

Online Education System

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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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DAFFODIL INTERNATIONAL UNIVERSITY

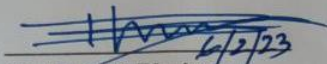

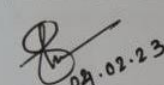

DHAKA, BANGLADESH

4th February 2023

APPROVAL

This Project titled “**Online Education System**”, submitted by Khondaker Easrun Hossain, ID No: **131-15-2265** 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 4th February 2023.

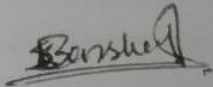
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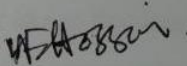
We hereby declare that this project has been done by us under the supervision of **Mr. Dr. Sumit Kumar Banshal, Assistant Professor, and Department of CSE** Daffodil International University. We also declare that neither this project nor any part of this project has been submitted elsewhere for the award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

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ABSTRACT

Physical education these days no longer applies to today's younger generations. Internet reading and reading grades that are popularly known as online education play a vital role in the country's education system. There is no denying that online education offers many benefits to younger students. However, there are many negative effects from online education. Limited collaborative learning, increased time and effort are the many negative effects from online education. This study examines the meaning of online education among students especially in a private higher education institution and its impact on the Bangladesh national education system. Data were collected through surveys, interviews and secondary data, analyzed using SPSS. The studies found that there are various barriers to online education and its effect on the quality of the Bangladesh Education System to some extent. A number of problems have been identified and these problems need to be addressed in order to preserve the quality of education for future generations. In addition, the Department of Higher Education should develop a comprehensive policy, carefully monitor the implementation of online education, evaluate and review the methodology used to teach and improve the preservation of online quality in a private higher education institution.

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CHAPTER 1

INTRODUCTION

1.1 Introduction

Online Education Systems via Internet, Network, or standalone computers. The online education systems are basically a network-enabled transfer of skills and knowledge. The Online Education Programs focuses on the use of electronic learning programs and learning processes. The Online Education systems include all forms of computer-based learning and teaching [11]. Information and communication system, whether online or not, serve as specific issues for initiating the learning of process. This often involves out-of-class and in-class educational experiences technologically, or progress continues in terms of device and curriculum. Online Education Systems Electronic and Networking Skills and Networking Online Education Program programs and processes include Webbase learning, computer-based learning, virtual learning opportunities and digital collaboration. Content is delivered via Internet, intranet / extranet, audio or video tape, satellite TV, and CD-ROM. That means E-learning systems consist of both the Education Management system and the course management system. It can be independent or teacher-led and includes media in the form of text, image, animation, video streaming and audio. It was often thought that new technologies could make a huge difference in education. At a particularly young age, children can make great use of new media connections, and develop their skills, knowledge, and worldview, under parental supervision, yes.

Many sponsors of the Online Education programs believe that everyone should be equipped with the basic knowledge of technology, and use it as a means to an end. In the 21st century, we have moved from the Industrial Age to the Information Age and now to the Age. Knowledge and proper management were keys to the success and survival of organizations in today's most powerful and competitive world. Acquisition, retention, transfer, retrieval, retrieval, and visualization of information often distinguish successful organizations from those that fail. The ability to access, integrate, and use relevant information effectively will be an important skill for the next century. Reading is the key to gaining our full potential. Our survival in the 21st century as individual, organizations and nations will be depend on

our ability to learn and apply what we learn in our daily lives. Its depend on our ability to learn and apply what we learn in our daily lives. The online education systems have the power to change how and when employees learn. Learning will be more integrated with the tasks and will use short, a modular, delivery systems. Using workplace technology, an online education system closes the gap between learning and work. Employees can combine learning to work more efficiently because they use the same tools and technology in learning as they work for the job. Both employers and employees recognize that online education systems will be reduce the narrowing gap between work and home, and between work and study. An online education system was a way for any organization that seeks to develop the skills and strengths of its employees. With rapid changes in all types of workplaces, especially medical and health care facilities, there is an urgent need to quickly train and rehabilitate people with new technologies, products, and services available within the environment. There was a permanent and undeniable need for proper management and use of the knowledge base to make it accessible and accessible to all stakeholders in the workplaces with the potential to change how and when employees learn. Learning will be more integrated with the task and will use short, a modular, delivery systems. Using workplace technology, online education systems closes the gap between learning and work. Employees can combine learning to work more efficiently because they use the same tools and technology in learning as they work for the job. Both employers and employees realize that the online education systems will be reduced the narrowing gap between work and home, and between work and study. An online education system is a way for any organization that seeks to develop the skills and strengths of its employees. With rapid changes in all types of workplaces, especially medical and health care facilities, there is an urgent need to quickly train and rehabilitate people with new technologies, products, and services available within the environment. There was a permanent and undeniable need for proper management and use of the knowledge base to make it accessible and accessible to all stakeholders on the job.

1.2 Motivation

Specifically, we are driven to do this by comparing and contrasting the existing state of online education with our idealized vision for its future.

• **Current system**

The current situation was very limited in a few activity, students are not able to get information beyond what the lesson gives them. This ultimately limits student performance, as all student achievements are collected in class presentations. Here were some of the problems with the current system:

- The current systems at FTMS University were that lectures download student or teaching guides.
- Student hand out assignments in hardcover or in their e-mails.
- Students only get help with talks when the talks are in their office.
- New subject discourses should find building material on their own.
- The students needs to be in the classroom to gain knowledge and thus give up all other activities.
- Learners were able to share resources effectively and hold group discussions that were monitored or guided by talks

• **The future system**

It is hoped that this program will serve as a basic information for university-level study labs that allow students with skills (current, past and expected), to take a look. The program will ultimately bring about effective communication between students, lectures, and management, accessing information and other resources anytime, anywhere. Here are some of the expected results of the project:

- Assignment loading assignment and resource for their units.
- Student to download resources and upload assignment.
- Provides an easy way to manage courses websites that include program details, announcements, and course discussions.

1.3 Objectives

The online education system represents a new shift in the fields of learning, providing faster access to specifics information and knows ledges. Provide online tutorials that can be

deliver anytime and anywhere using a variety of e-learning solution such as Web-based courseware, online discussion groups, live classes, video and audio streaming, Web chat, online simulation, and visual advice. The online education system enables organizations to outperform other organizational spaces by providing a virtually integrated learning environment. Companies should educate and train vendors, employees, partners, and customers to stay competitive and an online education system can be providing such training at the right time in a less expensive way. Developing and deploying effective online education programs may require product and services offered by various vendors, leaving one to connect the dots. One first way was to define the objectives of the learning solution you are looking for. The definition of the objectives of an online education system solution was driven by the following factors:

- **To perform task analysis**

Determine the task to be taught, identify the tasks under which certain other activities are involve, and identify the knowledge, skill, and attitudes required to complete the tasks efficiently and effectively.

- **To perform training needs analysis**

Identify the target audience of training. Identify the lack of knowledge, skill, and attitudes of the audience and determine what the target audience needs to know.

- **To review existing capabilities**

Review existing method and infrastructure for providing training or meeting learning need.

- **To determine expectations**

Identify concrete expectations and / or ROI requirements from the online system solutions you want. The development of an online program plans begins with setting goals. What will be the online system systems accomplish? Without a real understanding of the goals of an online education system, it will be difficult, if not impossible, to succeeds.

Before using an online education system, organizations need to set similar goals or objectives.

Common objectives and objectives include the following:

- **To reduce learning costs**

As a small business owner, you know that online transactions cost as much as those that require paper or staff. It's the same with an online education program because there are no papers, no delays, and no travel expenses. Such learning enables employees to take what they have just learned from their computer screens and apply it to the tasks at hand.

- **To motivate employees**

Online education system is considered an effective way to keep up with new technology, to generate new ideas, and to keep our workforce fresh and inspired.

- **To improve flexibility of course delivery**

Smaller businesses don't have the staff to manage their training and development initiatives. Online education systems technologies can overcome these administrative restrictions.

1.4 Expected Outcomes

Technology has the power to transform education. It is important to bring it to class to enable learning.

Here are some of the reasons (importance / importance).

1. Students need to be involve in what they were doing to improve learning outcomes
2. It empowers learner to become thinkers / readers / risk takers in a safe environment.
3. Learn to trust the teacher... to defend themselves... independence!
4. Increases the student population as it exposes student to the world outside their hometown or rural city.
5. It was compatible with Home Education where primary school students no longer need to be attacked by distance and isolation, as technology allows them to study almost and retain their chosen subjects, allowing e.g. LOTE (languages other than English) and other special subjects that will be taught in schools by a visual teacher.

6. Allows a portable learning environment - anywhere, anytime, anyhow.

1.5 Project Management and Finance

Online education can only be successful with well-managed projects and budgets. The team working on the system has to determine its goals and who it is intended for before creating a schedule with major milestones and deadlines for tasks like course creation and website design. There has to be a strategy for managing risks and a budget for allocating resources like money and time to various projects and members of the team. A marketing and promotion strategy should be created to attract potential students and partners, and quality control mechanisms should be devised to assure the quality of the courses and other materials supplied. The system should be examined and tweaked on a regular basis to ensure it is meeting the needs of its users, and a revenue strategy should be established, such as through course fees or partnerships with schools or corporations.

1.6 Report Layout

Brief overview of the online education system, including its goals, course offerings, and intended student body. The methodology section of a report details the procedures carried out to gather and examine the data presented. Data on student enrollment, course completion rates, and student satisfaction are just some of the results presented in this section of the report. Interpretation and analysis of the results, including the identification of recurring themes or trends; this is the discussion. The final section of the report should include a summary of the report's key findings and their implications, as well as any suggestions for further research or development.

CHAPTER 2

BACKGROUND

2.1 Preliminaries/Terminologies

The online education system was among the most important explosion driven by online transformation. Although it may fail to manage all institutional functions such as certain subject that require skills and monitoring but it also increases communication between student and lectures that will leads to the goal of learning as students have access to anywhere and at any time [11]. An online education system delivers content using information and communication technology (ICTs). According to, the use of these structures includes a variety of methods including a systematic response system, a computer network, a video and audio conference meeting, online websites worldwide and computer-assisted instructions. This approach to delivery increases the likelihood that employees can participate in lifelong learning. So an online education system has many benefits rather than limitations.

- **Learning Management System (LMS)**

A Learning Management System (LMS) was a web-based software or technology application used to plan, implement, and evaluate a specific learning process. Often, the LMS provides the trainer with a way to built and deliver content, monitor student participation, and evaluate student performance [10].

- **Course Management System (CMS)**

The course management system was a set of tools that enables the trainer to create online course content and send it to the web without managing HTML or other programming languages [7].

Different authors use a variety of terms including online reading, Internet reading, online distribution, online reading, telephone reading, visual reading, computer-assisted reading, web-based reading and interactive reading in an online education system, making it difficult to come up with a name standard to describe an online education system. A common feature of all of these principles is the use of technology in the delivery of teaching

and learning. However, one author named Naidu violated an online education system and fell into the following categories:

1. Individual online education system where each student has access to online learning materials;
2. An independent online education system where each student receives online resources.
3. An integrated online education system where a group of students work together in real time via intranet or online.
4. A high-quality online education system where a group of students work together via the Internet or intranet but their communication is not made in real time.

This review of textbooks in reading will learn offline peer-to-peer reading, online learning using LMS (online education system), various online learning styles and their pros and cons [6]. This book review will not take part in social networking that takes place in an online social networking site.

2.2 Related Works

I have used book reviews to produce relevant ideas that can be refined. I also participated in the indepth thinking of these ideas with the aim of exploring their origins, meaning and status in the study. During the course I kept going back to the book reviews to update it, refine it, and add new information and views. In order to make sense of the scriptures, I tried to look up the books that were now available, similar and appropriate. I used the following criteria as a filter to determine whether I was submitting or extracting text from the book review process.

- Are the essentials needed for this study?
- Is the text proposed by the author nominated by a reputable authority?
- Will the text add to the psychological matrix for this study?
- Will the proposed text highlight the issues raised in this study?
- Does the information date indicate that it is a timely contribution to the sector?

Classes taught by the online education Center cover a wide range of computer and non-computer topics. Classes are presented as online conferences using video and flash media. Exercise is included in each phase of class education. The E-Learning Center offers online web design courses in many aspects of web design, but also in standard computer applications and certifications.

According to some authors, LMS in various universities and organizations is widespread because of the features they provide that facilitate the management and delivery of student content. Despite their extensive use, their focus is more on content delivery than on the reader. LMS provides little or no opportunity for students to engage in and participate in a variety of activities and writing content that can contribute to the information already available in the programs. LMS are designed for people / students who are already computerized, but for those who do not have computer skills they have difficulty adapting to the new learning program.

Here are some of the negative aspects of the study area that make up a different source: - 1. Outstanding and independent students (students) benefit from online building methods.

2. Designing online courses may require more thought and skill than traditional courses.
3. There are many new topics that can accidentally remove important topics from online discussions.

Online communication focuses on information rather than building information.

5. If the collaboration does not achieve the real purpose the learners will end up learning on their own.

2.3 Comparative Analysis

In some studies it has been found that in order to be successful, higher education must involve students as active participant in their learning. Achieving this means giving learners opportunities to communicate in ways that can encourage changed and growth in the learner's knowledge of the information. Such education aims to encourage students to become lifelong learner, to solve problem and critical thinking, and to turn them into

recipients of information and knowledge so that they can become active, motivated and creative readers. Here are some of the great features of the research site that make up a unique resource: -

1. Problem-solving through online conversations is more rewarding than face-to-face conversations and fewer messages.
2. The role of online discourses is critical to success.
3. Open assignments often stimulate thinking.
4. Received information is passed from temporary to long-term memory.
5. It helps to develop the ability to read independently, social skills, interaction, thinking ability and the ability to navigate online.

The main way to identify relevant articles was to read articles and summaries of selected journals and papers during the conferences. While most of the time this method is preferred to the search for keywords as it presents a complete way to identify relevant articles. Additionally, keyword searches are performed on a number of information sources. This is to cover other conference definitions and to explore the initial search method. Some of the key words used are: online tagging, electronic submission, annotation, tagging, test marking, check marking, constructive online educational program essay, essay marking, constructive review essay, and essay marking online. Relationship Assessment and Teaching and Learning in Different Journal Assessment is an important aspect of education that should be reflected in the broader context of educational objectives, curriculum design and student motivation. While a detailed examination of these issues is beyond the scope of this writing other highlevel revenue ideas can be made to provide the context for the following sections. Here are some of the results of the book review I went through. The first journal I mentioned was: - Student use of the group's projects learning management plan: case study investigating the interaction, collaboration and knowledge building by Steven d. Lonn Web-based Management Systems (LMS) allows teachers and students to share teaching materials, masked class announcements, submit and return courses assignments, and connect with others online. The results show that students have successfully uses LMS to collaborate and, with great co-operation, interact, but very little

evidence of knowledgebuilding using LMS technology. "The combination of learning principles and tools (LMS)... leads to a learning environment that is just more than the total of its part. This frequency, which is often done but less noticeable, continues to bring intelligence and students to the LMS with joy and determination based on the hope of in-depth, meaningful, and engaging learning [5] The second issue states: - The Educational Value of Integrating a Learning Management System and a Social Networking Platform by David Gremu. The use of LMS in various universities and organizations is widespread because of the features it provides that facilitate the management and delivery of student content. Despite their extensive use, their focus is more on content delivery than on the reader. LMS provides little or no opportunity for students to engage and collaborate on a variety of activities and writing content that can contribute to information already available in the programs. The third issue was: - The academic and student use of the learning management system: Debbi Weaver quality results Christine Spratt and Chenicheri Sid Nair. Many institutions of higher learning have used the Learning Management System (LMS) to manage online learning and teaching, with varying levels of support provided to staff and students, but often there is little follow-up inquiry into the quality of online sites or use by provided support agencies. The fourth journal was: - e-Learning and New Zealand school results: A review report for the Department of Education by Noeline Wright. This review of e-Learning books has examined texts in many countries, but only in the short term of the last five years [5]. Various methods have been used to select or complete the course for close review. E-Learning tools can motivate and engage students. These can be critical factors leading to improve educational outcome. Most young people have learned the technology of social media and used mobile technology as a daily tool, but they can be using neophytes when it comes to understanding how to use them in meaningful and educational ways.

2.4 Scope of the Problem

While the online education system has many benefits for students and organizations alike, it also has its limitations

- Computer literacy and availability of equipment. Any online education program includes basic equipments and a low level of computer literacy to perform the tasks

required of the systems. A student who did not have these skills, or who has access to these tools, will not be able to succeed in an online program.

- Some topics were not suitable for e-Learning. Certain subjects that require exertion and practice, such as sports and communication skills, are not the best tests of an online education system. However, an online education system can be a helpful companion in traditional education to teach background and technical knowledge.
- Students themselves may have a limit on the online education system. Adaptation and student focus on the online education systems require a high level of student commitment. A successful student of the online curriculum should be well-organized, motivated, and have good time for management skill. What you get from an online education program was directly related to the amount of effort you put into it.

2.5 Challenges

Online education system projects can face many problems. Challenges include:

Technical difficulties: Creating and sustaining an online education platform involves technical skills. Scalability, data security, and user experience may be issues.

Content development: Creating high-quality online course materials takes time and expertise.

Marketing and recruitment: In a competitive industry, recruiting students for online courses is difficult.

Retention and completion: Online students may struggle to stay engaged and finish courses, especially if they have other obligations.

Financing: New or smaller organizations may struggle to secure enough funding to build and operate an online education system.

Compliance with privacy, accessibility, and other standards can be difficult for online education providers.

CHAPTER 3

REQUIREMENT SPECIFICATION

3.1 Business Process Modeling

The research will be conducted as a university study, especially in the Department of Business Administration. Case studies will help to capture the information needed to complete the study. The survey includes respondents such as lecturers, students and other professionals from the University and off campus; this is the most important factor to complete a lesson.

In this phase of the data analysis process, the best approach that has been found is the most effective quality assurance that can help research to assess the information needed to build an effective yet efficient system. Quality research is a systematic approach that is used to describe what is happening in life and to give them a definition of its main purpose in gaining understanding; explore the depth, richness, and complexity found in this practice.

3.2 Requirement Collection and Analysis

The research was conducted at a tertiary institution. The purpose of the research is to design a special retention program for students. Research helps to explore and investigate the importance of student's reservation in terms of the old system. A simple random sample was used in the presentation of the participants, where each participant had an equal opportunity to participate. This was done to reduce cost and time, as well as to obtain accurate information from participants. People interviewed by university students, lecturers and other IT professionals. The interviewer is allowed to gather additional information about respondent's traits and personality traits that often play a significant role in interpreting the results, this was good because you were not biased against the interviewees and the answers are in the words they are interviewing.

The study will be conducted in one month; hopefully it will be enough for both the interviewer and the respondent to post and answer the questions to post. Project preparation will take four months which will involve the submission of project documents. During the design of the interface and the entire system will always be considered with users including students and lecturers and other technology system developers.

Data collection was the process of collecting and measuring information on a variety of interests, in a systematic way that enables a person to answer a set of research questions, evaluate ideas, and evaluated results. A systematic process of data collection was required as it ensures that the collected data was interpreted and accurate and that subsequent decisions based on the findings are valid. The process provides all the basics to measure and in some cases the focus on what needs to be improved, an important aspect of any type of researches. Accurate data collection can be affect research results and ultimately lead to invalid result. In this study the best data collection techniques used were Questionnaires and Interviews, and they are the ones used. Questionnaires: - was where data is collected by providing the respondent with a list of questions designed to obtain specific information. Questionnaires can be Paper-pencil questionnaires or Web based questionnaires. Conversations: - is where data is collected by having a conversation between the interviewer and the interviewer [2]. The conversation can be face-to-face, Phone or Computer Assisted Interviewing (CAPI).

3.3 Use Case Modeling and Description

● Best Learning Management System Defined

The best solution for the LMS was described in this study as one in which all components of the LMS were considered to be the learning infrastructure as a whole as the greatest student achievement was guaranteed from an institutional and systemic perspective. The characteristics of these components within the framework of student's achievement are assessed by the following attributes:

● Cost effectiveness

The total cost incurve included in this report represent the current summary of the cost of the LMS excluding transit and relocation cost, reports the Audit team. The benefits of the LMS are expected to outweigh the costs such as maintenance and other potential costs.

● Support and Training

The program should have a learning community that provides examples of students and resources, intellectual resources by providing online student support services and expertise including chat, email, phone and personal supported portal available 24/7/365.

- **Ease of Use**

The LMS should have easy-to-use resources and no additional tools questions can be done.

- **Scalability**

The LMS must be able to reports on the number of active subject, users, and the medium-sized courses capacity in their LMS. It should be able to hold a lot of active ingredients but still be able to use the last bit of volume.

- **Sustainability**

The sustainability of the LMS is critical to the future growth of university grades. The power of a comprehensive program to support learning technology within the LMS is challenging for both short and long term. Data from NC's successful listening notes show that: -

- (1) Colleges vary in preference to LMS but require ongoing support from the System Office.
- (2) Learning technology provides effective and efficient learning methods.
- (3) The increase in enrollment has had a negative impact on educators, problem areas, and encouraged innovative interventions to expand resources.

Administrator user case

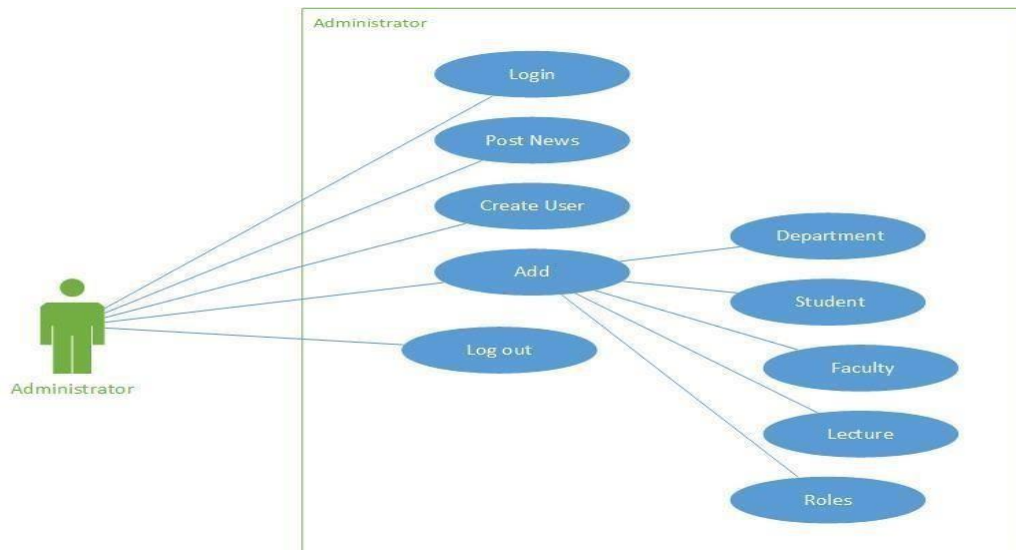


Figure 3.1: Administrator User Case

Lecture user case

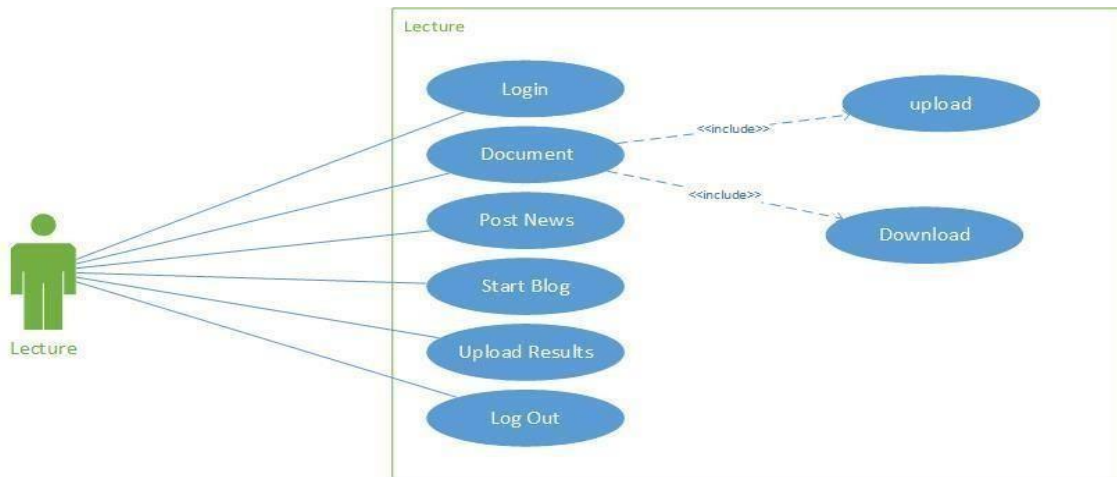


Figure 3.2: Lecture User Case

Student user case

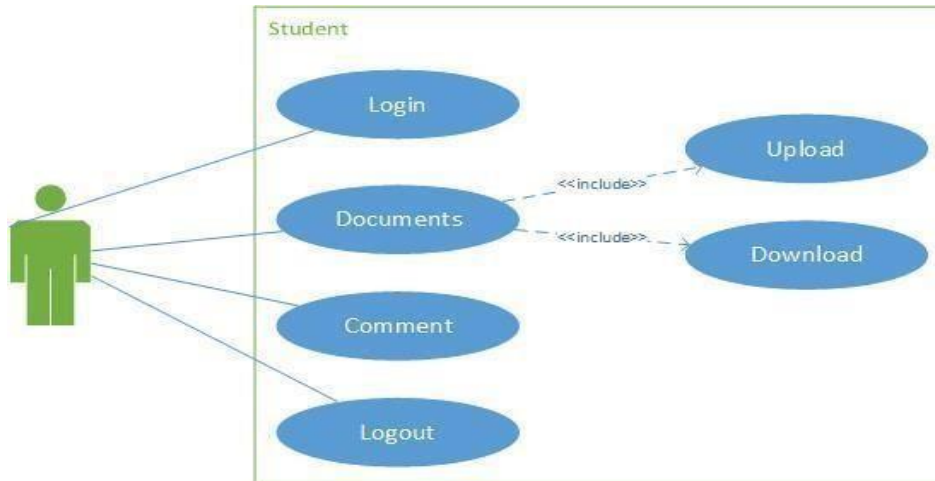


Figure 3.3: Student User Case

3.4 Logical Data Model

The following entities may be included in an online education system project's logical data model:

The term "user" is used to refer to everyone who interacts with the online learning platform, from students to teachers. To take a course means to enroll in a specific study unit that has its own unique title, description, and credit hour requirements unique to the online learning platform. Thirdly, "enrollment" is defined as "the record of a user's enrolment in a particular course," which includes the beginning and ending dates of that enrollment as well as the user's activity in the course (e.g. student or instructor). Fourth, a section is a smaller unit inside a larger course that typically meets at a predetermined hour and consists of a specific number of students. Five, an assignment is something that students are tasked with doing as part of a course. A student's grade is the sum of their assignment scores and the instructor's comments on how they did on the assignment or test. A payment is a record of a financial transaction within the context of an online education system, such as a student

paying tuition or an instructor being paid for creating a course. Any kind of user-to-user interaction inside an online learning platform, including but not limited to public forum posts and private messages. Resources are any supplementary materials, such readings, films, or lectures that are made available to students as part of a course.

3.5 Design Requirement

There may be a variety of design considerations for an online schooling system that must be met. The online learning system's interface should be straightforward and simple to use. Users with impairments, such as those with vision or aural impairments, should be able to fully participate in and benefit from the platform. The platform should be responsive, meaning it adjusts to the size of the screen it is being seen on and works well on desktop computers, laptops, tablets, and smartphones. Users' private information, including banking details, should be safe on the platform. The platform should be able to scale up to accommodate a high number of users and classes without negatively impacting performance. Learning management systems and payment processors are just two examples of systems and technologies that should be compatible with the platform. The platform should be malleable enough to allow for modifications like adding a company's logo and offering customized courses to each student. The system should be able to generate reports and charts to help keep tabs on each individual learner's development and measure each course's success.

CHAPTER 4

DESIGN SPECIFICATION

4.1 Front-end Design

Figure 4.7: Home Page interface of online education system: Now we will give the home page interface of our system that will show the home page of education system that are sent to the system. This page will be seen after the browsing website.

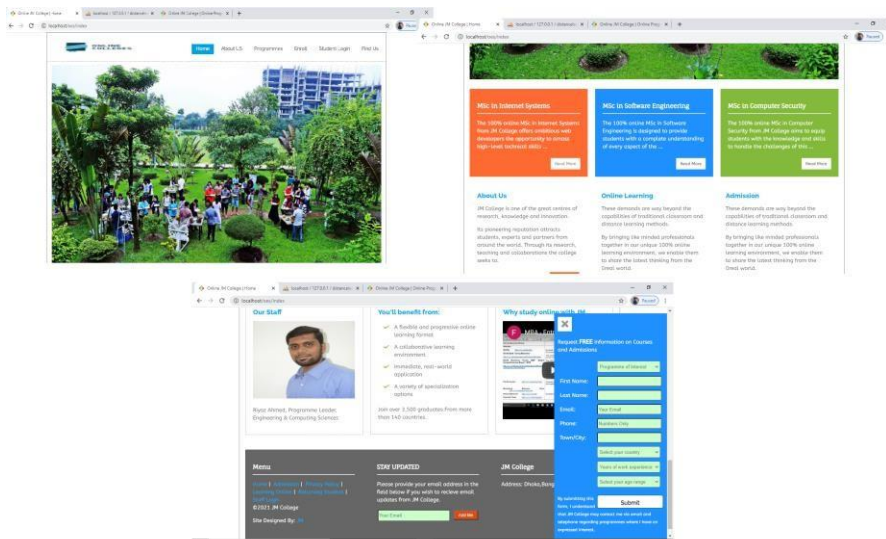


Figure 4.1: Home Page interface

Figure 4.8: Login Page interface of online education system: Now we will give the login page interface of our system that will login the site. This page will be seen the before login the system.

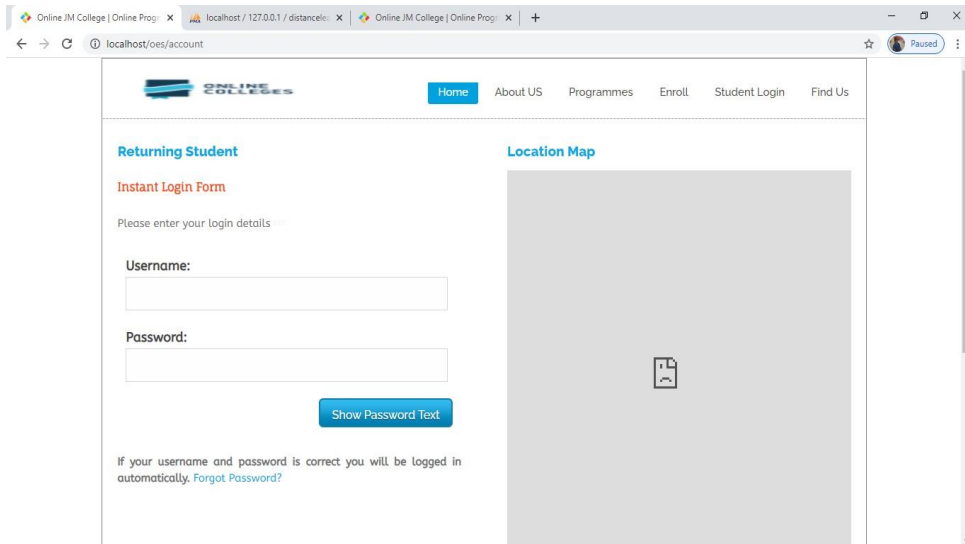


Figure 4.2: Login Page interface

4.2 Back-end Design

Figure 4.9: Admin Page interface of online education system: Now we will give the admin Page interface of our system that will login the admin.

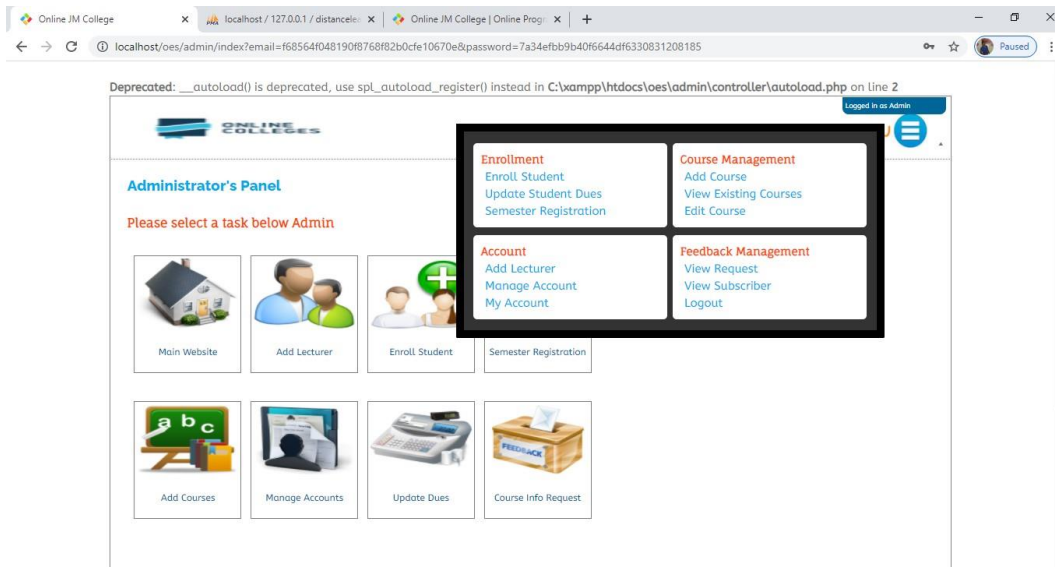


Figure 4.3: Admin Page interface

Also we have used SQL database to complete our back-end programming for the website.

4.3 Interaction Design and User Experience (UX)

The UI and UX of a platform used for distance learning are crucial components. The two terms "user experience" (UX) and "interaction design" (ID) are sometimes used interchangeably, yet they refer to two distinct aspects of the same thing: the user's experience while interacting with a system.

The online education system should have a clean, straightforward interface that is simple to use and navigate to provide the best possible interaction design and user experience. Course access and completion should be streamlined and efficient, and the platform should be responsive and work effectively across a variety of devices.

Accessibility for users with disabilities, options to tailor the experience to the needs of individual users, and analytics and reporting tools to monitor student progress and assess the efficacy of courses are all aspects of UX and interaction design that may be taken into account in an online education system.

4.4 Implementation Requirements

System requirements are what is required for a client to install a web application on their system and use it hopefully without difficulty. The purpose of this is to help clients ensure that all the tools or equipment needed. For analytics there are specific purposes for hardware, software and anything else that may be a minimum requirement to install a program. The minimum requirements are as follows.

● Hardware requirements

- Operating System (Windows 7 or above)
- Hard Disk (minimum 4 GB)
- Ram (more than 1 GB)
- Web Browser (preferably chrome)

● Developing Tools

- PHP Environment

- Database (MySQL)
- HTML5 & CSS3
- JavaScript
- Ajax
- Sever (XAMPP)
- Sublime text

CHAPTER 5

IMPLEMENTATION AND TESTING

4.1 Implementation of Database

In this chapter, we will be explained and try to answer projects questions and determine styles and relationship between variable. It presents the findings of a research projects, but also common human characteristics. It shows the results of research to be conducted in the study of the effectiveness of online education systems also known as a retention course. This chapter also explains and illustrates the core of the program by showing you the structure of the data, graphic user's diagrams of administrators, lectures and students. It explains how each user of the system can use the system easily. How they start logging in, what they can do in the system and login.

It was hoped that by the end of the implementation of this program 97 percent of the problem facing the current system will be solved and will meet all the needs of the user, which was easy to use as users are involved in all stages of the development programs. In this program there were three main users who are the managers, the students and the students, each with their own roles and roles within the program. The system was sensitive to privacy protection and therefore the system was designed to address these issues.

- **Administrator**

The system administrator will be having full access to the system that other users may not be able to do. Some of these includes: assigning roles to a user's (who is a manager, student or student), removing user, adding (department, power), and finally creating users.

- **Lecture**

The course will have the rights to upload and download documents, submit news about (tests, category, and assignments), and start discussion blogs and upload result (study courses).

- Student

The student will be having fewer rights, the student will be able to upload and download document, comment on course blogs, and view news posts with lectures, administrators, and eventually student will be able to view their courses.

Database Screen Shots

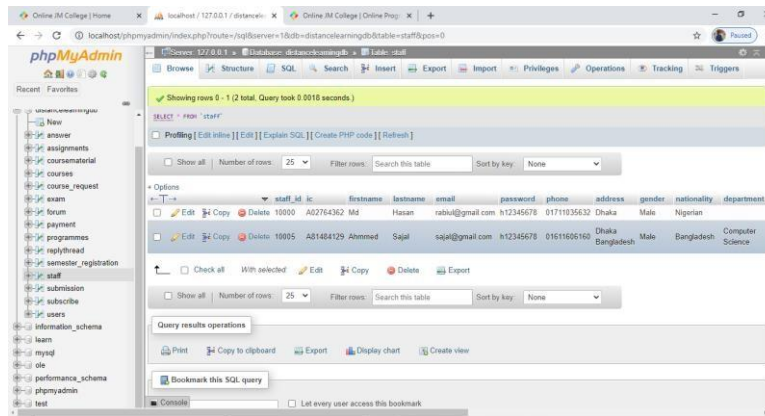


Figure 5.1: Staff Table

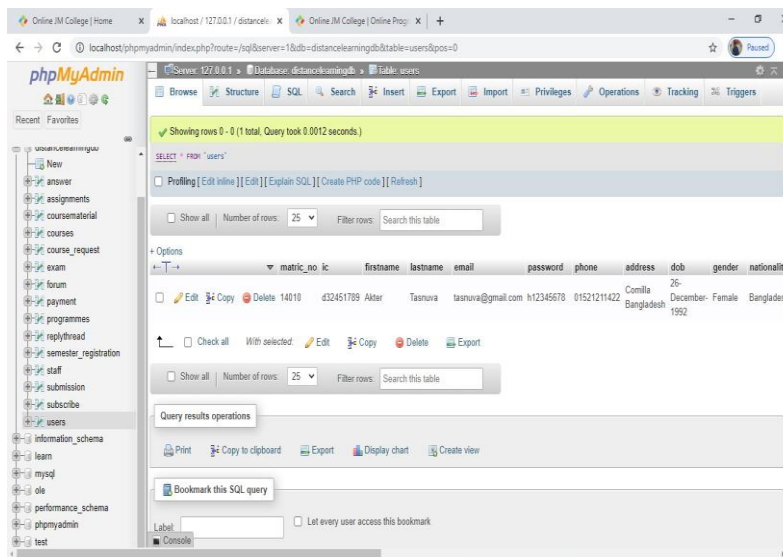


Figure 5.2: StudentTable

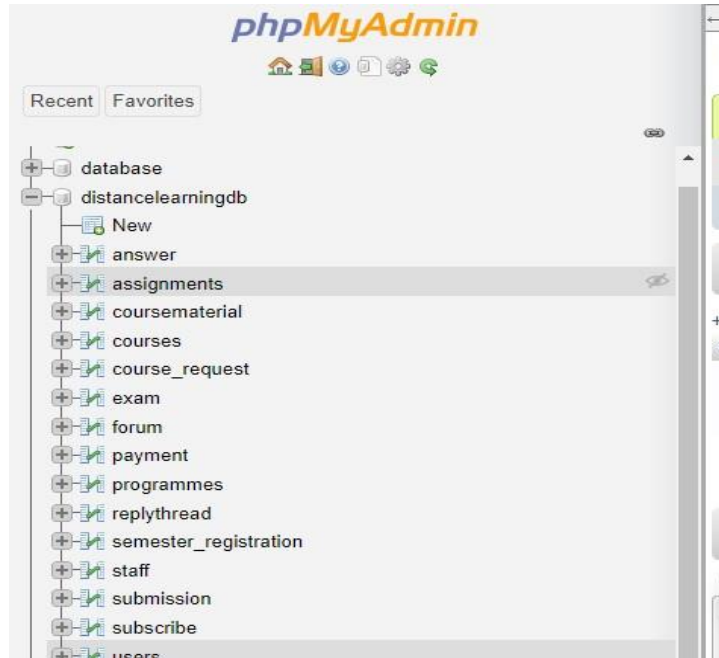


Figure 5.3: All field of database

4.2 Implementation of Front-end Design

Home Page interface of online education system: Now we will give the home Page interface of our system that will show the home page of education system that are sent to the system. This page will be seen after the browsing website.

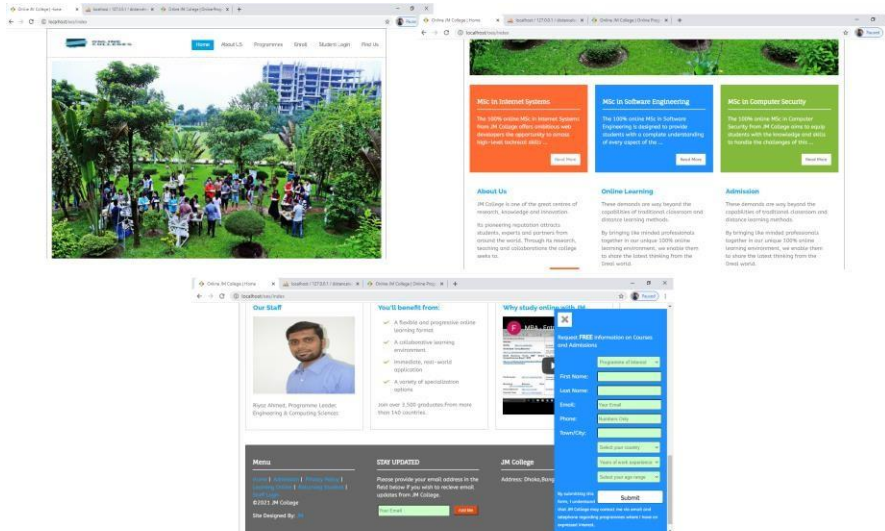


Figure 5.4: Home Page interface

Login Page interface of online education system: Now we will give the login Page interface of our system that will login the site. This page will be seen the before login the system.

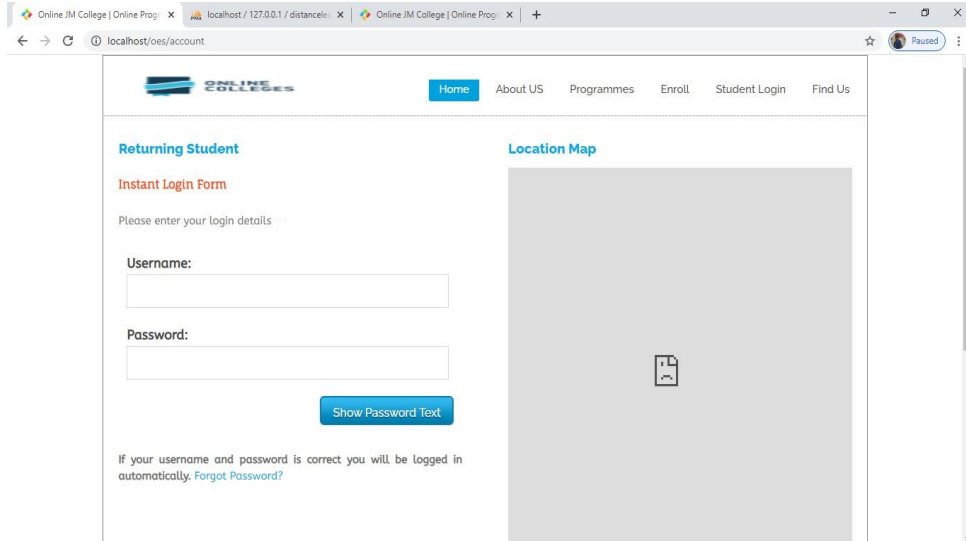


Figure 5.5: Login Page interface

Admin Page interface of online education system: Now we will give the admin Page interface of our system that will login the admin.

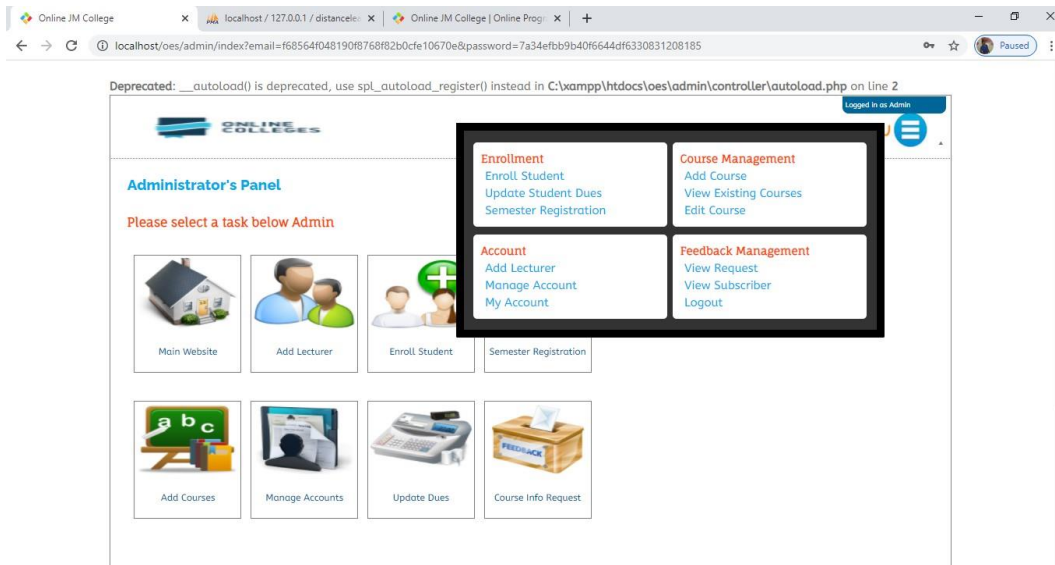


Figure 5.6: Admin Page interface

5.3 Testing Implementation

Through the university this program will help the institution to be more strategic and avoid convincing the cause of certain inappropriate information passing on to all students and lectures. The second step is to recommend that projects in the final year should be done in groups, because with a little student knowledge, it can help students develop more advanced programs rather than doing them on their own.

It can also be some of the challenges that students face during the projects.

5.4 Test Results and Reports

After an in-depth project I found that, there is a lot of detail about the topic of building a study center, but the biggest problem with the details is that there is a controversy that the system itself brings a lot of benefits to the organization. And there is the controversy over what should be the content of the course and what its limits should be.

CHAPTER 6

IMPACT ON SOCIETY, ENVIRONMENT AND SUSTAINABILITY

6.1 Impact on Society

Both in terms of access to education and the delivery of education, an online education system has the potential to have far-reaching effects on society. Individuals who may not be able to physically attend a traditional brick-and-mortar institution, such as those living in rural or remote areas, or those with disabilities or other commitments that make it difficult to attend classes on a regular basis, may have access to education through an online education system. Also, because students can access their courses and their assignments whenever they like, online education can provide a more adaptable and convenient learning environment. Working professionals who want to further their education might benefit greatly from this. Since there are no restrictions imposed by the size of the classroom, an online education system is able to provide a more comprehensive selection of academic offerings. Because of this, more people may be able to afford higher education and pursue better job prospects.

As a whole, an online education system has the potential to positively affect society by expanding people's access to education and making learning easier and more accessible.

6.2 Impact on Environment

By eliminating the need for students to commute to and from school every day, as well as the use of paper and other physical resources, an online education system may have a beneficial effect on the planet. With an online education system, students can access their coursework and turn in their assignments from the comfort of home, greatly reducing their carbon footprint and other environmental impacts. By making textbooks and other learning materials digitally accessible, an online education system can also help save trees. It can help conserve materials and cut down on waste in the process. Overall, an online education system can have a positive effect on the environment by providing a greener alternative to traditional in-person education.

6.3 Ethical Aspects

Creating and implementing an online education system requires ethical considerations.

Examples:

- Access to education: Students should have equitable access to online education regardless of location, socioeconomic status, or other reasons.
- Privacy: Online education should protect students' and teachers' personal and financial data.
- Intellectual property: The online education system should respect the intellectual property rights of instructors and other content creators and utilize materials appropriately and with correct acknowledgment.
- Fairness: Online education should be fair and nondiscriminatory.
- Quality: Online education should offer high-quality courses and materials and have procedures to verify content.
- Accessibility: Visual and auditory impaired users should be able to use the online education system.
- Professionalism: Online education should encourage instructors and students to act ethically.

6.4 Sustainability Plan

A sustainability strategy for an online education system should detail how it will be maintained. A sustainability plan should include the requirements and well-being of users and the environment while ensuring the long-term profitability and success of the online education system. Financial sustainability, Academic sustainability, Technical sustainability, Environmental sustainability, and Social sustainability covers the whole sustainability plan.

CHAPTER 7

SUMMARY, CONCLUSION, FUTURE RESEARCH

In this chapter in section 5.1 we conclude our development system. We describe the limitations of our developed system in section 5.2. In the same section, we also provide suggestion for future improvements.

7.1 Discussion and Conclusion

After an in-depth project I found that, there is a lot of detail about the topic of building a study center, but the biggest problem with the details is that there is a controversy that the system itself brings a lot of benefits to the organization. And there is the controversy over what should be the content of the course and what its limits should be.

In conclusion, in this project I find that developing a fully functional system is not only a difficult task but also requires a lot of knowledge in building a database and in other programming languages. I wish I could improve the system I had in my mind but due to limited ability I could not. It would be very helpful if the University could focus on some of the courses that will be written in a way that will help students in their projects, instead of learning the PHP languages used in program development. Finally, I would like to express how I find that this process of building a program stimulates the mind of the reader and learns how it can teach and teach itself. I've developed the ability to search for things and improve them and then have my own needs. It really has been a very good thing.

7.2 Scope for Further Developments

Through the university this program will help the institution to be more strategic and avoid convincing the cause of certain inappropriate information passing on to all students and lectures. The second step is to recommend that projects in the final year should be done in groups, because with a little student knowledge, it can help students develop more advanced programs rather than doing them on their own.

It can also be some of the challenges that students face during the project.

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Appendix

Project Reflection

To complete the projects, we faced so many problems, first one is to determine the methodological approach for our projects. It is not traditional works it is a research-based project, more over there are not much work done before on this area. So, we could not get that much help from anywhere. Another problem is that, collection of data, it is big challenges for us. There is no available source where we could get data, that's why we started collect data manually. After a long time with hard work, we could do that.

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