

VIRTUAL CLASSROOM

BY

SANAUL KARIM

ID: 142-15-4019

MD. IMRAN HASAN TUHIN

ID: 142-15-3889

AND

SK. NAFIS AHMED

ID: 142-15-3834

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

Supervised By

Md. Sadekur Rahman

Assistant Professor

Department of Computer Science and Engineering

Daffodil International University



DAFFODIL INTERNATIONAL UNIVERSITY

DHAKA, BANGLADESH

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APPROVAL

This Project titled “**Virtual classroom**” submitted by **Sanaul karim , Imran Hasan Tuhin** and **Nafis ahmed** 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 Bachelor of Science in Computer Science and Engineering and approved as to its style and contents. The presentation has been held on 5th May, 2018.

BOARD OF EXAMINERS



Dr. Syed Akhter Hossain
Professor and Head
Department of Computer Science and Engineering
Faculty of Science & Information Technology
Daffodil International University

Chairman



Dr. Sheak Rashed Haider Noori
Associate Professor
Department of Computer Science and Engineering
Faculty of Science & Information Technology
Daffodil International University

Internal Examiner



MD. Zahid Hasan
Assistant Professor
Department of Computer Science and Engineering
Faculty of Science & Information Technology
Daffodil International University

Internal Examiner



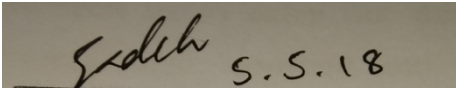
Dr. Mohammad Shorif Uddin
Professor
Department of Computer Science and Engineering
Jahangirnagar University

External Examiner

DECLARATION

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

Supervised by:



Md. Sadekur Rahman
Assistant Professor
Department of Computer Science and Engineering
Daffodil International University

Submitted by:

Sanaul karim
ID: 142-15-4019
Department of Computer Science and Engineering
Daffodil International University

Imran Hasan Tuhin
ID: 142-15-3989
Department of Computer Science and Engineering
Daffodil International University

Nafis Ahmed
ID: 142-15-3834
Department of Computer Science and Engineering
Daffodil International University

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ABSTRACT

This project is intended to develop a web-based application on online which will provide an easier communication between teacher and student. The proposed project is a web-based application which try to help the teachers and students. In our project there are two main actors so we defined their activity respectively. First of all, the users have to login in our system and create an account is created by admin. After approve the account users can see the join to the classroom. The teacher announces the exam time and student join the exam in the teacher declaration time.

The proposed system hardware/software setup is a fully automatic solution controllable from a single Pc. It is also very useful for an institute to test its students continuously for their mutual development and for researchers to make progress in work by getting negative and positive comments from the teacher, all users and the students. This system provides various types of questions (single textbox and image in questions) and calculate instant exam results or survey results which saves the precious time of faculties and researchers to check the papers and prepare result sheets and the teacher give his or her opinion and give proper mark distribution for the student exam sheet. To develop this web application we used HTML, CSS, Bootstrap, and php for better web design and make this application user friendly. After implementation of all functions, the system is tested in different stages and it works successfully as a prototype.

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CHAPTER 1

INTRODUCTION

1.1 Introduction

As a human being we have some basic demand that kind of demand is how life going to be easy. We can't move any moment without internet, so we can build a project "**Virtual classroom**" help to the teacher and student. "Virtual classroom" System is a web application that establishes a network between the teacher and student. The main goal of our project that we create a website that makes a communication among teacher and students. "**Virtual classroom**" is a combined set of tools for conducting classroom for teacher and student. This website developed by Google based website and it will more popular day by day. In modern times it is very beneficial for teacher and student.

1.2 Motivation

In develop country people are used internet online system. We know present day's in our country Internet become popular so we want to create a website that make our teacher and student save their time and remove the space barriers between teacher and student. Student also can remove his or her weakness join to this virtual classroom. So we are motivated from this time complexity and take student help using this "**virtual classroom**", teacher also observers the all student easily and student can take good preparation for the next when he or she bad in the last exam.

1.3 Objective

The **objectives** of a '**virtual classroom**' are to improve access to advanced educational experiences by allowing students/participants and teachers/presenters to participate in remote learning communities using personal computers and to improve the quality and effectiveness of education by using the computer to support the teacher and teacher take proper guideline in proper way.

Some objective in project given below:

- Improve access to & effectiveness of post-secondary education.
- Remove space barriers.
- Remove time conflicts. Student may participate in class activities whenever their schedule permits.
- To improve and enable and connect student around the world using internet technology.
- To reduce time.
- Increasing using internet system.
- To ensure space barriers for teacher and student to learn more about how and what to read to develop your knowledge and skills as a historian

1.4 Expected Outcome

The proposed project is a web-based application which try to help the teachers and student to study relation issue. In our project there are two main actors so we defined their activities respectively. The users fill sign up form firstly.

1.4.1 Teacher

Teachers can approve or cancel user request and check the profile of a student. Teachers also announced the exam time and student attend the exam that time. Teacher can also upload question paper in the classroom for the exam time.

1.4.2 Student

After approve the account, student can see the facilities and attend the exam and collect lecture sheet, observe himself or herself what the position he or she deserves.

1.4 Project Layout

We have organized our report follows. In chapter two, we have introduced the background circumstance of our project. We also briefed about the related work, the scope and challenges of the project and we are doing comparative study many other classroom or website .

Chapter 2

BACKGROUND

2.1 Introduction

Earlier we talked about why we referred to this project, we tried to support the teachers and the student, and we made sure that the communication teachers and the students reduced the spatial barriers and reduced the complexity of the time. The teacher and the student benefit from our system. Basically, we think about teachers and the student. In this chapter, we discuss all the tasks we need to worry about before taking a step forward. Here we discuss all related work, comparative studies, the extent of the problem and the challenges.

2.2 Related Work

Already we told that there are some related work that we defined an application which is planned to support to the teachers, the students and the authorities of an institution.

2.3 Comparative studies

The study will discuss two main objects. The first was the model for evaluating the distance of an official educational system and referred to virtual educational learning. The second responds to the most modern educational needs. The comparative study discusses or investigates how to improve studies at the advanced level of this evaluation.

2.4 Scope of the Problem

We have already seen that some current applications already help the teacher and the student. But these Web sites do not eliminate the reduction of the teacher's and the student's spatial barriers, we can do our best to provide an adequate security problem and reduce the time complexity of the student and teachers. By using this website, users make sure there is a balance between work and personal time. This website also reduces boredom, safe time, saves money, reduces costs and ensures comfort.

2.5 Challenges

No work exists without challenge. It is hard to convince users why they are using our website. We can face a big problem to make a website better than other websites or other different rooms that we can see before. We are in competition with our existing system, so we have to motivate people and manipulate people to use our system and make it understandable that our system is easier and better than others.

CHAPTER 3

REQUIREMENT SPECIFICATION

3.1 Business Process Modeling

Virtual education is an emerging concept. Here, the classes are not taken face-to-face in a classroom but through an electronic medium as a substitute. Taking up these virtual classes through an electronic medium is termed as E-Learning. E-Learning is proving itself as a boon for students especially for the disabled who are not able to go and attend the lectures.

3.1.2 Requirement Collection and Analysis

Developing a virtual classroom system to promote a greater count of students to splurge into the field of Education. The purpose of this software requirements specification is to verify that all the specifications are correct and are verified. This document also serves to ensure the software development life cycle.

3.1.3 System statement of scope

This project has a lot of scope for future development. Features like ability to capture videos for making presentation, students can give examinations and after the exam, all students can show other's scripts.

3.1.4 Major constraints

For ensuring platform independence of the software, the implementation will be PHP so users system must have a PHP run time environment.

3.1.5 Functional and Data Model

This section describes overall system function and the information domain in which it operates.

3.2 Logical Data Model

A use case diagram, is a visual depiction of the different scenarios of interaction between system actors and use cases. The usefulness of use case diagrams is more as a tool of communication between the requirements capture team and the user group

3.2.1 Software Interface

It should be possible for E-learning tool to be implemented in both Windows System environments. The GUI and other parts of the E-learning tool software are to be done in PHP. The output of this software will need a web browser for viewing it.

3.3 Design Requirement

The user interface is an important part of this software and will make the software very user friendly. The input screen should have some icons that will be used for opening the browse window and importing the input files. It should also show the files that are being imported. The preview screen should be able to show the presentation slides, video and the table of contents as a complete multimedia presentation.

3.3.1 Subsystem Description

A detailed description of each subsystem is presented

3.3.2 Performance Issues

When a more number of users are using the system at a time there may be a load error due to the server access

3.3.3 Design Constraints

The system must be designed to allow web usability. That is, the system must be designed in such a way that will be easy to use and visible on most of the browsers.

3.3.4 Project schedule

A top-level schedule for the development project is proposed and given below:

3.4.5 Project Schedule

- Requirement Analysis
- Designing the system
- Coding the software
- Unit Testing
- Integration Testing
- Operational Testing
- Documentation & Maintenance

3.5 Use Case Diagram

In use case diagrams the below figures shows that-

- Teacher, student and Admin act as actors.
- And the attributes are associated with actors.
- These attributes include some sub-attributes.
- Particular actors are associated with particular attributes.
- Admin is associated with all the attributes.
- That is why he get all the features of this application.

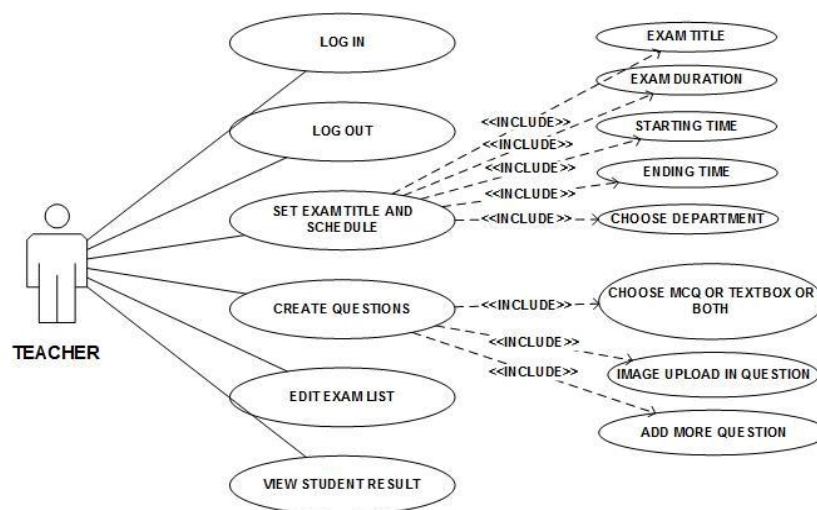


Figure: Use Case Diagram for teacher log in

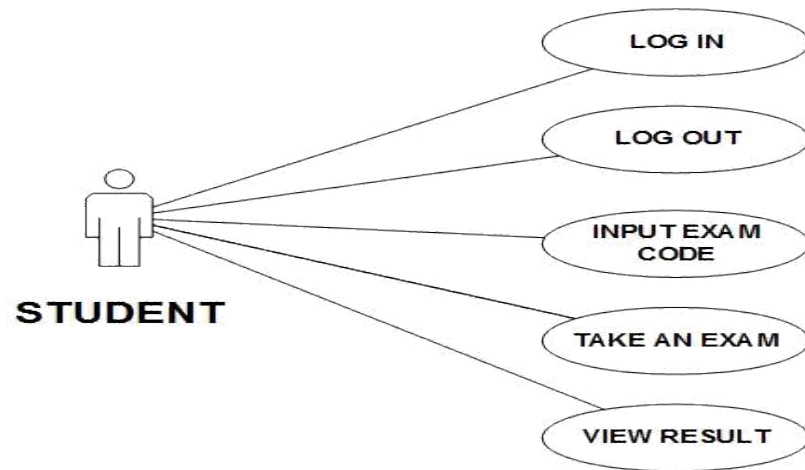


Figure: Use Case for Student

CHAPTER 4

DESIGN SPECIFICATION

In this chapter we have represented our application's whole overview and front-end design. This chapter contains some snapshots of our program. The snapshots are given sequentially.

4.1 Overview of Pages and Descriptions

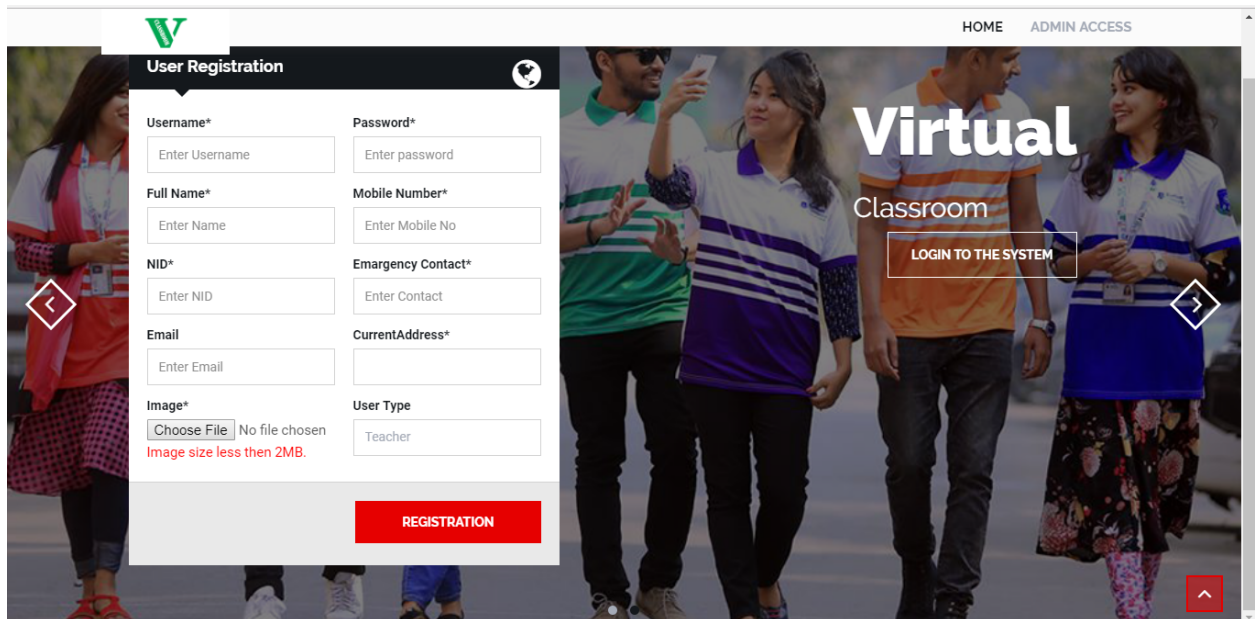


Figure: Homepage for Virtual Classroom

The above figure is our application's main home page. It has a navigation bar containing home and admin access bar on the right side. User Needs to click on the “LOG IN TO THE SYSTEM” to see the full features. Registration is required for unregistered users. Registered users can login through the login bar.

4.1.2 Log In page

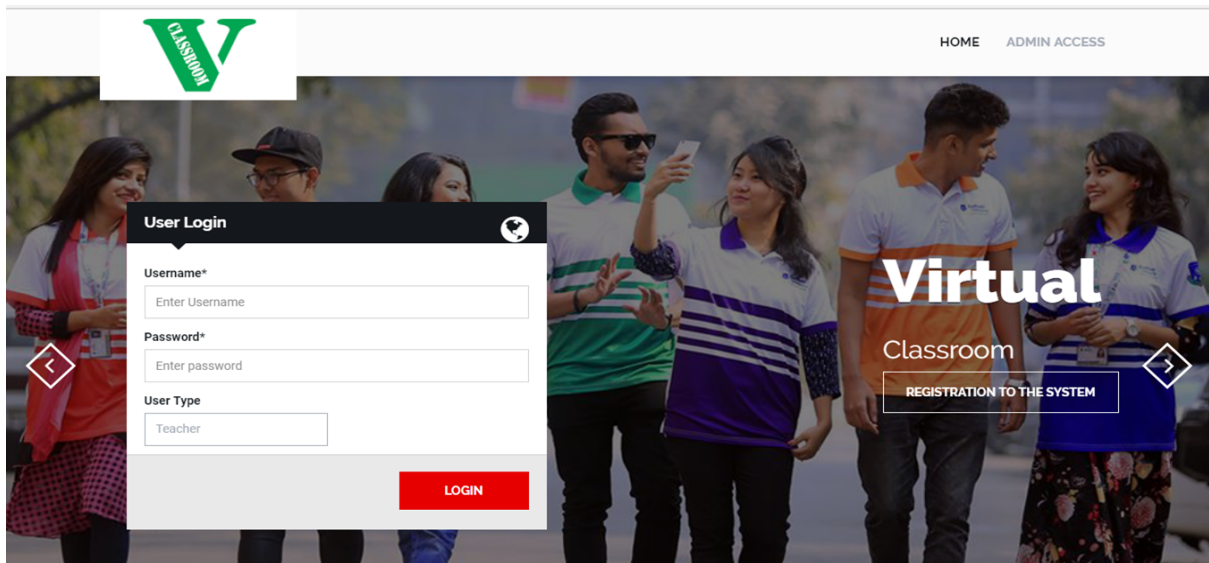


Figure: Log in page for Virtual Classroom

Only Registered User can log in to the virtual classroom. When Logging in to the system, It will ask user the user type. That are Log in as Teacher or Log in as student.

4.1.3 Teacher's Page:

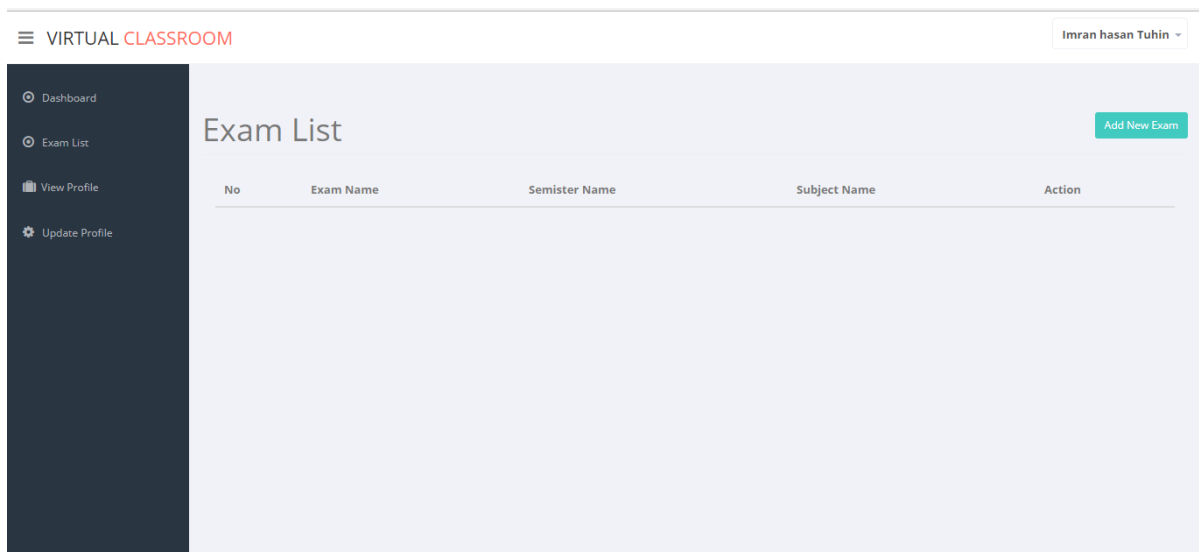


Figure: After Log in page for Teacher

4.1.4 Teacher's Information Page:

The screenshot shows a web interface for a 'VIRTUAL CLASSROOM'. At the top right, the user 'Imran hasan Tuhin' is logged in. On the left is a dark sidebar with navigation links: Dashboard, Exam List, View Profile, and Update Profile. The main content area features a red profile card for 'tuhin3989' with email 'tuhinh2011@gmail.com'. To the right, a teal header reads 'User Information', followed by a 'Bio Graph' section containing a table of personal details.

Bio Graph			
Name	: Imran hasan Tuhin	Email	: tuhinh2011@gmail.com
pin	: 3218	Mobile	: 01521211514
NID	: 13823982907371121	Address	: dhaka
Emergency Contact	:01521211514		

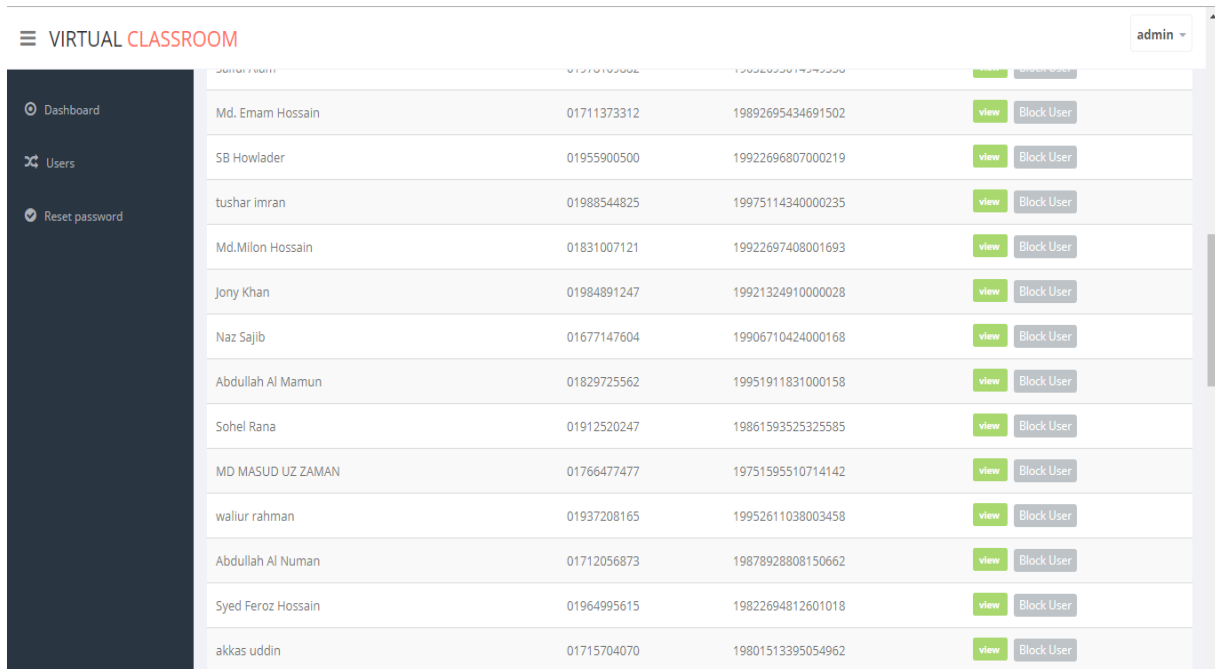
Figure: Teacher Information Page

4.1.5 Admin Log in Form:

The screenshot displays a login form with a teal header button labeled 'SIGN IN NOW'. Below it are two input fields: the first contains the text 'admin' and the second is a password field with masked characters '.....'. At the bottom is a red button labeled 'LOG IN'.

Figure: Admin Login Form

4.1.5 Admin Interface



The screenshot displays the 'VIRTUAL CLASSROOM' admin interface. On the left is a sidebar with navigation options: Dashboard, Users, and Reset password. The main area shows a table of users with columns for Name, ID, and a status indicator. Each row has 'view' and 'Block User' buttons.

Name	ID	Status	Actions
Md. Emam Hossain	01711373312	19892695434691502	view Block User
SB Howlader	01955900500	19922696807000219	view Block User
tushar imran	01988544825	19975114340000235	view Block User
Md.Milon Hossain	01831007121	19922697408001693	view Block User
Jony Khan	01984891247	19921324910000028	view Block User
Naz Sajib	01677147604	19906710424000168	view Block User
Abdullah Al Mamun	01829725562	19951911831000158	view Block User
Sohel Rana	01912520247	19861593525325585	view Block User
MD MASUD UZ ZAMAN	01766477477	19751595510714142	view Block User
waliur rahman	01937208165	19952611038003458	view Block User
Abdullah Al Numan	01712056873	19878928808150662	view Block User
Syed Feroz Hossain	01964995615	19822694812601018	view Block User
akkas uddin	01715704070	19801513395054962	view Block User

Figure: Admin Interface

4.2 Back-end Design

Back end refers to the separation of concerns about the data access layer (*back end*) of a piece of software, or the physical infrastructure or hardware.

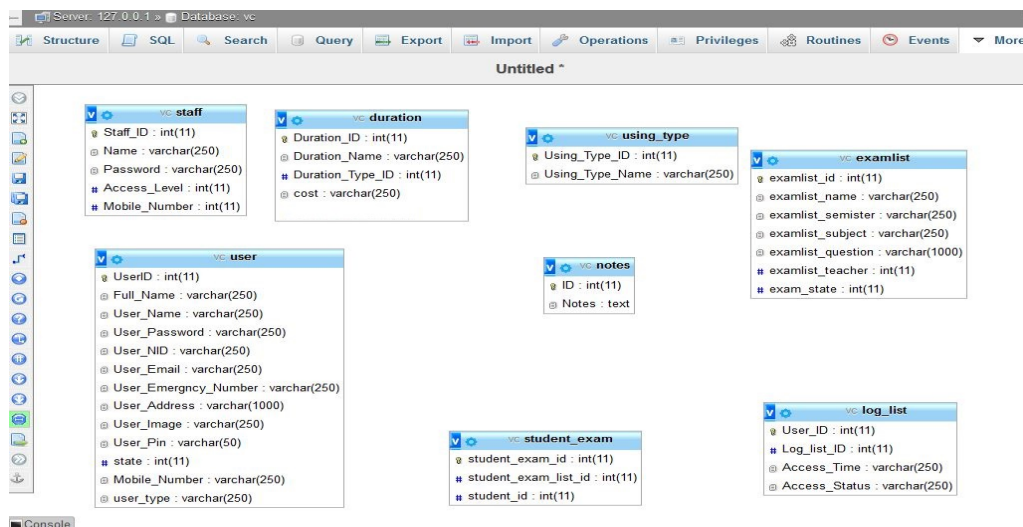


Figure: Class Diagram of the Virtual Classroom

4.3 Interaction Design and UX

4.3.1 UX Design (User Experience Design) As is found on Wikipedia “**User experience design** (UXD, UED or XD) is the process of enhancing user satisfaction by improving the usability, accessibility, and pleasure provided in the interaction between the user and the product.

4.3.2 Interaction design

Interaction design can be understood in simple (but not simplified) terms: it is the design of the interaction between users and products. Most often when people talk about interaction design, the products tend to be software products like apps or websites. The goal of interaction design is to create products that enable the user to achieve their objective(s) in the best way possible.

If this definition sounds broad, that’s because the field is rather broad: the interaction between a user and a product often involves elements like aesthetics, motion, sound, space, and many more. And of course, each of these elements can involve even more specialized fields, like sound design for the crafting of sounds used in user interactions.

As you might already realize, there’s a huge overlap between interaction design and UX design. After all, UX design is about shaping the experience of using a product, and most part of that experience involves some interaction between the user and the product. But UX design is more than interaction design: it also involves user research (finding out who the users are in the first place), creating user personas (why, and under what conditions, would they use the product), performing user testing and usability testing, etc.

4.3.3 The 5 dimensions of interaction design

The 5 dimensions of interaction design is a useful model to understand what interaction design involves. Gillian Crampton Smith, an interaction design academic, first introduced the concept of four dimensions of an interaction design language, to which Kevin Silver, senior interaction designer at IDEXX Laboratories, added the fifth.

- **1D: Words**

Words—especially those used in interactions, like button labels—should be meaningful and simple to understand. They should communicate information to users, but not too much information to overwhelm the user.

- **2D: Visual representations**

This concerns graphical elements like images, typography and icons that users interact with. These usually supplement the words used to communicate information to users.

- **3D: Physical objects or space**

Through what physical objects do users interact with the product? A laptop, with a mouse or touchpad? Or a smartphone, with the user's fingers? And within what kind of physical space does the user do so? For instance, is the user standing in a crowded train while using the app on a smartphone, or sitting on a desk in the office surfing the website? These all affect the interaction between the user and the product.

- **4D: Time**

While this dimension sounds a little abstract, it mostly refers to media that changes with time (animation, videos, sounds). Motion and sounds play a crucial role in giving visual and audio feedback to users' interactions. Also of concern is the amount of time a user spends interacting with the product: can users track their progress, or resume their interaction some time later?

- **5D: Behavior**

This includes the mechanism of a product: how do users perform actions on the website? How do users operate the product? In other words, it's how the previous dimensions define the interactions of a product. It also includes the reactions—for instance emotional responses or feedback—of users and the product.

See how 5 dimensions of interaction design come together in the animation below:

Important questions interaction designers ask:

What can a user do with their mouse, finger, or stylus to directly interact with the interface? This helps us define the possible user interactions with the product.

What about the appearance (color, shape, size, etc.) gives the user a clue about how it may function? This helps us give users clues about what behaviors are possible. Do error messages provide a way for the user to correct the problem or explain why the error occurred? This lets us anticipate and mitigate errors.

What feedback does a user get once an action is performed? This allows us to ensure that the system provides feedback in a reasonable time after user actions.

Are the interface elements a reasonable size to interact with? Questions like this help us think strategically about each element used in the product.

Are familiar or standard formats used? Standard elements and formats are used to simplify and enhance the learnability of a product.

For instance, if the company is large enough and has huge resources, it might have separate jobs for UX designers and interaction designers. In a large design team, there might be a UX researcher, an information architect, an interaction designer, and a visual designer, for instance.

But for smaller companies and teams, most of the UX design job might be done by people, who might or might not have the title of “Interaction Designer”. In any case, here are some of the tasks interaction designers handle in their daily work:

- **Design strategy:**

This is concerned with what the goal(s) of a user are, and in turn what interactions are necessary to achieve these goals. Depending on the company, interaction designers might have to conduct user research to find out what the goals of the users are before creating a strategy that translates that into interactions.

- **Wireframes and prototypes:**

This again depends on the job description of the company, but most interaction designers are tasked to create wireframes that lay out the interactions in the product. Sometimes, interaction designers might also create interactive prototypes and/or high-fidelity prototypes that look exactly like the actual app or website.

4.4 Implementation Requirements

A virtual classroom, on the other hand, is a system that provides the same opportunities for the teaching and learning process beyond the physical limits of the traditional classroom's walls, thanks to the use of computer communication networks. Due to the ubiquity and popularity of the Internet - particularly the World Wide Web - most virtual classroom implementations are Web-based.

4.4.1 Step 1 - Assess the needs and the necessary conditions to satisfy them

We begin assuming that the reader has very basic knowledge of virtual classroom concepts, pros, and cons and wants to perform a feasibility analysis before proceeding into actual implementation. The main purpose of this step is to assure the existence of a need for the proposed virtual classroom and the basic infrastructure to develop it. This is simple, though essential, question of economics. Unless there is a minimum number of (remote) students who will benefit from the virtual classroom implementation, the initiative will be seen by the upper management as a waste of time, money, and resources.

Step 2 - Estimate the development cost, effort, and implications

At this point, it is assumed that the basic needs and the necessary conditions to satisfy those needs have been assessed. In other words, the approach looks feasible enough to move one step further and start talking about numbers. The main purpose of this step is to reach a clear, accurate, quantitative estimate of the overall cost of developing the virtual classroom.

Step 3 - Plan the virtual classroom

After having estimated the overall cost of developing the virtual classroom, assessed its impact on existing structures, and established some of its minimum requirements, it is time to look more closely at the project from an educational perspective. Some questions to help assessing the pedagogical feasibility of the proposed project are:

The primary purpose of building a virtual classroom should be to improve the experience of the students and instructors, rather than to play with new technology. Developing a list of educational goals is an essential part of the planning process. It is strongly advisable not to go ahead without figuring out which goals must be reached. Difficulties in coming up with such a list might be a warning about the overall validity of the approach. Examples of such goals are:

- o Ensuring that all students and teachers have equal access to instructions and receive all instructional material on time.
- o Providing students with on time, continuous, and frequent feedback opportunities to assess their understanding and skills of subject matter.
- o Supplementing theory with a variety of practical tutorials and activities. Theory and application should be intertwined and inspiring entities.
- o Increasing student-to-student and student-to-instructor-in and outside lectures.
- o Systematic planning based on the realization that the purpose behind any technology in education, is for it to be utilized as a tool to aid the learner's knowledge construction, sharing, and debating information and constructing knowledge.

Step 4 - Design the virtual classroom

Now that the pedagogical aspects of the proposed project have been assessed, it is time to start the actual design process. Here are some questions to help at this stage:

The HTML pages containing the course material should be organized in a way that makes navigation easy, simple, and consistent (from the user's point of view) and reduces the amount of work necessary for site maintenance (from the instructor's/administrator's point of view). Part of these objectives can be achieved by providing a suitable overall structure for the pages. There are several good ways of organizing the pages and their interdependencies, such as hierarchical tree, or linked list. Regardless of the organization strategy, the final outcome should always provide for a user-friendly, easily maintainable, navigation scheme.

Step 5 - Prepare and distribute contents

Writing pure HTML code in a text-based editor may still be the preferred way to go for several people with computer programming background, but there are more, friendlier, and better alternatives to it. It is strongly advisable to research, compare, and evaluate Web-design tools and supplementary software before adopting a certain set of tools. Changing lanes at the middle of the road might be costly and troublesome.

Using more than one tool to edit the same page can lead to problems, ranging from the harmless though annoying "war" between their extra HTML meta tags to serious compatibility issues.

Step 6 - Enable communication

Effective communication between instructor and students and among students themselves should be a high priority issue during the design of the virtual classroom. Some pertinent questions are:

There are basically two possible ways of implementing communication between instructor and students in a virtual classroom: synchronous and asynchronous.

Synchronous communication tools, such as Class Point or NetMeeting, allow the instructor to teach live lectures through the Web using resources such as audio and video conferencing, white board and text-based chat. Students can interact by asking questions, normally using a text window. Some type of floor control is normally desired, to prevent chaos and ensure that students will have their questions answered in a First Come First Served (FCFS) basis.

Asynchronous tools allow information to be placed for future processing. Some common examples are: e-mail, bulletin board systems, mailing lists, and the course pages themselves.

A successful virtual classroom implementation should use both synchronous and asynchronous techniques to enable one-to-one (normally instructor-to-student), one-to-many (typically instructor-to-class) or many-to-many (e.g. threaded discussions) interactions.

Step 7- Implement class management procedures

Class management tasks are the clerical and administrative tasks necessary to ensure that a classroom operates efficiently. These are tasks that many educators wish they did not have to perform, even knowing their importance for the operation of a class.

Step 8 - Set up the system

It is now time to get a little more technical and discuss some issues involved in setting up the system and making the virtual classroom available. Some of the relevant questions are:

The first step is to select the computer that will act as a Web server and its operating system. The choice of operating system is a critical one, since many other software components (Web server, mail server, etc.) will depend on the underlying operating system. The combination of UNIX-based machines running the free Apache Web server is a very common one.

Step 9 – Set up the environment

Installation, configuration, and security protection of a virtual classroom are too detailed and lengthy steps to be mentioned in this paper. At this point it is strongly advisable that the instructor and her technical support team rely on specialized books, tutorials, and the experience system administrators.

Step 10 - Maintain and update the virtual classroom

Creating a virtual classroom demands a lot of work, but that is just the beginning. As with any other computer-based information system, the virtual classroom requires maintenance and frequent updates to retain its usefulness. Some of the questions involved are:

Backups are essential maintenance measures in any computer-based system and virtual classrooms should be no exception. The most common contemporary backup devices are zip disks, tape drives, and magneto-optical disks. Many backup utilities (several of them operating system-specific) are available to make the task easier and reduce the risk of human errors.

There are some issues of backup policy that have to be established and strictly followed, such as:

- o Scheduling policy (when are backups performed)
- o Frequency policy (how often)
- o What to backup
- o Who is responsible
- o Which media to use
- o Where to store the backup

An inevitable side effect of the rampant progress in computer technology is the frequent need for software and hardware upgrade. Provisions should be made for these tasks, both in terms of cost as well as in the possible technical consequences of such upgrades.

CHAPTER 5

IMPLEMENTATION AND TESTING

5.1.11 Implementation of Database

Database design is the process of producing a detailed data model of database. The data model contains all the needed logical and physical design choices and physical storage parameters needed to generate a design in a data definition language, which can then be used to create a database. A fully attributed data model contains detailed attributes for each entity.

A database collects and stores data in such organized way that data requirements are satisfied by the database. The general objective is to make information access easy, quick, inexpensive and flexible for the user. There are also some specific objectives like controller redundancy from failure, privacy, security and performance. A collection of related records makes up a table. To design and store data to the needed forms database tables are prepared. Two essential settings for a database are:

- Primary key: This field is unique for all the record occurrences.
- Foreign key: This field is used to set relationship between tables. Normalization is a technique to avoid redundancy in the tables.

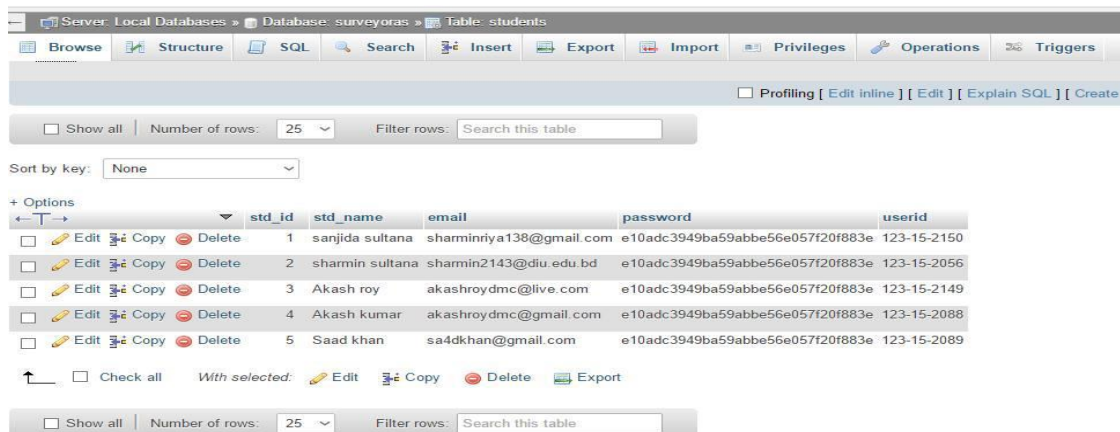
5.1.2 Database Management System

A database management system (DBMS) is system software for creating and managing databases. The DBMS provides users and programmers with a systematic way to create, retrieve, update and manage data. In our application we used MySQL.

5.1.3 MySQL

MySQL is the most popular open source relational SQL database management system. MySQL is one of the best RDBMS being used for developing web-based software applications. We are using MySQL as database in our proposed system.

5.1.4 Database Tables



Server: Local Databases » Database: surveyoras » Table: students

Browser Structure SQL Search Insert Export Import Privileges Operations Triggers

Profiling [Edit inline] [Edit] [Explain SQL] [Create]

Show all | Number of rows: 25 | Filter rows: Search this table

Sort by key: None

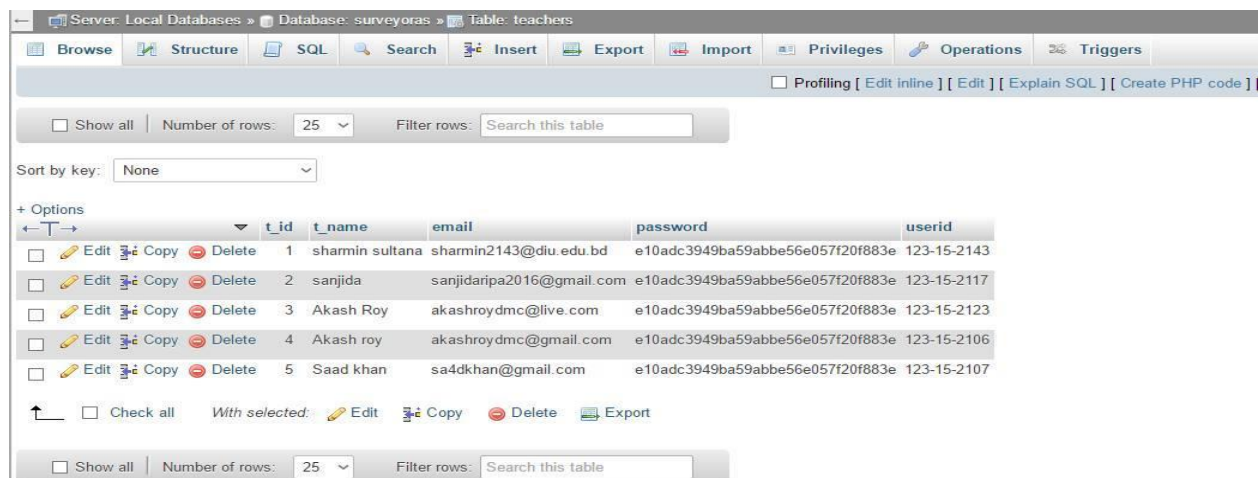
+ Options

		std_id	std_name	email	password	userid
☐	Edit Copy Delete	1	sanjida sultana	sharminriya138@gmail.com	e10adc3949ba59abbe56e057f20f883e	123-15-2150
☐	Edit Copy Delete	2	sharmin sultana	sharmin2143@diu.edu.bd	e10adc3949ba59abbe56e057f20f883e	123-15-2056
☐	Edit Copy Delete	3	Akash roy	akashroydmc@live.com	e10adc3949ba59abbe56e057f20f883e	123-15-2149
☐	Edit Copy Delete	4	Akash kumar	akashroydmc@gmail.com	e10adc3949ba59abbe56e057f20f883e	123-15-2088
☐	Edit Copy Delete	5	Saad khan	sa4dkhan@gmail.com	e10adc3949ba59abbe56e057f20f883e	123-15-2089

Check all | With selected: Edit Copy Delete Export

Show all | Number of rows: 25 | Filter rows: Search this table

Figure: Table for Student Login



Server: Local Databases » Database: surveyoras » Table: teachers

Browser Structure SQL Search Insert Export Import Privileges Operations Triggers

Profiling [Edit inline] [Edit] [Explain SQL] [Create PHP code]

Show all | Number of rows: 25 | Filter rows: Search this table

Sort by key: None

+ Options

		t_id	t_name	email	password	userid
☐	Edit Copy Delete	1	sharmin sultana	sharmin2143@diu.edu.bd	e10adc3949ba59abbe56e057f20f883e	123-15-2143
☐	Edit Copy Delete	2	sanjida	sanjidaripa2016@gmail.com	e10adc3949ba59abbe56e057f20f883e	123-15-2117
☐	Edit Copy Delete	3	Akash Roy	akashroydmc@live.com	e10adc3949ba59abbe56e057f20f883e	123-15-2123
☐	Edit Copy Delete	4	Akash roy	akashroydmc@gmail.com	e10adc3949ba59abbe56e057f20f883e	123-15-2106
☐	Edit Copy Delete	5	Saad khan	sa4dkhan@gmail.com	e10adc3949ba59abbe56e057f20f883e	123-15-2107

Check all | With selected: Edit Copy Delete Export

Show all | Number of rows: 25 | Filter rows: Search this table

Figure: Table for Techer Login

5.3 Implementation of Interactions

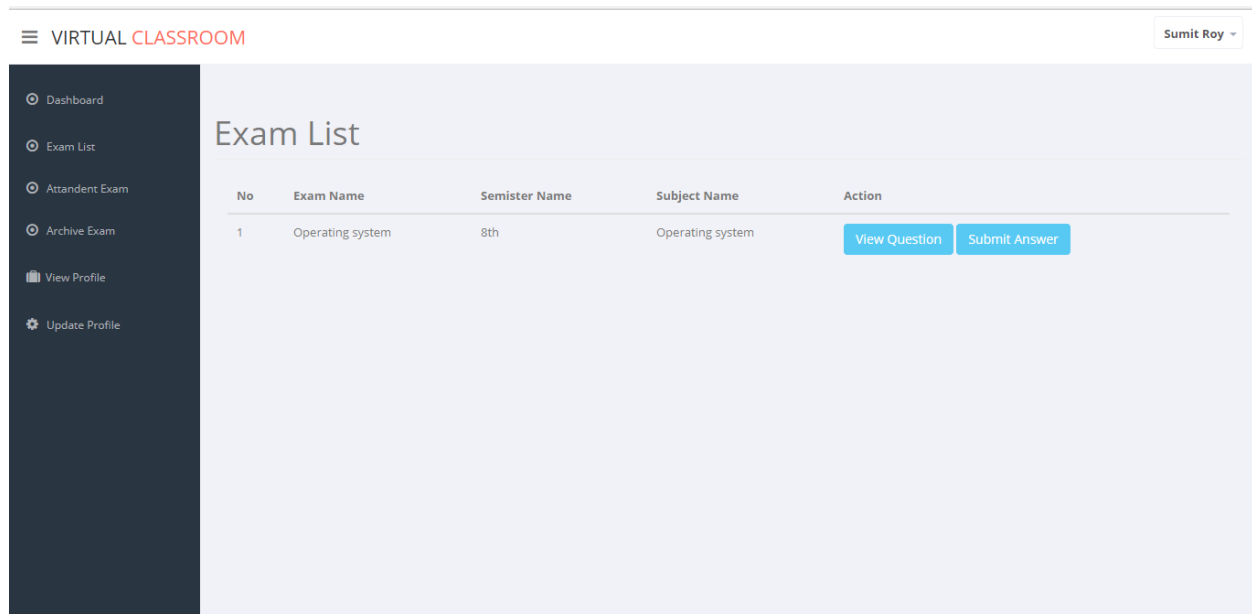


Figure: Exam List

5.4 Testing Implementation

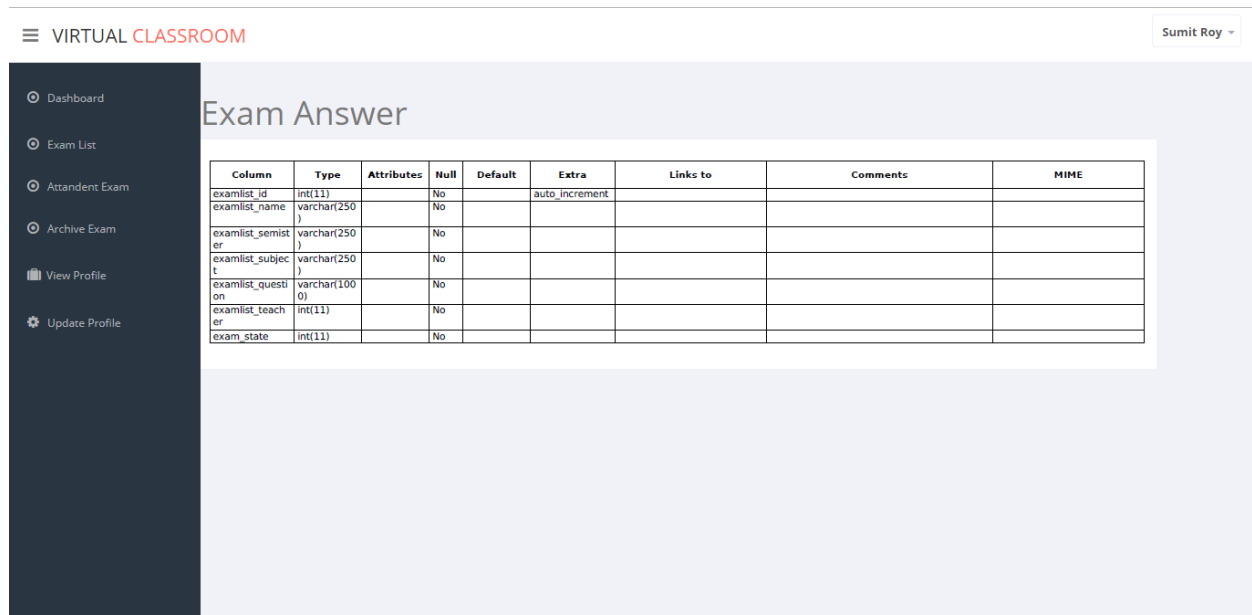


Figure: Exam Answers Of others

5.5 Test Results and Reports

VIRTUAL CLASSROOM

Saidur Rahman

Dashboard

Exam List

Exam Archive

View Profile

Update Profile

Attaned Student Answer Script

No	Student Name	Exam Name	Semister Name	Subject Name	Action
1	Sumit Roy	Operating system	8th	Operating system	View Answer
2	Sumit Roy	Operating system	8th	Operating system	View Answer

Figure: Students Answer Scripts

CHAPTER 6

CONCLUSION

The application has been successfully implemented. After connecting with the application through the localhost its overall features and functionalities just works fine. This application's workflow and responsive design is user friendly and efficient enough to work with.

We have encouraged and took initiatives to develop this application because various Organizations need this system in their day to day operations. The Online Exam and Survey System features for creating exams including various departments and courses (IT, commerce, science etc.) for conducting examinations and creating survey for users. This system helps in conducting examinations and survey quickly and publishing its result automatically, all the operations performed by the application itself efficiently which saves a lot of time. With the effective use, any institute or researchers can apply the Online Exam and Survey System for conducting quick examinations and survey and getting better results in less time.

This project is meant for describing all the features and procedures that were followed while developing the application. This document specially mentions the details of the project how it was developed, the primary requirement, as well as various features and functionalities of the project and the procedures followed in achieving these objectives.

6.1 Limitations

Our application has some limitation. We will overcome these limitations in future. Some of the main limitations are-

- Only developed for web application.
- We implemented this application through localhost, it should have a domain to access the website through the internet.
- Some features need to be included such as extensions and widgets.

6.2 Future Scopes

- Our mission is to make this application for all platform like windows, osx, ios and android.
- Our application's data needs more storage in future, so we will add this with larger database system such as Oracle Database or Microsoft SQL Server .
- We will add more additional features to make it more dynamic to satisfy larger organizations and make this application trusted by them and verified.

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Plagiarism Report

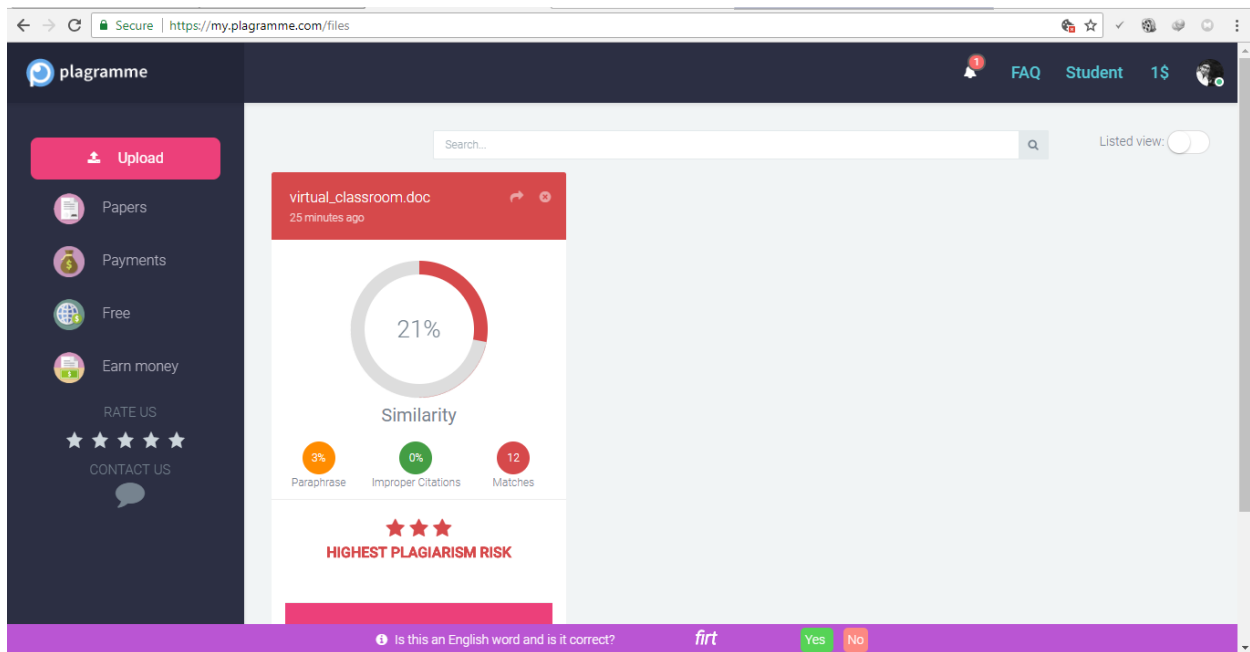


Figure: Plagiarism Test

