

WEBSITE FOR ONLINE LEARNING

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Abstract - *Online Learning Website has been one of the active research areas in the field of Education today. It has numerous advantages such as Online Educational institutions (schools, colleges, and universities) in India are currently based only on traditional methods of learning, that is, they follow the traditional set up of face-to-face lectures in a classroom. Although many academic units have also started blended learning, still a lot of them are stuck with old procedures. The sudden outbreak of a deadly disease called Covid-19 caused by a Corona Virus (SARS-CoV-2) shook the entire world. The World Health Organization declared it as a pandemic. This situation challenged the education system across the world and forced educators to shift to an online mode of teaching overnight. Many academic institutions that were earlier reluctant to change their traditional pedagogical approach had no option but to shift entirely to the online teaching-learning i.e. is EdTech. This article includes an attempt to make an online learning platform where student and teacher can interact in a better way of e-learning modes in this time of crisis.*

Keywords - *COVID-19, Education, Online Learning, EdTech, Online learning platform.*

1. INTRODUCTION

Research examining the effectiveness of e-Learning has increased in recent years. This is primarily due to the increased possibilities for IT and learning as well as increased political and organizational attention to 'what works' in learning. The deadly and infectious disease Corona Virus also known as Covid-19 has deeply affected the global economy. This tragedy has also shaken up the education sector, and this fear is likely to resonate across the education sector globally.

Earlier there was no such any problem as Covid-19 which would make us known about the situations and need of such an application which would be used for online classes & live sessions. So to make it convenient a system is essential for regular use in order to deal with such situations.

The purpose of this project is to develop a back-end application for online-learning applications and queries using graphical user interface. It allows for flexible data format and deliver of its data so that each analysis application can receive only the information it needs and in the format required. In this system a student has to register his profile firstly by creating an id password so that the particular student can interact with the system

easily and also can purchase for a course, by authentication and authorization and can chat with others by his or her identification. The complete system is built on graphical user interface which will help the particular student to interact with the system in a flexible manner. A student can join live sessions also by creating a request from the particular student id.

The advancement of this application enables us to experience live classes with the same atmosphere and activities of regular classroom (Includes attendance, Pdf Notes, test series, online results, certification courses, video lectures).

2. RELATEDWORK

Ayebi-Arthur [1] conducted a case study of a college in New Zealand which was badly affected by seismic activities. In her study, she found that the college became more resilient to online learning after that disastrous event. Technology helped them overcome the barriers in those difficult times. But they suggest that robust IT Infrastructure is a prerequisite for online learning. Infrastructure needs to be so strong that it can provide unhindered services during and after the crisis. As per the World Economic Forum, the Covid-19 pandemic also has changed the way how several people receive and impart education.

Todorova & Bjorn-Andersen [2]. Today, we are forced to practice online learning, things would have been different if we have already mastered it. The time we lost in learning the modes could have been spent on creating more content. But it is better late than never. This virus surely has accelerated the process of online learning. For instance, this e-application called ZOOM is making a lot of news because of its viable features. It allows conducting live online classes, web-conferencing, webinars, video chats, and live meetings. As most of the schools, colleges, universities, companies are closed due to lockdowns/curfews and most of the people are working from home, this app helped in keeping people connected via video conferencing. This application is trending on Google play store amidst the ongoing crisis. People are practicing social distancing so this application gave them a sigh of relief. ZOOM also allows conducting business meetings.

Seville et al [3]. Reliability and sufficient availability of Information Communication Technology infrastructure, learning tools, digital learning resources in the form of Massive Open Online Courses, e-books, e-notes, and so on are of utmost importance in such severe situations.

Martin [4] some teaching strategies (lectures, case-study, debates, discussions, experiential learning, brainstorming sessions, games, drills, etc.) can be used online to facilitate effective and efficient teaching and learning practices. In such panicky situations, where the lives of so many people are at stake, teaching and learning should be made interesting. This will also reduce the stress, fear, and anxiety levels of people. For this, proper technique and learning support should be provided to teachers and students.

Tull et al [5] To make e-learning effective in such difficult times, we need to focus on the use of technology more efficiently, that is, the usage of that technology which has minimum procurement and maintenance costs but can effectively facilitate educational processes. Before bringing in and adopting any e-learning tool or technology, its pros and cons need to be weighed. Institutions should conduct plenty of research when bringing the right technology for different educational initiatives. There should be proper clarity on the purpose and

context of technology adoption. As several factors affect the choice of a particular technology such as security features, availability and condition of laboratories, internet speed, internet access. Digital literacy levels of the beneficiaries, and so on. E-learning can help in providing inclusive education even at the time of crisis.

Doug Lederman [6] “Embrace” is probably too strong. “Acquiescence” suggests too much passivity. Whatever word you choose, though, the data indicate that American faculty members -- whether grudgingly or enthusiastically -- are increasingly participating in and, to a lesser extent, accepting the validity of online education.

Inside Higher Ed's 2019 Survey of Faculty Attitudes on Technology, conducted with Gallup and published today, shows a continuing uptick in the proportion of faculty members who have taught an online course, to 46 percent from 44 percent last year. That figure stood at 30 percent in 2013, meaning that the number has increased by half in six years.

Lest anyone think that that trend means professors have fully embraced the value and benefits of online education, though, think again. While three-quarters of instructors who have taught online believe it made them better teachers in several key ways, professors remain deeply divided about whether online learning can produce student learning outcomes equivalent to face-to-face instruction.

3.PROPOSEDWORK

The purpose of this project is to develop a website for online-learning with live videos sessions and also to make a better way in which a student can interact with a teacher in an officially online manner and also can clear their doubts & queries using graphical user interface of live sessions and doubt classes. To begin with a user need to login first, in case of user not registered needs to register first and then can avail all the features. All the data are stored in database so that one can find all the study materials (Notes, Video lectures, Test series etc).

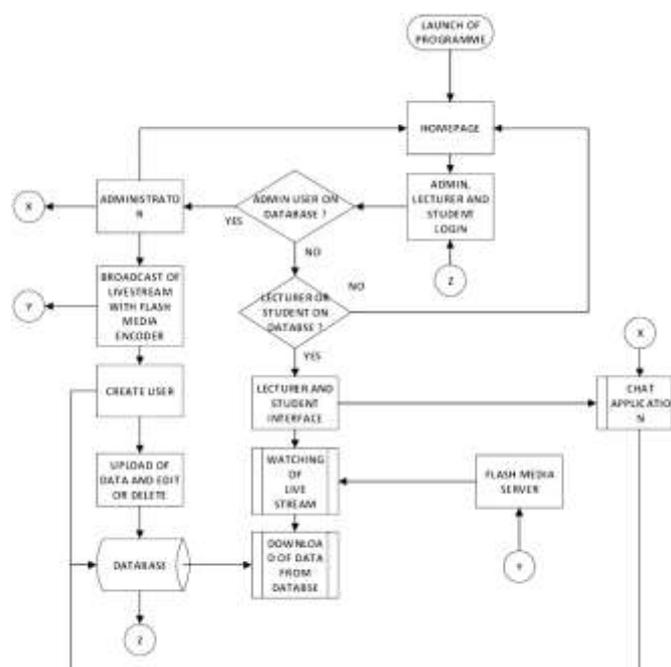


Figure3.1 Flowchart For Functionality of Online Learning System

4. MODULESDESCRIPTION

The project is divided into 3 modules – student, course expert and administrator. The roles of the modules are as follows:

4.1 Student: The student selects from various courses available. The student takes a test on a course. There might be courses, which has only test modules. Each question has multiple choices with only one correct answer. The test will be time bound. Student can see the test schedule. New Users will be able to register themselves in the system as students. All students will be able to modify their own profile. Student views previous test reports, receives feedback for a test taken Student can go to the discussion board and browse through questions and answers and discussing solutions of questions asked in test. Student can chat with course expert. Student can also send messages to the course expert.

4.2 Course Expert: Creating test questions for the course, test questions will reside in the Draft area if either it is saved while creating/modifying or it has been rejected by admin. Modifying test questions, deleting the entire test, browse through the tests that students have submitted, just as a student would, view the results of those students that have taken test for his courses. Replying back to the messages from students.

4.3 Administrator:

Publish tests submitted by Course Experts. Before publishing test questions it is customary to get it reviewed by admin. After going through its content either it gets approved or gets rejected. Modify the profile of other users registered in the system. Change user status from inactive to active.

5. EXPERIMENTALRESULTS

The proposed method is implemented in Java script, HTML, CSS. The user has to register firstly to use the system. After registration, an ID with password will be assigned automatically to the user and notification will be sent to respective mail ID. Now the user will be able to enjoy all the services of the website For Eg. (Live Session, Class, Video Lecture, Certified Courses etc). The user can also interact with the teachers for any doubt and also a help chat for any problem or service query will be there on screen. This system is also very beneficial for teachers who want to teach as freelancer. Also able to track the courses taught and attendance of every single student with their track record of their performances in test and quiz. The experimental results are shown in the following Table 5

USER	DATABASE
Student	
Teacher	
Administrator	

Table 5.1 Database Result

6. PERFORMANCE EVALUATION

We can see from the past years the growing opportunity & demand of the online learning platforms since 2017 and also see the future market expected by 2022 as shown in Table 6.1

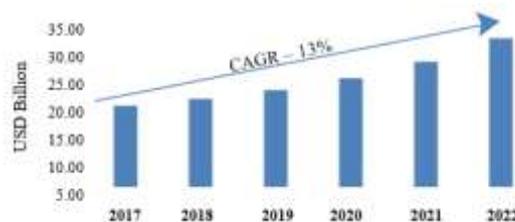


TABLE 6.1 Global Corporate E-learning market size (2017-2022 USD Billion)

7. CONCLUSION

Online learning platform has been a challenging task in the past few years. But due to development of advance java script domain in recent years and creation of huge amount of technological advancement from our day-to-day life, online learning vision has seen enormous improvement in everyone's life. HTML, CSS & Java Script provides about an ease of learning throughout the world. The only way to improve ourselves is to update our platform and learning techniques & advancement with growing days which our software application provides. This will also develop a habit of online learning and consequences in future. The system improves the true positive rate and reduces the false positive rate of operation.

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