Amaderi Biswobidyaloy

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

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APPROVAL

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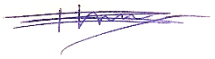

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We hereby apprehend that, this project has been executed by us under the supervision of **Moushumi Zaman Bonny, Assistant Professor, Department of CSE** Daffodil International University. Moreover, we announce that neither this project nor any part of this project has been proposed elsewhere for reward of any degree or diploma.

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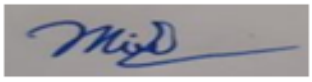

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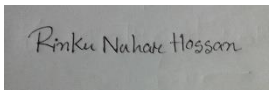

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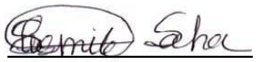

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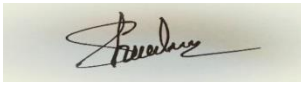

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ABSTRACT

Keeping pace with the modern world, Bangladesh is also becoming a technology dependent county. In its continuity, the internet has reached the doorsteps of every human being in our country. The internet has united the whole world today. Nowadays, all kind of activities can be done at home on the digital platform. In our country, the whole process of education has started to be internet based. Since as a student needs to study at a good university for a bright future, so he or she needs proper university admission guidelines. Amaderi Biswobidyaloy will serve as a proper guide for a student during this admission period.

As our website is internet based so it is providing all the information related to admission free of cost to all the students and students can access it from anywhere in the country. Through our website, students can view university list, university time and date, question bank as well as test their skills. Moreover, through our website students will be able to do counselling with the teachers of different departments. This will enable every student to reach the doorstep of their desired dream.

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TABLE OF CONTENTS

CONTENTS	PAGE NO
Board of examiners	i
Declaration	ii
Acknowledgements	iii
Abstract	iv
CHAPTER	
CHAPTER 1: Introduction	**01-03**
1.1 Introduction	1
1.2 Motivation	1
1.3 Objectives	2
1.4 Expected Outcome	2
1.5 Report Layout	3
CHAPTER 2: Background	**04-08**
2.1 Introduction (Proposed System)	4
2.2 Related Works	4-6
2.3 Comparative Studies	7
2.4 Scope of the Problem	8
2.5 Challenges	8
CHAPTER 3: Requirement Specification	**09-16**
3.1 Business Process Modeling	9
3.2 Planning	10
3.2.1 Scrum	10
3.2.2 Kanban	10
3.2.3 Agile Project Management	10

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3.3 Requirement Analysis 10
3.3.1 Functional Requirement 11
3.3.2 Non-Functional Requirement 11
3.4 Use Case Model and Description 11-14
3.5 Logical Data Model 14-15
3.6 Design Requirements 15-16

Chapter 4: Design Specification 17-19

4.1 Front-end Design 17
4.2 Back-end Design 17
4.3 Interaction Design and UX 18
4.4 Implementation of requirements 19

Chapter 5: Implementation and Testing 20-45

5.1 Implementation of Database 20-21
5.2 Implementation of Front-end Design 21
5.2.1 Website Front-end Design 22-32
5.2.2 Registered User 33-36
5.2.3 Admin Panel 37-41
5.3 Implementation of Interactions 41
5.4 Testing Implementation 42-46
5.5 Test Results and Reports 46

Chapter 6: Conclusion and Future Scope 47

6.1 Discussion and Conclusion 47
6.2 Scope for Further Development 47

Appendix 48-51

References 52-53

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LIST OF FIGURES

FIGURES **PAGE NO**

Fig 2.1: Resultinbd.net 05
Fig 2.2: Admissionwar.com 05
Fig 2.3: edpdbd.org 06
Fig 2.4: CampusPlant 06
Fig 3.1: Agile Methodology 09
Fig 3.2: Use case diagram of Amaderi Biswobidyaloy 12
Fig 3.3: Dataflow Diagram 15
Fig 5.1: MongoDB Database 20
Fig 5.2: Database of users 20
Fig 5.3: Database of all teachers 21
Fig 5.4: Database of all books 21
Fig 5.5: Homepage of Amaderi Biswobidyaloy 24
Fig 5.6: List of Public Universities 25
Fig 5.7: List of Private Universities 26
Fig 5.8: List of National Universities 26
Fig 5.9: Top 10 Ranking of Universities 26
Fig 5.10: Top Public Universities Ranking 27
Fig 5.11: Top Private Universities Ranking 28
Fig 5.12: Top National Universities Ranking 28
Fig 5.13: Admission Time and Date 29
Fig 5.14: Admission Time and Date of Public Universities 29
Fig 5.15: Admission Time and Date of Private Universities 29
Fig 5.16: Admission Time and Date of National Universities 30
Fig 5.17: Question Bank of Public Universities 30
Fig 5.18: Question Bank of Private Universities 30
Fig 5.19: Our Team of Amaderi Biswobidyaloy 31
Fig 5.20: Privacy and Policy of Amaderi Biswobidyaloy 32
Fig 5.21: Terms and Conditions of Amaderi Biswobidyaloy 32
Fig 5.22: Registration Form 33

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Fig 5.23: Log-in Form 33
Fig 5.24: Appointment System for user 34
Fig 5.25: Make Appointment by Searching 34
Fig 5.26: Details of Teacher 34
Fig 5.27: Skill Test 35
Fig 5.28: Appointment Status of User 35
Fig 5.29: Purchasing System of User 36
Fig 5.30: Order List of User Profile 36
Fig 5.31: User Opinion 36
Fig 5.32: Pending Order 37
Fig 5.33: Delivery Order with Payment 37
Fig 5.34: Add a Book 38
Fig 5.35: Add a Question 38
Fig 5.36: Add a university 39
Fig 5.37: Add a Teacher for Appointment 39
Fig 5.38: View Question List 39
Fig 5.39: View Teacher List 40
Fig 5.40: View Book List 40
Fig 5.41: View University List 40
Fig 5.42: Pending Appointment 41
Fig 5.43: Approve Appointment 41

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LIST OF TABLES

TABLES **PAGE NO**

Table 2.1: Comparative studies 07
Table 3.1: Representation of Use Case Diagram for General Users 13
Table 3.2: Representation of Use Case Diagram for Registered Users 13
Table 3.3: Representation of Use Case Diagram for Admin 14
Table 5.1: TEST CASE 01 42
Table 5.2: TEST CASE 02 43
Table 5.3: TEST CASE 03 44-45
Table 5.4: TEST CASE 04 45-46

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CHAPTER 1

INTRODUCTION

1.1 Introduction

Amaderi Biswobidyaloy is a web-based application that provides all universities information of Bangladesh. It provides several information like university list, university ranking, admission time and date, question bank and many more. In the modern age admission test is a battlefield for the bright future of all students. Students need to know the right information at the right time to be successful in this battlefield. Keeping in this mind, our website has been designed in such a way that a student can find out all the information related to the university as well as several books. All the question papers of the past years of all the universities have been included in this website. Users can access our website in two ways. If a user does not register then he can only access the external aspects of the website. Registered users will get all the benefits of this website. Through login, a user can buy books related to admission test, will be able to take appointments of teachers of different departments and be able to test their skills. Users will also be able to share their valuable feedback with us and in case of any problem they face, they will be able to contact us directly through messenger chat. This is how our website will play a helpful role in a student's admission test.

1.2 Motivation

We know web application is an application program which composed on a remote server and rescued over the internet via a browser interface. It can be aimed for a wide diversity of uses and also be used by everyone [5]. Keeping pace with the developed world, our country has become technologically dependent by online. Now a days everyone collects all the necessary information through online. Even after all this, we haven't found any complete website that can provide information to the students at the time of admission. This is why we have created a website where students can find all the information, they need during their admission in one website.

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1.3 Objectives

Amaderi Biswobidyaloy is to help Bangladeshi student denomination to attend enrichment in all walks of their life [6]. During the admission test, every student is under a kind of stress. Then they need a system through which they can get all the information they need without any hassle and save their valuable time. Amaderi Biswobidyaloy is such an informative website through students can know all the updated information. We always strive to provide students with educational authentic news to build Digital Bangladesh. So Amaderi Biswobidyaloy is providing the information solution to the students for getting admission to their desired institute.

1.4 Expected Outcome

- We can get all kinds of admission information
- We will be able to know what kind of universities are there in Bangladesh
- Information about different criteria of public universities
- Knowledge about the list of private universities in our country
- Knowledge about the list of national universities in our country
- We can see the list of the top 10 public, private and national universities in Bangladesh
- Getting accurate admission time and date for public, private and national universities
- Provides question bank for public and private universities
- We can see all public, private and national universities website
- We can order admission related books
- For counseling we can get appointment
- We can test our own skill
- If user faces any kind of problem, then he/she can contact through messenger
- User can deliver their valuable feedback

Predominantly we can ensure the dynamic security and high quality online-based website and further immediate information of every university and its admission test.

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1.5 Report Layout

CHAPTER 1: INTRODUCTION

In this particular segment, we recapitulate the motivation, objectives and expected outcome of our project.

CHAPTER 2: **BACKGROUND**

In this particular segment, we have recapitulated about our proposed system, related work and compare it with other adversary systems about related work, problem areas and project challenges as well.

CHAPTER 3: REQUIREMENT SPECIFICATION

In this segment, we have given ideas about business process modeling, requirements analysis, models for use in project systems and their descriptions, logical data models and design requirements.

CHAPTER 4: DESIGN SPECIFICATION

In this chapter, we will be given an idea of the front end and back-end design of the project, the design of the user interaction and also the implementation requirements.

CHAPTER 5: IMPLEMENTATION AND TESTING

In this segment, we will discuss the implementation of the database, implementation front-end designs, interactions implementation, and project test results as well as test implementation.

CHAPTER 6: CONCLUSION AND FUTURE SCOPE

In this chapter, we will discuss the conclusions and opportunities for further development that is very much concluded from the project.

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CHAPTER 2

BACKGROUND

2.1 Introduction

Amaderi Biswobidyaloy is a new procreation education and information based online platform. Amaderi Biswobidyaloy is primarily designed for admission seeking students. Through this website, admission seeking students in any part of the country will be able to know the information of their expected university. Many students don't know which university is in which part of the country. For this reason, we have designed our website in such a way that they can view all the universities according to the location division. In maximum number of cases after completing the higher secondary exam, the students have no idea what to read for admission test. For this, our website has counseling system so that the students can get the right direction. As students get all kinds of benefits from a website, they will be able to focus more on their studies and won't waste their precious time. Since now everything is digitalized, that's why students can be accessed with several platforms like laptop, desktop, mobile and different browsers.

2.2 Related works

In addition to our website, there are several others websites that provide information on admission tests. There is a website which name is “Resultinbd.net”. This website deals with the information of admission circular of college, public and national universities, BCS exam, job circular and seat planning. But in this website, there is no login system [6].

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Figure 2.1: Resultinbd.net

Another one is "Admission War" which also provides admission information about school, college universities and there is also some helpful PDF book for the students [7].

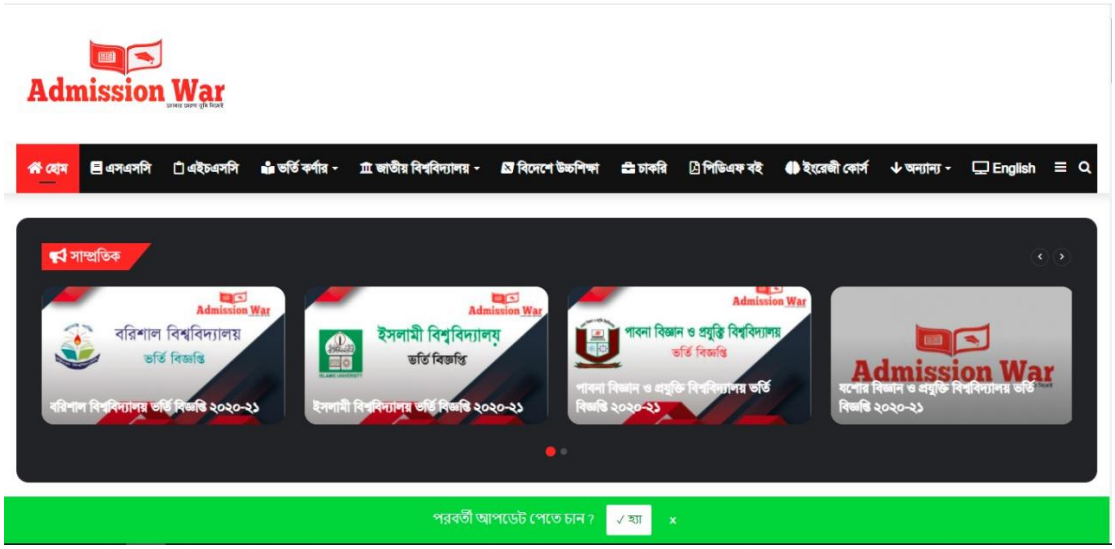

Figure 2.2: admissionwar.com

Then another website called "Educationpedia of Bangladesh". This website is also giving the details of admission time and date, history of public and private universities, question bank and gives the important content for the preparations of students. As it is an open website there is no login system [8].

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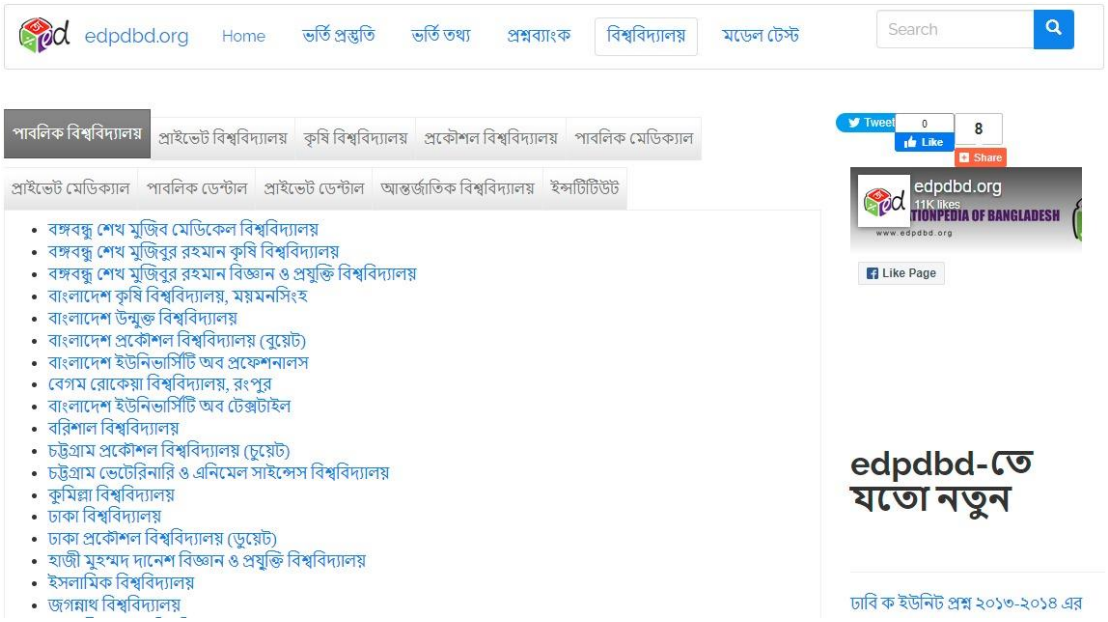

Figure 2.3: edpdbd.org

And last one is named “Campus Planet” that demonstrates guideline about admission along with the news of admission and job circular [9].

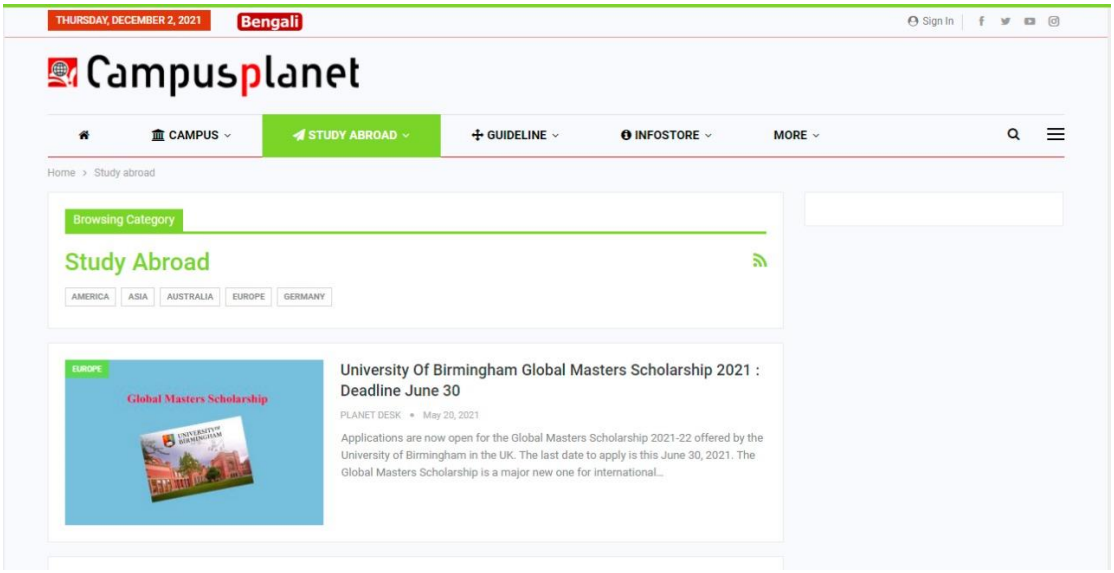

Figure 2.4: CampusPlant

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2.3 Comparative Studies

Assimilating to other existing websites our accomplished website is establishing modern features to the users. In our system a user can login by registration. Our website provides user account security properly. Comparative studies within these works displayed in table 2.1:

Case	Resultinbd.net	Admission War	Educationpedia of Bangladesh	Campus Planet	Amaderi Biswobidyaloy
Registration	No	No	No	No	Yes
Result	Yes	No	No	No	No
Job circular	Yes	Yes	No	Yes	No
University Information	Yes	Yes	Yes	Yes	Yes
Security	No	No	No	No	Yes
Admission Circular	Yes	Yes	Yes	Yes	Yes
Purchasing System	No	No	No	No	Yes
Counseling System	No	No	No	Yes	Yes
Communicating System	No	No	No	No	Yes
Feedback	No	Yes	No	No	Yes

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2.4 Scope of the Problem

- Without internet connection, user and admin both can't get access of the website
- Public users can't attain all facilities
- All user profile and public comments are controlled by admin panel
- Users can get access easily of the whole system by creating account
- When a user takes an appointment, he/she has to wait for it to be approved
- Unavailability of books
- In the case of emergency communication, sometimes user won't get his reply in time

2.5 Challenges

- Actuate regulation is complex
- Lack of exposer
- Sometimes it is difficult to keep the site UpToDate
- Maintenance issues
- Providing substantive and authentic information
- Prepare important query for the user

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CHAPTER 3

Requirement Specification

3.1 Business Process Modeling

Amaderi Biswobidyaloy contains a specific model which is called agile development model. We know that agile model supposed that entire project needs to be handled in a different way and the exiting systems need to be fitted to best suit in the project requirements [1]. That's why we have used this model in our project.

As we used agile model, the first step which refers software development approach flourished on iterative development [2]. In agile model it segmented all tasks into lesser iterations. Every iteration involves cross functional teams that works at one time in various areas like, planning, requirement analysis, design, development, testing, deployment, release, maintenance. Here is a figure 3.1 that will describe agile model.

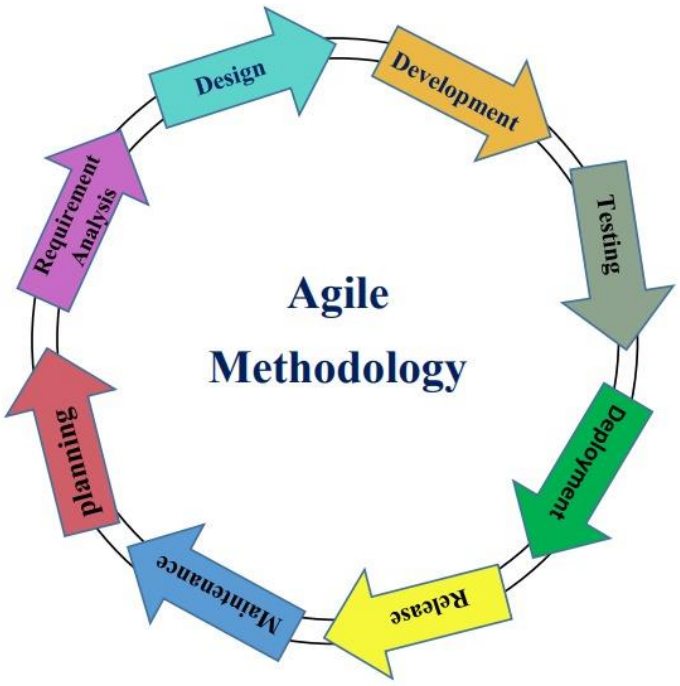

Figure 3.1: Agile Methodology

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3.2 Planning

We have looked at various admission related educational websites but haven't found the full information on a single site. That's why we have planned to create a website where students can learn about the admission procedure of all the universities in Bangladesh within the same website. In this phase, we have scrum, kanban and agile project management.

3.2.1 Scrum

Since we have worked as a team, we often plan for a certain period of time that what changes have been made or if there are any problems or what updates or deletions have been made.

3.2.2 Kanban

We have discussed whether it is possible to do anything beyond our knowledge. Mainly we have followed workflow management system. We have been able to visualize our work through this phase and also able to maximize the efficiency.

3.2.3 Agile Project Management

We have divided our work into two main parts such as front-end development and back-end development. Then we divided them into smaller parts. Agile Project Management promotes collaborative work with its users. Through this we can constantly learn and ensure the accuracy of the work we are constantly doing.

3.3 Requirement Analysis

Since we have created an educational website, we will have two types of development phases in this case such as Functional Requirements and Non-Functional Requirements. Here in Non-Functional requirements, it describes that how our system works and in Functional Requirements it describes the systems work flow.

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3.3.1 Functional Requirement

In our website, we have used many functional requirements. Like- there we have a registration panel where user can register by e-mail, after completing the registration, user can log in by providing e-mail address and password. By logging in this website, user can access the rest of the system and do his work. For us, there is also an admin panel which can't be accessed by the user.

3.3.2 Non-Functional Requirement

Since we have made our website user friendly, users will be able to access certain things without login or registration, so that this website is attractive to the user. In this function we made our system more efficient, also optimized the performance and operates very smoothly.

3.4 Use Case Model and Description

A use case diagram narrates the proposed functionality of a new method. A use case diagram which illustrates a discrete unit of interaction between a human or machine and the method. As it is an individual unit of significant work like generate account or prospect account details. Each of the use case narrates the functionality to be manufactured in the mentioned method, which can comprise diversified use case's functionality or enhance diversified use case with its own demeanor.

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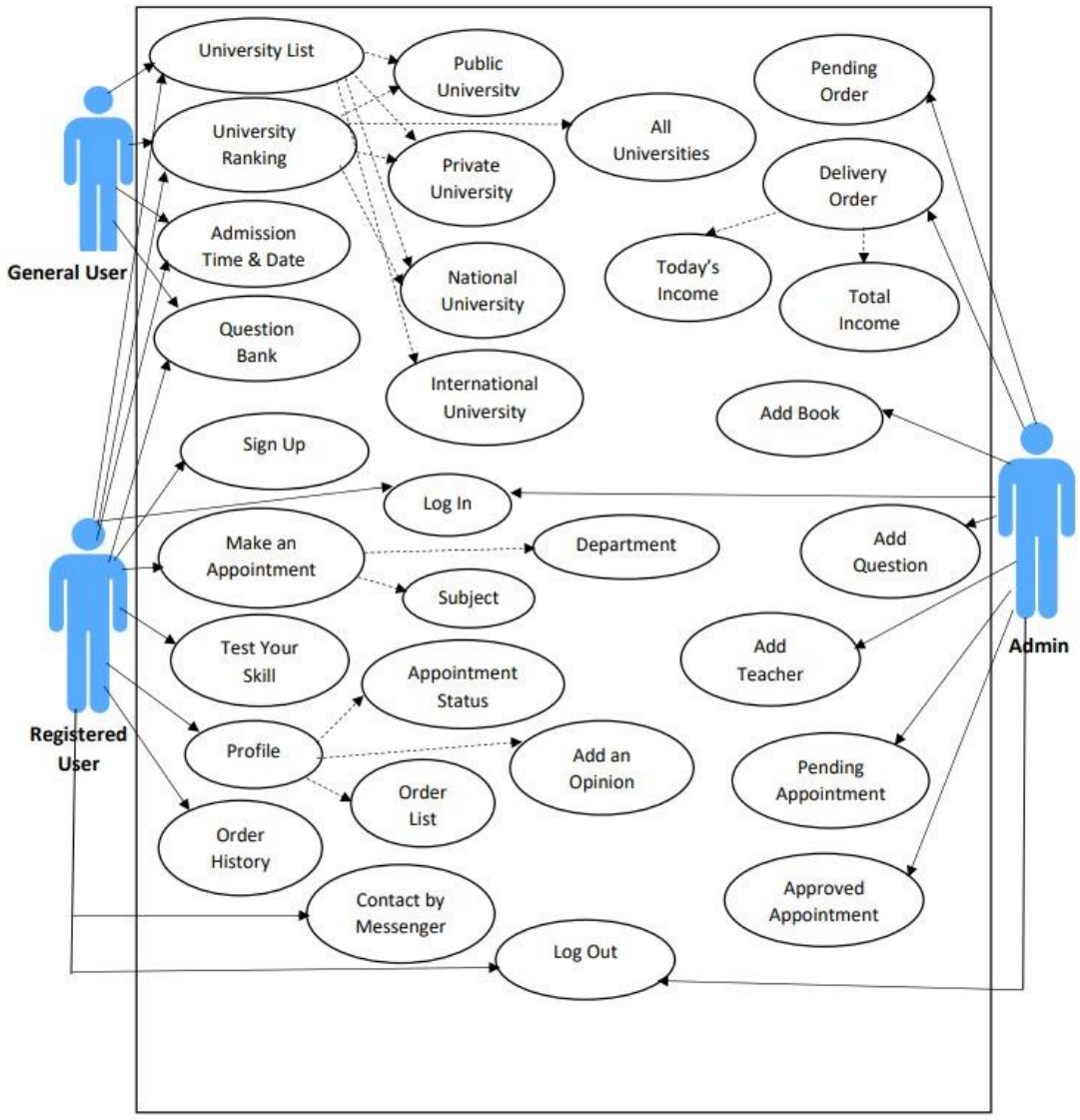

Figure 3.2: Use case diagram of Amaderi Biswobidyaloy

In our system, there are two kinds of users, General User and Registered User. General user can access university list, university ranking, admission time and date, question bank. On the other hand, Registered User can make an appointment, test his skill, make his own profile, can sign up and log in, order history along with the general user. In profile section, registered user can check his appointment status and add his opinion. Users' opinion is something we need to work on in the future. There is also a segment called admin panel. An admin can add question, add teacher, can approve appointment, can see pending appointment, pending order and also delivery order. Registered user and admin both can log out from the system after completing their tasks.

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Table 3.1: Representation of Use Case Diagram for General Users

Use-case (i)	System that enrolls General Users
Primary actor	General Users
Secondary actor	Invalid
Pre-condition	This is free for all, basically general users who viewed the site
Post-condition	If general user wants to apply any of these universities, they must have logged in else they can't access this facility.
Description	General users mean the people who aren't register in the system, they can't access the inner facilities but they only can view university list, university ranking, admission time and date, question bank.

Table 3.2: Representation of Use Case Diagram for Registered Users

Use-case(ii)	System that enrolls Registered Users
Primary actor	Registered Users
Secondary actor	Invalid
Pre-condition	In this segment the user must have an account for log in. User need to provide all the correct information for creating his account.
Post-condition	When a user successfully created his account, user will access all the inner facilities and services.
Description	Registered user means the people who already registered or created his own account. Only registered users can use our system properly. For the registration procedure they have to register with a valid e-mail address and valid password.

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Table 3.3: Representation of Use Case Diagram for Admin

Use-case(iii)	Admins that own the system
Primary actor	Admin
Secondary actor	Invalid
Pre-condition	Admins also have an account to log in to manage the system. Though admin account is pre-defined by developer so that no one can generate fresh admin.
Post-condition	Nobody can’t be able to login into the admin panel.
Description	Admin can develop the whole system.

3.5 Logical Data Model

Logical Data Model is a norm of data model which narrates data elements in trifles that is used to exhibit visual compassionate of data enteritis, attributes, keys and relationship. This model is supremely independent from a tangible database apropos establish a directional structure for elements of the semantic layer in data management system [3].

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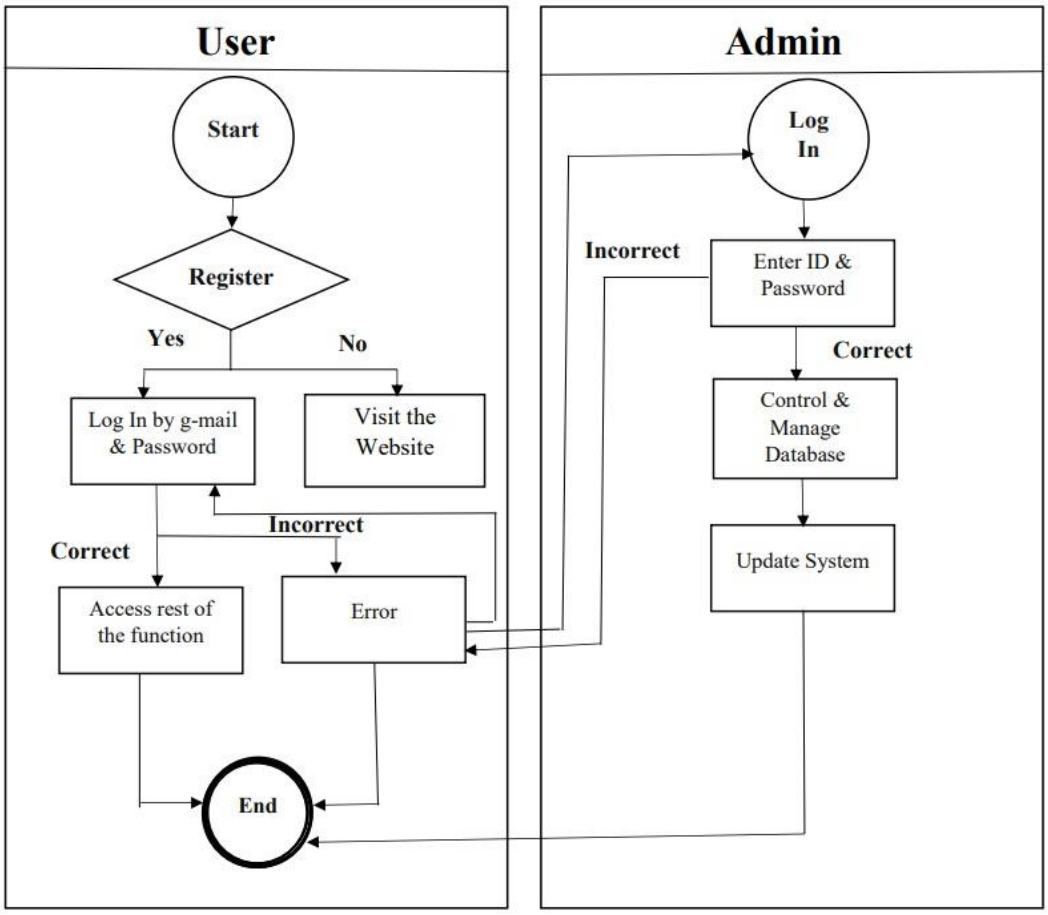

Figure 3.3: Data flow diagram

In this above diagram figure:3.3, we demonstrate the workflow of our project. Here, if the user is registered then he can login by g-mail and password and if is correct then he can access all functions. If the password or g-mail is incorrect then it will show error. In that case we have to login again. Now, if the user is not registered then he can just visit our website and access some functions.

For admin, admin can login by entering his id and password. Then if it is correct the admin can control and manage the full website database and he can make any kind of changes in the website. If the password and g-mail is incorrect, it will show error.

3.6 Design Requirements

We all know a goodly designed website is a gladness to use. The main thing is that it apprehension the attention of the user, sustains the intelligence that they might need

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and convinces them to engage with the service. A website also gleams the affectation with the its' customers and if their doughty to keep up with the times [4].

Design requirements for Admin Panel

- Login page
- Order details
- Payment gateway
- Add book
- Add question
- Make appointment
- Update user information
- Take actions
- Logout

Design requirements for User

- Viewing university list
- Viewing university ranking
- Admission time and time
- Question Bank
- Login
- Booking appointment
- Skill test
- Profile
- Connect through messenger
- Order book

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Chapter 4

Design Specification

4.1 Front-end Design

Front-end web development is the evolution for graphical user interface of a website, by the demeanor of html, css and js, wherein users can observe and interact with the website [10]. Some other tools that help to generate front-end design.

React.js

By creating user interfaces in java script for isolated platforms react.js can be used. It is a general, feature rich, element-based java script UI library. React Js also be used to amplify miniature applications as well as extensive, complicated applications. The primary characteristic of react.js which discriminates it from several popular java script frameworks is pliability. React community felicitation react library through providing massive set of ready-made materials to exhibit web application [11][12].

Bootstrap 5.1

We all know bootstrap is the most popular html, css and js framework for manifesting a responsive and mobile friendly website. It is also a free and open-source front-end development framework for websites. Responsive design invents it possible for a web page to discover the visitants screen size, orientation and automatically accommodate the display [13][14].

4.2 Back-end Design

Back-end development is the portion of a website which can't be observed by the users. It is acquainted as contented management system. This part is hidden for the users but the admin or developer can access this portion. This portion conduct different behind-the-scene functions like constructing libraries, coding and APIs. That is also environs an upper level of cooperation when likened to front-end development [15][16].

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Express.js

Express.js which is a back-end web application framework for Node.js. It is released open source and free software under MIT license. Node.js take steps various prominences which make web application development simple and speedy. It is also defined roots of user application emerged on HTTP and URLs. Express.js that easily connect with databases like MongoDB and MySQL [17][18].

Node.js

Node.js which is an open source, cross platform runtime ambience for developing server site and also networking applications. The applications of node.js are written in java script. That can be conduct among the node.js runtime on Microsoft windows and Linux. It provides rich library of diverse java script modules that simplifies the development of web applications [19].

MongoDB

MongDB which is specified as open-source document-oriented database that is planned to depot a massive scale of data and moreover approves one to work with that data very efficiently. This is classified under the NoSQL database whereas the storage and salvation of data in MongoDB which is not in the form of tables. It is developed and manage by MongoDB.lmc under SSPL. It provides official driver support for all popular languages such as C#, C++, C, .Net, Go, Node.js, PHP, Python, Ruby etc. [20].

4.3 Interaction Design and UX

Basically, interaction design is a method in which designers focus on constructing fascinating web interfaces which is logical and thought-out behaviors and operations. Interactive design mainly conducts technology and morality of strong communication to generate desired user experience. It can be understood in easy terms mainly it is the design of the interaction between user and products. The objective of interaction design is to create products which qualify the user to attend their objectives [21][22]. UX that means user experience allude to any interaction a user has with service. It is contemplating each and every element which shapes this experience, user feel and how friendly for the user to use and accomplish their desired tasks. The intention of the UX design is to make proficient, simple and relevant experiences for the user [23]. An exact

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design makes a website very delightful to the users. Interaction design and UX design is very much important for making the website user friendly. For this we design a significant logo for our project, make necessary pages, buttons, specific menu bar and also drop-down menu bar, add images and keep the updating system to make our website more user friendly.

4.4 Implementation of requirements

Implementation means spending, passing or contemplation of a plan, a scheme else any kind of design, conception, norm, policy for doing something. For making a complete website, we need to use some software or tools to make our working process easy. We have developed a website and we also used some software and tools and combined them to make our work easy.

- React.js
- Bootstrap 5.1
- Express.js
- Node.js
- MongoDB
- Visual studio

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CHAPTER 5

Implementation and Testing

5.1 Implementation of Database

Implementation of database or expansion is the method of building of database software, customizing and configuration, testing, fusing with applications and constructing the users. Implementation embroils the composition of a database similar to the specification of a rational illustration [24]. For our project, we are using MongoDB database program. Here we are demonstrating some figures of our database.

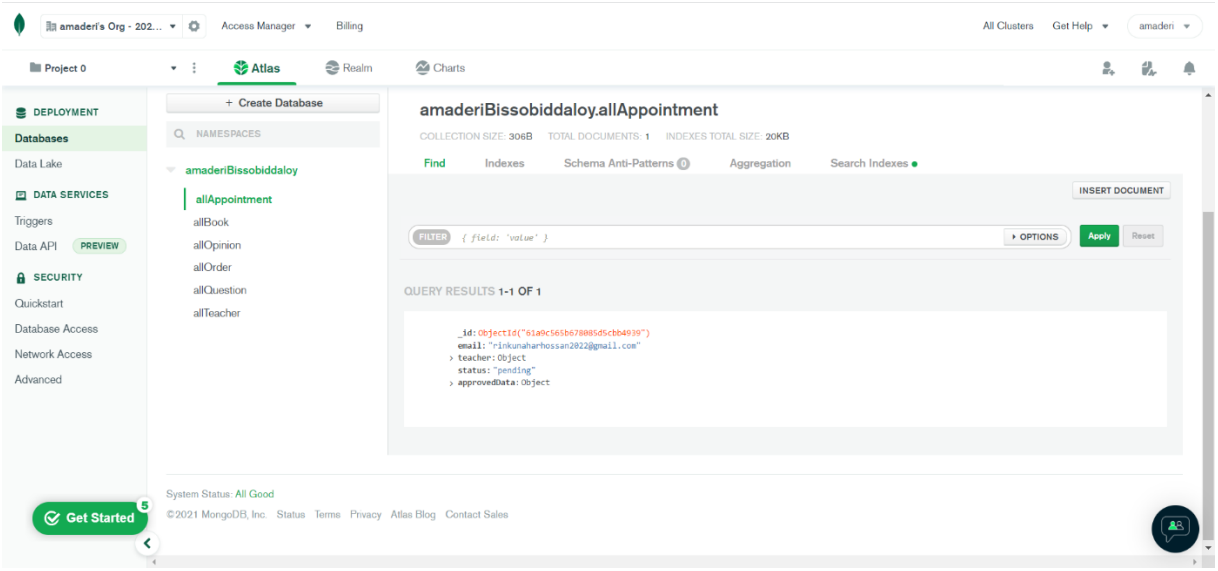

Figure 5.1: MongoDB Database

Figure 5.2: Database of Users

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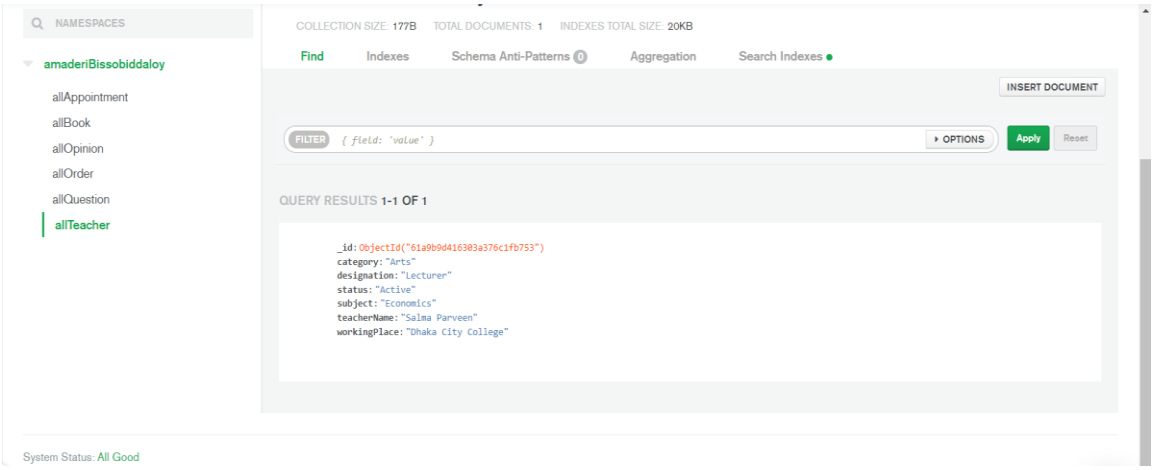

Figure 5.3: Database of all teacher

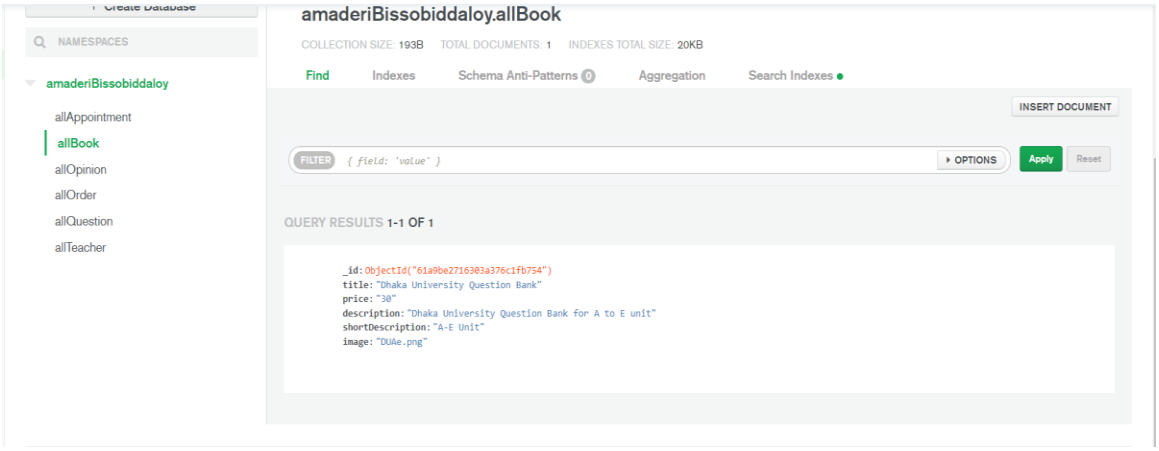

Figure 5.4: Database of all book

5.2 Implementation of Front-end Design

It is very important and also challenging to elaborate engaging and spanking front end because this needs to balance the user's device screen size. Though it is very much presuming to build a facile and user-friendly UI design for all the user. We have tried our level best to make our website user friendly. We have created our website as a responsive website so that all users can easily access it from any kind of devices.

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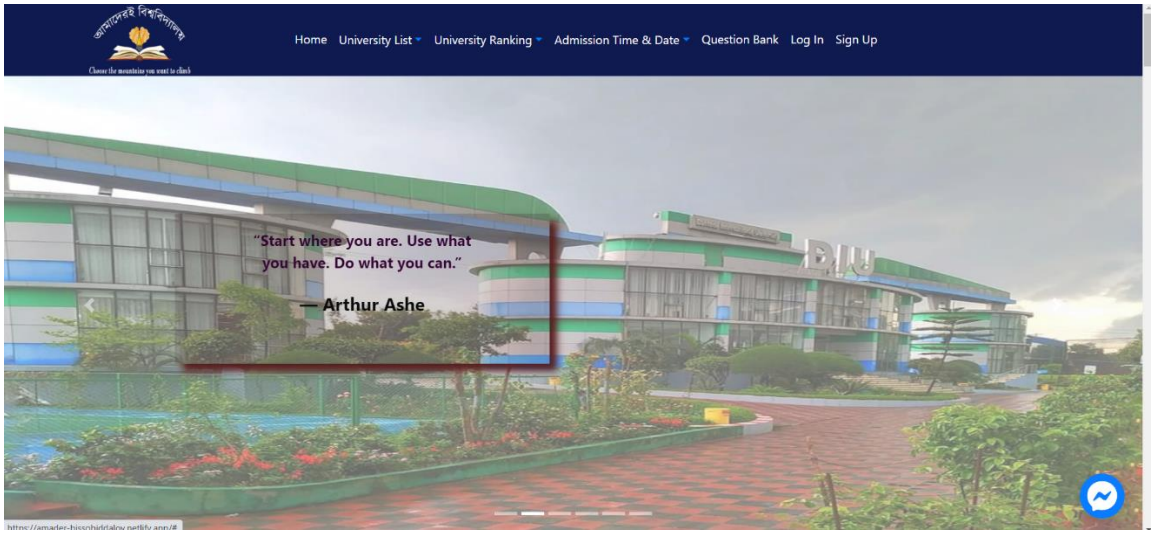
5.2.1 Website Front-end Design



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Daffodil International University

The University of Dhaka is a public university located in Dhaka, Bangladesh. It is the oldest university in Bangladesh. On the first day of July 1921, the university opened its doors to students. Today, it is the largest public research university in Bangladesh

North South University

North South University is a private university based in Dhaka, Bangladesh. The mission of North South University is to produce competent graduates in their selected disciplines who will have productive careers or choose to engage in advanced studies.

Uttara University

Uttara University or UU is a private university at Uttara, in Dhaka, Bangladesh. It is a well-recognized university both nationally and internationally for its motto of "Quality Education at Affordable Tuition".The prime objective of this university is to help grow students professionally as well as personally.

See More

University Ranking

According to the university list of UGC Bangladesh, there are 46 public universities and 92 private universities in Bangladesh.This ranking of Universities in Bangladesh is based on Web o Matrics. From this list you will be able to find out the particular university ranking, You also get data of university types which may help you to create a new list of private or public university rankings.

Public University

1. Bangladesh University of Engineering and Technology
2. University of Dhaka
3. University of Chittagong
4. Rajshahi University
5. Jahangirnagar University

See More

Deciding on a university to go to and a degree to study isn't always easy. There are so many universities and degree choices, you might feel overwhelmed! Reading in a good public university is most of the student's dream. Some students don't have an option. Studying at a private university can be very expensive. Some can't afford that. So, some students don't have an option. They must study at a public university so that they can complete their graduation. There is a very limited amount of seat available in public universities. Every year after passing their HSC exam student fight for every single seat. Whoever gets the opportunity, they are treated very special and respected in our society. Three Bangladeshi universities have managed to

Private University

1. North South University (NSU)
2. BRAC University (BRACU)

The emergence of private universities was prompted by several factors of which two are most important. (1) The demand for higher education increased much faster than the public university system could cope with; and (2) scarcity of public fund and other resources i.e. the government could no mobilise the required infrastructures, and financial and human resources t match the rapidly increasing demand. With continuous widening of the gap

Admission Time & Date

Public University Admission Test 2020-2021 time& date schedule

See More

Private University Admission Test 2020-2021 time & date Schedule

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National University Admission Starts 2020-2021 time & date Schedule

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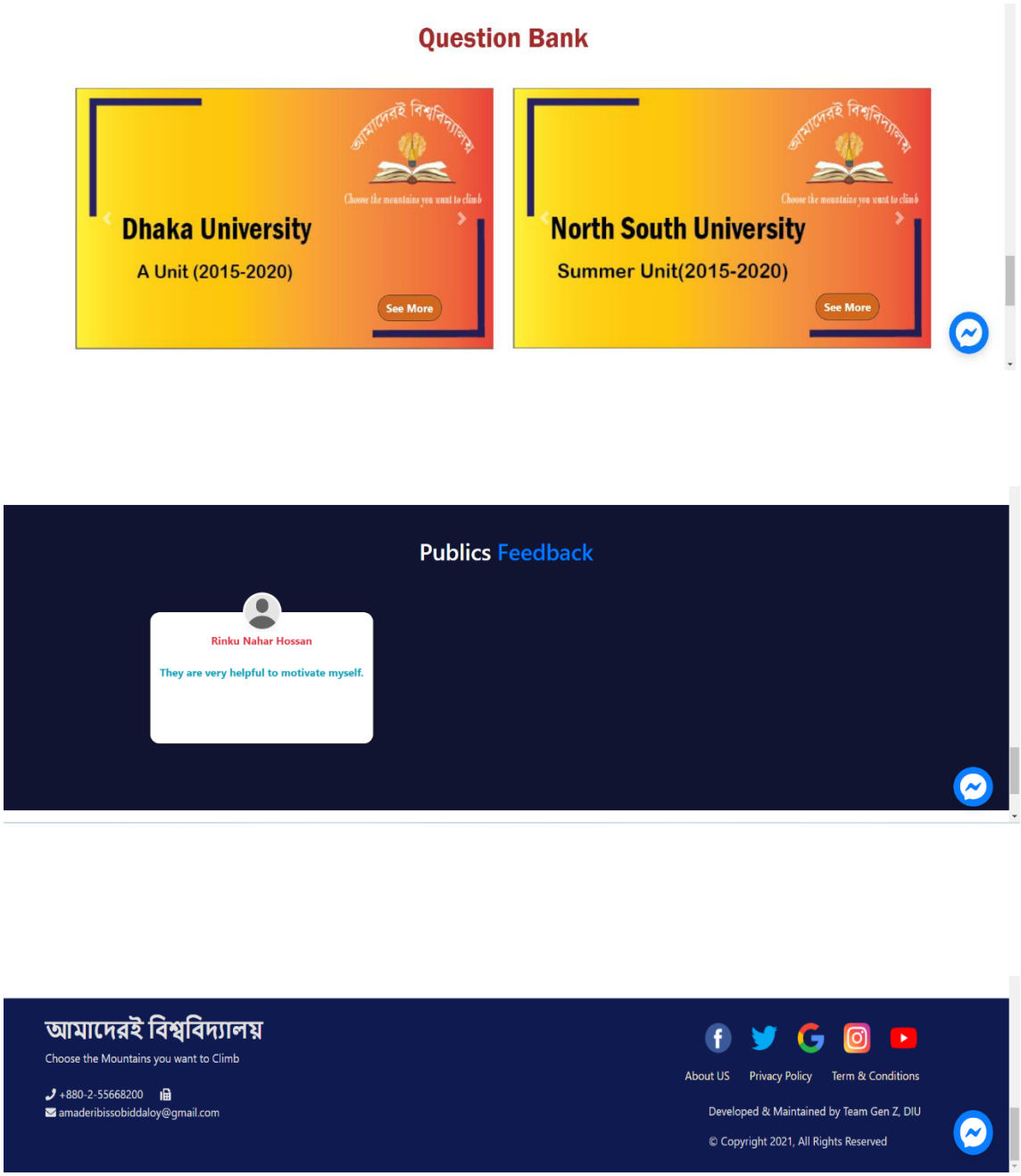

Figure 5.5: Home page of Amaderi Biswobidyaloy

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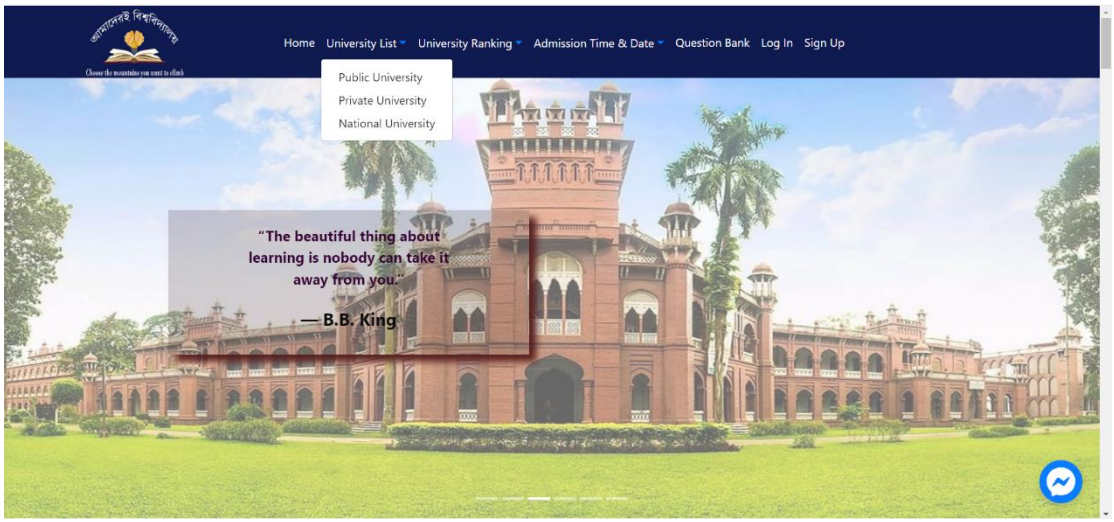

Home University List University Ranking Admission Time & Date Question Bank Log In Sign Up

Public University List

Bangladesh has 53 public universities to the bulk of higher studies students. These universities are funded by the government while managed as self-governed organizations. Dhaka division is home to thirteen public universities, among which eight are in Dhaka City. There are seven public universities in Chittagong division, six in Rajshahi division five in Khulna division, four in Mymensingh Division. Each of Rangpur division, Sylhet division & Barisal division has two. as of 2020 the University Grants Commission of Bangladesh has introduce the cluster system for students enrollment.

General Universities

SL	University	Acronym	established	Location	Division	Specialization	Ph.D Granting
01	Dhaka University	DU	1921	Dhaka	Dhaka	General	Yes
02	Rajshahi University	RU	1953	Rajshahi	Rajshahi	General	Yes
03	Chittagong University	CU	1966	Chittagong	Chittagong	General	Yes
04	Jahangirnagar University	JU	1970	Savar, Dhaka	Dhaka	General	Yes
05	Islamic University, Bangladesh	IU	1979	Kushtia	Khulna	General	Yes

Science & Technology Universities

SL	University	Acronym	established	Location	Division	Specialization	Ph.D Granting
01	Sunamganj Science and Technology University	SSTU	2020	Sunamganj	Sylhet	STEM	Yes
02	Shahjalal University of Science and Technology University	SUST	1986	Sylhet	Sylhet	STEM	Yes
03	Rangamati Science and Technology University University	RMSTU	2014	Rangamati	Chittagong	STEM	Yes
04	Patuakhali Science and Technology University University	PSTU	2000	Patuakhali	Barisal	STEM	Yes
05	Pabna University of Science And Technology	PUST	2008	Pabna	Rajshahi	STEM	Yes
06	Noakhali Science and Technology University University	NSTU	2006	Noakhali	Chittagong	STEM	Yes
07	Mawlana Bhashani Science and Technology University	MBSTU	1999	Tangail	Dhaka	STEM	Yes
08	Lakshmipur Science and Technology University	LSTU	2020	Lakshmipur	Chittagong	STEM	Yes
09	Jashore University of Science and Technology University	JUST	2007	Jessore	Khulna	STEM	Yes
10	Hajee Mohammad Danesh Science & Technology University	HSTU	1999	Dinajpur	Rangpur	STEM	Yes
11	Chandpur Science and Technology University	CSTU	2020	Chandpur	Chittagong	STEM	Yes
12	Bogura Science and Technology University	BSTU	2020	Bogura	Rajshahi	STEM	Yes

Figure 5.6: List of Public Universities

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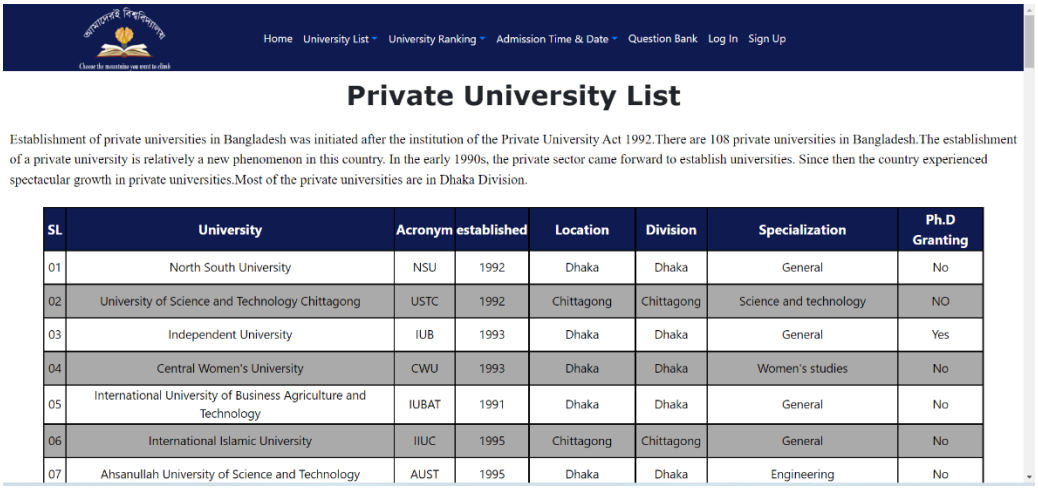
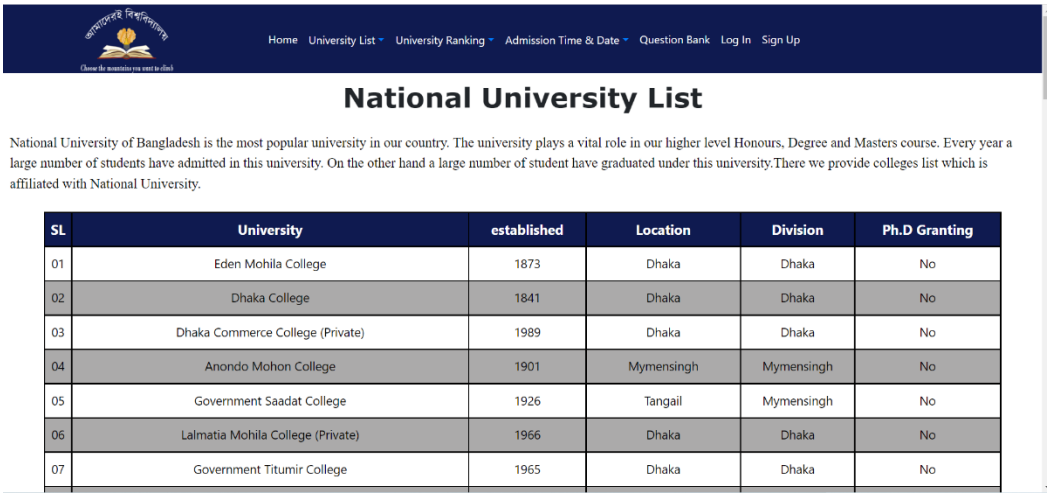


SL	University	Acronym	established	Location	Division	Specialization	Ph.D Granting
01	North South University	NSU	1992	Dhaka	Dhaka	General	No
02	University of Science and Technology Chittagong	USTC	1992	Chittagong	Chittagong	Science and technology	NO
03	Independent University	IUB	1993	Dhaka	Dhaka	General	Yes
04	Central Women's University	CWU	1993	Dhaka	Dhaka	Women's studies	No
05	International University of Business Agriculture and Technology	IUBAT	1991	Dhaka	Dhaka	General	No
06	International Islamic University	IIUC	1995	Chittagong	Chittagong	General	No
07	Ahsanullah University of Science and Technology	AUST	1995	Dhaka	Dhaka	Engineering	No

Figure 5.7: List of Private Universities



SL	University	established	Location	Division	Ph.D Granting
01	Eden Mohila College	1873	Dhaka	Dhaka	No
02	Dhaka College	1841	Dhaka	Dhaka	No
03	Dhaka Commerce College (Private)	1989	Dhaka	Dhaka	No
04	Anondo Mohon College	1901	Mymensingh	Mymensingh	No
05	Government Saadat College	1926	Tangail	Mymensingh	No
06	Lalmatia Mohila College (Private)	1966	Dhaka	Dhaka	No
07	Government Titumir College	1965	Dhaka	Dhaka	No

Figure 5.8: List of National Universities

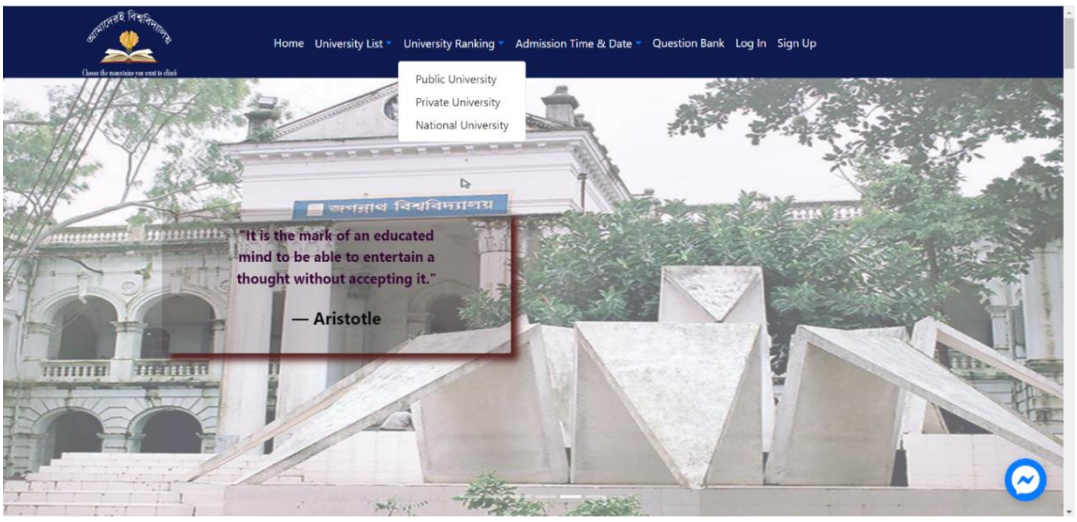


Figure 5.9: Top 10 Ranking of Universities

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Filter With Subject CSE

Rank	University Name	World Ranking
1	University Chittagong	3101
2	Bangladesh University of Engineering and Technology	1794
3	Chittagong University of Engineering and Technology	2714
4	University of Dhaka	1909
5	Jahangirnagar University	3042

Figure 5.10: Top Public Universities Ranking

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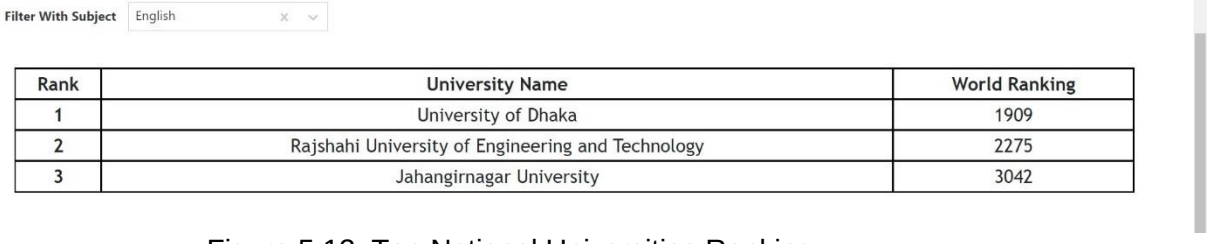
Rank	University Name	World Ranking
1	University of Asia Pacific	4612
2	North South University	3091
3	BRAC University	3039

Figure 5.11: Top Private Universities Ranking



Rank	University Name	World Ranking
1	University of Dhaka	1909
2	Rajshahi University of Engineering and Technology	2275
3	Jahangirnagar University	3042

Figure 5.12: Top National Universities Ranking

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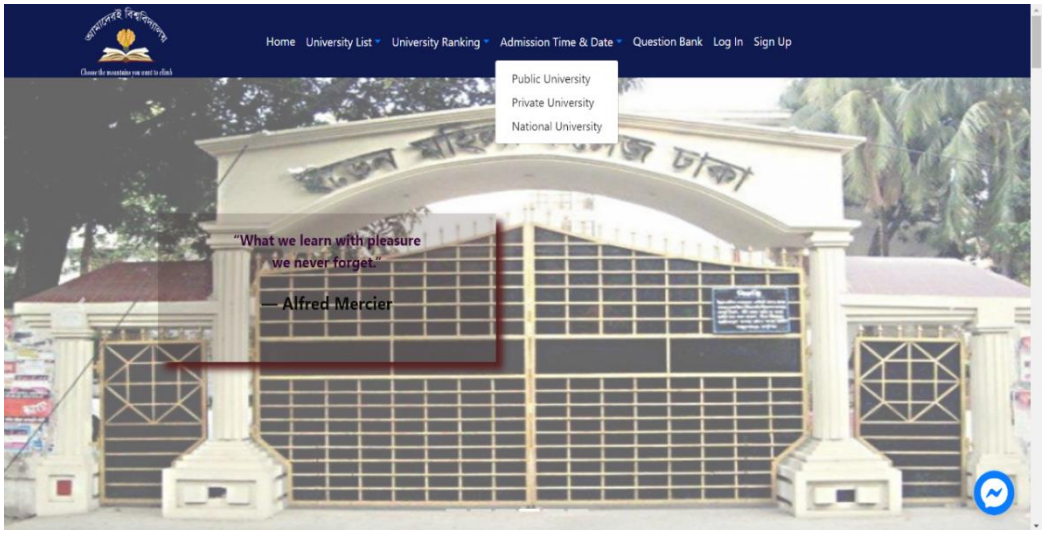
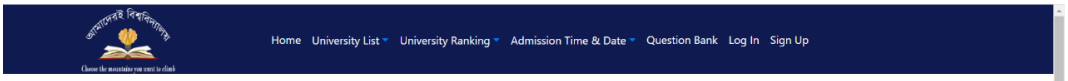


Figure 5.13: Admission Time & Date

University Name	Admission Circular	Application Starts	Application Ends	Unit	Admission Date	Admission Time
Dhaka University	2020-2021	08.03.2021	31.03.2021	A	01.10.2021	11am-12.30pm
				B	02.10.2021	11am-12.30pm
				C	22.10.2021	11am-12.30pm
				D	23.10.2021	11am-12.30pm

Figure 5.14: Admission Time & Date of Public Universities



Private Universities Admission Time & Date

University Name	Admission Circular	Application Starts	Application Ends	Subject	Admission Date	Admission Time
United International University	2020-2021	20.10.2021	22.10.2021	School of Science & Engineering	23.10.2021	11am-12pm
				School of Business & Economics	23.10.2021	11am-12pm
				School of Humanities and Social Sciences	23.10.2021	11am-12pm

Figure 5.15: Admission Time & Date of Private Universities

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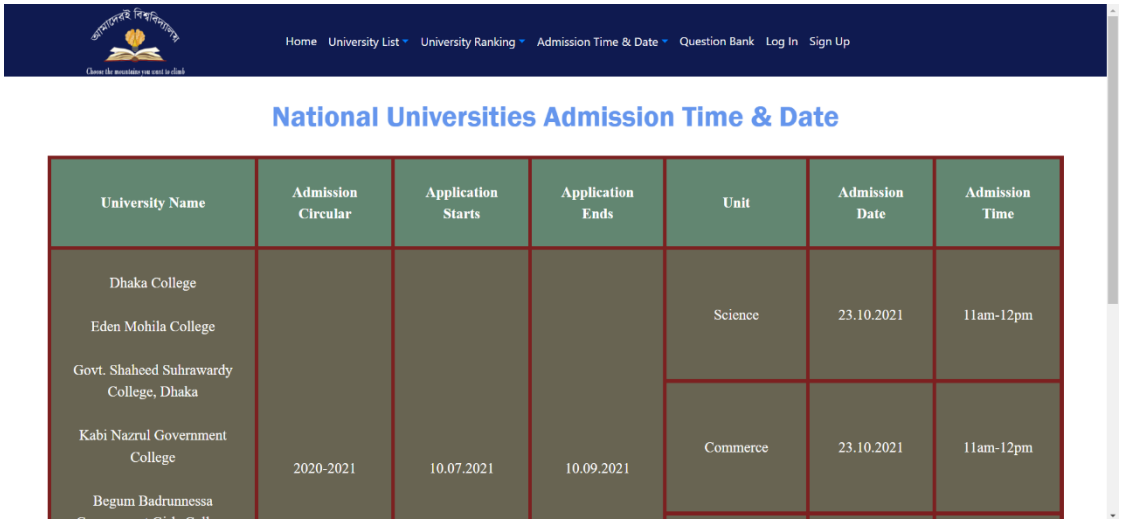

Figure 5.16: Admission Time & Date of National Universities

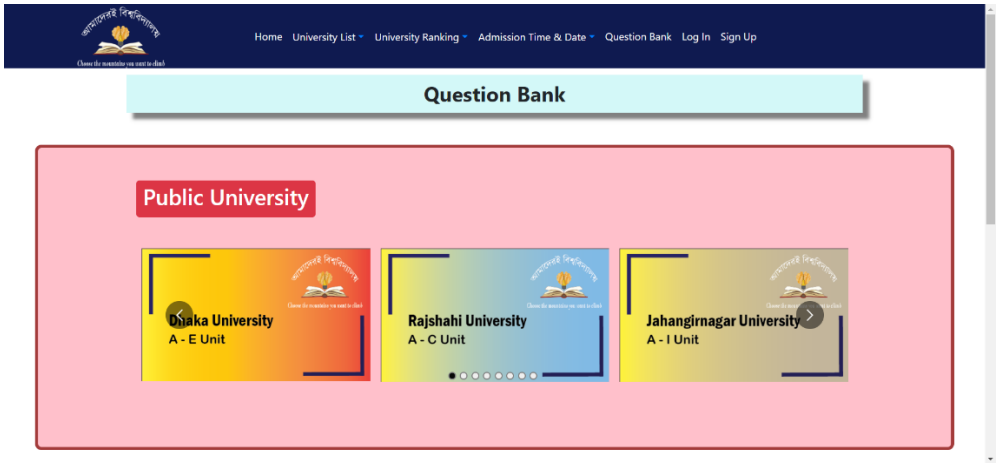

Figure 5.17: Question Bank of Public Universities

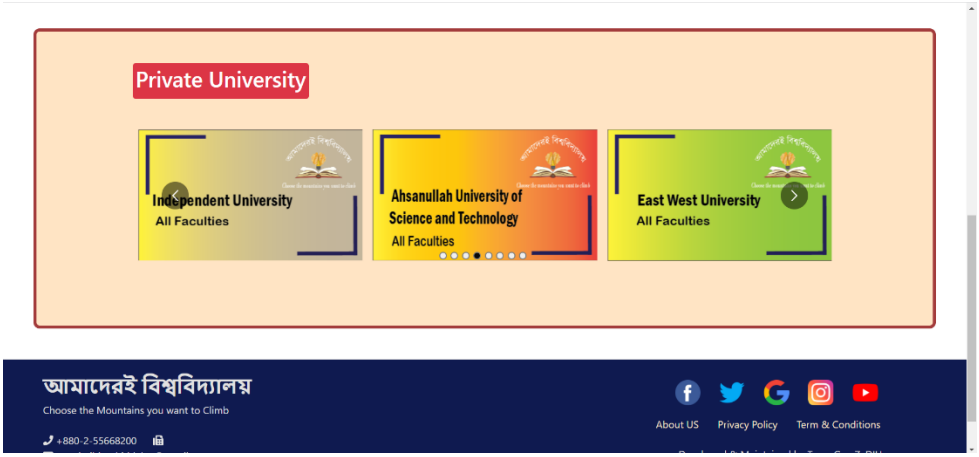

Figure 5.18: Question Bank of Private Universities

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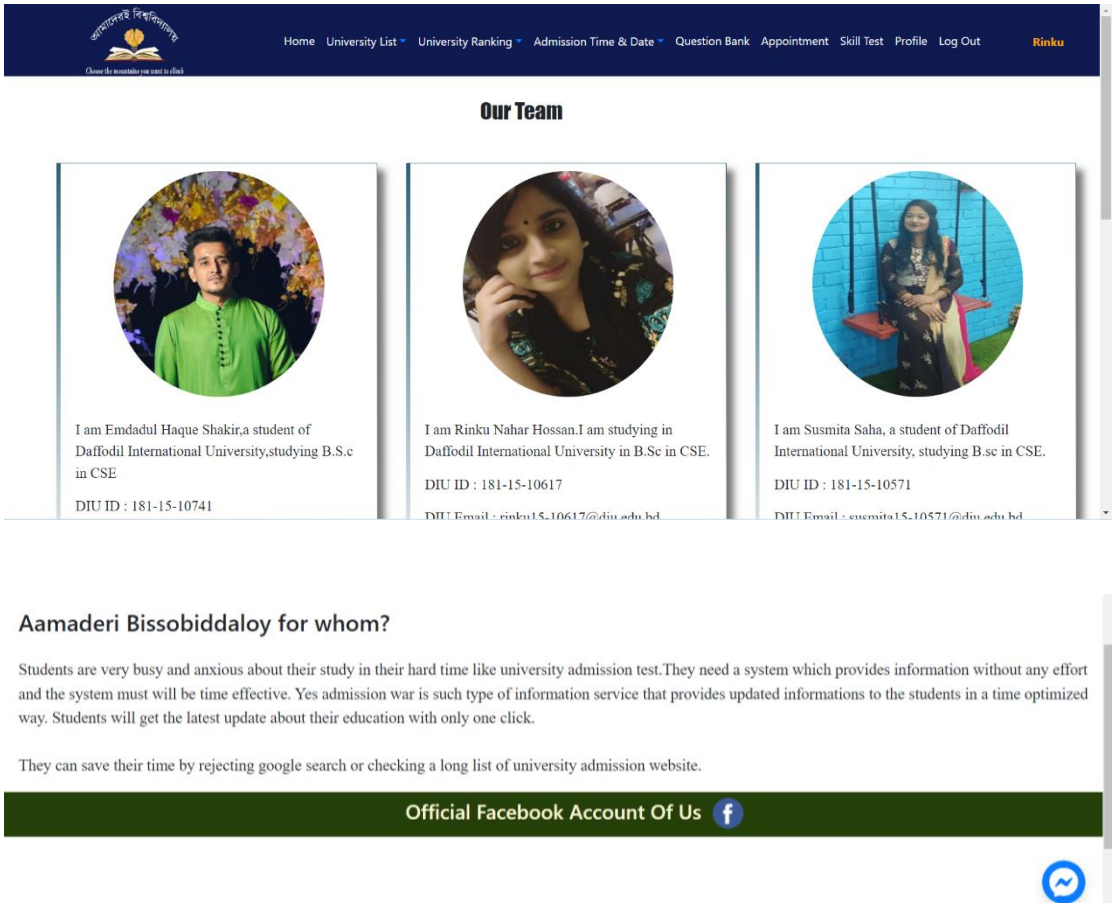
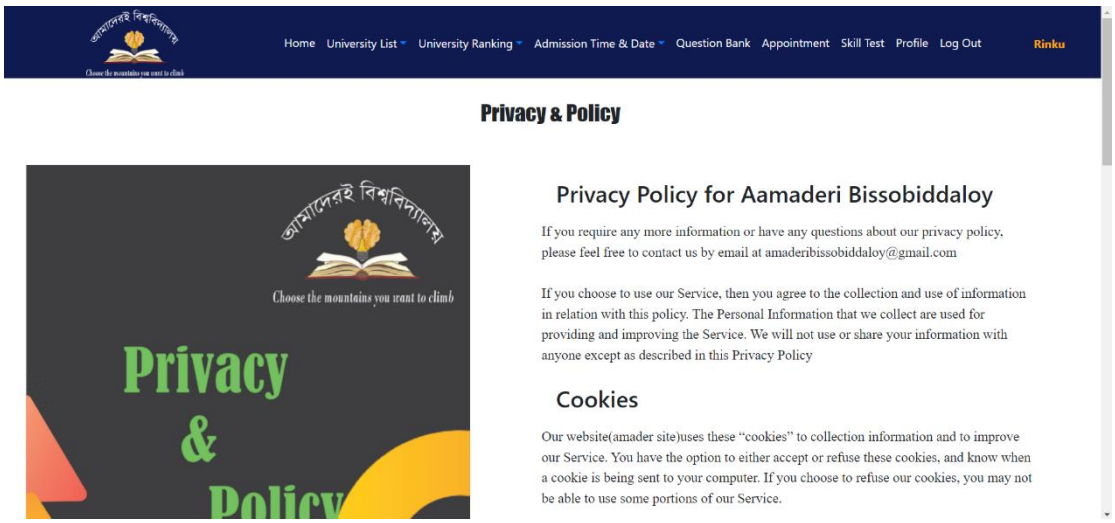


Figure 5.19: Our team of Aamderi Biswobidyaloy



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Security

We value your trust in providing us your Personal Information, thus we are striving to use commercially acceptable means of protecting it. But remember that no method of transmission over the internet, or method of electronic storage is 100% secure and reliable, and we cannot guarantee its absolute security.

Consent

By using our website, you hereby consent to our privacy policy and agree to its terms.

Update

This Privacy Policy was last updated on: Wednesday, October 13, 2021.

Changes to This Privacy Policy

We may update our Privacy Policy from time to time. Thus, we advise you to review this page periodically for any changes. We will notify you of any changes by posting the new Privacy Policy on this page. These changes are effective immediately, after they are posted on this page.

Confession:

All the information presented here is collected from the internet by . Since no human is above error, we may have some unintentional error. We sincerely apologize for all the error and also state th re not responsible for any misinformation obtained from it and the error visible to you can be sent to us via the following mail (amader mail) .

Figure 5.20: Privacy & Policy of Aamderi Biswobidyaloy

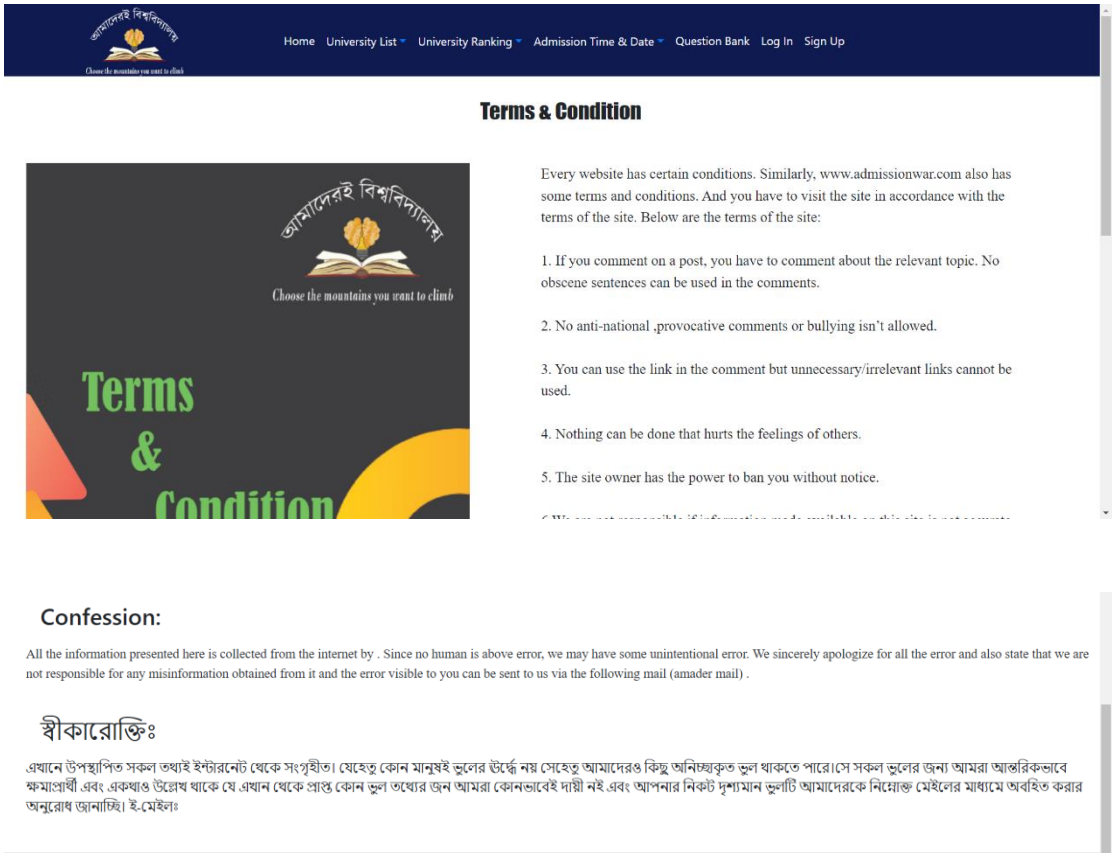

Figure 5.21: Terms & Conditions of Aamderi Biswobidyaloy

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5.2.2 Registered User

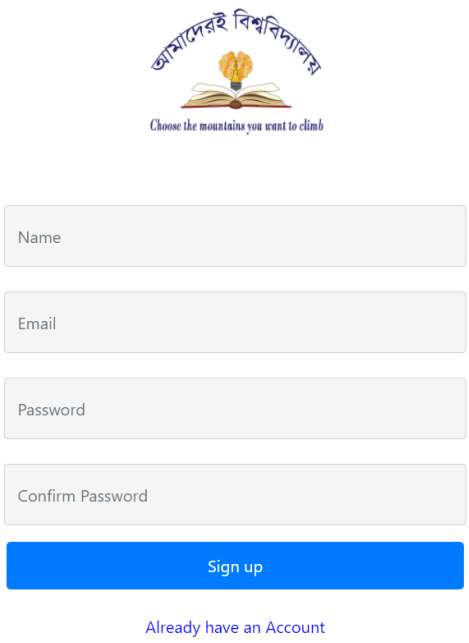

Figure 5.22: Registration Form

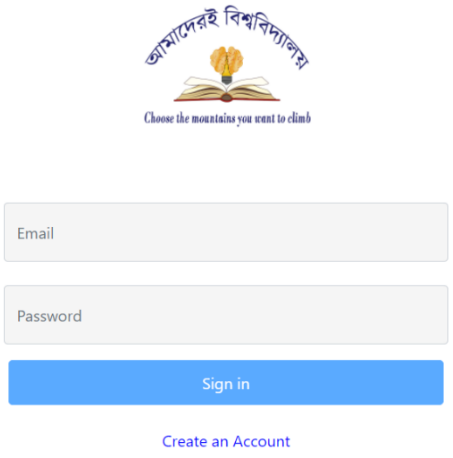

Figure 5.23: Log-In Form

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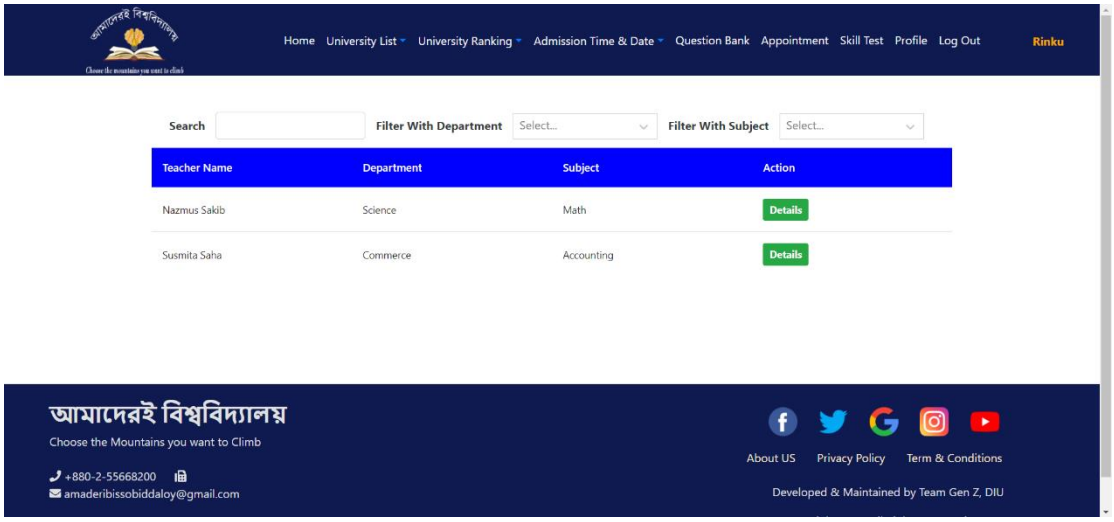

Figure 5.24: Appointment System for User

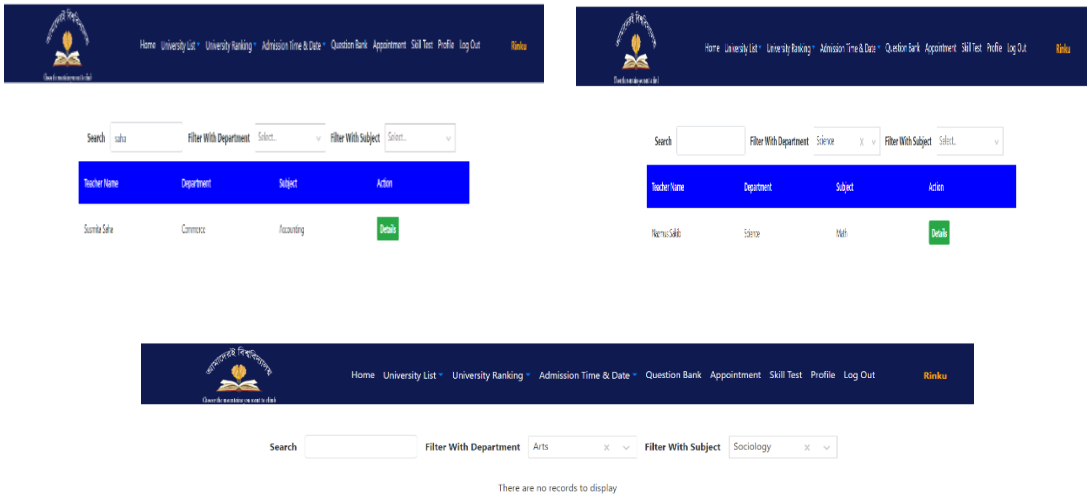

Figure 5.25: Make Appointment by Searching

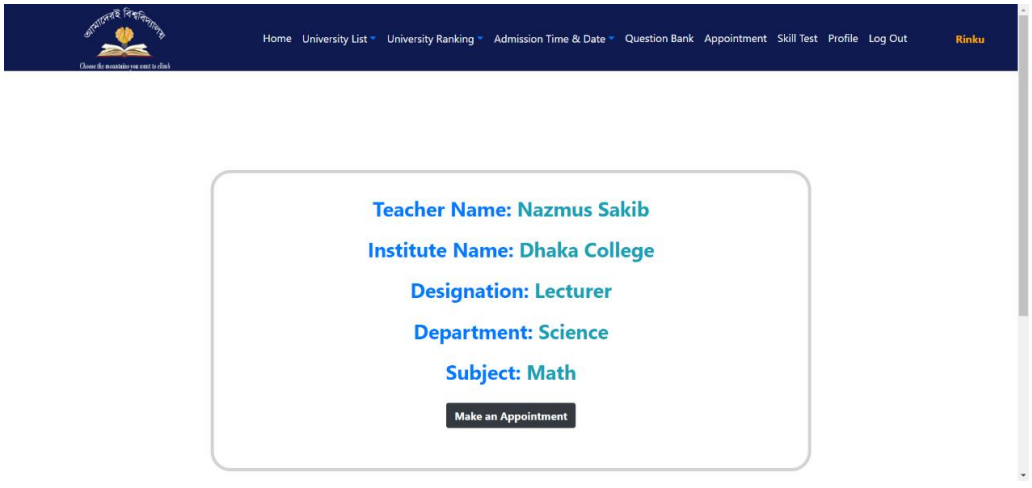

Figure 5.26: Details of Teacher

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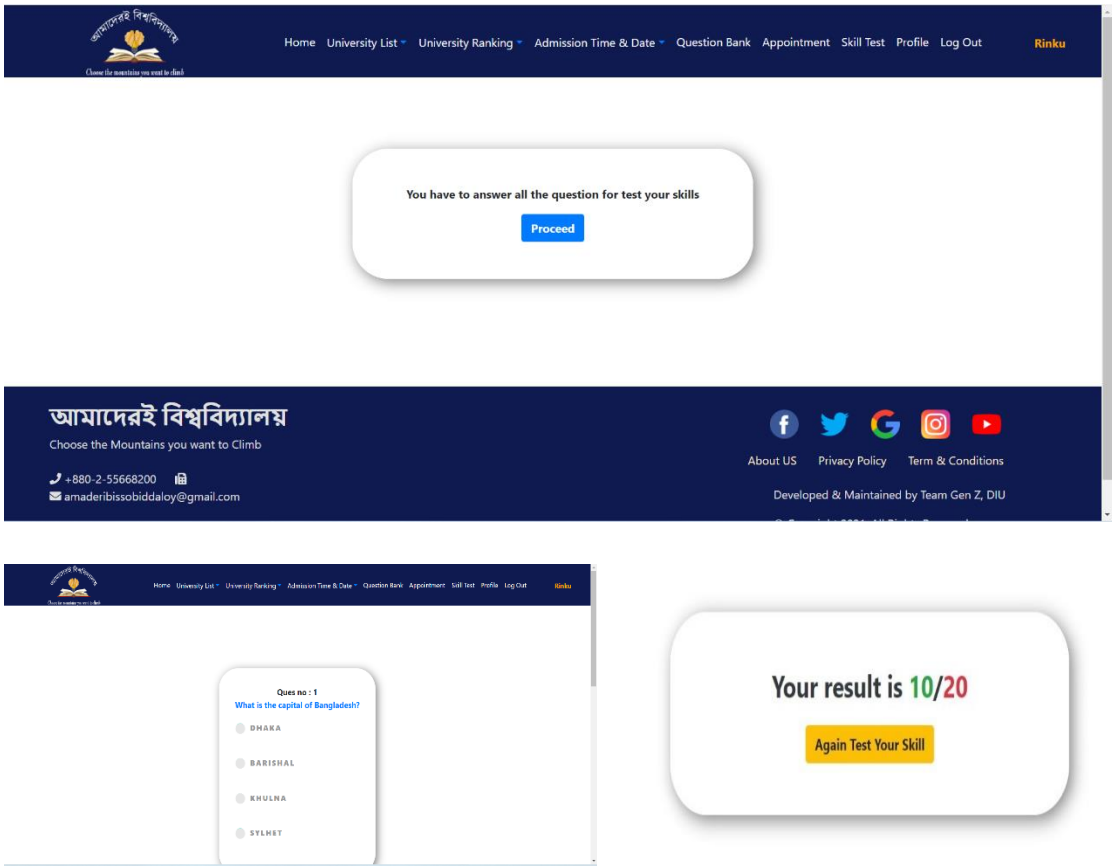


Figure 5.27: Skill Test

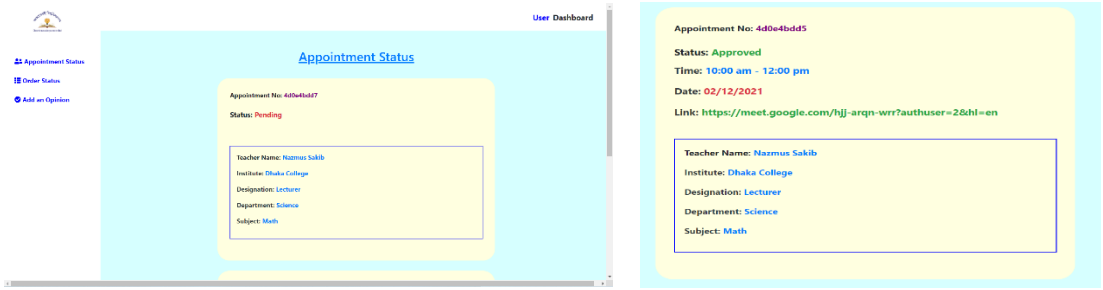
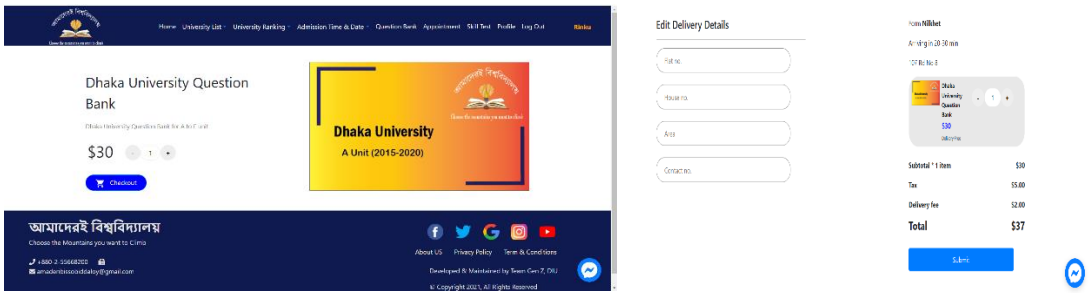


Figure 5.28: Appointment Status of User



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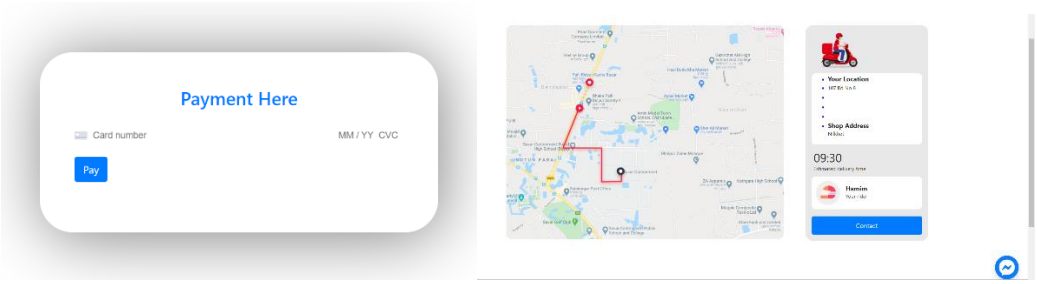

Figure 5.29: Purchasing System of User

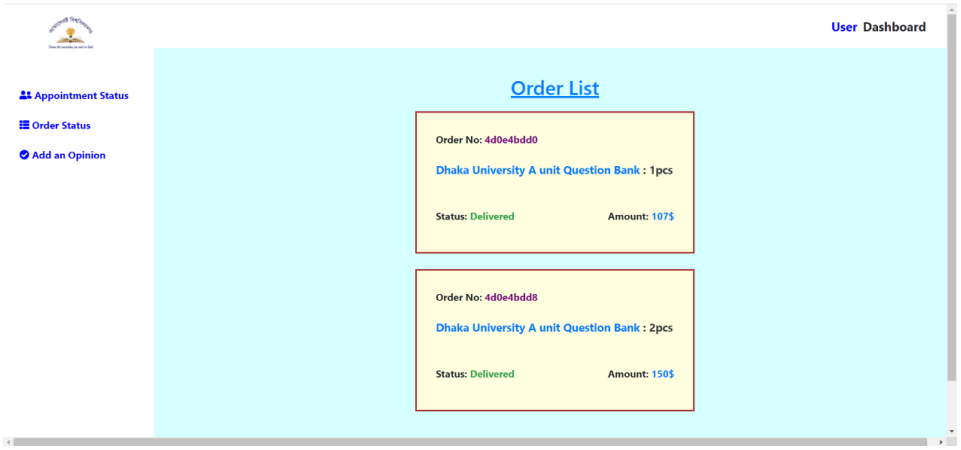

Figure 5.30: Order List of User Profile

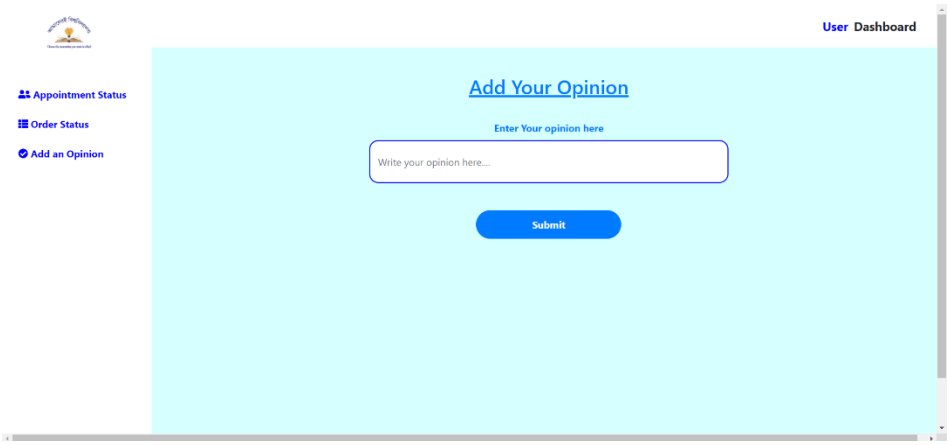

Figure 5.31: User Opinion

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5.2.3 Admin Panel

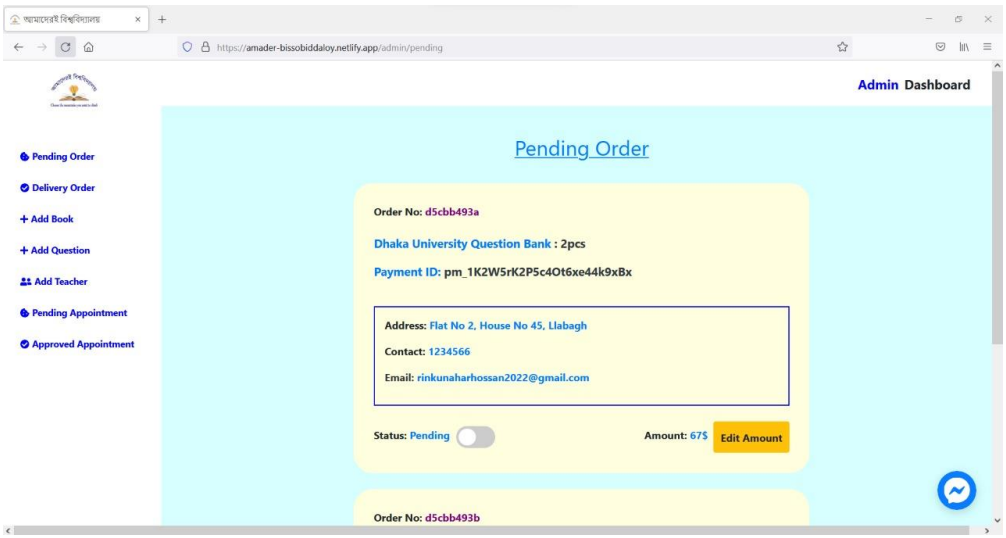

Figure 5.32: Pending Order

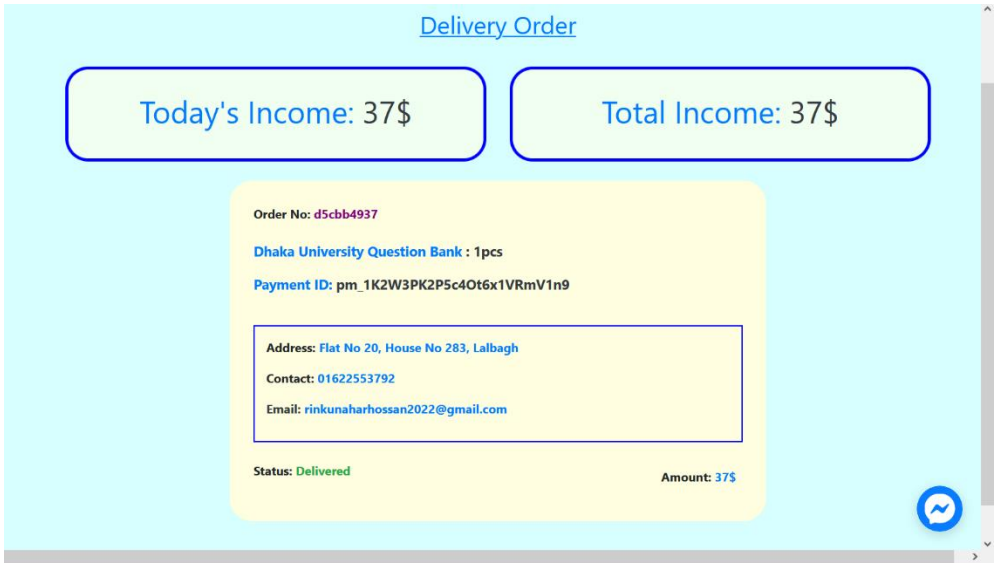

Figure 5.33: Delivery Order with Payment

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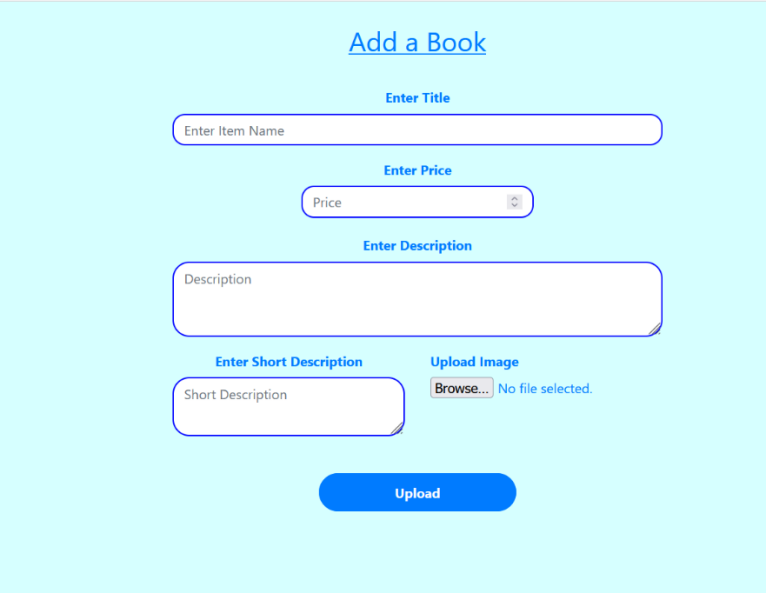

Figure 5.34: Add a Book

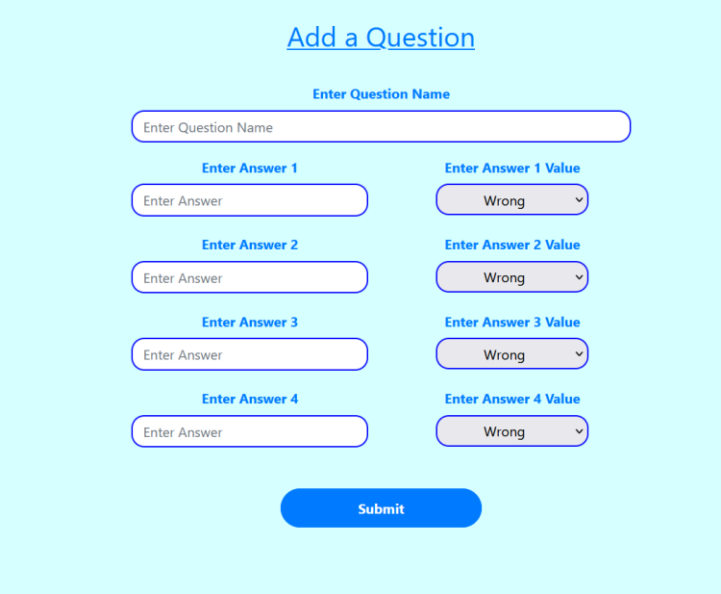

Figure 5.35: Add a Question

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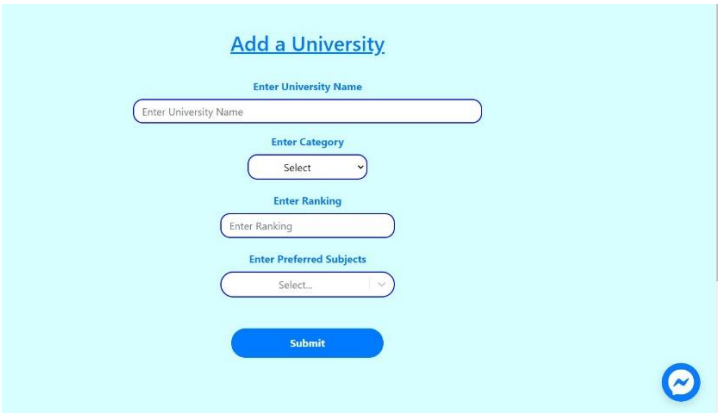

Figure 3.36: Add a university

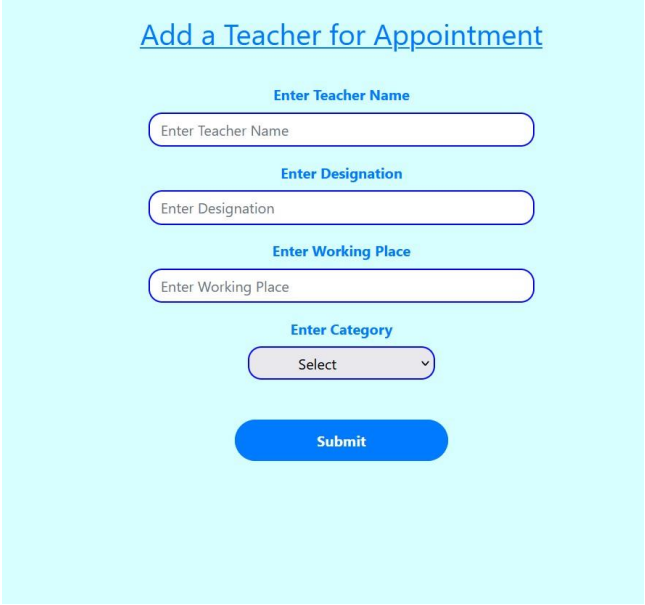

Figure 5.37: Add a Teacher for Appointment

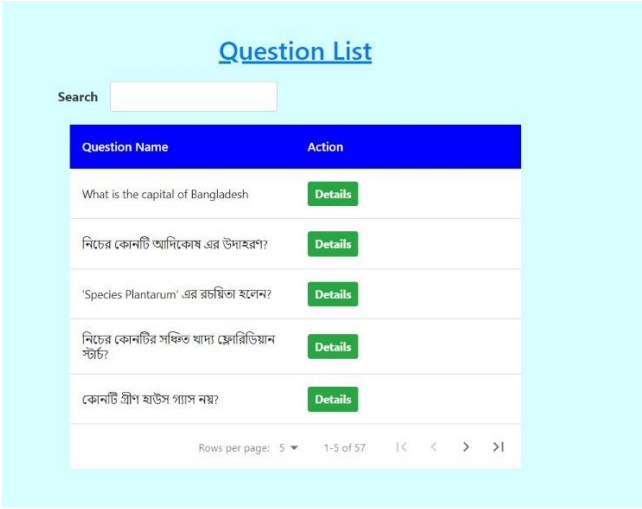

Figure 5.38: View Question list

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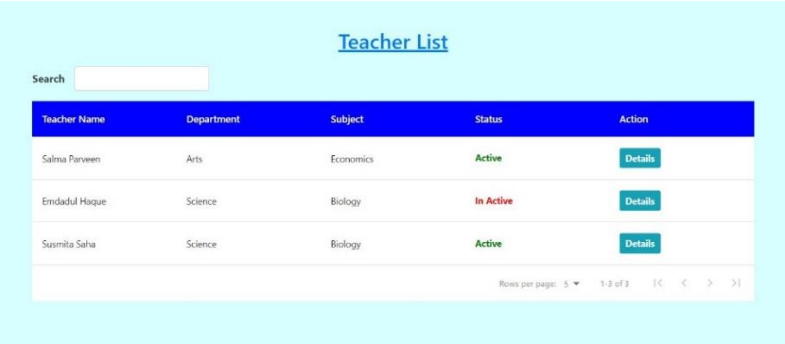

Figure 5.39: View Teacher list

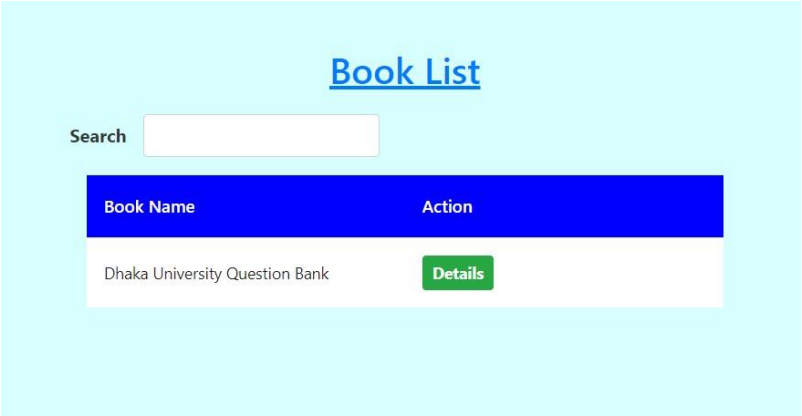

Figure 5.40: View Book list

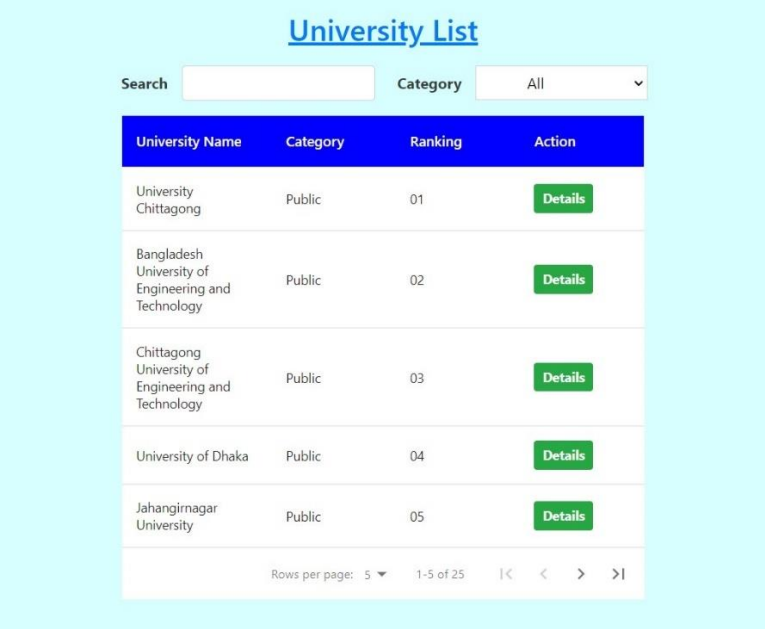

Figure 5.41: View University list

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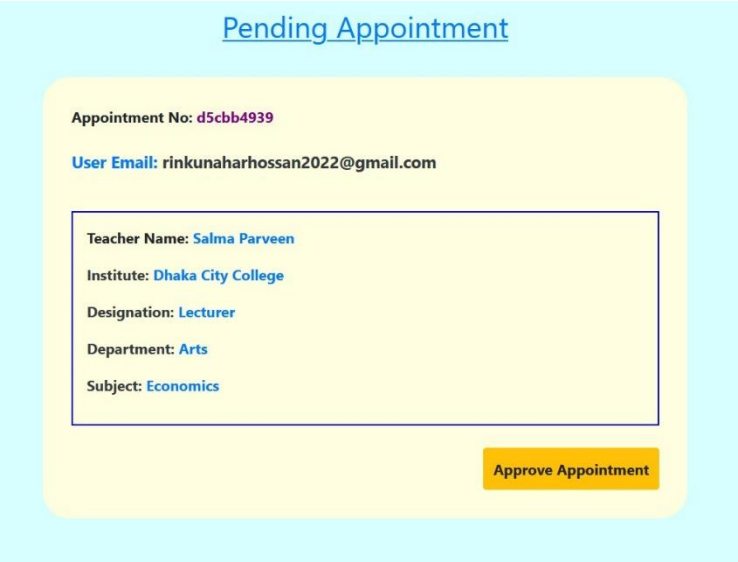

Figure 5.42: Pending Appointment

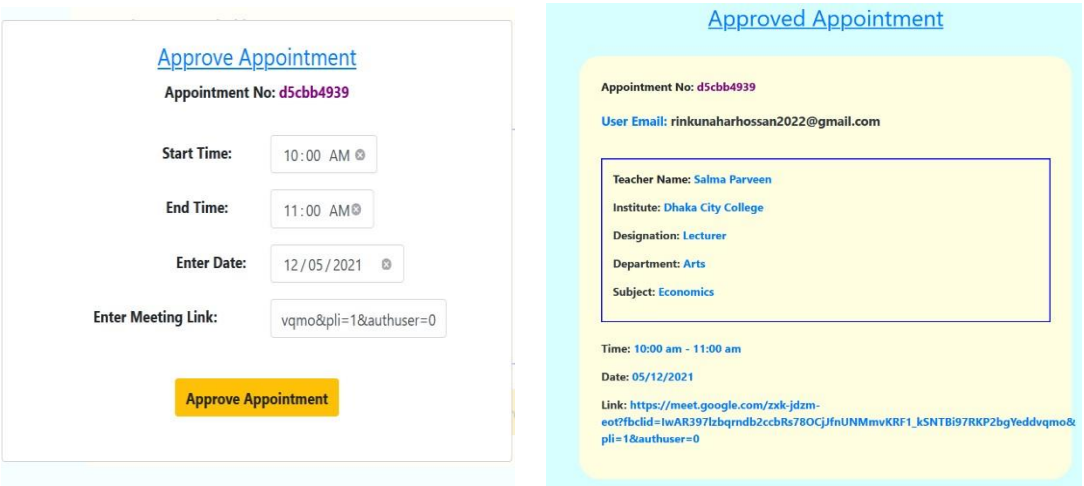

Figure 5.43: Approve Appointment

5.3 Implementation of Interactions

In this project, we make our system fascinating and progressive by interaction. We have made our website responsive for advance user experience. For this reason, we have implemented some identical features in our project that's why our system is very much user friendly.

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5.4 Testing Implementation

Since we have created a website, website testing is very necessary before use. Website testing is inclosing website for dynamic bugs before its formed operative and approachable to ordinary public. Website testing that is subsidence for functionality, indemnity, congruity and performance of the website [25]. So, we are demonstrating testing result for our website.

Table 5.1: TEST CASE 01

Test Case	Test-Input	Desired Outcome	Acquired Outcome	Conclusion	Tested Date
Internet Browsing	Various browser & windows version up to 11	Successfully enter in the website	Enter Successfully	Pass	08-11-2021
Responsive	Various Devices	It looks exactly the way we design	Fit for all devices	Pass	08-11-2021
Landscape or portrait mode	Tested on landscape or portrait mode	Successfully, fit for all modes	Fit for all modes	Pass	08-11-2021

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Table 5.2: TEST CASE 02

Test Case	Test-Input	Desired Outcome	Acquired Outcome	Conclusion	Tested Date
Visit Homepage	Browse our website	Successfully Visit the homepage	Successfully Visit the homepage	Pass	08-11-2021
Visit university list	Browse our Website and go to university list	Successfully visit the university list	Successfully visit the university list	Pass	08-11-2021
Visit University Ranking	Browse our Website and go to university ranking	Successfully visit the University Ranking	Successfully visit the University Ranking	Pass	08-11-2021
Visit Admission time & date	Browse our Website and go to admission time & date	Successfully visit admission time & date	Successfully visit admission time & date	Pass	08-11-2021
Access Question Bank	Browse our Website and go to question bank	Successfully access the question bank	Successfully access the question bank	Pass	08-11-2021
Communication	Communicate through messenger	Successfully send	Successfully send	Pass	23-11-2021

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Table 5.3: TEST CASE 03

Test Case	Test-Input	Desired Outcome	Acquired Outcome	Conclusion	Tested Date
Registration	Required user information	Successfully registered	Successfully registered	Pass	09-11-2021
Log-in	Mail and password	Successfully Logged-in	Successfully Logged-in	Pass	11-11-2021
Mail	Invalid mail	Warning With Invalid mail	Show Wrong mail	Pass	11-11-2021
Password	Invalid Password	Warning With Invalid Password	Show wrong password	Pass	12-11-2021
Already Registered	Same information which is given by user in the registration time	Show already registered	Showing Already registered	Pass	12-11-2021
Counseling	Make appointment	Approved or pending	Showing the status	Pass	12-11-2021
Teacher Details	Search desired teacher	Successfully show details about the teacher	Successfully show details about the teacher	Pass	
Order book	Go to cart	Purchase Successfully	Purchase Successfully	Pass	13-11-2021

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Order Status	Go to profile	Successfully show pending or delivered	Successfully show pending or delivered	Pass	13-11-2021
Add an opinion	Go to profile	Successfully entered opinion	Successfully entered opinion	Pass	11-11-201
Skill Test	Give answer to the given question	Successfully showing the result	Successfully showing the result	Pass	12-11-2021

Table 5.4: TEST CASE 04

Test Case	Test-Input	Desired Outcome	Acquired Outcome	Conclusion	Tested Date
Pending Order	User request for books	Successfully show the request	Successfully show the request	Pass	19-11-2021
Deliver Order	Press deliver button	Successfully show the delivered status to the user	Successfully show the delivered status to the user	Pass	20-11-2021
Add Book	Insert new book information	Successfully add books to the site	Successfully add books to the site	Pass	21-11-2021
Add Question	Insert a set of questions	Successfully add questions to the site	Successfully add questions to the site	Pass	21-11-2021

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Add Teacher	Insert new teacher information	Successfully add teacher information	Successfully add teacher information	Pass	22-11-2021
Pending Appointment	User request for counseling	Successfully show the request	Successfully show the request	Pass	23-11-2021
Approved Appointment	Press approve button	Successfully show the appointment status to the user	Successfully show the appointment status to the user	Pass	28-11-2021

5.5 Test Results and Reports

Test report is very important to manifest any test result in a discipline scheme that accommodate calculating the test results rapidly. We have tested some of the situation that we already given above.

Now, we demonstrate results of our project:

- User friendly
- Invulnerable website
- Updated information
- Proper guidance
- Minimize waste of time
- Provides all universities information
- Convincing website
- Apprehensible interface
- Easy to communicate
- Easy to learn
- Easy to purchase
- Provides question bank
- Provides admission time & date

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CHAPTER 6
Conclusion and Future Scope

6.1 Discussion and Conclusion

Finally, we are able to build our desired website properly. To us it was like a flam come true. Where Bangladesh was a few years ago, it is no longer in that position in terms of technology. Now, everyone is moving forward in tandem with the age through internet. After HSC, most of the students do not understand exactly how they will study for the admission test. Moreover, they do not understand that where they should be admitted for any subject in any university. And for any particular university, we have to browse the internet separately every time. In that case we providing all the necessary information for the students in one platform through our website. Also, for the last two years it has been very difficult for corona pandemic to go out and do everything. So, we have ensured that the students can buy the books they need from home. In one word we have made little effort to ensure that students time is not wasted in any way and so that they get a proper guideline from any part of the country.

6.2 Scope for Further Development

- Our vision is to make our website into mobile application for both android application and IOS.
- In future we will add informations of all admission coaching centers in Bangladesh and if possible, we will try to provide services like admission coaching centers through online platform
- In future we will add job circular and job portal
- We will add all the necessary information for BCS exam
- In future, for registered user when we will update any kind of information immediately user will get notification through their mail.

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Appendix

Sample code:

Connecting to the Database

```
const uri
= mongodb+srv://${process.env.DB_USER}:${process.env.DB_PASS}@cluster0.ow
4tc.mongodb.net/${process.env.DB_NAME}?retryWrites=true&w=majority;

const client = new MongoClient(uri, { useNewUrlParser: true, useUnifiedTopology:
true });
client.connect(err => {
   const orderCollection = client.db("amaderiBissobiddaloy").collection("allOrder");
   const itemCollection = client.db("amaderiBissobiddaloy").collection("allBook");
   const questionCollection =
client.db("amaderiBissobiddaloy").collection("allQuestion");
   const teacherCollection =
client.db("amaderiBissobiddaloy").collection("allTeacher");
   const opinionCollection =
client.db("amaderiBissobiddaloy").collection("allOpinion");
   const appointmentCollection =
client.db("amaderiBissobiddaloy").collection("allAppointment");
```

Update Order

```
app.patch('/updateOrder/:id', (req, res) => {
      orderCollection.updateOne({ _id: ObjectId(req.params.id) },
         {
            $set: {
               finalData: req.body
            },
         })
         .then(result => {
            res.send(result.matchedCount > 0);
         })
   })

   app.patch('/updateAmount/:id', (req, res) => {
      orderCollection.updateOne({ _id: ObjectId(req.params.id) },
         {
            $set: {
               finalData: req.body
            },
         })
         .then(result => {
            res.send(result.matchedCount > 0);
         })
   })
```


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For Adding Books

```
app.post('/addItem', (req, res) => {
        const file = req.files.file;
        const image = req.files.file.name;
        const title = req.body.title;
        const price = req.body.price;
        const description = req.body.description;
        const shortDescription = req.body.shortDescription;

        file.mv(`${__dirname}/item/${file.name}`,err=>{
            if(err){
                return res.status(500).send({msg:'Failed to upload Image'});
            }
        })

        itemCollection.insertOne({ title, price, description, shortDescription, image })
            .then(result => {
                res.send(result.insertedCount > 0);
            })
    })
app.get('/items', (req, res) => {
        itemCollection.find({})
            .toArray((err, documents) => {
                res.send(documents);
            })
    })
```

For Question

```
app.post('/addQuestion', (req, res) => {
        const data = req.body;
        // console.log(req)
        questionCollection.insertOne({ data })
            .then(result => {
                res.send(result.insertedCount > 0);
            })
    })

    app.get('/questions', (req, res) => {
        questionCollection.find({})
            .toArray((err, documents) => {
                res.send(documents);
            })
    })
```


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For Teacher

```
app.post('/addTeacher', (req, res) => {
        // const data = req.body
        const category = req.body.category;
        const designation = req.body.designation;
        const status = req.body.status;
        const subject = req.body.subject;
        const teacherName = req.body.teacherName;
        const workingPlace = req.body.workingPlace;
        // console.log(req)
        teacherCollection.insertOne({ category,
designation,status,subject,teacherName,workingPlace})
            .then(result => {
                res.send(result.insertedCount > 0);
            })
    })


    app.get('/teachers', (req, res) => {
        teacherCollection.find({})
            .toArray((err, documents) => {
                res.send(documents);
            })
    })
    app.get('/teacher/:id', (req, res) => {
        teacherCollection.find({ _id: ObjectId(req.params.id) })
            .toArray((err, documents) => {
                res.send(documents[0]);
            })
    })


    //for opinion
    app.post('/addOpinion', (req, res) => {
        const data = req.body;
        // console.log(req)
        opinionCollection.insertOne({ data })
            .then(result => {
                res.send(result.insertedCount > 0);
            })
    })

    app.get('/opinions', (req, res) => {
        opinionCollection.find({})
            .toArray((err, documents) => {
                res.send(documents);
            })
    })
```


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For Appointment

```
app.post('/addAppointment', (req, res) => {
        // const data = req.body
        const email = req.body.email;
        const teacher = req.body.teacher;
        const status = req.body.status;
        // console.log(req)
        const approvedData = {};
        appointmentCollection.insertOne({email,teacher,status,approvedData})
            .then(result => {
                res.send(result.insertedCount > 0);
            })
    })

    app.get('/appointments', (req, res) => {
        appointmentCollection.find({})
            .toArray((err, documents) => {
                res.send(documents);
            })
    })
    app.patch('/updateAppointment/:id', (req, res) => {
        appointmentCollection.updateOne({ _id: ObjectId(req.params.id) },
            {
                $set: {
                    email :req.body.email,
                    teacher: req.body.teacher,
                    status: req.body.status,
                    // console.log(req)
                    approvedData: req.body.approvedData
                },
            })
            .then(result => {
                res.send(result.matchedCount > 0);
            })
    })
});


app.listen(process.env.PORT || port)
```


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