**RESEARCH ARTICLE** 

# **Online Course Management System**

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## ABSTRACT

Web coach is India's first live interactive virtual classroom site for the online course importing affordable learning. We give an opportunity to the students to get an advantages of personalized learning. We offer course modules, assignment & performance test to control the discipline. We are fully dedicated in delivering one of the most technological advanced quality online tutoring programs.

*Keywords* :— Online Class Management System, E-Learning, Learning Management System, Online Classroom, Course Content Management.

## I. INTRODUCTION

In recent years, the rapid development of Computer Aided Instruction (CAI) has been taking on an important part in the modern teaching management system. Traditional teaching methods (e.g., face-to-face teaching) are not providing adequate support for the scholars to apply towards the track. So, many online social networking sites and some other course management sites that are based along the platform of WWW applications are getting popular among schoolchildren and teachers [1]. Social networking sites such as Facebook, Google+, Twitter, and so on, in addition to hosting market, personal sharing, and/or societal matters have started to host E-learning services. There are over 1.86 billion active Facebook users according to the report of monthly active users on Facebook till January 2, 2017 [2]. As these social networking sites allow the users to do multiple activities other than Elearning, these sites are not an ideal berth for the instructors and students to interact with each other for academic purpose.

In 2013, Student Experience and Expectation of Technology stated in its survey that the twenty-first century students maintain a significant digital engagement. In that subject, it was found that 96% of the students had access to a laptop or a desktop computer at home, and 82% had access to a smartphone [3]. These data stipulate that students use these digital devices in almost every aspect of their lives including their learning. It, therefore, is a safer and safer undertaking in general design and evolve an online course management system for all educational institutions. He probably has the most upside of the freshmen Universities are using their own course management system. It is not a safe idea to divvy up the university data (e.g., student and instructor information) to a third-party web application for a course management service. An entry has its own user (e.g., students, instructors, employees) data and those are private and exclusive in nature. Putting on these data, an institution can develop and nurture its own online course management system for its users.

An existing online training system in general exhibits integrated network sharing of teaching resources, teaching resources management, video courses, and instructorstudent interaction. As of today several virtual learning models have been projected and implemented in different environments [4- 8], and these object lessons are being constantly promoted and improved when applied in realworld places. A course management system is easy to apply and is equipped with appropriate teaching aids, and thus, to a large extent, caters for the requisites of both the teachers and students in an actual learning environment. For example, it has the capability to introduce syllabus, update bulletin board, preset courses, search for available data and information using search engine, provide abundant reference materials, traditional textbooks and multi- media data, offer simple editing facilities, emerging tools for exhibition and exchange such as built-in blog, and real-time communication tools such as online communication, message board, and BBS, so as to facilitate timely communication between the instructors and students. In addition, it can support teaching assistance modules such as exercise module, homework module, download module, etc. However, the existing models reveal some of the following difficulties:

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- An instructor must create a classroom first and make a corresponding unique classroom code.
- All of the students of a particular class of a particular instructor are required to be enrolled in the classroom using the student email address or a unique id.
- Students need to use their registered email addresses to log in and utilize that unique classroom code to link up the class.

To address the above troubles, a scheme to pursue automation of the classroom creation part has been proposed. Teaching methods, interactions between instructors and students, and course management methodologies vary university to university. In this story, a design of an online automated course management system (OCMS) is taken from North South University, the first private university in Bangladesh. Most of the private universities have open credit System for taking classes. The system using which a student takes classes from among all the offered courses in a semester is known as the Advising System. A proposal has been introduced by the writers as a novel hassle-free way to plan a course management system which will be integrated with the Student Portal and Teacher Portal accounts so that all the services can be found at one place. The system's structure is based on Windows, Apache, MySQL, and (XAMPP). In addition and JavaScript is also employed in the front end.

In brief, the major contributions of this work towards developing an ACMS are:

- First appearance of an automated classroom creation methodology
- Consolidation of all essential classroom management modules
- Establishment of easier communication between teachers and students

The remaining of the paper has been ordered in four discrete parts. Part II brief discusses about the related previous works in this country. Part III showcases the proposed plan in details. Part IV shows the details of implementation of the proposed work and Section V introduces the final thoughts on the topic and the suggestions for future work in the concerned subject.

## II. RELATED WORKS

Learning and Management System (LMS) is a software application that enables readers and system administrators to carry out administration, documentation, tracking, accounting and delivery of E-learning courses [9]. In some literatures, interaction is also identified as an essential role that must be provided in LMS [10-12]. In the field of online social networking, some researchers shift their focus from traditional e-learning to social networking based e-learning, due to the feeling that it can provide better interaction [13-15].

Moodle and Blackboard are two totally different learning management systems when compared to the course management approaches [16].

The full form of Moodle, i.e., Modular Object-Oriented Dynamic Learning Environment, indicates that the course management approach is modeled, and is dynamic and object-oriented. The course manager can add/take out the model of reading activities, which cooks it is a very flexible learning management system.

Compared to Moodle, most of the functions in Blackboard system are not that flexible [17]. Moodle is a General Public License (GPL) open source learning platform, whereas Blackboard is a business package system. Engrade is an online Gradebook and record keeper that allows teachers to bring off their classes online as well as post grades, assignments, attendance, and upcoming homework for parents and students to go to.

The Engrade suite provides a Gradebook that automatically calculates scores and offers tools for custom grading scales and weighing assignments, an attendance book that automatically emails parents with absences, a homework calendar for students and parents, and online reports where students can expect at their scores, homework and attendance in real time [18]. Engrade was free until 2016 when it became a paid service.

#### DESIGN OF OCMS

The database that has been used, was acquired from the Information and Technology Department of North South University (NSU). Only the Advising, Student, Teacher, Course table's schema diagram have been hired to prepare the Advising Data.

No individual sign-up system has been kept in the

purported system. For all the active teachers and enrolled students have their student and teacher portal accounts, no further process step is introduced for classroom creation. The suggested system is designed to integrate the existing students' and teachers' portals of North South University. The concept of one beak for all services has been implemented, like Google uses for its servings.

An Admin panel has been incorporated for creating new rails, and adding new teachers and students. Admin Panel is responsible for making the young teachers and students, their username and watchword. Fig. 1 depicts the basic system structure.

#### A. Core Modules

The system is designed based on the Advising Table as one of the major objectives was to pass the classroom management smoother. At the beginning of a new semester, each student advises his or her own courses by himself of herself. After this advising process, these data are saved to Advising Table of the database. In the developed system, it is named as

### **III. IMPLEMENTATION AND THE SYSTEM**

In this region, the implementation of the system is illustrated with some representative screenshots of the automated course management system. This approach is thought to explain the features of the system.

The desired implementation of the system is based on Codeigniter framework, which is a PHP framework [19], the programing language is PHP for web server-side programming and JavaScript, CSS and JQuery for web front-end programming. The database used in the system is a capstone, which is a MySQL database.

The main interface for all qualities of users is shown in Fig. 5. This is the main interface. In this interface we have two modules first one is an admin and second one is user modules OCMS.



Figure 5. Main interface of OCMS.

Fig. 6 In this figure. We show admin home page. In admin page, we have two module first module is Add Course and second module is Add Question & Answers.

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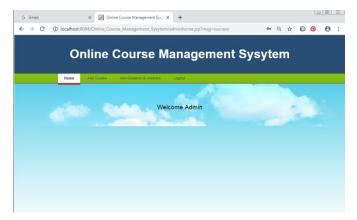


Figure 6. Admin Page

Fig. 6 In this figure. We show admin home page. In admin page, we have two module first module is Add Course and second module is Add Question & Answers.

Fig. 7, In this page admin will Add Courses and video file to that path.

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		ADD COURSE	

Figure 7. Add Courses from the Admin end.

Fig. 8, In this page admin will add Question & Answers to this page.

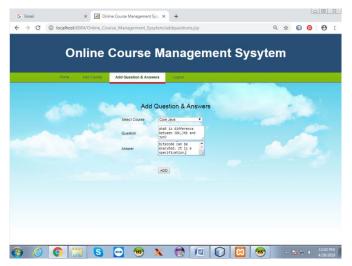
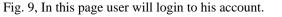


Figure 8. Add Question & Answers from the Admin end.



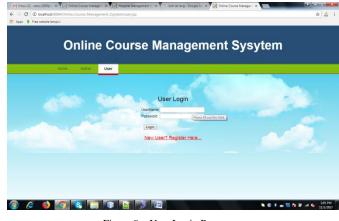


Figure 9. User Login Page.

Fig. 10, In this page user will click on view courses in that we have C, C++, Core Java and Advance Java. Once we click on any course the course video will be exposed on the cover.

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Figure 10. View Course Page From User SidE.

#### **IV. CONCLUSION AND FUTURE WORK**

From the description of the above designed and developed system, it can be reasoned that the proposed scheme is a fuss-free automated classroom management organization with all the LMS features. It is a highly secured system as there is no outside or third-party involvement in the system. It employs the central database of the university and, as such, creation and maintenance of an additional database is non required.

Most of the world's top universities are giving their own classroom management system to address concerns about security and privacy. An estimate has been preceded in this composition to design an automated, but a simple course management system for universities offering open credits without condoning the security and privacy issues.

In the time to come, the central Advising System can be integrated into the existing system so that the course management system can circumvent depending on the advising database. The online tutorial sharing and online examination taking modules can also be integrated into the system. These works would make the designed system even more accomplished.

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