreement and in accordance with applicable data protection rules, including the GDPR, according to the system. To preserve trust, data usage must be transparent, with explicit privacy rules and ways for consumers to manage their data. Furthermore, the application need to adhere to inclusive standards, guaranteeing all alumni, irrespective of their socioeconomic situation, equal access to possibilities. Creating a culture of properly and ethically giving returning to the community and encouraging a polite, safe, and harassment-free environment on the platform are further examples of ethical issues. By giving these moral considerations top priority, the alumni system of management may function honorably and benefit its users as well as the community at large.

### 5.2.4 Sustainability Plan

An alumni management system web app's sustainability strategy aims to maintain the app's long-term sustainability, environmental responsibility, and ongoing usefulness to the school and its alumni. In order to handle future increases in the number of users and features, the app should be developed with a scalable design. This will guarantee that it can adapt to new developments in web technologies. Over time, performance and data protection will be maintained by the implementation of regular software upgrades and security patches. By using energy-efficient cloud-based hosting solutions and favoring virtual events over in-person ones, the system may reduce its carbon footprint from an environmental standpoint while also saving money on travel and resource usage. In order to finance continuing development and operating expenses, the sustainability strategy should incorporate a variety of revenue streams, such as premium privileges, event hosting, or collaborations with corporate sponsors. In order to ensure the app's relevance and influence for next

generations, it should also promote a community-driven strategy in which alumni support the platform's development through involvement, mentorship, and feedback. The alumni management structure will continue to be a useful, flexible, and accountable resource for many years to come by including these components.

### 5.3 Project management and Financial analysis

As part of our goal, we are working on a web development project. A subsection under this part has to address our project's financial analysis. Below, in Table 5.1, are the estimated costs for each part of the web development project.

Table 5.1: Estimated Cost for DIU alumni

| SN | Components | Estimated Cost (BDT) |
|---|---|---|
| 01. | Visiting Stakeholders | 500-1000 |
| 02. | Software and Tools | 1500-2000 |
| 03. | Front end , database & Back end design | 1500-2000 |
| 04. | Documentation and Report Writing | 500-1000 |
| 05. | Contingency (10% of total) | 1500-2000 |
| **Total Estimated Cost** | | 5,500-8,500 |

### 5.4 Complex Engineering Problem

#### 5.4.1 Complex Problem Solving

Create a category-based mapping to solve this area's problems. Provide subsections for each mapping to support your claims (see Table 5.2).

Table 5.2: Mapping with complex problem solving.

| EP1 Dept of Knowledge | EP2 Range of Con-flicting Requirements | EP3 Depth of Analysis | EP4 Familiarity of Issues | EP5 Extent of Applicable Codes | EP6 Extent of Stak e-holder Involvement | EP7 Interdependence |
|---|---|---|---|---|---|---|
| √ | √ | √ | √ | √ | √ | |

**Mapping with Knowledge Profile for EP1**

This table 5.3 is designed to map the EP1 to the Knowledge Profile.

Table 5.3: Mapping with knowledge Profile.

| K3 Engineering Fundamentals | K4 Specialist Knowledge | K5 Engineering Design | K6 Engineering Practice | K8 Research Literature |
|---|---|---|---|---|
| √ | √ | √ | √ | √ |

### 5.4.2 Engineering Activities

In this part, provide a mapping of engineering activities. Provide subsections for each mapping to support your claims (see Table 5.4).

Table 5.4: Engineering activities

| Engineering Activity | Related Engineering Proficiency (EP) | Rationale |
|---|---|---|
| 1. Requirement Gathering and Analysis | EP1 - EP4 | Balance conflicting functional objectives while acknowledging user and system demands. |
| 2. System Design and Architecture | EP3 - EP6 | Build a scalable, secure infrastructure that connects IoT devices and real-time data. |
| 3. Development of Web Application | EP2 - EP5 | Provide features that are necessary for the app, such as space availability and payment options. |
| 4. Database Management and Storage | EP3 - EP6 | Effective data storage and privacy control are essential for managing large databases. |

| | | |
|---|---|---|
| 5. UI/UX Design | EP2 - EP5 | Make an intuitive, user-friendly interface with a focus on accessibility and web compatibility. |
| 6. Security and Privacy Implementation | EP4 - EP7 | Implement encryption, safe payment methods, and compliance with privacy regulations. |
| 7. Testing and Validation | EP2 - EP5 | Test the system's functionality, security, and performance to ensure reliability. |
| 8. Deployment and Maintenance | EP3 - EP6 | Install the system, monitor its operation, and do routine maintenance. |
| 9. User Feedback and Continuous Improvement | EP3 - EP6 | Collect feedback so that the equipment may be enhanced and improved in response to real-world usage. |

## 5.5 Summary

During this phase of research, we determine the requirements of the project and the most effective strategy for improving the system's performance. We also define the prerequisites for system installation to help them assess the availability of trained workers. We attended a presentation that covered the class diagram for the system as well as the design and implementation phases. The administrator and user interfaces are also included.

Table 5.5: Mapping with complex engineering activities.

| EA1<br>Range of re-sources | EA2<br>Level of Interaction | EA3<br>Innovation | EA4<br>Consequences for society and environment | EA5<br>Familiarity |
|---|---|---|---|---|
| √ | √ | √ | √ | √ |

# CHAPTER 6

# Conclusion

## 6.1 Summary

We have tried to complete the project and prove that our efforts were worthwhile. By arranging alumni information, facilitating connection, and providing a forum for participation, a Daffodil Alumni enhances the relationship between the institution and its graduates. The system facilitates the seamless management of events, job opportunities, and community interactions while also providing resources for professional growth and assistance. Despite challenges including data privacy concerns, user acceptance difficulties, and maintenance costs, the Daffodil Alumni program is a smart investment since it has the potential to improve alumni involvement, fundraising, and networking opportunities. We are certain that we were made in a time when everyone is considering creating a framework for self-help. Each and every alumnus will be connected via the Daffodil alumni. Alumni will be encouraged and given employment notifications, both of which will help them create their careers. Alumni will also communicate with each other via the website. It's also quite likely that the finished product will be maintainable because the admin and frontend are kept apart. It will be quite easy to manage events if you use the website.

## 6.2 Limitations

Despite its potential, the Daffodil Alumni Management System project for Daffodil alumni has certain disadvantages that should be carefully considered. Maintaining the privacy and security of data is crucial as handling private information requires stringent measures to avoid security lapses and unwanted access. Furthermore, accurate or outdated data may compromise the system's effectiveness, which depends on the accuracy and integrity of the data entered. Additionally, integrating with the academic databases and systems that are currently in place may be difficult, requiring platform consistency and synchronizing. Furthermore, user engagement is essential to the Daffodil Alumni's successful deployment; if alumni and academic staff

do not participate in or accept the new system, its potential benefits may be restricted. The system's attributes and scope may also be impacted by financial constraints, which might limit the system's functionality or deployment range. Addressing these limitations and limits is essential to building a strong and prosperous Daffodil Alumni that benefits both the school and its alumni.

- Getting our users to be able to use the web application is the hardest part.
- Developing a pipeline for event management that covers the start of the event, photo sharing, and activity sharing.
- Enhancing the usability of the software is a challenging undertaking.

### 6.3 Future works

Our job would be enhanced with more supplies and provisions to help the customers. We have planned to add a few steps in the future to make the framework's contents more understandable. The following section discusses a few of these components:

- Establish a system of end-to-end messaging to facilitate simple contact between alumni and students.
- Enhance the website's usability and interaction.
- Provide a payment gateway so that growing contributions to charity causes can be accepted.
- Establish a comment area for the event.

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