

PRIVATE UNIVERSITY ADMISSION ASSISTANT BY

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

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APPROVAL


This Project/internship titled “Private University admission assistant”, submitted by Neel Ratan Nath, ID: 152-15-5661 and Md. Foiz Ahmed, ID: 152-15-505 and Urmila Rajbongshi, ID: 152-15-6128 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 03 May 2019.

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DECLARATION

We hereby declare that, this project has been done by us under the supervision of **Saiful Islam, 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.

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ABSTRACT

The project is all about Private university admission system. It is made only for private university in Bangladesh. It contains information and admission system of private university in Bangladesh. In our country there are 103 private University of UGC approved. Among them we worked for first 65 university information by ranking in this system. In this system 2 level of users and they are admin and student. The admin level encompassed the other level of user. The system is stored information and admission system of private university in Bangladesh which is saved in the database. In this system there will be an admin who add, delete and modified the database. User can get a suitable university for him/her by providing his/her academic result. Student can know about the credit and tuition fess of the subject. They can get a map view and other information of the selected University. By providing the academic result a student can know about the information of the subject which is suitable for him/her.

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CHAPTER 1

INTRODUCTION

1.1 Introduction

Education is very significant part of our life. In our country admission into a university is a challenging matter. After completing Higher secondary certificate exam, a student faced so many problems in admission. Student who can't get chance in public university have fall in frustration. After more thought when they decide to admit himself in a private university, they became confused in case of subject and university choosing. Then they collect information from the university websites and so many other ways but can't get a rich information in subject choosing.

It is a hard task to collect requirement of the preferable subject. By checking websites of the university and phone call is hard and time consuming process.

So to eradicate these problems we have developed and web based application named V-info.

Our main goal is to provide such a system where student can get suitable subject or his/or preferable subject information and tuition fees and the university all over information.

1.2 Motivation

With the help of the technology our life has been easier than before. To collect admission requirement, student need to search the websites of the university or visiting the university. But collecting admission information is a challenging matter. Sometimes student can't know about the credit and requirement of the subject properly.

Admission into a private university student faces many problems. Some of are –

- The information about admission system of a private university can't collect properly.
- To know about the requirement of the suitable subject is a challenge.

1.3 Objectives

- Our main goal is to make a web based android app by which by student get help in admission into a private university.
- A student can get him/her preferable subject details by giving his/her result and study medium.
- Student can get details of all private university of Bangladesh in this web based app.
- This is helpful to find a suitable subject by checking his/her requirement.
- It is hoped that the system will bring solutions to student
- whose are interested to admit into a private university

1.4 Expected Outcome

The expected outcome of this project is given below:

- It will be an easy way to collect private university information.
- There will be a proper information of a private university.
- Subject information will get properly from this system.
- In the proposed system, there will not be any redundant information anywhere.
- The system should be easy to use.
- Any type of information will be available when the user required.

1.5 Report Layout

The project report contains six chapter. Summarization is given below:

- The motivation, objectives and expected outcome have been discussed in details in chapter one.
- The background of our project which is covered with related works of the web based app and discussion of the problems and challenges of the system is discussed in chapter two.

- Business Process Modeling, Requirement Collection and Analysis, Use Case Modeling and Description, Logical Data Model, Design Requirements are manifested in chapter three named “Requirement Specifications”.
- Chapter four will contain design specification. Front-end design, Back-end design, Interaction Design UX & Implementation requirements are illustrated here.
- Implementation of Database, Implementation of Front-end Design, Implementation of interactions, testing implementation, Test results and reports are described in chapter five.
- Finally, chapter six contains conclusion & future scope of the development.

CHAPTER 2

BACKGROUND

2.1 Introduction

Planning to admission into a private university in Bangladesh is challenging matter.

Student whose can't get chance in public university, there are two option for them. One of the option is national University. But national university in Bangladesh can't provide engineering subject. Professional bachelor degree is not available in national university. The other option is private university.

But admission into a private university student faced some problem. To know about the subject details and student had to search it on google or phone call or visiting in the university.

To know about the suitable subject list which he/she deserves by his/her requirement is another problem. Sometimes the admission information is not correct in internet

2.2 Related Works

When we choose this idea of this project, we heard about a site in Germany, which is developed for foreign student. It is only useful for foreign student in Germany. The website daad [ref1-daad.de] is useful for foreign credit transfer and foreign student admission system.

2.3 Comparative Studies

www.daad.de site is useful for Germany but there are no similar sites in Bangladesh.

In the present there are only one way to know about the admission system in private university in Bangladesh by searching in the internet.

So we build a simple and user friendly web based application for the perspective of Bangladesh. The main goal of our project is to build a system to collect the admission information of private university in Bangladesh.

2.4 Scope of the Problem

It is totally a new system for students. Higher secondary certificate passed students are faced many problems in admission into a suitable private university. Similarly, we faced many problems while making the system.

The scopes of the problems are given below:

2.4.1 An easy system for Students

The web based application is designed for making the admission system in private university easier for students. So it is very important to make this system user friendly.

2.4.2 Information Gathering

We need valid information of private university. Admission into a preferable subject of a student is depend on the valid admission information and subject requirement.

2.5 Challenges

In every environment of our life there are challenges but we are to overcome this to make new things which is good for us. The challenges we have faced to complete this system are given below:

2.5.1 User friendly UI

A system is better in all way when the system has better UI. We tried to keep the system simple and easy.

2.5.2 Find out the problem

We tried our best to find out the bugs and missing features that should have been in this system.

2.5.2 Database management

We faced some problems which database management system we will use to actualize the web based application.

2.5.3 Time maintaining

It was a very difficult parts to maintaining the time. We always kept in our mind about the project deadline.

CHAPTER 3

REQUIREMENT SPECIFICATION

3.1 Business Process Model

Here is the BPM for the search. User can search the result by requirement.

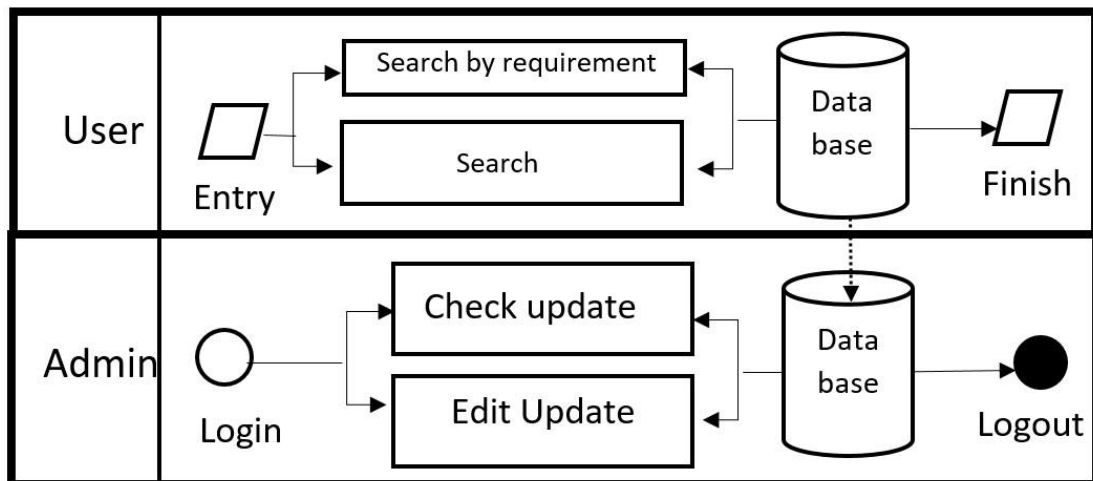


Figure-1: BPM for search result

User can get a map view of university from this system

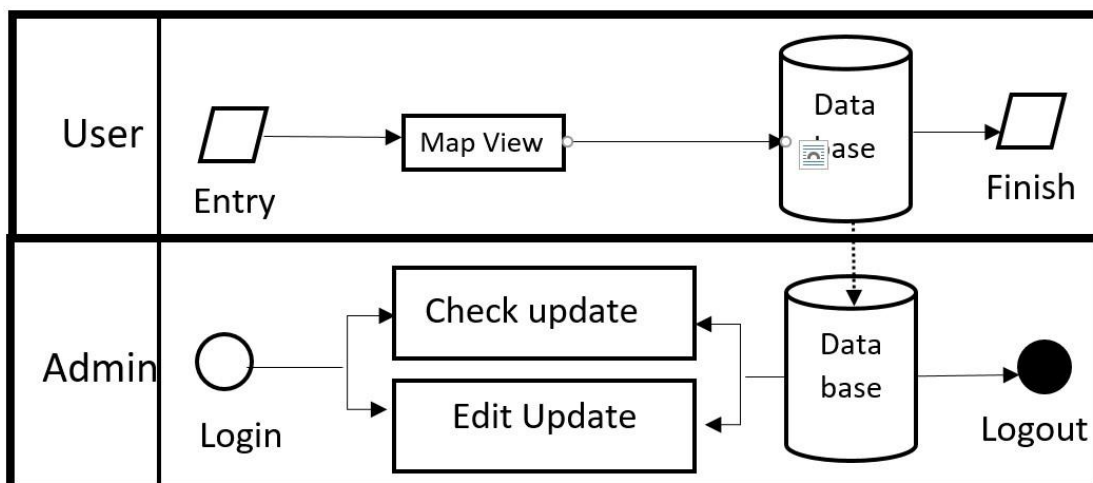


Figure-2: BPM for map view

Here is the BPM for university list. User can show the university list and academic information

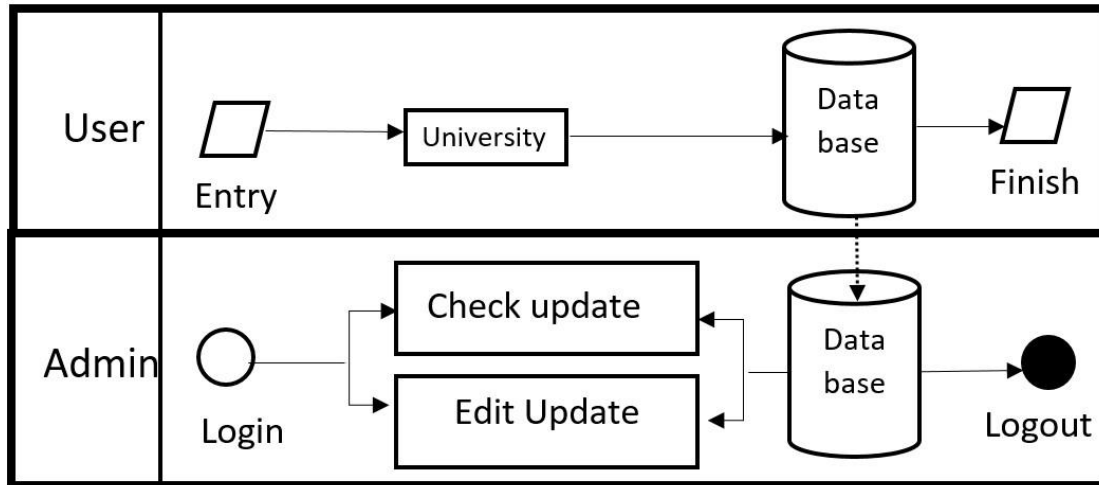


Figure-3: BPM for University

3.2 Requirement Collection and Analysis

Gathering requirement is one of the most important task to complete an application and web site. Without requirements and development, it is tough to complete a web based android application. The requirements are given below:

- Each user can use this web based application.
- Student can search the University details.
- Student can get a map view of the mentioned universities.
- Science student can admit into any kind of subject in any universities if there result equal or higher than the requirements.
- Commerce and arts student have other platform.
- Bangla medium and English medium has extra facilities and need extra requirement to get preferable subject list.
- Undergraduate programs of the private universities of Bangladesh are briefly described in this web based android application.

3.2.1 Hardware & Software Requirement for System

Firstly, we need to look after the minimum requirement of hardware and software to run it. There are some software requirements in addition to hardware to run this site properly.

The following requirements are needed to visit the site:

- Browser: Google Chrome, Mozilla Firebox or any browser which supports at least HTML 5.
- RAM: Minimum 1 GB for pcs or less for mobile devices.
- Operating System: Windows, Linux, Android etc.

3.2.2 Analysis

We have credence and confidence to develop this system completely. We decided to do that as PHP and MYSQL in backend.

3.3 Use Case Modeling and Description

In case of use case of user her user can get the result, subject list, map view, university list from the menu and search option

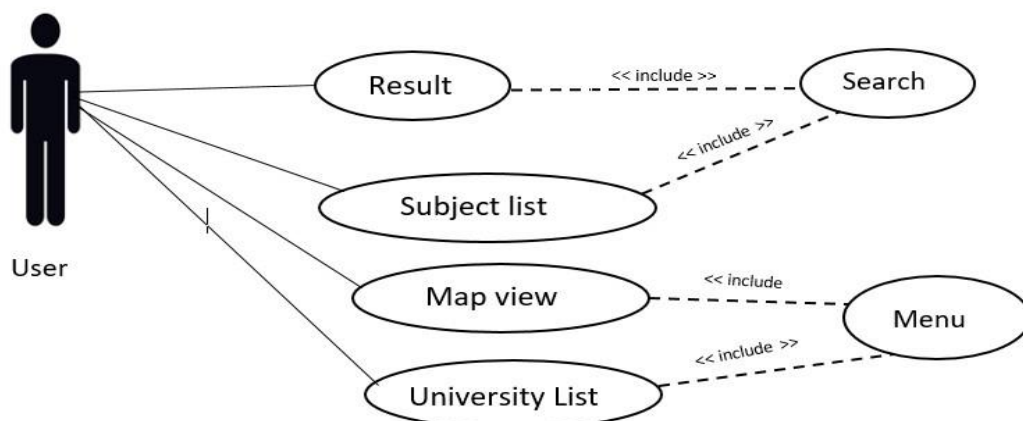


Figure-4: Use Case Diagram for user

Admin can update the database. The modified or update will show to the search list.



Figure-5: Use Case Diagram for admin

3.4 Logical Data Model

Logical data model describes data those are stored in database as deep as possible. It includes all entities and relationship among them.

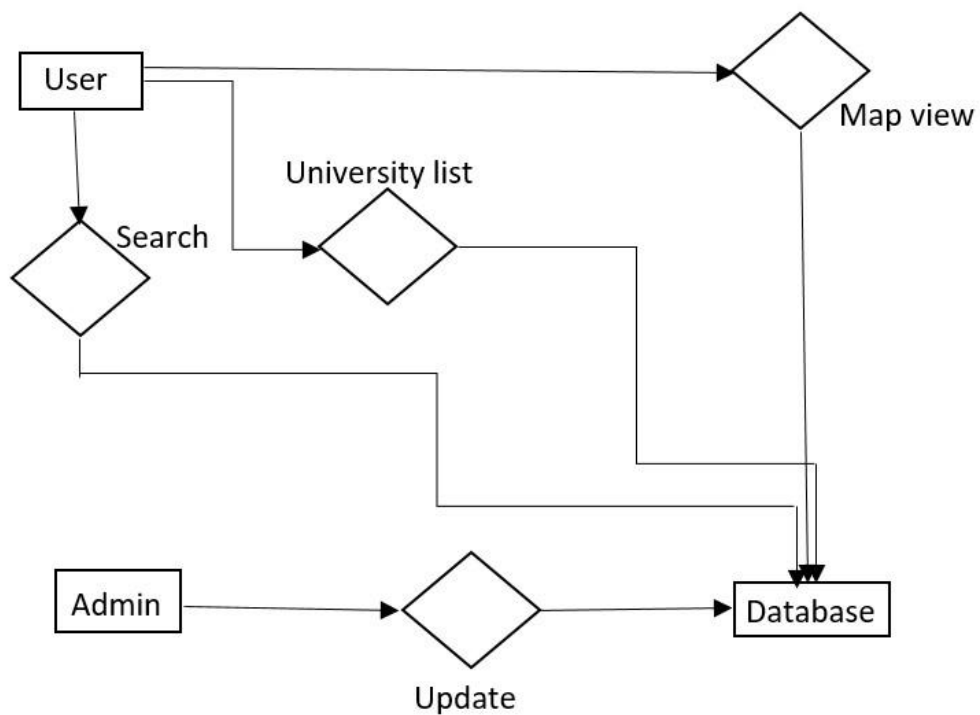


Figure-6: Logical Data model

3.5 Design Requirements

Designing the User Interface is most important tasks for making the site usable.

The design requirements are given below:

- User-friendly site.
- Easy way of searching the subject and university details.
- Easy ways of searching the map view of universities.

CHAPTER 4

DESIGN SPECIFICATION

4.1 Front-end Design

Here is the Home page of our system.



Figure-7: Home Page

Here user can see the university list in ranking

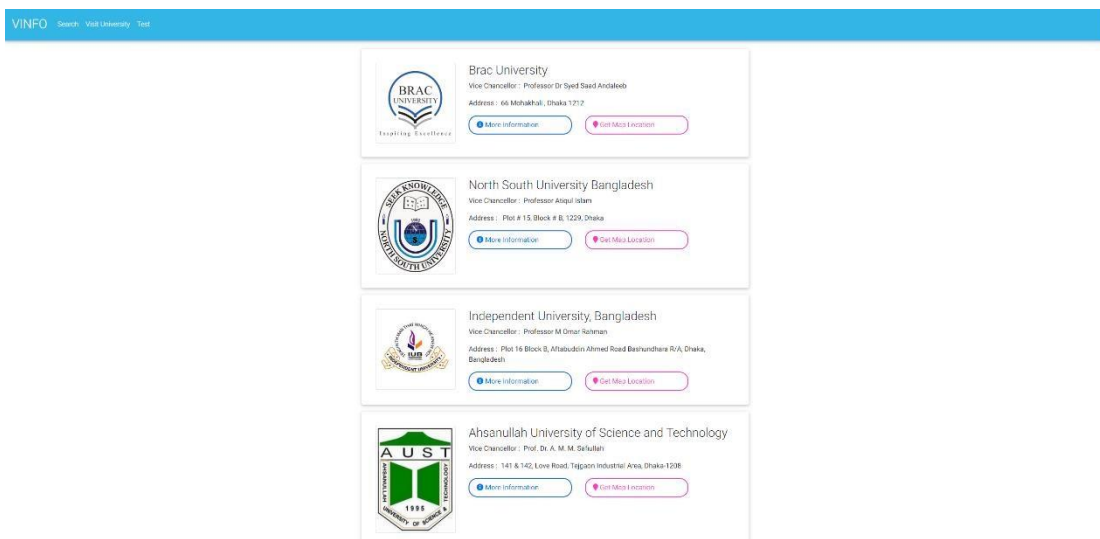


Figure-8: University list

Here we see the academic information of university

Undergraduate Program			
Course Name	Total Semester(s)	Total Credit(s)	Tuition Fees
BSc in Computer Science & Engineering (CSE)	12	136	897,622/-
Bachelor of Architecture	16	199	1,513,976/-
Bachelor of Social Sciences in Anthropology	12	130	899,822/-
Bachelor of Science in Biotechnology	12	136	876,922/-
Bachelor of Business Administration (BBA)	12	130	929,822/-
Bachelor of Social Science in Economics	12	130	899,822/-
BA in English	12	130	869,822/-
BS in Computer Science (CS)	12	120	899,822/-
BS in Electronic and Telecommunication Engineering (ETE)	12	130	919,822/-
BS in Electrical and Electronic Engineering (EEE)	12	136	979,822/-
Bachelor of Laws (LL.B) (Hons)	12	136	968,822/-
Bachelor of Science in Mathematics	12	127	918,822/-
BS in Microbiology	12	136	979,822/-
LLM (Hons) Professional	8	164	5,762,822/-
Bachelor of Science in Physics	12	132	948,822/-

Figure-9: Academic Information

Here user can see the see the map view of universities

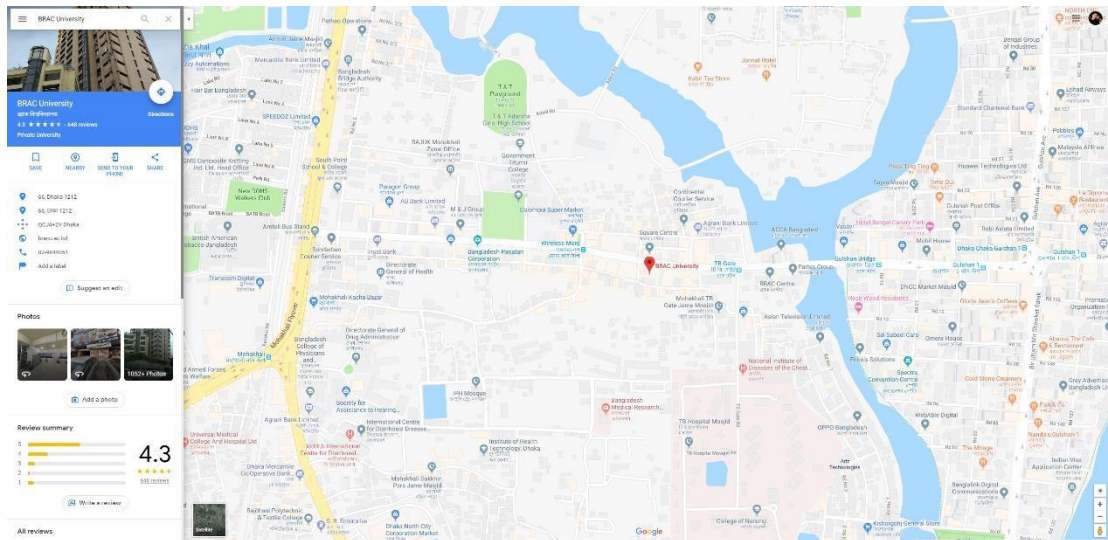
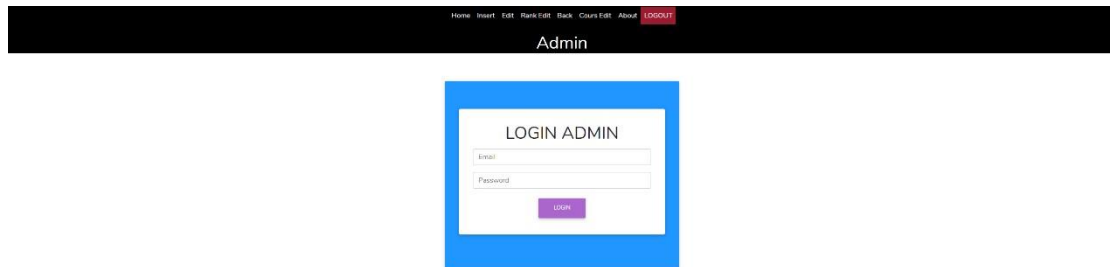


Figure-10: Map View

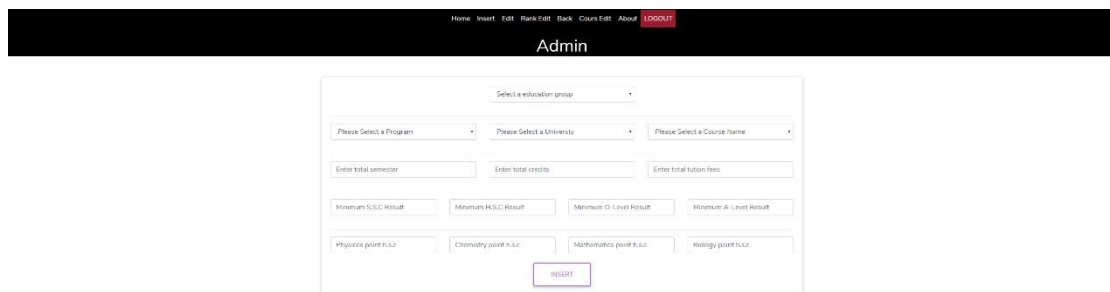
Admin login system designed given below:



The screenshot shows a web application interface with a black header bar containing the word "Admin" in white. Below the header is a white login form titled "LOGIN ADMIN". The form includes two input fields: "Email" and "Password", and a purple "LOGIN" button.

Figure-11: Admin Log-in system

Admin also can insert a course details



The screenshot shows a web application interface with a black header bar containing the word "Admin" in white. Below the header is a white form titled "Course Insert". The form includes a dropdown menu for "Select a education group", three dropdown menus for "Please Select a Program", "Please Select a University", and "Please Select a Course Name", three input fields for "Enter total semester", "Enter total credits", and "Enter total tuition fees", four input fields for "Minimum S.S.C Result", "Minimum M.S.C Result", "Minimum O.L level Result", and "Minimum A.L level Result", and four input fields for "Physics part B.S.C.", "Chemistry part B.S.C.", "Mathematics part B.S.C.", and "Biology part B.S.C.". A purple "INSERT" button is located at the bottom center of the form.

Figure-12: Course insert

Admin can edit the rank manually.

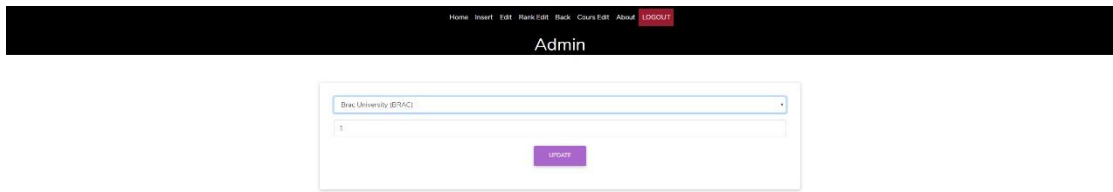


Figure-13: University Rank updating

Admin also can update the information of the university

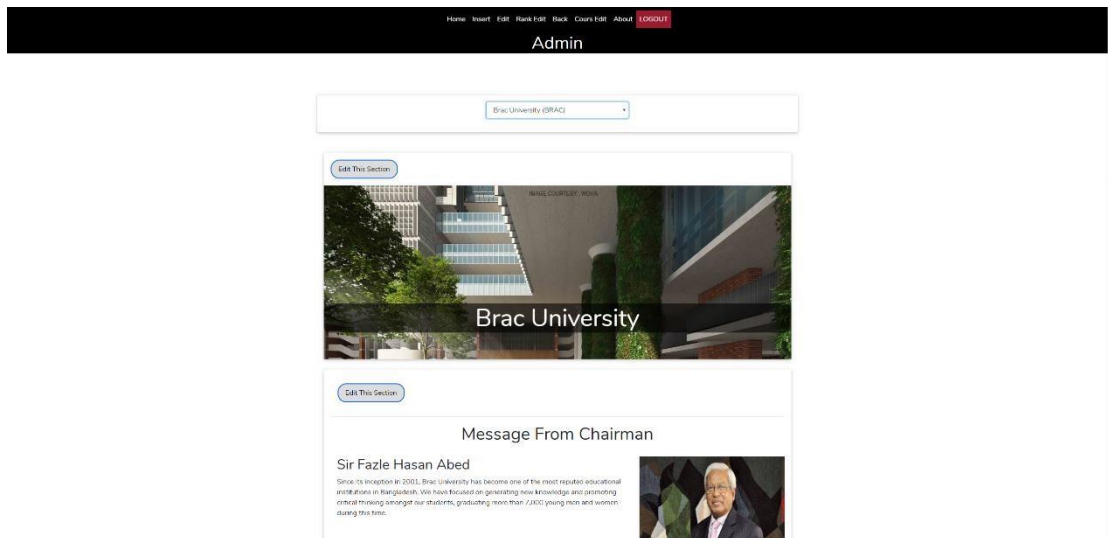


Figure-14: University information updating

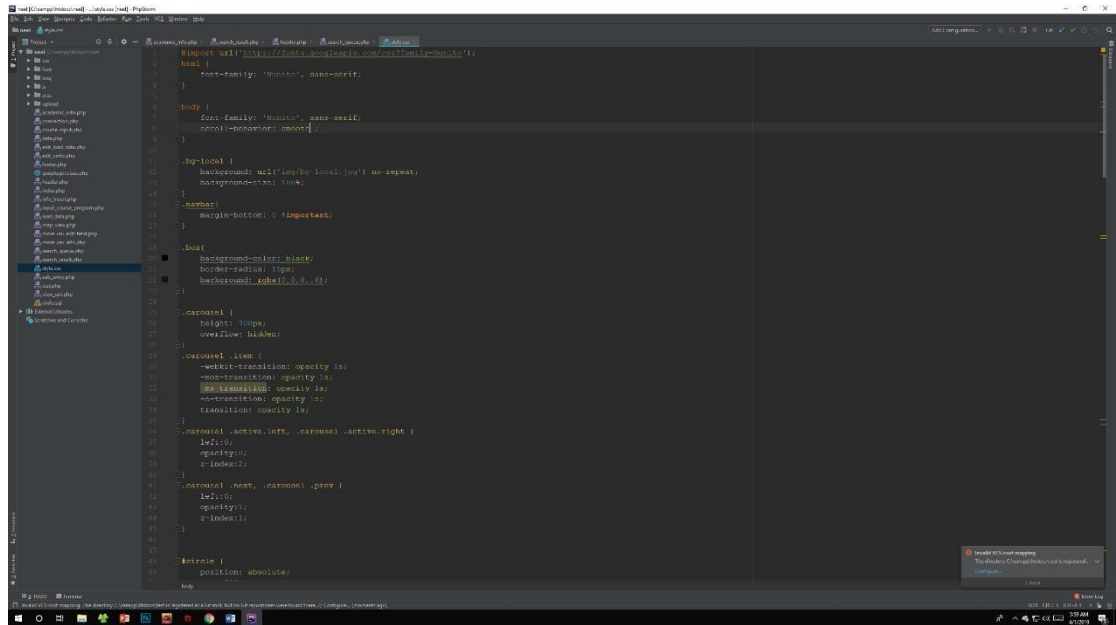


Figure-18: PHP

4.2.2 MySQL

MySQL is one of the most important open source database. It is a relational database. It is easy to use. We have used MySQL database in our project. All information is stored in the database by admin.

4.3 Interaction Design and UX

UI design usually refers to graphical user interfaces. It is the most important part for any site to ensure user usable experience better.

4.4 Implementation Requirements

To give a work in a visual look we have to focused on Implementation. The primary plan was to make the system usable and easier for students.

We needed the following things to implement the application:

- PHP
- PHP Strom
- JavaScript

- JAVA
- HTML & CSS
- MySQL

We used the following software to implement the system:

- XAMPP
- Android Studio
- Php Storm (IDE)


CHAPTER 5

IMPLEMENTATION AND TESTING

5.1 Implementation of database


This is the database of course details and admission requirement

Table 1: course details database

#	Name	Type
<input type="checkbox"/> 1	id 	int(11)
<input type="checkbox"/> 2	full_name	varchar(60)
<input type="checkbox"/> 3	program_name	varchar(20)
<input type="checkbox"/> 4	total_semester	varchar(11)
<input type="checkbox"/> 5	total_credits	varchar(11)
<input type="checkbox"/> 6	tution_fees	varchar(10)
<input type="checkbox"/> 7	rank_allover	int(11)
<input type="checkbox"/> 8	versity_id	int(11)
<input type="checkbox"/> 9	science	varchar(10)
<input type="checkbox"/> 10	arts	varchar(10)
<input type="checkbox"/> 11	commarce	varchar(10)
<input type="checkbox"/> 12	biology	double
<input type="checkbox"/> 13	physics	double
<input type="checkbox"/> 14	mathematics	double
<input type="checkbox"/> 15	chemestry	double
<input type="checkbox"/> 16	ssc	double
<input type="checkbox"/> 17	hsc	double
<input type="checkbox"/> 18	a_level	double
<input type="checkbox"/> 19	o_level	double
<input type="checkbox"/> 20	total_point	int(11)


This is the database of university details and academic information

Table 2: university details database

#	Name	Type
1	id 	int(11)
2	rank_allover	int(11)
3	university_name	varchar(60)
4	short_uni_name	varchar(10)
5	vc_name	varchar(60)
6	university_address	varchar(300)
7	location	varchar(500)
8	v_logo	varchar(560)
9	covar_image	varchar(560)
10	p_one_name	varchar(60)
11	p_one_m	varchar(2000)
12	p_one_image	varchar(560)
13	p_two_name	varchar(60)
14	p_two_m	varchar(2000)
15	p_two_image	varchar(560)

This is the university name and sub-name database

Table 3: university sub-name database

#	Name	Type
1	id 	int(11)
2	sub_name	varchar(100)

5.2 Implementation of Front-end design

Front-end design defines the user interface design. To makes up a user interface we need to create the main HTML, CSS and JavaScript code. Interface Design will play the main role for any system. The designs need to usable and user friendly. Front-end design should be simple which can be easily understood by anyone who will use the system.

5.3 Testing Implementation

Based on user activity

Table 4: Testing Implementation

Test case	Test input	Expected outcome	Actual result	Result	Tested on
1.Study medium	Blank or incorrect medium	To warn that no education medium selected	Showed the warning message	Passed	29/3/19
2. Educational Background	Blank or incorrect educational background	To warn that no educational background selected	Showed the warning message	Passed	29/3/19
3.University List	Tested on menu	To show the University ranking list	Showed the list	Passed	29/3/19
4.Map view	Tested on browser	To show the location of the university in map	Showed the location	Passed	29/3/19

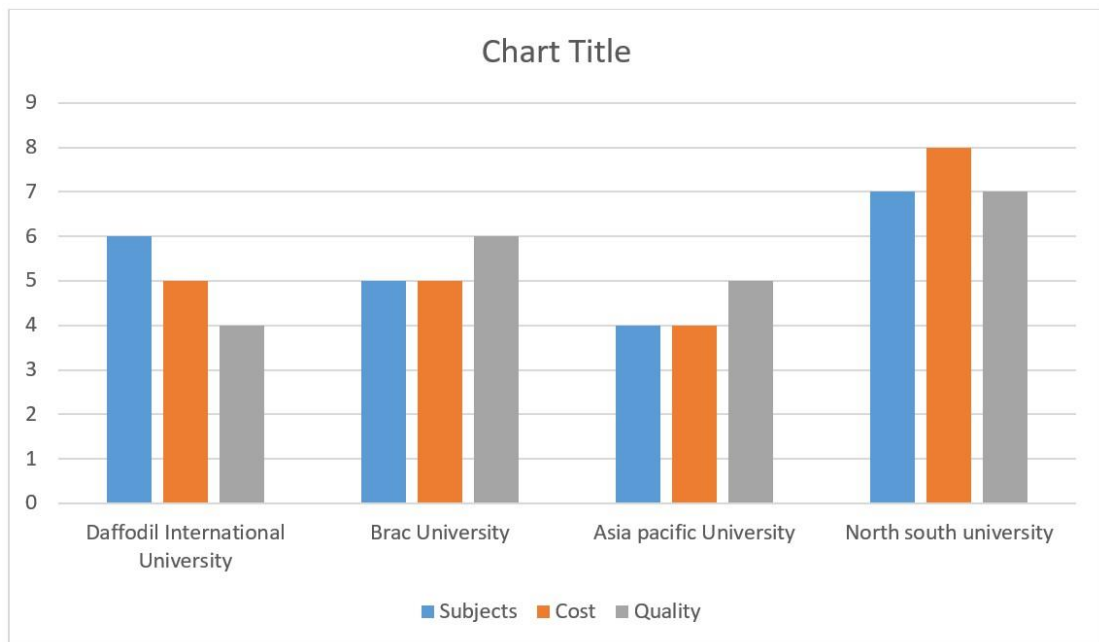
5.1 Test results and reports

We have tested on some case. Some of them accurately passed but faced some problems in some cases. To create a different platform for admin is a difficult task and sometimes it showed failed status and show some errors.

Input the course table and university information it also showed failed status. Then we accurate it by our hard work.

Here the chart shows some university subject quantity, cost and quality. The three different color represent the quantity, cost and quality.

Table 5: Chart of University details



CHAPTER 6

CONCLUSION AND FUTURE SCOPE

6.1 Conclusion

Hope so student will get benefit from this app. Admission system will be more reliable. Private varsity admission office will be get benefit from this app.

We have successfully completed the system. The most difficult part of the project is requirement collection. To build a reliable data management we had to collect the valid data.

We face some difficulties while doing this project like as to make the bpm table, use case diagram. But in the end we have overcome this with the help from our honorable supervisor sir and by our hard work, mental strength, patience.

6.2 Future Scope

The project is complete but we can add some features in this in future.

Features can be added in future in this project given below:

- The app is only for undergraduate program, so we can add here graduate program and diploma program.
- Online admission, online admission form registration can be added in this app.
- More information of varsity can be added.
- More private university can be added in university list.

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- [7] Get the map view option from <<<https://www.google.com/maps>>> [last accessed on March 29,2019 at 02:00 pm]

Appendices

Appendix A:

The appendix defines the project reflection. We have many experience while doing this project.

Our honorable supervisor suggests us more interesting features for our system and gives us valuable suggestion in project meeting. Group meeting was memorable. We discussed each other to make the system fantastic. Actually our target is to build a system which will help student. We also discussed with each other to make system more usable.

