Final Year Report on Development of an Online Admission Information System

BY

Mir Hamimul Islam

ID: 121-15-1801

And

Samsil Arafina Saki

ID: 152-15-5644

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

Supervised by

Md. Sazzadur Ahamed

Senior Lecturer

Department of CSE

Daffodil International University

Co-Supervised by

Mr. Abdus Sattar

Assistant Professor

Department of CSE

Daffodil International University



DAFFODIL INTERNATIONAL UNIVERSITY

DHAKA, BANGLADESH

December 2019

APPROVAL

This Project/internship titled "Online Admission Information System", submitted by Mir Hamimul islam and Samsil Arafina Saki, ID No: 121-15-1801 and 152-15-5644 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 06 December 2019.

BOARD OF EXAMINERS

Dr. Syed Akhter Hossain Professor and Head

Department of Computer Science and Engineering Faculty of Science & Information Technology Daffodil International University

Nazmun Nessa Moon Assistant Professor

Department of Computer Science and Engineering Faculty of Science & Information Technology Daffodil International University

Dr. Fizar Ahmed
Assistant Professor

Department of Computer Science and Engineering Faculty of Science & Information Technology Daffodil International University

Dr. Mohammad Shorif Uddin

Professor

Department of Computer Science and Engineering Jahangirnagar University Chairman

Internal Examiner

Internal Examiner

External Examiner

DECLARATION

We hereby declare that, this project has been done by us under the supervision of Md. Sazzadur Ahamed, Senior 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.

Supervised by:

Md. Sazzadur Ahamed

Senior Lecturer

Department of CSE

Daffodil International University

Co-Supervised by:

Mr. Abdus Sattar

Assistant Professor

Department of CSE

Daffodil International University

Submitted by: Mite Harrimul Islam

(Mir Hamimul Islam)

ID: 121-15-1801

Department of CSE

Daffodil International University

(Samsil Arafina Saki) Samsil Arafina Saki

ID: 152-15-5644

Department of CSE

Daffodil International University

ACKNOWLEDGEMENT

First we express our heartiest thanks and gratefulness to almighty God for His divine blessing makes us possible to complete the final year project/internship successfully.

We really grateful and wish our profound our indebtedness to **Md. Sazzadur Ahamed**, **Senior Lecturer**, Department of CSE Daffodil International University, Dhaka. Deep Knowledge & keen interest of our supervisor in the field of web Development to carry out this project. His endless patience, scholarly guidance, continual encouragement ,constant and energetic supervision, constructive criticism, valuable advice, reading many inferior draft and correcting them at all stage have made it possible to complete this project.

We would like to precise our heartiest appreciation to Md. Sazzadur Ahamed and Head, Office of CSE, for his kind help to wrap up our venture conjointly to other staff part and the staff of CSE division of Daffodil Worldwide College

We would like to thank our whole course mate in Daffodil Worldwide College, who took portion in this talk about whereas completing the course work.

At long last, we must recognize with due regard the consistent bolster and patients of our guardians.

ABSTRACT

Present time in our country, getting admitted to a good university is a huge challenge for regular student, this is because of the shortage of information, a student cannot figure out the proper place to get admitted. It is a large mistake to get accepted wrong university which can harm student's life. University life is a very golden time of all students. For the lack of information student can't select proper university that will damage their student life which is call the most precious time. For getting into proper university student must research all the information about a university.

For that reason we have developed website that can offer all the solution for these difficulties. Our project is to develop a website where a student can have all the data about any university. After compeering the given information students can take the appropriate choice for them. Student also can attend in a demo admission test which can develop more confident than before. They can have any kind of assistance from this website .we ensure that find out and get admitted into the appropriate university is no transcendental.

TABLE OF CONTENTS

CO	ONTENTS	PAGE
App	proval	i
Boa	ard of examiners	i
Dec	claration	ii
Ack	knowledgement	iii
Abs	stract	iv
CH	IAPTER 1: INTRODUCTION	1
1.1	Introduction	1
1.2	Motivation	1-2
1.3	Objectives	2
1.4	Expected Outcome	2
CH	IAPTER 2: BACKGROUND	3
2.1	Introduction	3
2.2	Challenges	3
2.3	Project Resource	3

CHAPTER 3: REQUIREMENT SPECIFICATION	4
3.1 Existing web applications	4
3.2 Bangladesh University of Engineering and Technology (BUET)	5
3.3 Daffodil International University (DIU)	6
3.4 University of Dhaka	6-7
3.5 Jahangir Nagar University	7-8
3.6 Green University of Bangladesh	8-9
3.7 Admission war	9
3.8 Comparison between the existing system and our proposed system	10
3.9 Design Requirements	10
3.10 Functional Requirements	11
3.11 Non-Functional Requirements	11-12
3.12 Software Requirements	12
3.13 Use Case Modeling and Description	12-13
3.14 Entity Relationship Diagram and Description	14
CHAPTER 4: DESIGN SPECIFICATION	15
4.1 Front-end Design	15
4.2 Interface Design	15
4.3 Registration	15-16

4.4	Login	17
4.5	University Dashboard	18
4.6	Information pages	19
4.7	University list	20
4.8	University information	21
4.9	Student Question	22
4.10	Search perfect option	23
4.11	University Comparison	24
СН	APTER 5: IMPLEMENTATION AND TESTING	25
5.1	Requirements for Implementation	25-26
СН	APTER 6: CONCLUSION	27
6.1	Discussion and conclusion	27
6.2	Conclusion	27
6.3	Scope for Further Developments	28
RE	FERENCE	29

LIST OF FIGURES

FIGURES	PAGE
Figure 3.2: BUET website [6]	5
Figure 3.3: DIU website [1]	6
Figure 3.4: Dhaka University [4]	6-7
Figure 3.5: Jahangir nagar university website [3]	7-8
Figure 3.6: Green university website [2]	8-9
Figure 3.7: Admission war website [5]	9
Figure 3.13: Use Case Diagram [8]	13
Figure 3.14: Entity Relationship diagram [9]	14
Figure 4.3: Admin Registration from	15
Figure 4.3: University registration from	16
Figure 4.4: Admin login	17
Figure 4.4: University Login form	17
Figure 4.5: University Dashboard	18
Figure 4.6: public and private university option	19
Figure 4.7: University list	20
Figure 4.8: University Info	21
Figure 4.9: Student question	22
Figure 4.9: Search perfect option	23
Figure 4.10: University comparison	24

CHAPTER 1

INTRODUCTION

1.1 Introduction

In our country, after passing college level that is HSC or diploma level students have to get admission to universities for completing graduation. But students have to face many difficulties in this process. One of the main difficulties in finding the right information about the admission process. Students get confused when they want to find the information. They don't get sufficient information, due to this insufficient information they cannot get admission to their desired institute. There are two main types of universities

in Bangladesh [10]. They are-

- Public (government-owned and subsidized)
- Private (private sector owned universities)

There are 46 public universities and 80 private universities in Bangladesh. Different universities have different methods of admission. So it is hard to get knowledge of all these universities and compare them. Our project is to solve those problems. In our project, we are building a platform where universities can share their information and student can have that information in one place. Students can also post any problems and get help from others. This will make the admission system more easily.

1.2 Motivation

Most of the students don't have sufficient information about the admission system of all universities. For this lacking of information, students face many problems. Students get confused with the wrong information. Our project is to make provide the right information which will help the students to get the appropriate path. Without awareness of the admission system, many students cannot find the right institute for their graduation. In public and some private universities, there is an admission test system. The student

Will get test-related information on our website. Again there is an opportunity of the wavier system in some of the private universities depending on the result or many other criteria. The student will get details about the wavier system and can make a proper budget plan for their study. Students and also parents can compare different institutions depending on given information and can choose the right institute for them.

1.3 Objectives

The main aims and objectives of this project are given below:

- To provide the right information about the admission system.
- To find the university based on their budget.
- To compare and get the best one.
- To find the university in the desired area.
- To make awareness among students about the admission system.
- To save the time of getting lots of information about the different institutes.
- To gather all important information in one place.
- Save students from fake information and fake people.
- Gather all important information in one place.
- Collecting correct information.

1.4 Expected Outcome

- Students can get all the information on one platform.
- Save time of searching for different information from different places.
- Verification system confirms that there cannot be any fraud people who can Provide the wrong information.
- Confirmed security of the information.
- Students can compare universities and can choose the best university for them.
- Students and parents can search universities according to their budget.
- Students can give a demo admission test which will make them more confident.
- Universities can make publicity from the university.

CHAPTER 2

BACKGROUND

2.1 Introduction

In this chapter, we will talk about the background of the project. In this chapter, we will present some related works to our web application. Though there are no such projects which will fully be related to our project. Here we will describe some project which is mostly similar to this project. In the last part of this chapter, we will discuss web application and present a brief review of the technique which we use to build our website.PHP is very popular language we also use Laravel framework.80% website all over the world r made by PHP, So we use PHP strom IDE. Laravel, Jquery, Bootstrap as a framework. For our database we used MySQL. And for the language, we use Html, CSS, PHP

2.2 Challenges

We have to face many challenges to build the perfect project. That areCollecting correct information.

- We are depended on the University grants commission (UGC) website for information.
- UGC does not have any API by which we can gather information automatically
- We have two steps of email verification process but most of the public university
- There is no such project which is related to our project that's why we are not
- getting any idea from another website

2.3 Project Resource:

- Laravel framework
- MySQL database
- Web design
- Data collection
- Html, CSS, Jquery, Bootstrap as a framework

CHAPTER 3

REQUIREMENT SPECIFICATION

3.1 Existing web applications

In our project, we are offering many benefits in one window. It will be help-full for Both universities and students as well as for parents. As we already show that this project will help to get information about the admission system moreover students can give test exams on our website. That means it covers many facilities in one platform. In our country, there is no such work which fully related to our project. There are

Somedifferent website which helps to get admission information but that only provide information about their institute. Again there is some website which allows getting help about admission test and take demo test. But on our website, we will provide all university information about the admission system and admission test process. Here we are giving those websites which are slightly similar to our website.

3.2 Bangladesh University of Engineering and Technology (BUET)

Bangladesh University of Engineering and Technology abbreviated as BUET. It is one of the most prestigious institutions for higher studies in our country. At present, BUEThas eighteen teaching departments under five faculties and it has six institutes.

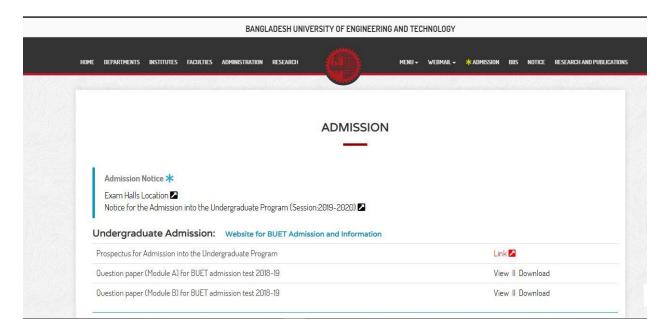


Figure 3.2 BUET website [6]

As a public university BUET has some different criteria for getting admission intoit. There is an admission test system, but on their website, they don't provide muchInformation about the admission test.

3.3 Daffodil International University (DIU)

Daffodil International University is one of the leading private universities in Bangladesh.IT was founded in 2002 with the approval of UGC and Ministry of education

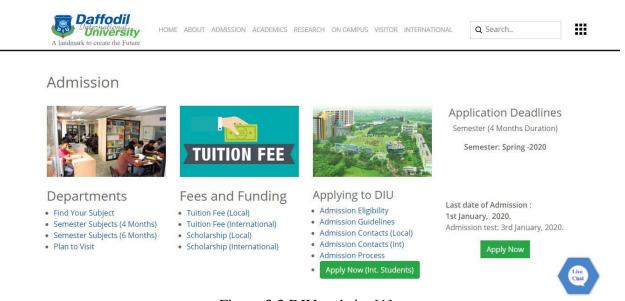


Figure 3.3 DIU website [1]

3.4 University of Dhaka

University of Dhaka opened its doors to students On the first day of July 1921. It has 13Faculties, 83 departments, and 12 Institutes. The main purpose of the University was to Create new areas of knowledge and disseminate this knowledge to the society throughits students.

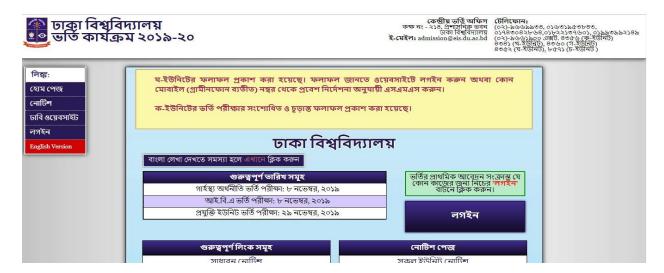


Figure 3.4 Dhaka University [4]

On the website, they categorized the admission information into two types. One is forBangladeshi students and another one is for international students, figure 2.4 shows that clearly.

3.5 Jahangir nagar University

Jahangir nagar University accustomed as a residential accessible university in 1970. Now it has 34 departments and Six Faculties along with two institutes, with added than fifteen thousand students, and about Five hundred academics adherent to teaching and research. The sprawling arresting campus is anchored 30 kilometers from the Basic Dhaka, able-bodied affiliated with a civic highway. The aboriginal assembly of Independent Bangladesh accepted university its Charter in 1973 beneath which the university is getting operated.



Figure 3.5 Jahangir nagar university website [3]

3.6 Green University of Bangladesh

Green University of Bangladesh (GUB), good private universities in Bangladesh. IT was founded in 2003 under the Private University Act 1992 with a vision to create global higher education center of excellence.

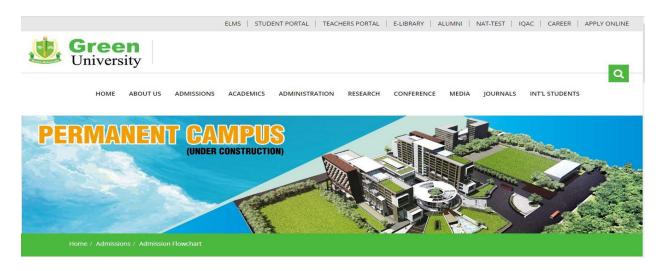


Figure 3.6 Green university website [2]

In the green university website, they present their admission information in the admission section with every detail. But they only provide information about their university. So students can only have the idea of getting admitted to the green university.

3.7 Admission war

Admission war is a website where a student can find many tips about admission testsat different universities especially public universities. They also provide informationabout school and college examination.

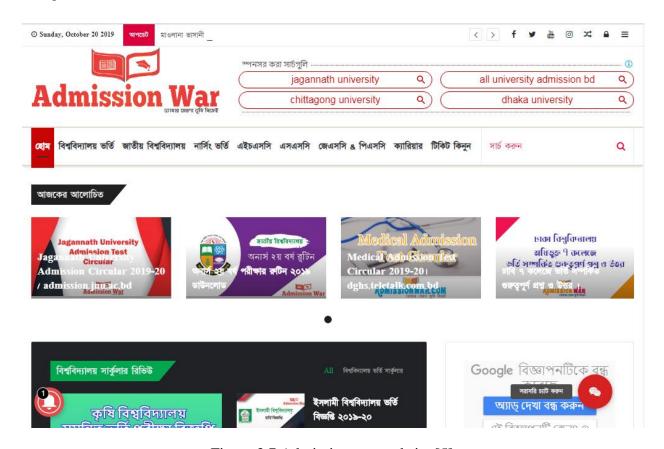


Figure 3.7 Admission war website [5]

In the admission war website, they provide information about admission circular, Admission tips and also provides a book that will helpful for the admission test. But they don't give information about the admission process of a private university.

3.8 Comparison between the existing system and our proposed system

- 1. University of Dhaka Give circular and information about Dhaka University. We provide public and private universitiesInformationisproviding by the website.
- 2. BUET gives Students can find admission information about BUET but cannot findhelp about the admission test. We provide besides getting information about admission tests and systems, students will get any type of help by asking a question and giving a test.
- 3. Green University Provides information about only their university admission system. Provide information about all university admission system.
- 4. Jahangirnagar University Provide admission test result of their own university and Our website does not provide admission test results.

3.9Design Requirements

Requirements analysis, also called requirements engineering, is the process of determining user expectations for a new or modified product. These features, called requirements, must be quantifiable, relevant and detailed. In software engineering, such requirements are often called functional specifications. There are two types of requirement for application which are-

- Functional Requirements
- Non-functional Requirements

3.10 Functional Requirements

The interdisciplinary field of engineering that concerns the design and maintenance of Complex systems are functional requirements that are part of requirements analysis. Functional requirements describe the desired end function of a system operating within regular parameters, to assure the design is adequate to make the desired product and the end product reaches its potential of the design to meet user expectations. Basic functional requirements of an ecommerce site are-

- Fast
- Responsive
- Smooth
- Personalized
- Accessible

According to those requirements, our website can fulfill all of them by providingMany facilities. Some of them are-

- Our web page loads fast.
- Our website automatically adapts to accommodate the device's resolution, screen size,and scripting abilities.
- It has a smooth checkout flow.
- the site contains the details of every product
- Using the blogging option it makes personalize the site.

3.11 Non-Functional Requirements

Nonfunctional Requirements (NFRs) define system attributes such as security, reliability, performance, maintainability, scalability, and usability. They serve as constraints or restrictions on the design of the system across the different backlogs. There are so many non-functional requirements for an e-commerce website. Our website meets most of those requirements.

Some of them are given below-

• Security.

• Privacy.

• Scalability and performance.

• Speed of services.

• Accessibility.

• Documentation and Usability.

• Search.

3.12 Software Requirements

IDE: PHP

Framework: Laravel, Jquery, Bootstrap

Database: Mysql

Language: Html, CSS, php

3.13 Use Case Modeling and Description

Use case diagram is a graphical depiction of the interactions between both the elements of system. A use case is a methodology used in system analysis to clarify and establish system requirements.

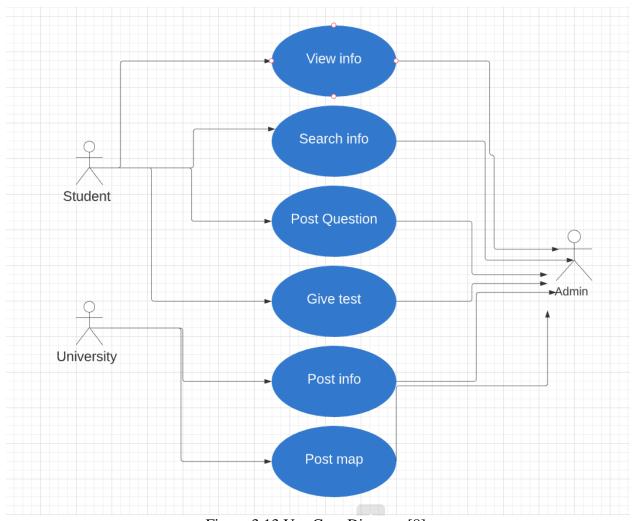


Figure 3.13 Use Case Diagram [8]

In this context, the term "system" refers to something being developed or operated, such as a mail-order product sales and service Web site. Use case diagrams are employed in UML, a standard notation for the modeling of real-world objects and systems.

In figure 3.2 we showed the use case diagram of our project. Where two users use different cases and admin maintain all of them.

3.14 Entity Relationship diagram and description

In database terms, a schema is the organization and structure of a database.[10] Schema contains schema objects, which could be tables, columns, data types, views, stored procedures, relationships, primary keys, foreign keys, etc. A database schema can be represented in a visual diagram, which shows the database objects and their relationship with each other.



Figure 3.14 Entity Relationship diagrams [9]

CHAPTER 4

DESIGN SPECIFICATION

4.1 Interface Design

In this project there are two types of users, one is a university and another one is students. And an admin will manage all the activities. Depending on that idea we design our interface. In the subsections of these sections, we will provide a pictorial view of our project.

4.2 Registration

The first admin panel will have to register for maintaining all activity in the system. There is a registration form where admin will get registered with providing name, email, and password.

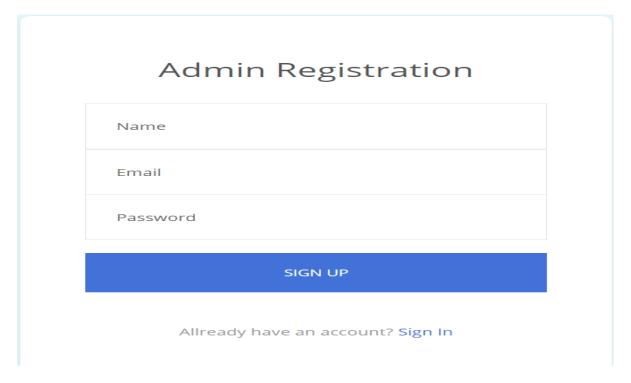


Figure 4.2 Admin Registration from

Students and universities will also have to get register in the system and this registration will be verified to maintain the security of the information and ensuring the right information.

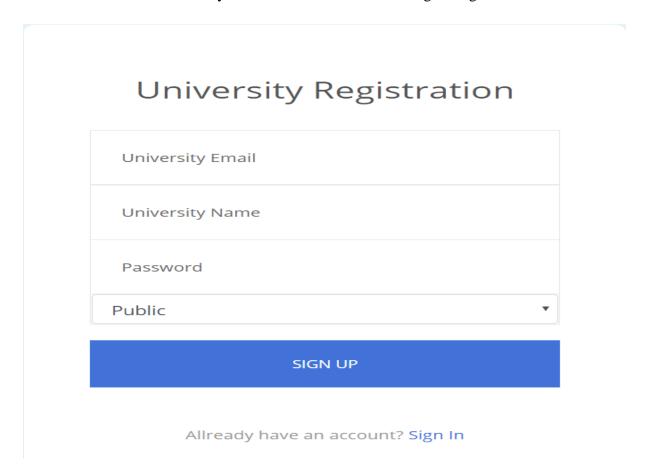


Figure 4.2 University Registration from

4.3 Login

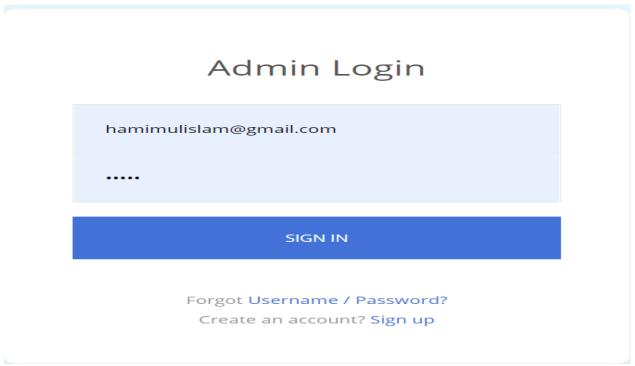


Figure 4.3 Admin login

After the registration user can log in to the site with their email and password.

University and students will also get a login page every-time they try to get into the website.

University will have to provide a university email to login.

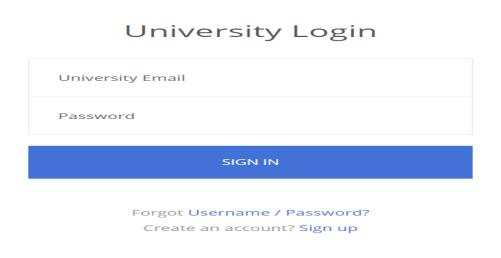


Figure 4.3 University Login from

4.4 University Dashboard

After login university will get a dashboard where they can add their information and edit previous information. In university profiles, the university can add their departments, cost and university notice etc.

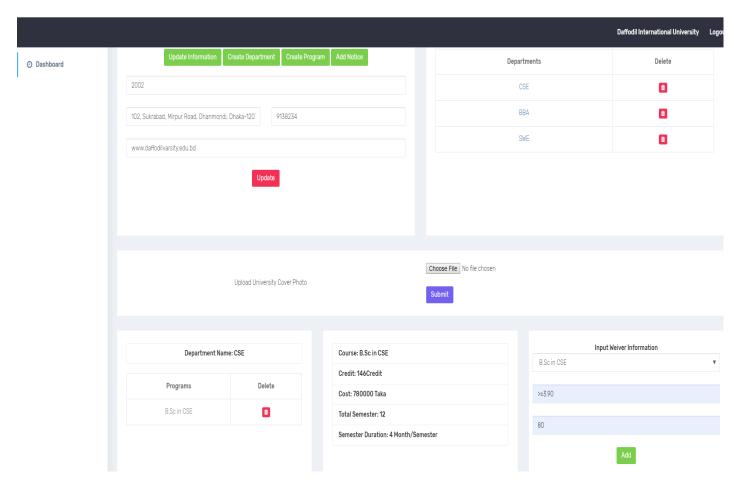


Figure 4.3 University Dashboard

4.5 Information pages

There is three type of university in our country public and private and medical. For getting the information will be three options. After clicking the public it will show the information about public universities and the same for the private option and medical. Figure 4.1.6 is showing the options.

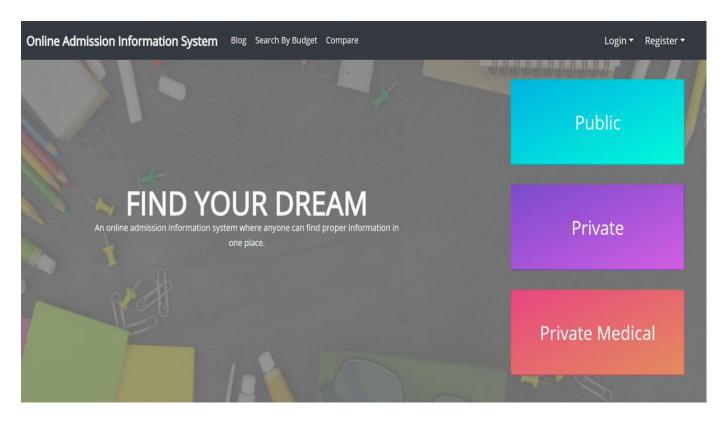


Figure 4.5 public private and private medical university option

4.6 University list

As we depicted in figure 4.1.7, there will be the university list for the students. Students can get information after clicking the university. When they click individual university they can found all information which is very important for them.

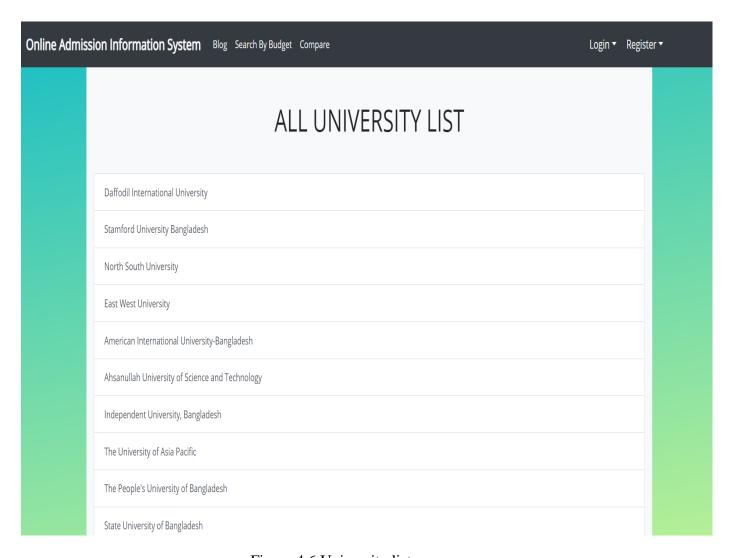


Figure 4.6 University list

4.7 University information

After clicking on one university from the list of university student will get information about the university. Suppose here is daffodil international university site information. Student can collect Address, department information and also see their notice board

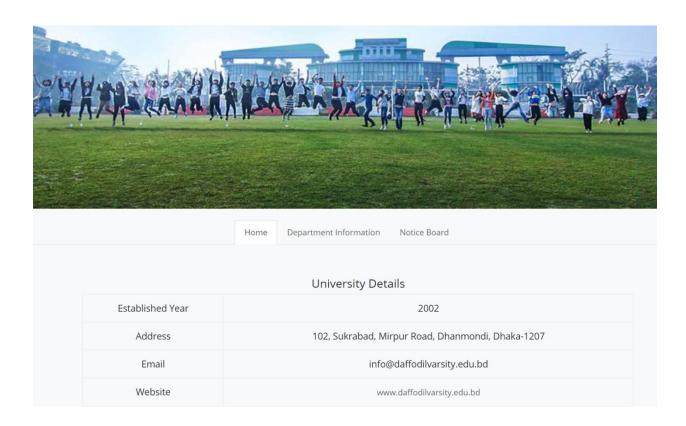


Figure 4.7 Daffodil International University Info

According to figure 4.8 students can get an idea about the university. One can knowthewavier system and many more.

4.8 Student Question

Students can ask a question about any university information. And get help from otherMembers.

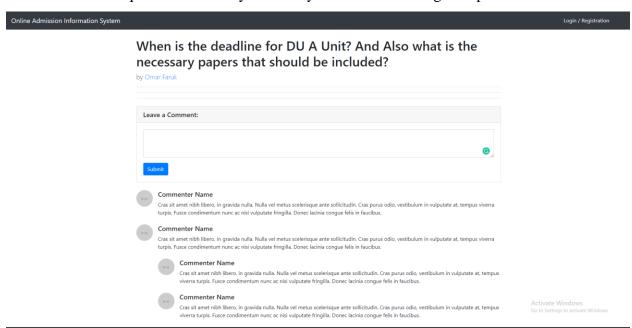


Figure 4.8: Student post

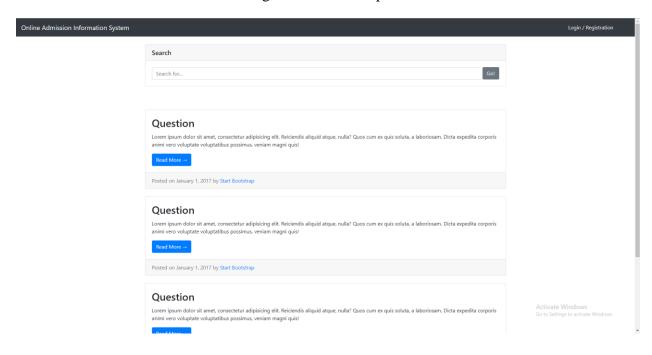


Figure 4.8 Student post

4.9 Search perfect option

According to the student budget, students can search for university and can compare the options. And can find the best result from them.

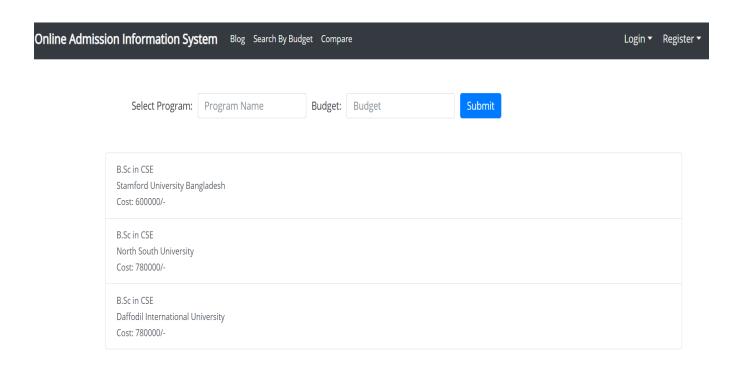


Figure 4.9 Searchby Budget option in University

In this chapter, we showed some images of the main project from that anyone can get the idea out of our project. Those images define the process of our project with the visualization.

4.10 University comparison

Student can compare some university, here they can see at the same time 3 university side by side, they can see university department information, budget information, total credit and total semester information too.

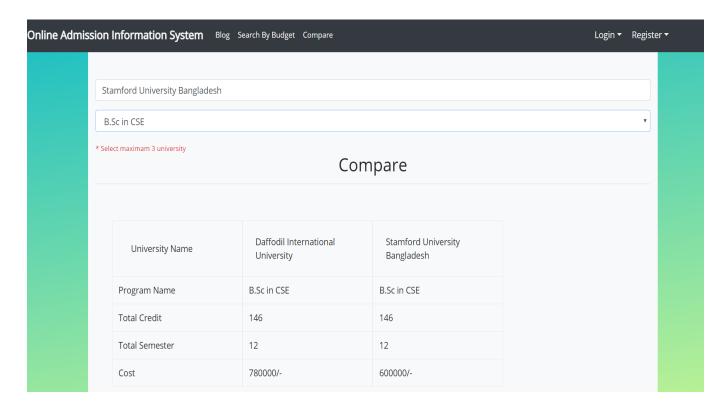


Figure 4.10 University comparison

CHAPTER 5

IMPLEMENTATION AND TESTING

5.1 Requirements for Implementation

After arranging one point will come that's implementation and after that testing, in this session, I will discuss implementation and testing in my project. Some of the

Features were implemented and some were not due to some difficulty. But the overall performance of the system is satisfying and it's ready for production.

Testing is required for knowing all the function of the project is working successfully or not.

For implementing this project first of all we need,

- 1. A domain
- 2. A hosting
- 3. University API
- 4. Map impalement

If we have these we are ready to run our project. Then for the user specification, we need to attract visitors like students and universities. Also, Admin should store

the emails by communication with the university before registration. When a university registers in our system students will get all the detail by browsing our site.

If we did get the university API then data management would be much more efficient. Now we have to manually set data in the database which is a dummy data sate and might be conflict with the original data.

Google Map API is much more costly now days. That is why we could not use the Google map in out system. The reason we could not show the university location.

Price of domain and hosting is playing a major limitation for our system. There are a lot of free hosting websites available but they do not provide good service. That is

Why we could not host our site for production use.

CHAPTER 6

CONCLUSION AND FUTURE SCOPE

6.1 Discussion

In this last chapter, we talk about the advantages of the project that is we try to represent the advantages of the project. Then everything has some limitations. Our project also has some limitations. We have discuses those limitations in this chapter. Also, we talkabout the plans of us that is what we will add in the project in the future.

6.2 Conclusion

Different universities have different method of admission. So, it is hard to get knowledge of all these universities and compare them. Our project is to solve those problems. In our project, we are building a platform where universities can share their information and student can have that information in one place. Students can also post any problems and get help from others. This will make the admission system easier. Most of the students don't have sufficient information about the admission system of all universities. For this lacking of information, students face many problems. Students get confused with the wrong information. Our project is to make provide the right information which will help the students to get the appropriate path. Without awareness of the admission system, many students cannot find the right institute for their graduation. In public and some private universities, there is an admission test system. The student will get testrelatedinformation on our website. Again there is an opportunity of a wavier systemin some of the private universities depending on the result or many other criteria. The student will get details about the wavier system and can make a proper budget plan fortheir study. Students and also parents can compare different institutions depending on given information and can choose the right institute for them.

6.3 Scope for Further Developments

In the future, we will develop our work. Developing a process is very important for any project. We have many plans for our future work. Those are given below-

- We will add the admission process more elaborately. That is we will add a suggestion, Previous admission questions, solution of the question, etc.
- In the future, we will add information about international universities for higher Studies.
- Now we are only providing information about universities but in the future, we Will also add college and school-level information.

References

- [1] "Daffodil International University", *Daffodilvarsity.edu.bd*, 2019. [Online]. Available: https://daffodilvarsity.edu.bd/. [Accessed: 31- Oct- 2019].
- [2] "Home | Green University of Bangladesh", *Green University of Bangladesh*, 2019. [Online]. Available: https://green.edu.bd/. [Accessed: 31- Oct- 2019].
- [3] "Jahangir nagar University-1stYear Undergraduate Online Admission- জাহাঙ্গীরনগরবিশ্ববিদ্যালয়২০১৯২০শিক্ষাবর্ষে১মবর্ষমাতকশ্রেণিতেভর্তি", *Ju-admission.org*, 2019. [Online]. Available: https://ju-admission.org/. [Accessed: 31- Oct- 2019].
- [4] 2019.[Online]. Available: https://admission.eis.du.ac.bd/index.php?act=login/index.[Accessed:31-Oct-2019].
- [5] "AdmissionWar.com তোমার প্রেরণা তুমিনিজেই" , *Admissionwar.com*,2019.[Online]. Available: https://www.admissionwar.com/.[Accessed: 31- Oct- 2019].
- [6] "Bangladesh University of Engineering and Technology-BUET", *Buet.ac.bd*, 2019. [Online]. Available: https://www.buet.ac.bd/web/. [Accessed: 31- Oct- 2019].
- [7] "Diagram", En.wikipedia.org, 2019 .[Online] . Available: https://en. Wikipedia .org/ wiki/ Diagram. [Accessed:31- Oct- 2019].
- [8] "What is use case diagram (UML use case diagram)?- Definition from WhatIs.com", WhatIs.com,2019.[Online].
 - Available: https://whatis.techtarget.com/definition/use-case diagram# targetText=A%.[Accessed:31 Oct-2019].
- [9] "Database. Guide|", Database. guide, 2019. [Online] .Available :https :// database .guide/
 .[Accessed:31-Oct- 2019].
- [10] "How many universities are there in Bangladesh? Quora", *Quora.com*, 2019. [Online]. Available: https://www.quora.com/How-many-universities-are-there-in-Bangladesh. [Accessed: 31- Oct- 2019].

Online-Admission-Information-System-converted.pdf

ORIGINALITY REPORT 16% 2% SIMILARITY INDEX **INTERNET SOURCES PUBLICATIONS** STUDENT PAPERS **PRIMARY SOURCES** Submitted to Daffodil International University Student Paper rootsbd.com Internet Source Submitted to Harrisburg University of Science and Technology Student Paper Submitted to Kolej Universiti Poly-Tech MARA % Student Paper green.edu.bd 5 Internet Source Submitted to Myanmar Computer Company (MCC) - MANDALAY Student Paper Submitted to 82915 % Student Paper Submitted to The British College Student Paper

9	studynews4u.blogspot.com Internet Source	1%
10	digit.hbs.org Internet Source	1%
11	Submitted to Ghana Technology University College Student Paper	1%
12	Submitted to Softwarica College of IT & E-Commerce Student Paper	1%
13	www.edunews.bd24x7.com Internet Source	1%
14	Submitted to North South University Student Paper	1%
15	Submitted to NCC Education Student Paper	<1%
16	www.buet.ac.bd Internet Source	<1%
17	Submitted to Oxford Brookes University Student Paper	<1%
18	Submitted to Study Group Australia Student Paper	<1%
19	Submitted to Pathfinder Enterprises Student Paper	<1%

20	examresultbd.com Internet Source	<1%
21	saifuls-allaboutbangladesh.blogspot.com Internet Source	<1%
22	bdjobs.guru Internet Source	<1%
23	jultika.oulu.fi Internet Source	<1%
24	wpuinfo.blogspot.com Internet Source	<1%
25	Submitted to Middlesex University Student Paper	<1%
26	Submitted to International Islamic University Malaysia Student Paper	<1%
27	Submitted to University of Dhaka Student Paper	<1%