



A mobile platform e-learning System to enhance the quality of learning and teaching

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Abstract: Online E-learning system is a android application. Computer-based learning and interactive communication are included in this E-learning scheme. This E-learning method makes use of internet technology to provide students with information on a wide range of topics. Only registered users have the ability to add, display, or ask questions about topics. This project ensures that students receive an efficient and successful education. This method allows students and lecturers to communicate easily. E-Learning platform can be proposed to provide a good learning environment for learners. The e-Learning platform has a three-layer architecture to efficiently facilitate sharing, reusing learning materials, and interoperability among various learning material. Therefore, learners can make use of available learning objects without having to be affiliated with other Learning Management System. The E-Learning system manages and stores e-books information electronically according to categories. All the users can use the app to keep track of the materials available in the system, download them, or use them online.

Keywords: Online learning platform, Electronic Learning System, Educational platform, Learning management systems, E-learning systems, Mobile-based learning systems.

INTRODUCTION

E-learning is a learning system that is focused on formalised instruction but uses electronic tools. E-learning is largely based on the use of computers and the Internet, but it can take place in or out of the classroom. E-learning can also be termed as a network enabled transfer of skills and knowledge, and education are delivered to a large number of people at the same time or at various times. Previously, it was not widely known because it was thought that this system lacked the human element necessary for learning.

However, with the rapid progress in technology and the advancement in learning systems, it is now widely accepted by the general public. The invention of computers was the catalyst for this revolution, and as we become more reliant on smartphones, tablets, and other mobile devices, these devices are increasingly being used in classrooms for learning. Electronic instructional materials, such as optical discs or pen drives, are increasingly replacing books. Knowledge can also be shared via the Internet, which is available anytime, anywhere.

A good learning experience for learners can be provided by an e-learning platform. The e-Learning platform has a three-layer architecture to efficiently facilitate sharing, reusing learning materials, and interoperability among various learning material. Therefore, learners can make use of available learning objects without having to be affiliated with other Learning Management System. The E-Learning system manages and stores e-books information electronically according to categories. This system helps all the users to keep a constant track of all the books and videos available in the system, download or watch/read them online. Recently e-learning systems are experiencing rapid development. In order to personalise the learning process and tailor content to each learner, an e-learning system should employ techniques that can meet the needs of learners. Furthermore, these programmes must employ a variety of technology to alter the environment and modify instructional materials to meet the needs of students. It moreover makes convenient for the student to download learning materials whenever required.

PROBLEM STATEMENT

With the advancement of technology and the ever-increasing number of students and departments in educational institutions, it is becoming increasingly difficult to share study materials between students and faculties. Students can quickly locate their preferred learning subject and videos using the E-Learning System. E-learning is a less costly, more effective, and more convenient way for students to access notes and prepare for exams. This programme helps colleges save money while also making it easier for students to access notes. Students and universities alike waste a significant amount of money on printing expenses that could be avoided.

OBJECTIVE

The main objective of the E-Learning system is to assist the students get over the traditional methods of learning and make them accustomed to the internet where the notes for their respective subjects are easily available. It has a feature that automates the process of learning notes online. This project's introduction benefits both students and teachers. Teachers can use their unique ID to upload their notes to the app, and students can access these notes by searching for the file's name under their respective department.

SCOPE OF PROJECT

Online learning is a wide platform to help students get more educated. With the E-learning, the concepts of learning has differed from the old times.

This e-learning platform is widely increased as the each individual contains a smart phone with high speed internet through , which each can access the courses on the websites in minutes.

LITERATURE REVIEW

Author / Year	Research	Result	Conclusion
Fischer et al. (2015)	Studied how proceedings of scientific conferences can be used for studies in the field of e-learning.	They examined the abstracts of 427 scientific articles of trend leading German-speaking e-learning Conferences. <i>Gesellschaft für Medizinische Informatik und Biometrie</i> (GMW) and <i>Deutscher Fachschriften-Verlag</i> (DeLFI) published from 2007 to 2013.	The researchers discovered that a careful investigation of the frequency distribution over a seven-year period indicates the intensity of scientific debate regarding e-learning trends, and that judgments regarding the didactical or technical potentials of advances can be drawn. They discovered that learning management, mobile learning, virtual worlds, e-portfolios, social media, and Massive Open Online Courses have significant development potential for e-learning in German higher education.
Moravec et al. (2015)	Researcher showed how e-learning tools impact students' achievement. The study was attended by nearly 2000 students.	According to Moravec et al. (2015), the results of the questions from the area of law where the tool was supplied in a pilot version are compared to the results of questions from the field of law where the e-learning tool was not supplied.	The researchers discovered that the use of e-learning tools had an impact on the students' grades. However, the idea that the e-learning tool can have a negative impact on pupils who rely on offered materials was debunked.
Mothibi (2015)	Using the Cohen's model research papers on the influence of ICT-based e-learning on academic higher education. success done between 2010 and 2012.	The researcher examined the relationship between e-learning and students' academic achievement in higher education. ICT also had a considerable favourable impact on pupils' overall academic accomplishments, according to the findings.	The researcher found that ICT had a statistically significant positive influence on e-learning based students' academic achievements.



- Salter et al. (2014) Researcher aimed to E-education helps to clarify For all topics and in all circumstances, demonstrate the features the vehicles pharmaceutical the researchers discovered that e-learning and benefits of the practice and elements of vehicles in is successful in improving knowledge of e-education in general that it would facilitate the immediately after training. and process of analysis and helps in particular in the to count the number of pharmacy. elements, a more precise and speedier, where a variety of ideas contribute to a more comprehensive understanding.
- Suri and Sharma (2014) and Suri and Sharma (2014) The researchers used The researchers discovered a link between disciplines of attitude scale by employing variables of scale on computer and e-students and their survey learning attitude, emphasising the responses and attitudes questionnaires to 477 department's function in learning and towards e-learning. students enrolled in various student happiness. courses across 6 major disciplines in Panjab University Chandigarh, India.
- Arasteh et al. (2014) Arasteh et al. (2014) A dynamic replication The researchers found that the availability examined a concept for technique was employed to of the e-learning services in the proposed dynamic resource tolerate resource model was higher than hose of the basic management that develops failure/unavailability during resource management services. This availability. the execution of an e- paradigm maintains a trade-off between learning service in the the cost of e-learning services and their economic grid system. level of excellence.

MOTIVATION

According to recent reports, university students enrolled in e-learning courses outperform those enrolled in conventional courses. This can be seen in action at Carnegie Mellon University (CMU) in America, where e-learning approaches have improved student exam performance. It is therefore imperative that an education system is developed that can quickly respond to changes in the technical, social, cultural, and political environments. Including technology into the learning process does not guarantee that students will be inspired. In reality, the student-teacher relationship has become less intimate as a result of online learning. Teachers must adapt their classrooms to the digital age. Teachers must have a thorough understanding of their students' motives. Students enroll in online courses with the aim of finishing them, but they often fail for a number of reasons. Student motivation can play a role in the success or failure of online learning.

EXISTING SYSTEM

Currently many applications exist in playstore (e.g. GeeksForGeeks, TutorialPoint, W3School, etc.) which have same function of providing education/learning material to learners. The biggest limitation/problems with these websites are that, if user want to find different academic subject related material then, they have to access different sites and material is not fully provided for academic specific subjects. But in this application there is not such restriction to user and user can quickly access similar courses and also have privileges to download and upload the materials. In this application, we have also included the Test section where lecturer can set the topic specific test to student and student can attempt the test any number of times before the specified deadline.

PROPOSED SYSTEM

The main disadvantage of the online E-learning application is less interaction between lecturer / instructor and learner. For the solution to this problem, in the modified version of the e-Learning application we have added discussion section in our application. This section will help learner to connect with the lecturer and other users for solving any



doubts and questions. Any user whether student or lecturer can access this section to interact with the other users of application. For the more clarification of question asked to other users, we have provided the facility to attach the picture while posting the question.

Applications

- E-learning system can be implemented for schools, colleges, institutes, and organizations and can also be used in private institutes or classes.
- E-learning system can also be used to attract kids in paying attention to classes and teaching by offering visual animated examples and colorful images of the subject that is being taught.
- For adult learning system, we can design more interactive environment with the support for discussion and question asking on the subject of matter.
- In medical education e-Learning has a large amount of benefits, with this method they can set their own pace and time for the learning process, because information is there for them regardless the time and date.
- E-learning system can be used in corporate areas to train employees. With the help of e-Learning cost for traveling and hosting of employees are cut down completely, as they can obtain all the needed information by electronic means.
- E-Learning System is the best tool for language teaching by allowing support to audio format accessibility for all the students.

CONCLUSION

An E-learning or Electronic Learning System is an educational platform that takes place over the Internet. Our mobile platform e-learning application helps in providing effective learning and teaching. Our System has user-friendly features which helps users to understand system quickly in less efforts. Our application can be used in wide domains for providing best quality learning and teaching with Improved efficiency and effectiveness.

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