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Artificial Intelligence Tutelage System

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Abstract— *E-learning, often known as "online learning," "virtual learning," "remote learning," and other similar terms, is an alternative to traditional classroom instruction. "Distance education," "digital learning," or "mobile learning." E-learning involves using several distinct technologies, including the web, open broadcast, loop, cable, microwave, broadband lines, fibre optics, satellite, wireless communications equipment, audio/video conferencing, and others, for one-way or two-way transmission. To improve educational knowledge, e-learning makes use of interactive technology and communication infrastructure. It has the ability to change how we typically teach and learn across the board. It will improve standards and increase long-term learning involvement. Although it cannot completely replace teachers and lecturers, it will improve the quality and scope of their instruction and reduce the time spent on administration. Each learner will be changed to reach his or her full potential, and it will make it easier to give an academic force the freedom to change. It makes a very ambitious educational system for an emerging learning society feasible. As demand grows, there is a need to standardise the E-learning system and to use new technologies to raise the standard of the current system. Despite the fact that many corporations and academic institutions have previously adopted various standards, there are still certain issues with these standards' benefits and drawbacks that must be addressed by incorporating new technical standards into the current norms to improve their usability and systematicity*

Keywords— ***intelligent recommendation, online education, learning standards, technology-enhanced learning procedure, Meeting , Attedence , Presentations***

I. INTRODUCTION

Teachers can connect their students to a variety of applications and tools, enabling students to be creative in how they demonstrate their knowledge of standards. A student might react to an assignment, for instance, by uploading a video recording, snapping a photo of their original artwork, or sharing a document that they collaborated on with classmates. The cloud gives students the chance to express themselves and make choices about how to exhibit their learning, and it gives them access to a variety of technological tools for doing so. Teachers and students can tailor coursework through the cloud to each student's unique needs. The 21st-century classroom requires more flexibility in terms of design and layout, much as technology is influencing and reshaping future occupations. The education system based on AI uses technology to enhance and augment the learning experience for students. This can include using chatbots for personalized tutoring, using machine learning algorithms to personalize lesson plans and curriculum, and using virtual and augmented reality for immersive learning experiences. Additionally, AI can be used for tasks such as grading assignments, providing feedback, and tracking student progress. The goal of an AI-based education system is to provide a more efficient and personalized learning experience for students.

E-learning, also referred to as electronic learning, is one of the most important aspects of the modern world. Any learning or teaching method made possible by technology is referred to as e-learning. Knowledge and communication systems use specialised media to carry out academic activities, whether or not networked learning is utilised. The phrase is likely to be used to describe both outside-of-classroom and inside-classroom educational experiences using technology as long as curriculum and device developments continue. The use of a computer and a network to impart knowledge and skills is known as e-

learning. E-learning tools and procedures include web-based learning, computer-based learning, virtual learning possibilities, and online collaboration. Content can be found on the Internet, intranet/extranet, audio or video cassette, satellite television, and CD-ROM. It combines text, image, animation, streaming video, and audio with other content and can be taken at your own leisure or under the guidance of an instructor. The demand for e-learning has been rising daily as a result of its flexibility. Due to their independence from place and time, e-learning systems are gaining popularity among academics and students alike. This independence allows for greater learning flexibility. The Internet is used to implement the majority of e-learning systems. Due to rising need to improve the quality of current systems, the e learning system needs to be standardized . Consequently, the goal of this e-learning platform is to educate pupils by way of this website.

II. RELATED WORKS:

Author	**year**	**Technique/ Models**
Qingsong Tu, Jian Liu	2013	Adaptive recommendation-based system for online education. This system may change the tudy strategies based on the learner's learning environment It increases the efficiency of the online learning process.
Haibo Yi, Zhe Nie	2017	A learning platform for college students to learn programming stuffs
Radhika Garg(SUSIMS)	2018	Attendance module, Placement module, Alumni Association module and many more
John thuku	2019	Class presentation, group activities, topic scheduling ,online tutorials etc..
Bo-wang	2019	School information system to connect various schools world wide
Zhang yan	2020	Reviews, project Module ,project handlings ,submission report management
Rohini.S.Choudhari Pratiksha Dehanikar Priya Jumle, Ranjana Kawle and Kajal Patel	2021	Create /join meeting with setting passwords Screen sharing /whiteboard Screen recording Upload view edit Documents Present video lecutures
Dimple Patil, Siddhi Rane, Vanshika Waghela, Sandeep Mishra	2022	Learnoative button must be clicked in order to register as an instructor. The instructor can also create courses, plan lectures or lessons, and add resources for particular courses. Additionally, the choice to charge for a course is up to the instructor. Enrolled students will have access to the lectures and resources that the instructor has posted for these courses. Students will also rate instructors.

III. LITERATURE SURVEY:

The majority of the papers examined are intensely focused on the efficiency and the effect that e-learning resources are having on the brains of the current generation. While some publications even touched on additional issues, such as what precisely is killing people's interest in studying something online.

3.1 Author :HAIBO YI, ZHE NIE describe A learning management system for college students is now required as the usage of the Internet, computers, and mobile devices grows. As a result, we create a productive learning management system for learning programming that is based on cloud computing and may enhance student learning and interaction. We categorise the learning management system into three platforms: SaaS (software as a service), PaaS (platform as a service), and IaaS (in the cloud). For learning programming, a SaaS learning platform offers lesson systems, learning systems, examination systems, document systems, forum systems, and programming systems. For learning programming, the PaaS learning platform offers Visual Studio 2015 Community, C-free, Eclipse, SQL Server, Oracle, IIS, and Apache. An IaaS learning platform offers network, computation, and storage infrastructure for learning programming. Using Microsoft ASP.Net (version 4.0) and SQL Server, we implement our designs on the OpenStack cloud computing platform (version 2008). The

experimental findings demonstrate the high efficiency of the learning management system based on cloud computing for programming learning, which offers learning services on SaaS, PaaS, and IaaS platforms for students majoring in computers.

3.2 Author: QINGSONG TU, JIAN LIU said that information age has swept the globe, altered human society's way of life and thinking, and provided a strong technological foundation for the revolution and advancement of traditional education. The Internet and education work together to produce the education system of the future as two significant drivers of social economic progress. Through thousands of emails, online education links teachers and students and facilitates face-to-face interaction. This transforms education significantly and introduces new concepts for teaching and learning. Online learning thus emerges as a new trend in educational advancement that many nations have already begun to closely monitor. The current online education system's content is basically disorganised by educational materials, without taking the learner's personal character, needs, or habits into account. Instead of automatically adjusting to the student and not being developed in accordance with the learner's law, they always demand that the learner adapt themselves. As a result, issues like inefficiency and a lack of adaptation constantly exist. The AOES can track each learner's learning progress and capture pertinent data in order to create the user study file. The learner's studying effect and initiative can be greatly enhanced by the system's ability to dynamically deliver studying suggestions for them based on their study files.

3.3 Author: JOHN THUKU said that For a long time tutorials has been known to enhance student participation in learning and often learning institutions have used them to improve student's learning experience. However, in the recent past, there has been a gradual decline in use of group tutorials discussions due large classes a lecturer is expected to teach. With the advent of emerging technologies such as cloud computing there is need to rethinking about how tutorials can be conducted in order to retain its benefits. This paper reports on an online tutorial management system (Tutmas) developed to improve the management of tutorials. It is based on research conducted at Kenyatta University where respondents were identified through snowballing. Data was collected through questionnaires, interviews and observations then Agile Software Development approach was used to develop the platform. Tutmas is a platform that provides lecturers with a forum to setup classes, add tutorial questions or topics, schedule class presentations, monitor group activities and assess the performance of individual groups. On the other hand, students are able to enrol in tutorial groups, indentify questions to write on, collaborate in writing the paper, upload and share the final papers to class members.

3.4 Author: ZHANG YAN describes ,based on the theory of software engineering, this paper designs a university research project management system based on cloud platform. The system includes project application and review module, project opening management module, project progress management module, project completion management module and project research results display module, which realizes the distributed submission of project declaration, opening report, progress report and conclusion report, and network review. The system has the characteristics of electronic materials, uninterrupted service, office network, automatic results, and feedback zero distance. It effectively solves the problem of declaration review and process management of university research projects, improves project management efficiency, and saves the working hours of project management personnel, review experts and teachers, promotes the university research results and realizes the information of university research project management.

3.5 Author: BO-WANG describes that We propose a simple cloud-based School Information System to connect branches of schools round the globe including rural, remote areas branches and metropolitan area branches. The connection and communication problem arises between remote areas and metropolitan areas with the head office for sharing of resources including information. This is because of lack of IT services deployment in such areas. We have designed a cloud-based application to manage school information including branches on cloud. The information system is to be controlled and managed centrally and all branches of school can use that information. The client application will be installed in the client computers at school branches. The branches may be in remote rural areas or in more developed metropolitan areas.

3.6 Authors:Rohini. S. Choudhari Pratiksha Dehanikar Priya Jumle, Ranjana Kawle and Kajal Patel they explains the design of an online learning web application that gives teachers and students a venue for structured interaction. This app is primarily made for organisations that want to conduct their own virtual learning and engagement activities outside of the traditional classroom setting. The goal of this software is to have everything in one location, allowing professors to efficiently teach students through content management so that students can readily access the study material without having to hassle with gathering it from other platforms. It gives users access to cutting-edge technologies for evaluating their students' progress using a range of evaluation tools. As an illustration, engage students in debate via video conferencing and quizzes. Their objective is to provide 1. Better communication between

student and teachers. 2. Prevent scattered data and resources provided by faculty. 3. For providing better and well organised content management

3.7 Author: Radhika Garg, SUSIMS is the most advanced, creative, and reliable solution for a university. Many tasks are conducted manually in the college data management systems that are currently in place. These are all time- and money-consuming, paper-based tasks. Different departments tackle different tasks. Due to this, it becomes extremely difficult to link data together and prevent duplication. Therefore, getting information from management becomes a very challenging and drawn-out procedure for students. All of these tasks have a better, paperless, time- and money-saving solution described in the proposed system. With the newest technologies, the globe is going toward cloud computing in the twenty-first century. SUSIMS is a complete information management system based on cloud computing. It integrates these processes onto smartphones with an easy-to-use interface and covers all the smallest details of a university's work flow. It comprises each and every significant module, such as the modules on attendance, placement, alumni associations, and many more. Redundant data is not present because all units are interconnected.

3.8 Authors: Dimple Patil Siddhi Rane Vanshika Waghela Sandeep Mishra .They created an application where a user will choose whether to register as a student or instructor as soon as they access our site. The login button must be clicked by the user in order to register as a student, and the InvisionLearnoative button must be clicked in order to register as an instructor. The passwords are hashed for security purposes before being stored with the rest of the registration data in MongoDB. The instructor can also create courses, plan lectures or lessons, and add resources for particular courses. Additionally, the choice to charge for a course is up to the instructor. Enrolled students will have access to the lectures and resources that the instructor has posted for these courses. Students will also rate instructors. Students and instructors can get in touch with us through the contact us page if they have any questions about the website or problems accessing a particular course. The administrator may therefore see the query in MongoDB and respond to it.

IV. PROBLEM STATEMENT

The inability to continue working during the lockdown time forced many universities/schools and every other department to abruptly switch to a digital work environment. Nobody anticipated it and it was unfamiliar to everyone at first; nevertheless, now it has become the new normal in people's life. The reach of digital learning increased the difficulties for organisations and developers in creating platforms that are safe for users and easy to use. The question of how a student will experience a virtual classroom environment is raised. However, a lot of businesses are now developing a solution for this issue. Through video conferencing tools like Google Meet, Google Classroom, and Zoom, universities and schools have been attempting to arrange and organise their lessons online. Forcing pupils to compile study notes and manage them has been a burden. The issue is that we must use many platforms for various purposes, none of which can be altered to suit our needs. It gets very monotonous to listen to online classes. Additionally, searching online does not yield information that is clear. that causes the delivery of study material to students to be random. It is also challenging to administer objective assessments to differentiate between students' levels, which calls for studying, identifying flaws, and attempting to remedy them. Working parents find it challenging to keep an eye on their kids. The current educational system is unable to meet the demands of a diverse education. excessive academic pressure There isn't a system in place to track students' development or present material that is catered to their interests. inadequate teacher-to-student ratio. Ads and objectionable content for youngsters are displayed in gaming applications. Due to COVID, children's motivation in learning new things has decreased, and there is no effective way to instruct the student. The current educational system requires a lot of labour from teachers. The maintenance and management of schools become tremendous jobs. Before grading the students' tasks, the schedule will be changed, the response papers will be edited, and the students will be given the necessary books.

V. CONCLUSION

We conducted surveys and research on a range of technologies that can be used for improved interactivity and app development efficiency. used them to analyse several learning management systems and other video conferencing tools like zoom and arrived to a specific result. As a result, we were aware of the power of open source, which has grown over time as a result of strong community support. Students at universities and other educational institutions will find it simpler to avoid the difficulties mentioned in the problem statement above by using the applications designed. The major goal is to create an active learning environment rather than just a teaching environment. To do this, many IT tools, APIs, and resources are used to engage students, as well as teachers who actively participate in raising standards of instruction.

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