

# **Online BCS Exam Preparation**

**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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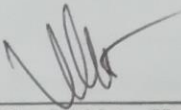
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**APRIL 2018**

## APPROVAL

This Project/internship titled “**Online BCS Exam Preparation**”, submitted by, Fahmida Zaman Laboni ,ID No: 162-15-7996 and Md.Sharif Mollick, ID No: 162-15-8050 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 12 September.

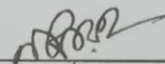
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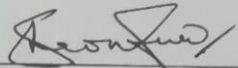
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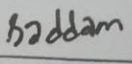
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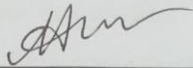
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## DECLARATION

We hereby declare that, this project has been done by us under the supervision of **Nazmun Nessa Moon, Assistant Professor, Department of CSE**, and 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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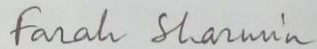
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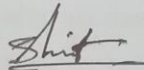
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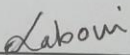
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First we express our heartiest thanks and gratefulness to almighty God for His divine blessing makes us possible to complete the final year project/internship successfully.

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

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

## **ABSTRACT**

This undertaking titled “**Online BCS Exam Preparation**” is an Online Exam platform, aimed at justifying the eligibility for BCS examination preparation. The platform is conceived as online-based gaining knowledge of and checking out the place. On the educational degree, it makes use of a range of security concepts, which are anticipated to extend students’ fairness in mastering by means of no longer allowing them to be out of focus from the device in the course of the exam time. We format this venture through net sketch tools such as html5, css3, jQuery, bootstrap and our backend design through some backend improvement equipment such as PHP, camp, stay server, etc.

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# CHAPTER 1

## INTRODUCTION

### 1.1 Introduction

This document will advocate all elements and strategies to make higher the system. This file frequently containing quintessential factors about objectives, scope limitation, process model, requirements, crew development, two manageable mission risks, task schedule, and quicker or later monitoring and reporting mechanisms.

Online Exam System is very sincerely useful for Educational Institute to put mutually an exam, maintain the time that will take to check the paper and put collectively mark sheets. It will assist the Institute with the checking out of University College students and adorn their skills. But the risks for this system, it takes a lot of time when you put at the same time the examination for the first time for usage. And we are wants the fluctuate of laptop constructions with an equal differ of students.

The extremely desirable use of "Online BCS Exam Preparation ", two Educational Institute or training offerings can use it to prolong their approach for inserting the exams, and for getting higher penalties in a suitable deal less time.

### 1.2 Motivation

Nowadays the web is on hand in all places and day via the day it is turning into not unusual in Bangladesh. So people are transferring toward the online systems on the different hand than traditional systems. Digital technologies are turning into an imperative part of our lives. Life is becoming a loads much less tricky day with the beneficial aid of the use of a day. Two in training the effect of technological draw close is tremendous. It made statistics available someplace each and each time and made college students to collect knowledge easily. But college university college students get a few areas to justify their statistics area or check their instructing for any kind of public exams. That's why our Online Exam System is developed to assist them. They will get simple and free of fee exam platform.

### **1.3 Objectives**

- To make a reachable platform for a persona who needs to furnish on line BCS guidance examination and justify their eligibility.
- To take a seat for the examination from someplace at any time, so it will decrease their treasured time.
- To allow every personality can take a seat for a awesome module.
- To allow a persona to create their profile and take a seat for on hand assessments for free of cost.
- To preserve first-rate take a look at standards.

### **1.4 Expected Outcome**

- Quality full examination platform.
- Collaboration with college college students and teachers
- A prosperous query bank.
- Large databases of scholar information.

### **1.6 Report layout**

The document arranges as follows –

Chapter-1 describes the introduction, motivation, goals and anticipated outcome. Chapter-2 introduction, related works, comparative studies, the scope of the hassle and challenges. In chapter -3 describes company machine modeling, requirement sequence and analysis, use modeling and description and diagram requirement. Chapter -4 described front-end design, back-end design, interplay sketch, and UX and Implementation requirement. In chapter -5 will describe the implementation of the database, implementation of front-end design and implementation of interactions, trying out implementation and take a appear at consequences and reports. In chapter -6 described the conclusion and future scope.

## **CHAPTER 2**

### **BACKGROUND**

#### **2.1 Introduction**

“An internet-primarily primarily based laptop for BCS preparation” is a laptop that is particularly especially based on the net software application software and operates via the internet. Overpopulated united states like Bangladesh the location poverty and lack of training are a good sized problem. So it is tough to get a risk to sit down for an examination any time on each occasion he needs barring any cost. Though there are severa paid choices it is very hard for human beings like our country. Our machine will furnish them an probability to sit down for an examination each and each and every time and someplace barring for any cost. It will be a net software program application software so that people can be in a function to get right of entry to it by means of ability of the internet and there will be no constraints to be admitted.

#### **2.2 Related Works**

We accompanied many web net sites like [udemy.com](http://udemy.com) [1], [codecademy.com](http://codecademy.com) [2], [codezenbd.com](http://codezenbd.com) [3], [onlinequizcreator.com](http://onlinequizcreator.com) [5], [onlinequizarea.com](http://onlinequizarea.com) [6] etc.

We collected files from a range of LMS enchantment agencies and academic organizations how they make bigger and keep the exams and institutions what do they count number on from these sorts of systems.

#### **2.3 Comparative studies**

We see many web sites that how they furnish this service. We placed a couple of websites these who are imparting these types of provider and we found some drawback of them. Most of them furnish paid provider and most of them have some restrained challenge be counted questions only but not secured. But this project provide more secure system for

the preparation of BCS examinee. For maintaining security any examinee cannot open any other sites while exam time.

## **2.4 Scope of the problem**

- Online Exam computer is designed for Educational Institutes (like teaching center, universities, coaching centers) and it will be on hand for anyone.
- The desktop handles all the operations and generates opinions as hastily as the take appear at is finished, which consists of a name, mark, time spent to clear up the exam.
- Allow university students to see or exhibit his answers after the examination is finish.
- The variety of questions is only greater than one prefer or actual and false two.

## **2.5 Challenges**

Here are some challenges which are hard to overcome. The predominant task is people engagement. People of developing country like Bangladesh are now not so worried about these things and it in fact tough to have interaction with the digital or online system.

## CHAPTER 3

### REQUIREMENT SPECIFICATION

#### 3.1 Business Process Modeling

In my laptop examiner set questions and machine admin maintain the machine and quicker or later candidates take segment the exam. The following figure 3.1 suggests the enterprise machine model.

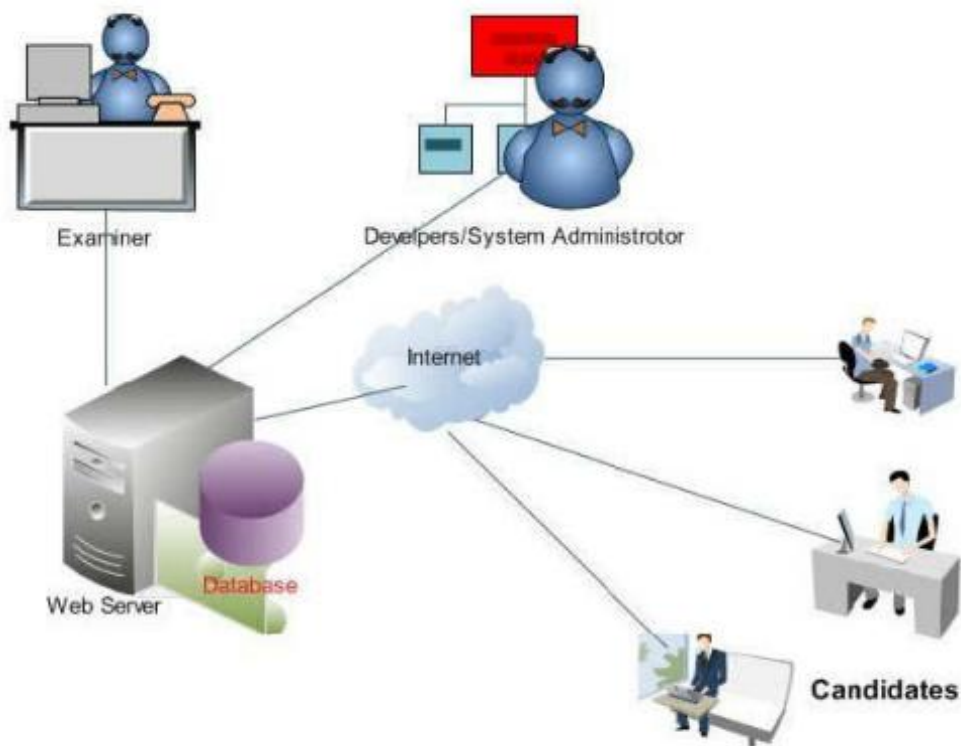


Figure 3.1: Business Process Model

#### 3.2 Requirement Collection and Analysis

The project ought to be deliberate and executed to manner information well-timed and create manageable preferences that are every relevant and realistic. To meet these goals,

every challenge ought to start with an entirely vetted and authorized requirement specification. This challenge is a tricky project. Requirements are commonly multifaceted, covering technical, economic and operational factors and are additionally perception, bias and stakeholder interests. As such requirements collection manner should include and tackle all these realistic to choose out out necessities at all levels and perceptions.

### 3.3 Use Case Modeling and Description

The use case model is indispensable to furnish a pinnacle view of our proposed desktop and make me apprehend how the machine will be working. The following figure 3.2 shows the use case model of this system.

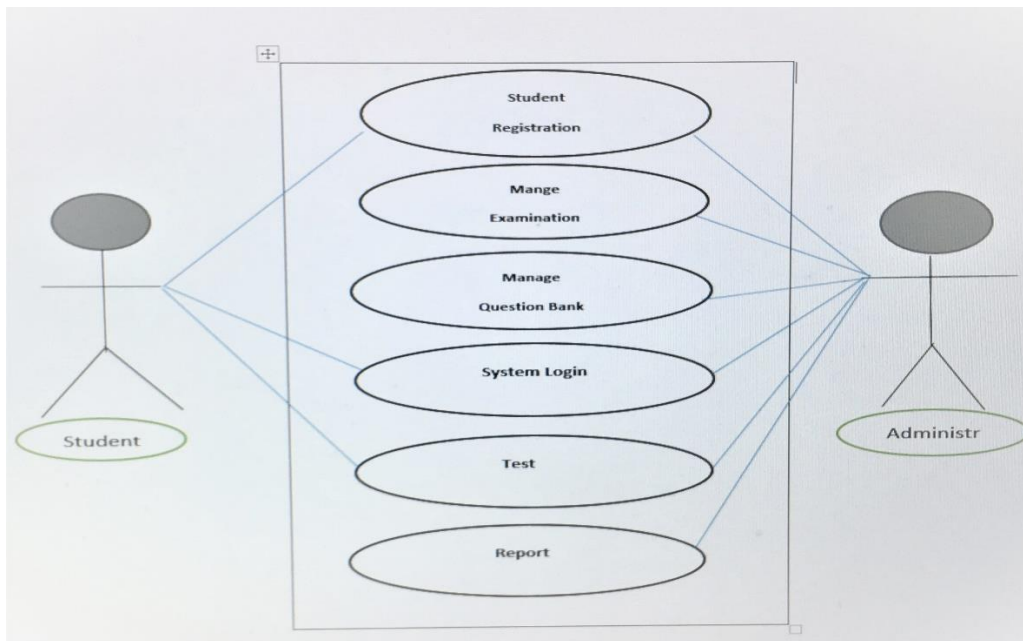


Figure 3.2: use case model.

### 3.4 Logical Data Model

A logical fact fashion represents the structure of a vicinity of information. They are diagrammatic and are most generally used in industrial organization strategies that are looking to entice assume of value to a business company and how they relate to one another. Once validated and approved, the model of the logical record emerges as the groundwork if a bodily information mannequin and form the design of a database.



Following Figure 3.3 logical records mannequin of our system.

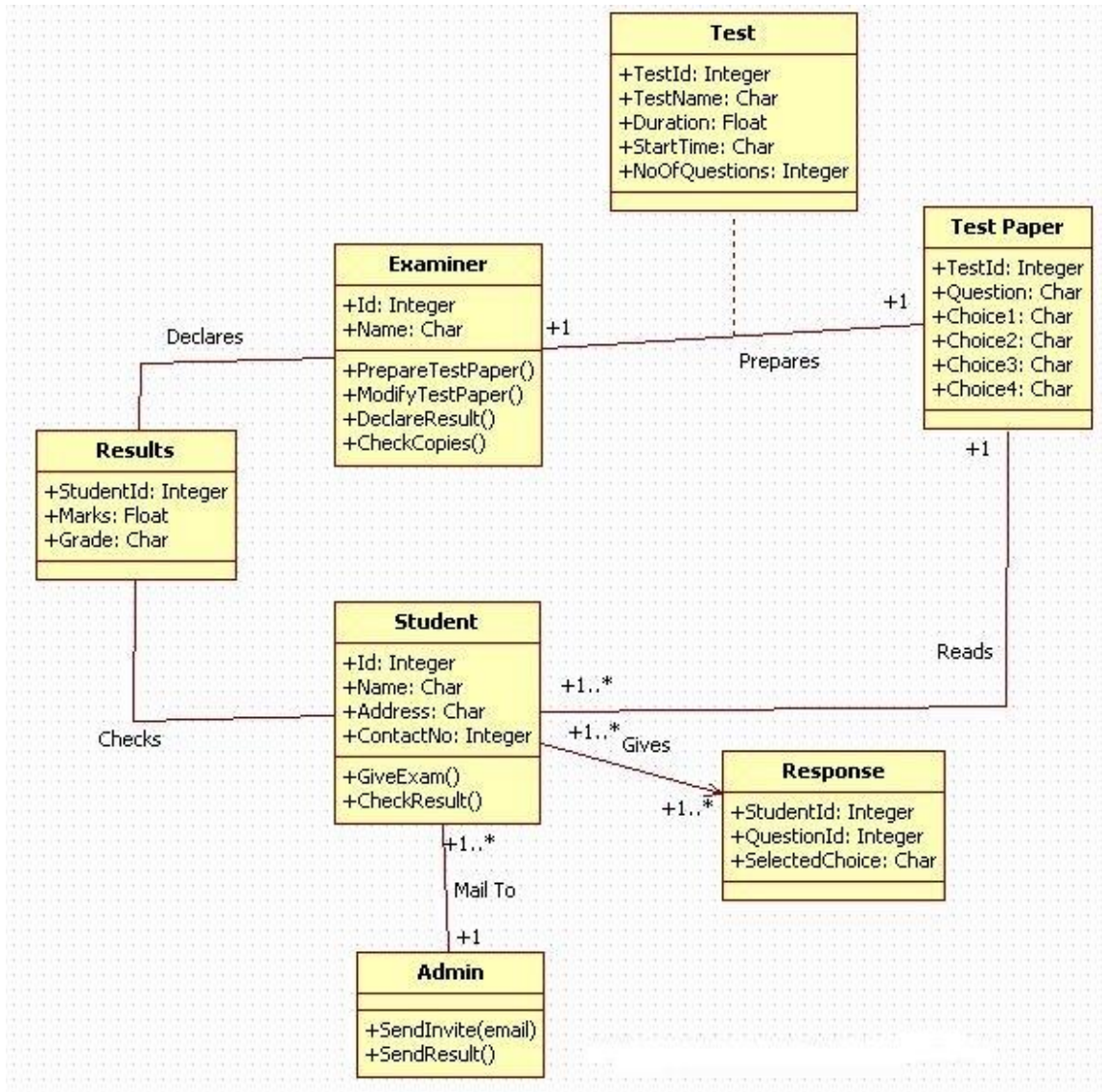


Figure 3.3: Logical Data model

# CHAPTER 4

## DESIGN SPECIFICATION

### 4.1 Front-end Design

**Home page:** This is our home page when user goes to address then he will be redirected to my main page. In this page we include a login form and our logo to make a student login his profile or create new account which is shown in the following figure 4.1.

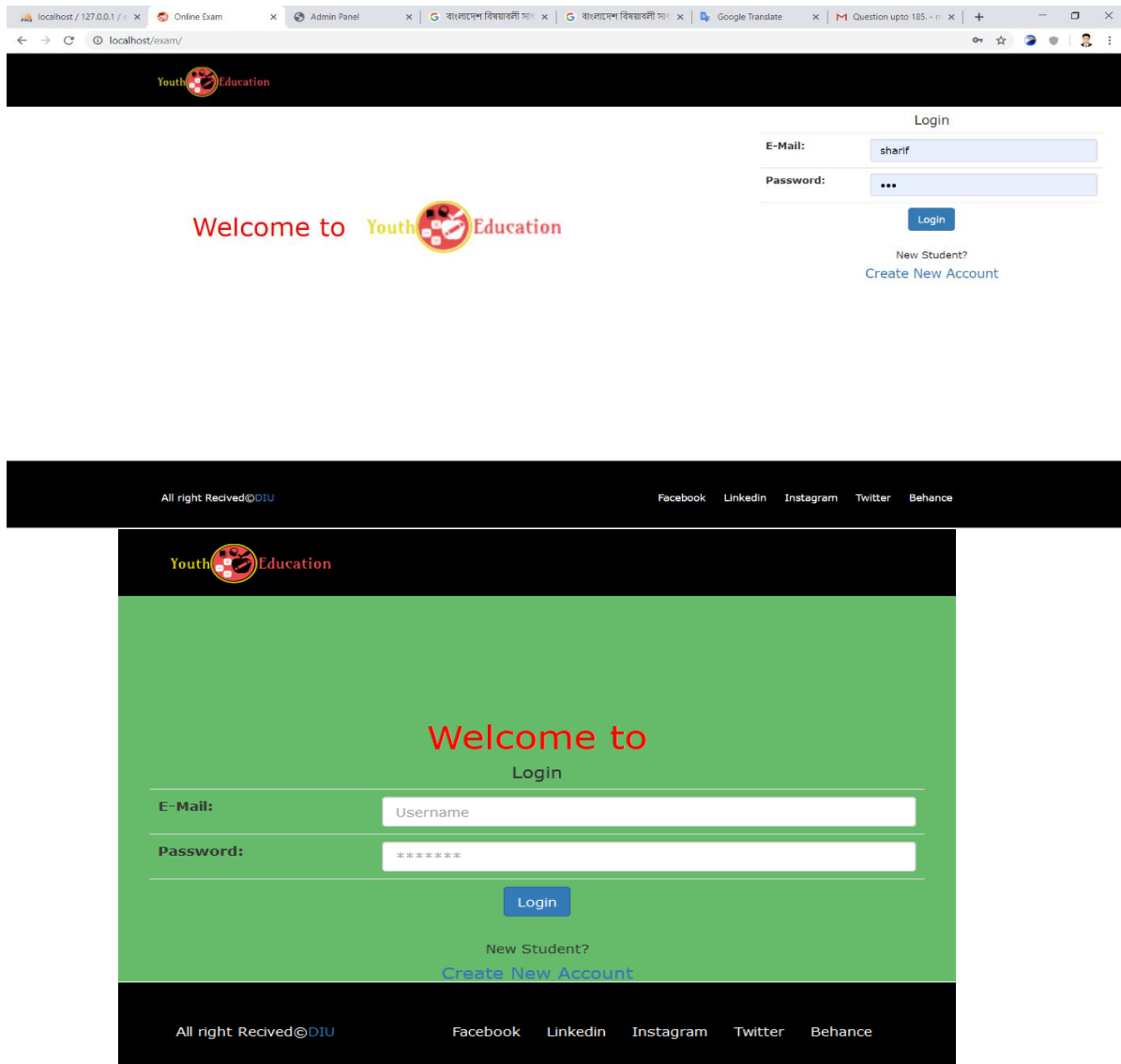


Figure 4.1: Home page

**Profile page:** Contain profile information of a student, exam taken or available exam for him. which is shown in the following figure 4.2.

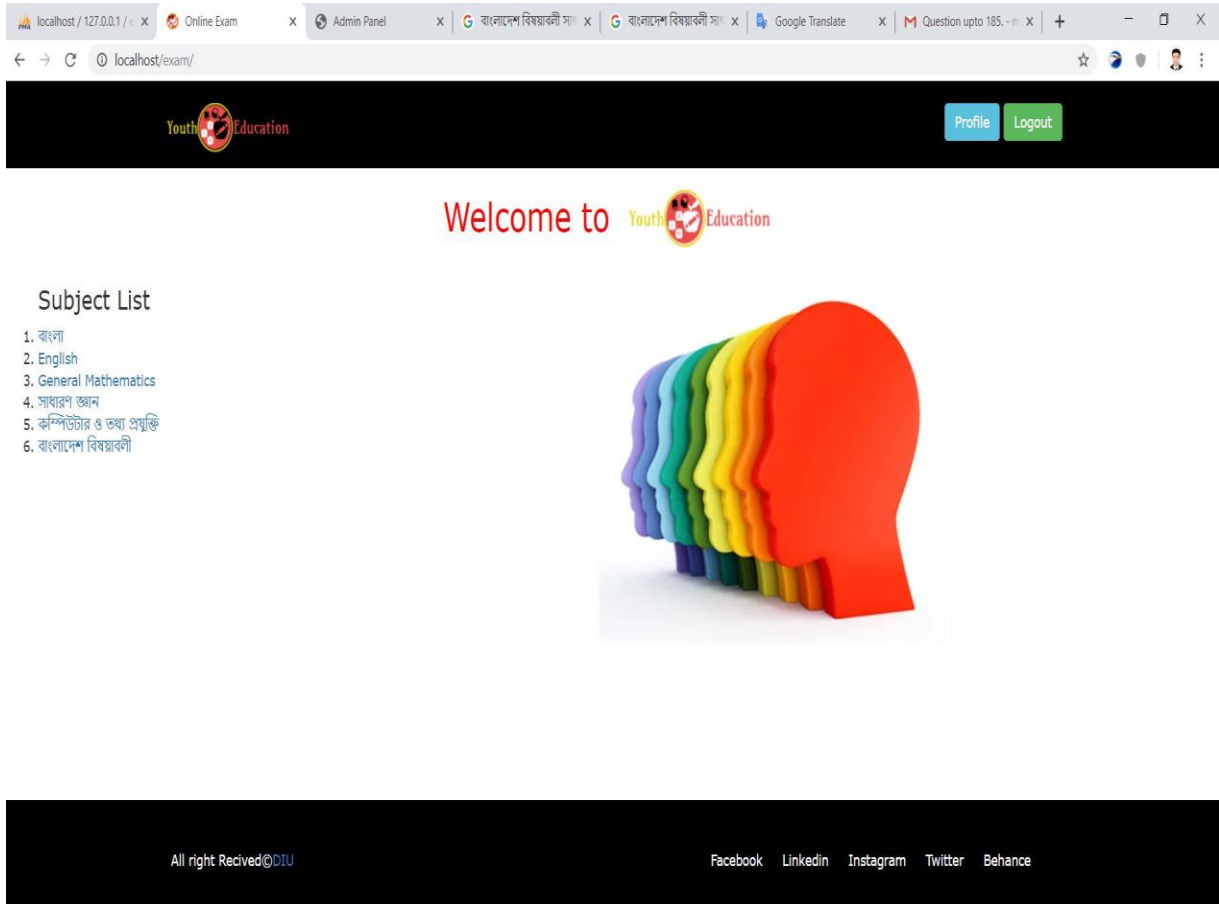


Figure 4.2: Available exam

**Exam Modules:** In this page we will create one exam but various module that an examiner can understand that he has weaknesses in a subject. The following figure 4.3 shows online exam various modules.

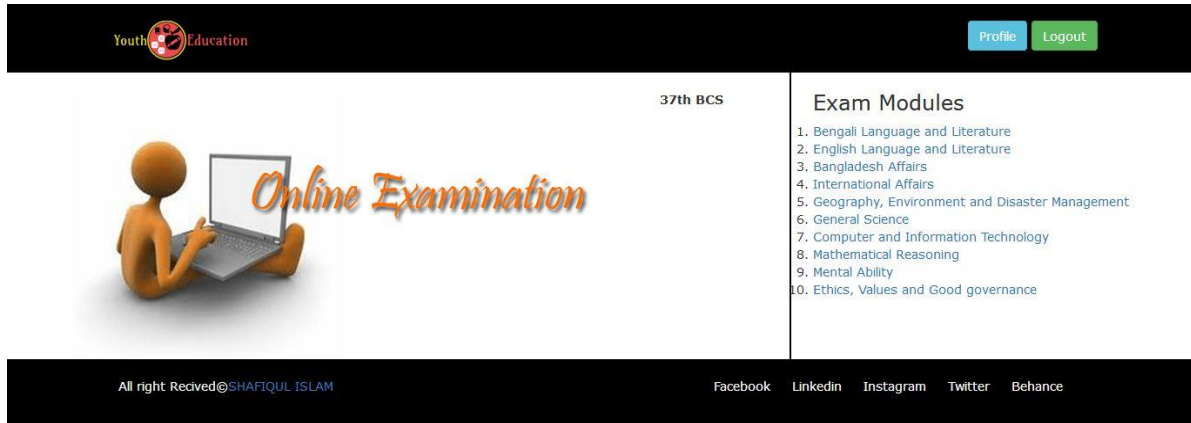


Figure 4.3: Online exam various Modules

**Exam Modules:** This is my online exam page where the examiner take an exam and one the exam time he also show the other subject that he can take exam. Which is shown in the following figure 4.4.

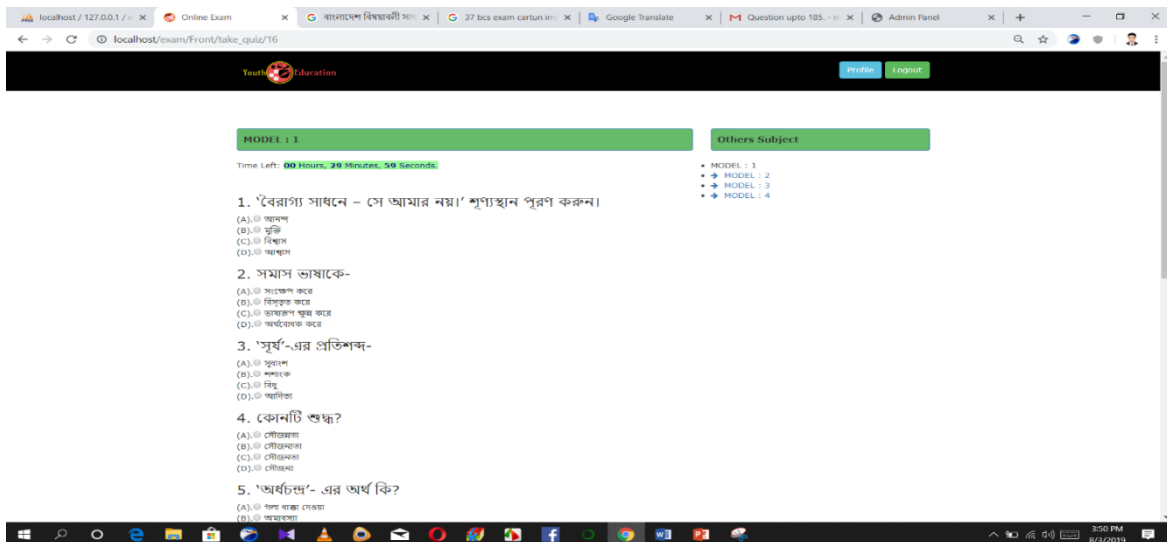


Figure 4.4: Question List

**Student Result:**

**Total exam in 37 BCS**

Number of Questions: 1

Correct answer: 1

1. মধ্যযুগের কবি নন কে? ✓

(A).  জয়নন্দী  
 (B).  বড় চণ্ডীদাস  
 (C).  গোবিন্দ দাস  
 (D).  জ্ঞান দাস

**Others Subject**

- → Module 1
- → Module - 1
- → Exam 3
- → Exam 4
- → Module - 1
- → NUSA G&WB2 Exam 5
- → Fast Part
- → Bangla
- → English
- → Math
- → Computer and Information Technology
- → General Knowledge
- → Bengali Language and Literature
- → English Language and Literature
- → Bangladesh Affairs
- → International Affairs
- → Geography, Environment and Disaster Management
- → General Science
- → Computer and Information Technology

Figure 4.5: Result

**Admin Panel Login:** This page is admin login page in figure 4.6 which is admin login with his email and password.

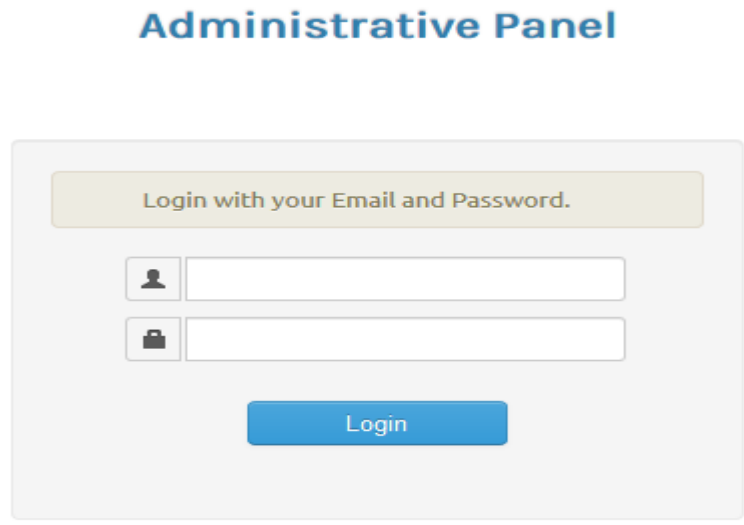


Figure 4.6: Admin Panel Login

**Admin Panel Login:** This page is Dashboard page in figure 4.7 which is show the total Dashboard.



Figure 4.7: Dashboard

**Subject Add & List:** This page is figure 4.8 create various subject add and one subject add but under one subject create various module.

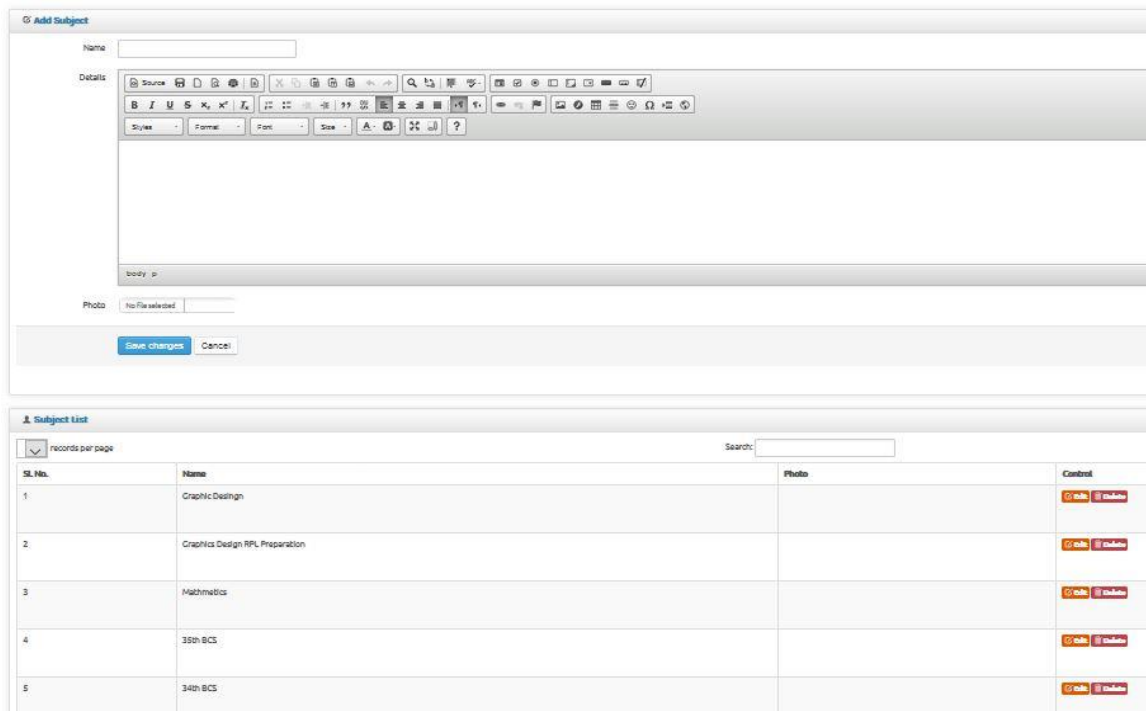


Figure 4.8: Subject Add & List

**Module Add & List:** On this section is create for module add and various kind of question add & List which is shown in figure 4.9.

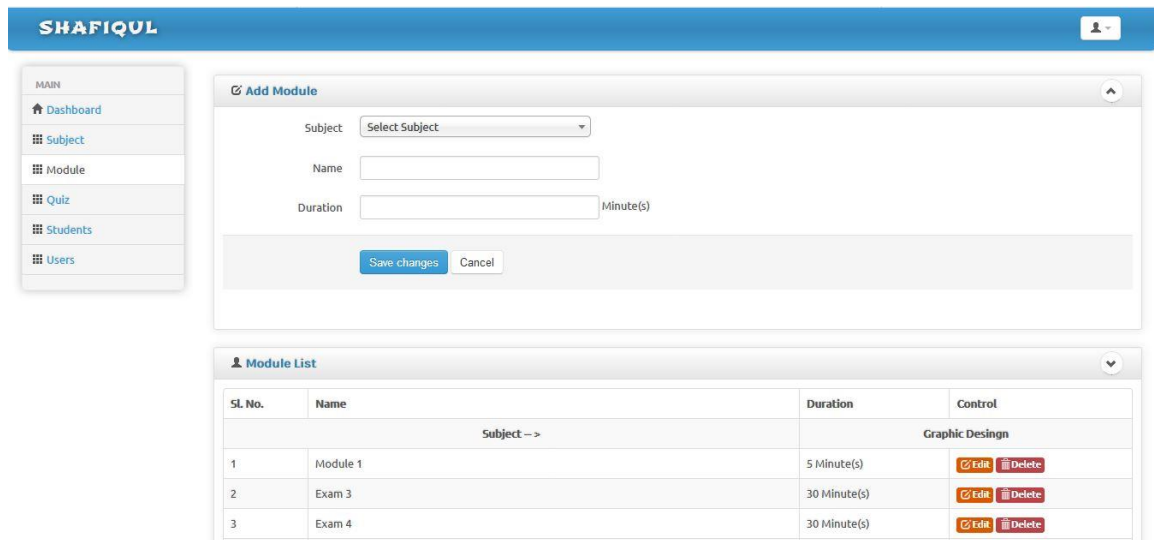


Figure 4.9: Module Add & List

**Add Quiz & List:** On this section is create one question and four option of right answer that is called MCQ question. That shown in figure 4.10.

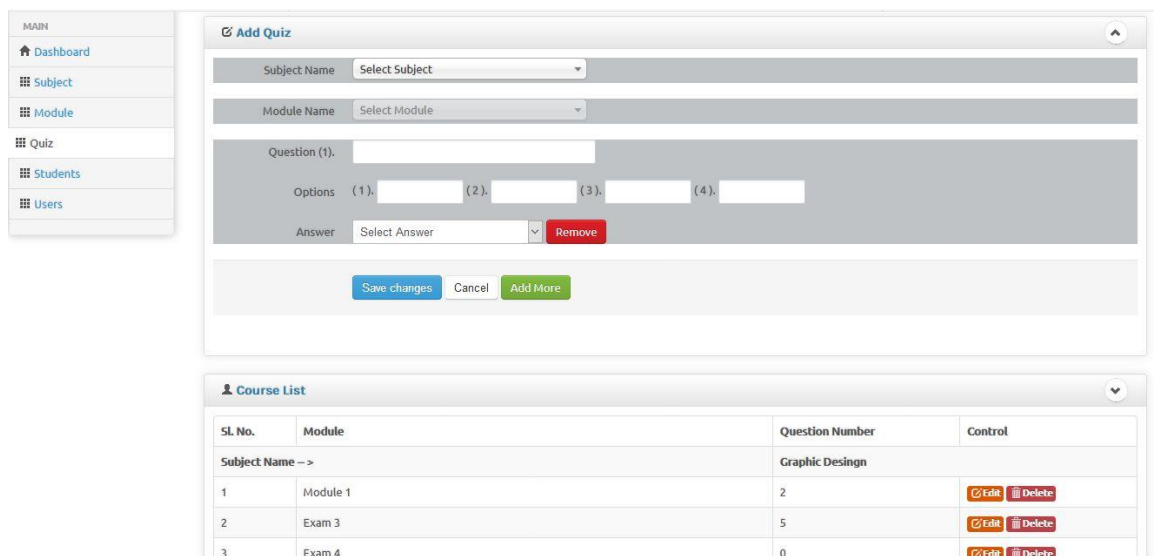


Figure 4.10: Add Quiz & List

**Result view & Publish or reset exam for particular student:** In this section admin can show result and reset exam for particular student .That shown in figure 4.11.

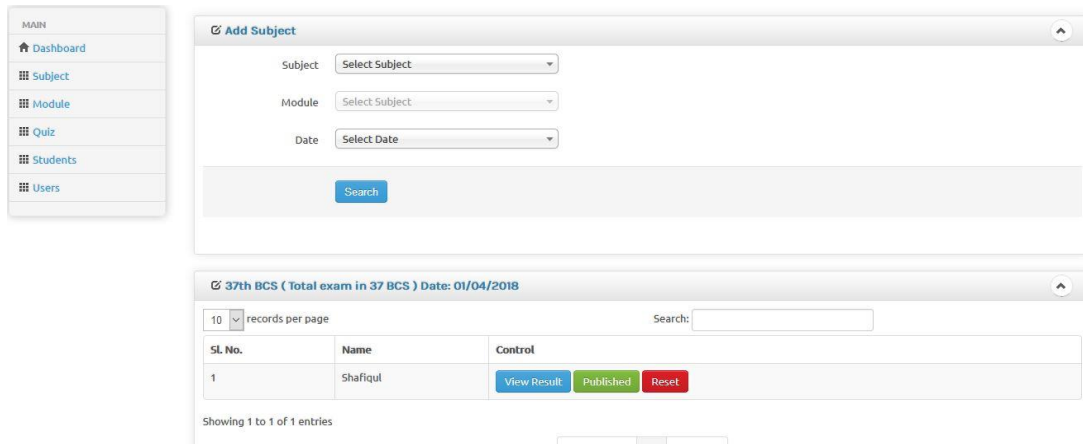


Figure 4.11: Result view & Publish or reset exam for particular student

**Result of an exam of a student:** After examination student can see their result and also see what correct answer is and what is wrong. That shown in figure 4.12.

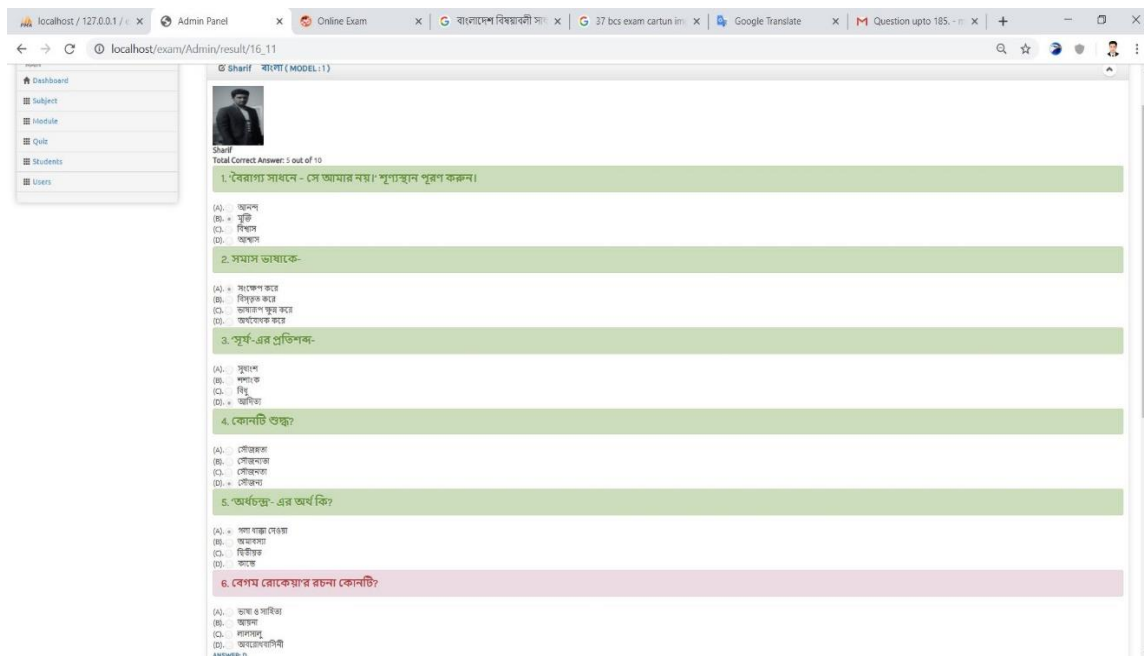


Figure 4.12: Result of an exam of a student

**Admin List & Add:** On this page a super admin can add an admin and also show the admin list that shown in figure 4.13.



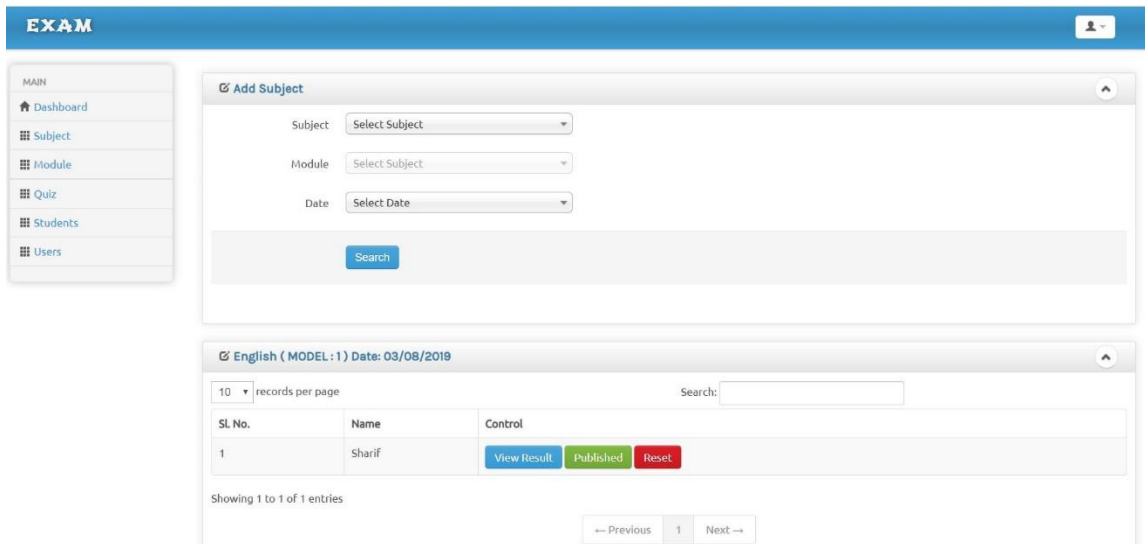


Figure 4.13: Admin List & Add

## 4.2 Back-end-Design

The back end is the device that drive a site the user doesn't see it or right away interlude with it as with client side technology, but it's evermore running in the grounding. Give easy functionality and actuality from the database in the browser. The mounting is the advection of database and a software author in a server side dialect, which run on Web servers, cloud-servers. The back-end right away interact with the database via an request, which pull, save or Change data.

### Responsibilities of the back-end design

- We use database creation, integration and management- e.g. MYSQL
- We use Web server technologies e.g. APACHE
- We use Server-site programming language –PHP and Java script

### Database

We create this type of database that we collect all of our information to the user and give support them fully in website. The following figure 4.12 shows database.

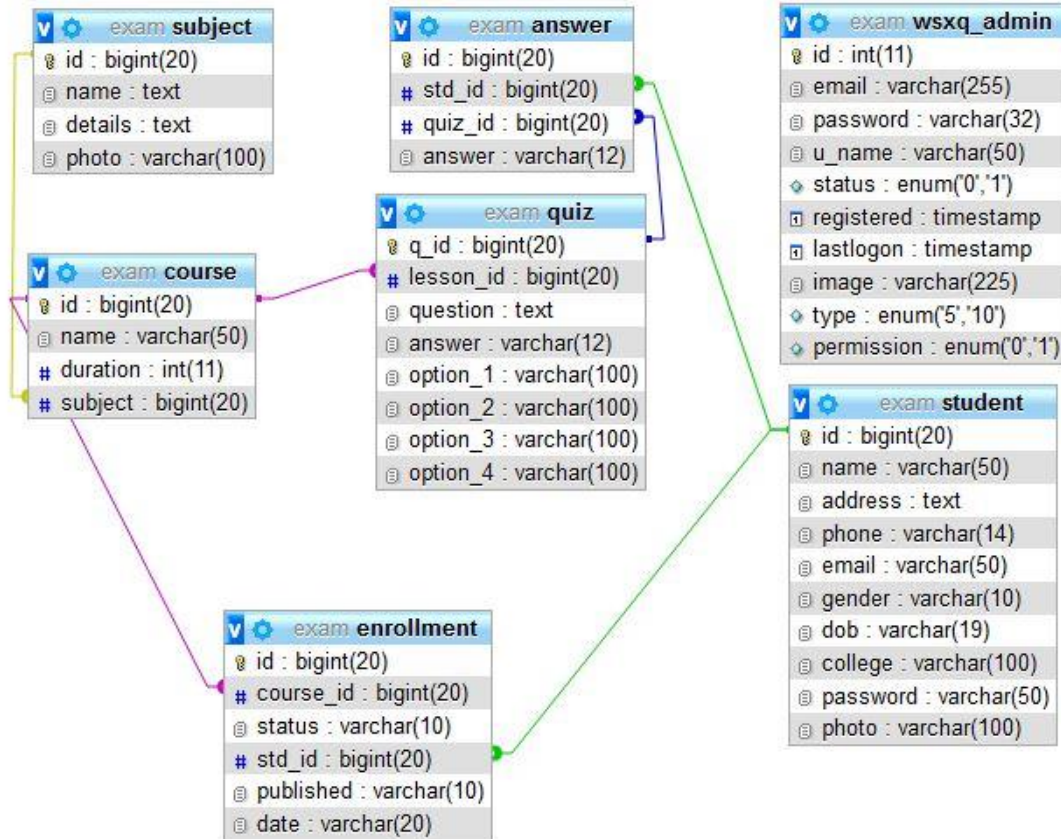


Figure 4.14: Database Schema

### 4.3 Interaction Design and UX

In this section the dilution diagram was used to show the messages into performer and System material to login process, due process and also spend process. These Material include the make new user, services and product sell service in database. Four order diagrams are select to illustrate this method login process, remark Read and write, product serving, and online service and also help entrepreneur.

### Data storage

While I serve the users and also develop my system than data store is very important for us. The following figure 4.15 shows how database connects and stores information.

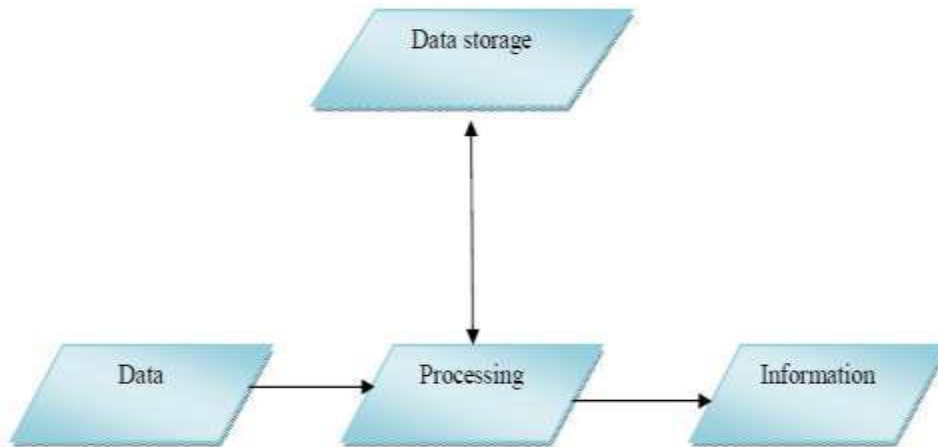


Figure 4.15: Data base connect and storage information.

## 4.4 Implementation Requirements

The discussion has been meanwhile compiled how the system can be deployed. But we need to do a plan of what will be necessary or changes to be made for the system to run successfully.

### Hardware Specification

It needs one computer to sustain the website. Who will be the feather he or she will act in his or the hosting server.

### Software Specification

It needs only website browser software to look over the website. But there are few applications. They are needed to update the website like Dreamweaver, Photoshop and internet connection. The aim of this project is to create an online exam system which follows the Software as a service model. Software as a service model.

## **CHAPTER 5**

### **IMPLEMENTATION AND TESTING**

#### **5.1 Implementation of database**

The reason of this challenge is to generate an online Exam System. This gadget will fulfill our user requirement and the database play the most significant position to fulfill the requirement. First create a database and some tables that will store private information, examination question, answers, admin facts, and acceptance information. In this undertaking, the database is accomplished very cautiously and some of the steps are:

- 1) To create a hassle-free database that admin and man or lady every are connected.
- 2) To Make the special desk and verify that the desk of all facts that we desire to be a phase of an individual and purchaser gets his facts properly.
- 3) To Use the programming language that is barring problems to evaluate the the front end diagram substitute in the future.

According to this project, the equipment chosen have been PHP (CODEIGNITER), jQuery, JavaScript, Ajax and HTML for designing the pages. And for the database MYSQL is used.

#### **5.2 Implementation of front-end design**

A design requirement mannequin is a daily reusable answer to a usually going on bother in software program software design. A layout mannequin is no longer a achieved design that can be modified into code. In this part, I will provide an explanation for how to remedy a problem that can be used in many especially a few situations.

#### **5.3 Implementation of the back-end**

The discussion has already been timbered that how the device can be developed. But we choose to make a diagram of the imperative matters or what adjustments can be made for the gadget to run it successfully.

## 5.4 Testing

Testing is the manner that the location we can take a look at how the device is working and trap the problem. Before attempting out the system, the device will be a complete one hundred percentage in trying out the sector. Some of the money owed and the records enter our gadget and study that is this system working effectively and if no longer then what is the problem.

## **CHAPTER 6**

### **CONCLUSION AND FUTURE SCOPE**

#### **6.1 Discussion and conclusion**

In ending, having entry to online Exam method has actually revolutionized and affected our society as an entire. Some secondary restriction will not be problem for this system we hope it will play a great role in Developing Part every day.

#### **6.2 Scope for further developments**

This Project formed here only for examination. In posterior here full instructional content Will be obtainable which will aid students more than.

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- [11] Software Requirement Specifications, Online Examination System.

## APPENDIX A: PROJECT REFLECTION

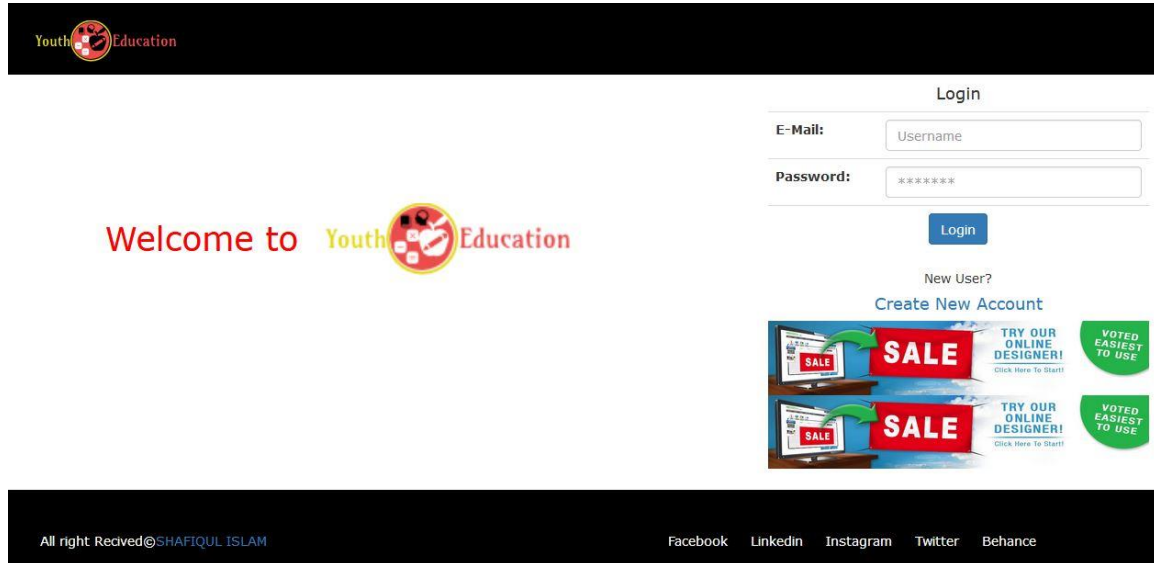


Figure A.1 Home page

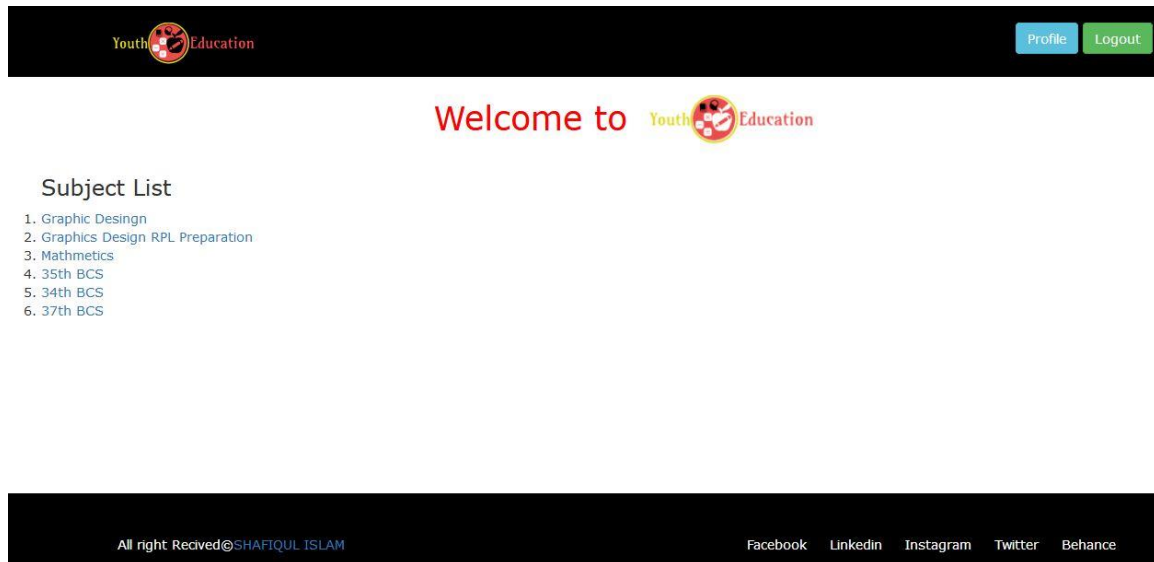


Figure A.2 Available exam



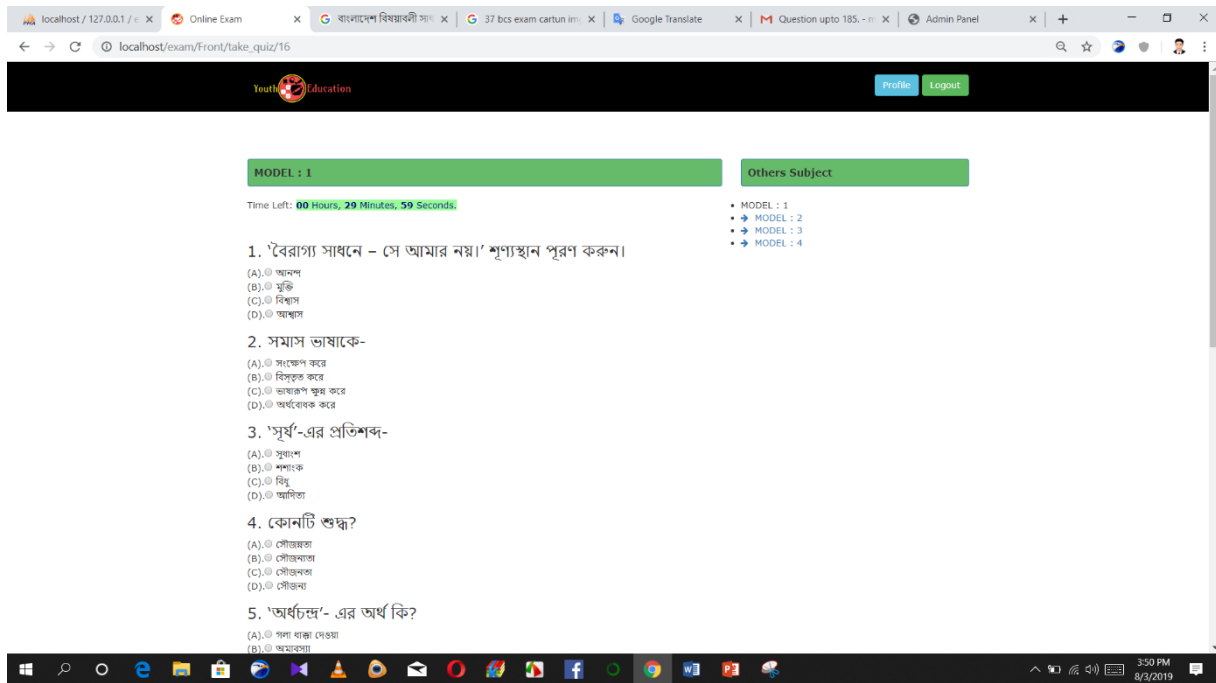


Figure A.3: Online exam various Modules



Figure A.4: Question List

Figure A.5: Result



### Administrative Panel

Login with your Email and Password.

Login

Figure A.6: Admin Panel Login

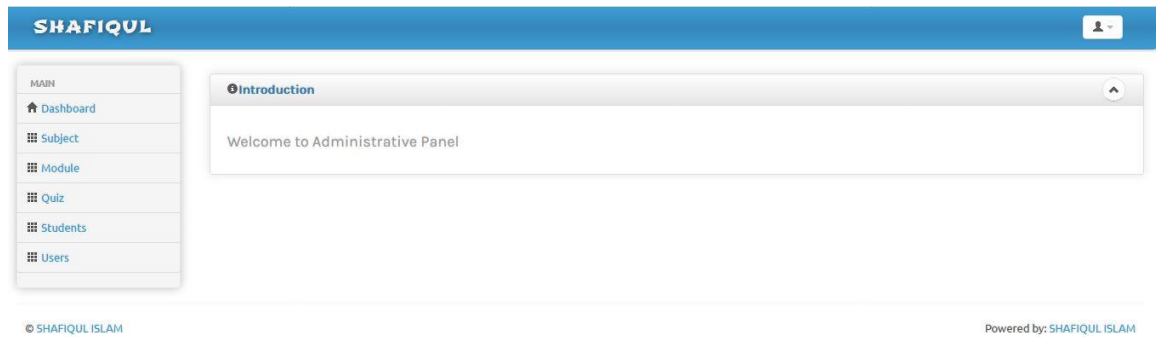


Figure A.7: Dashboard

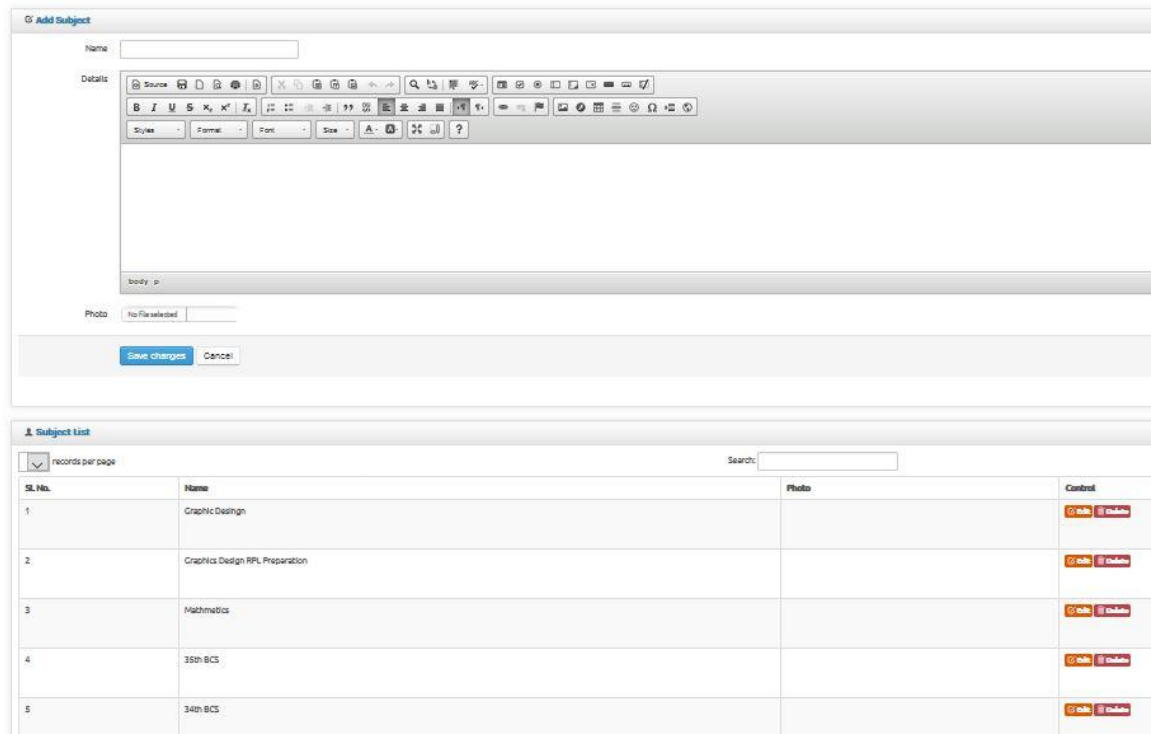


Figure A.8: Subject Add & List

**SHAFIQL** 1

MAIN

- Dashboard
- Subject
- Module
- Quiz
- Students
- Users

**Add Module**

Subject:

Name:

Duration:  Minute(s)

**Module List**

Sl. No.	Name	Duration	Control
Subject -->		Graphic Desingn	
1	Module 1	5 Minute(s)	<input type="button" value="Edit"/> <input type="button" value="Delete"/>
2	Exam 3	30 Minute(s)	<input type="button" value="Edit"/> <input type="button" value="Delete"/>
3	Exam 4	30 Minute(s)	<input type="button" value="Edit"/> <input type="button" value="Delete"/>

Figure A.9: Module Add & List

MAIN

- Dashboard
- Subject
- Module
- Quiz
- Students
- Users

**Add Quiz**

Subject Name:

Module Name:

Question (1):

Options (1).  (2).  (3).  (4).

Answer:

**Course List**

Sl. No.	Module	Question Number	Control
Subject Name -->		Graphic Desingn	
1	Module 1	2	<input type="button" value="Edit"/> <input type="button" value="Delete"/>
2	Exam 3	5	<input type="button" value="Edit"/> <input type="button" value="Delete"/>
3	Exam 4	0	<input type="button" value="Edit"/> <input type="button" value="Delete"/>

Figure A.10: Add Quiz & List

The screenshot displays a web application interface. On the left is a sidebar menu with the following items: MAIN, Dashboard, Subject, Module, Quiz, Students, and Users. The main content area is divided into two sections. The top section, titled 'Add Subject', contains three dropdown menus for 'Subject', 'Module', and 'Date', each with the placeholder text 'Select Subject' or 'Select Date'. Below these is a blue 'Search' button. The bottom section, titled '37th BCS ( Total exam in 37 BCS ) Date: 01/04/2018', features a '10 records per page' dropdown and a search input field. Below this is a table with the following data:

Sl. No.	Name	Control
1	Shafiqul	<a href="#">View Result</a> <a href="#">Published</a> <a href="#">Reset</a>

Below the table, it says 'Showing 1 to 1 of 1 entries'.

Figure A.11: Result view & Publish or reset exam for particular student

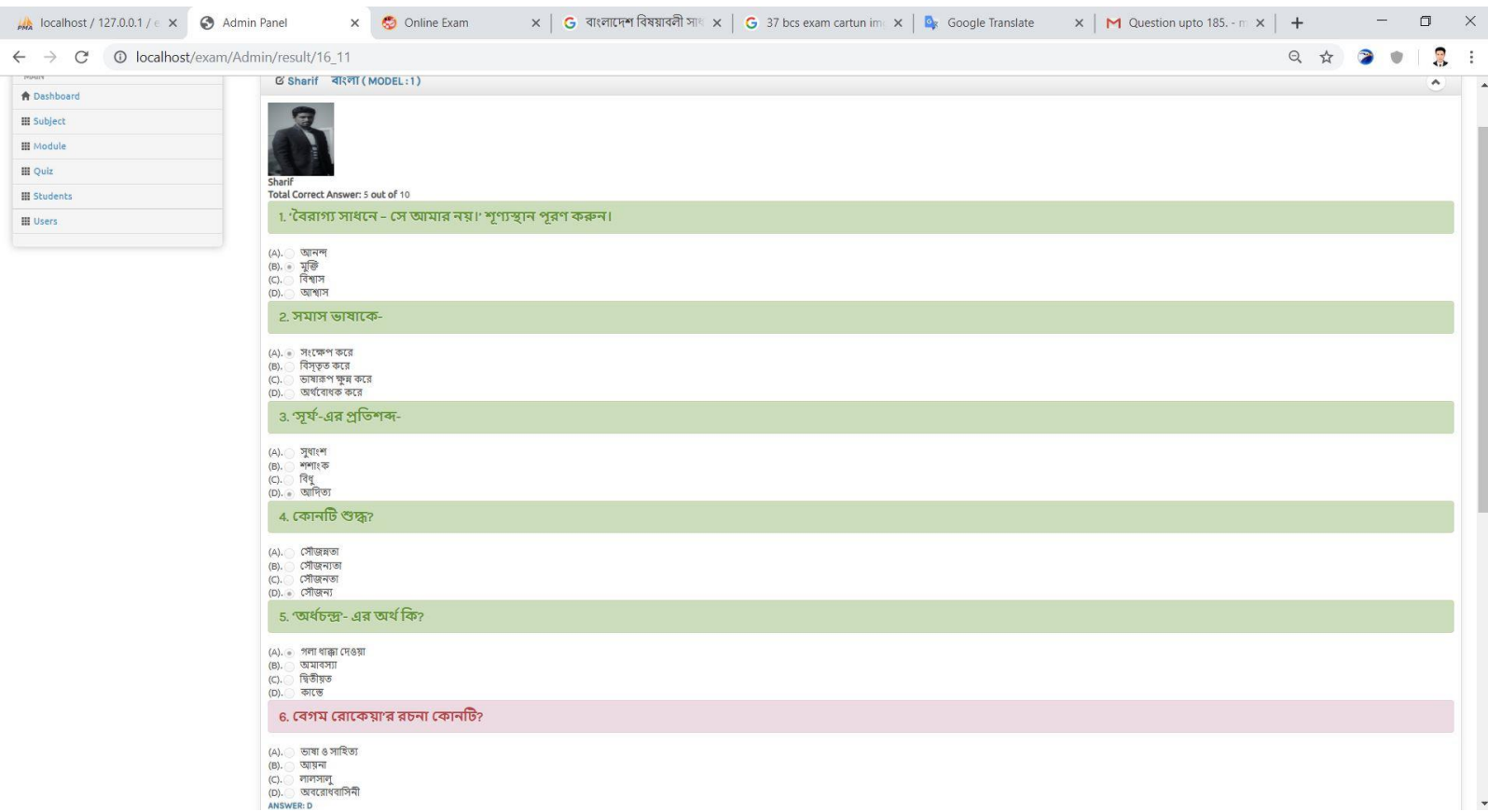


Figure A.12: Result of an exam of a student

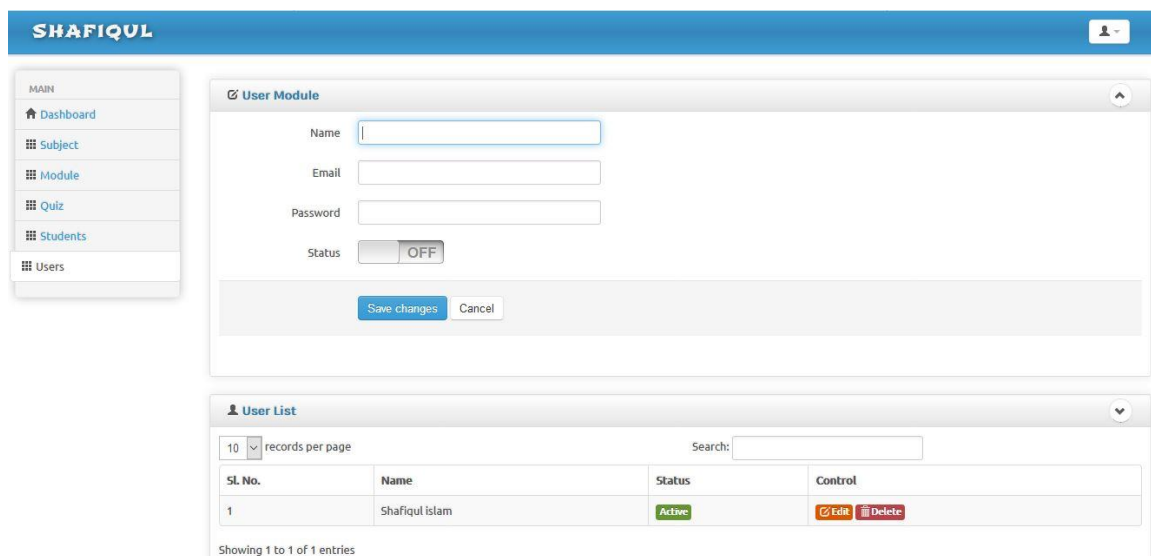


Figure A.13: Admin List & Add

## APPENDIX B: RELATED DIAGRAMS

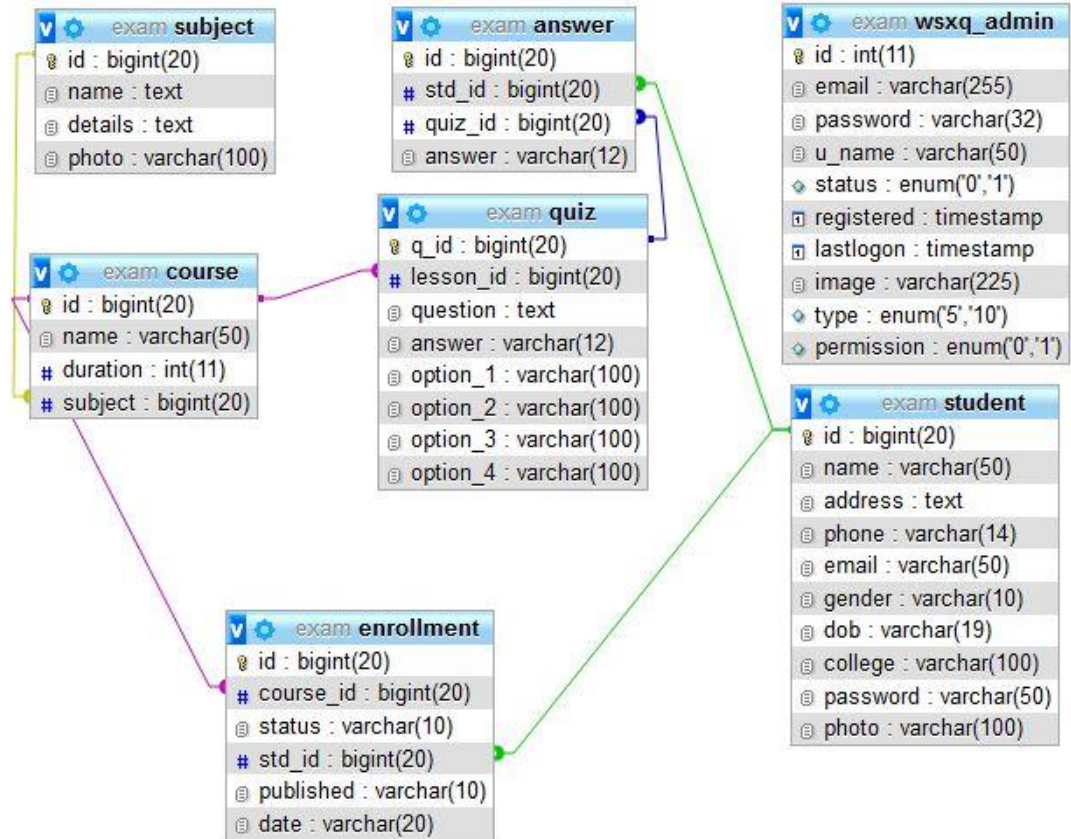


Figure B.1: Database Schema

# Online bcs exam preparation

## ORIGINALITY REPORT

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SIMILARITY INDEX

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INTERNET SOURCES

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STUDENT PAPERS

## PRIMARY SOURCES

1

[www.techcommunicators.com](http://www.techcommunicators.com)

Internet Source

<1%

2

E. Trengove, B. Dwolatzky. "A Software Development Process for Small Projects",  
International Journal of Electrical Engineering  
Education, 2012

Publication

<1%

Exclude quotes Off

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