

SMART CLASS WITH SOCIAL MEDIA FEATURES

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ABSTRACT

A smart virtual classroom is a system that gives the same facilities for the teaching - learning process, beyond the physical limits of the traditional classroom's walls. Due to the access of the Internet, most virtual classrooms are based on the World Wide Web. Wikipedia.com says, "A virtual classroom is a learning environment created in the virtual space. Virtual Classroom is a simulated classroom via the Internet,[1] which provides a convenient communication environment for distance scholars just like traditional face-to-face classroom .[2] A virtual classroom allows scholars to attend a class from anywhere in the world and aims to provide a learning experience that is similar to a real classroom.

INTRODUCTION

Education over the Internet is the latest concept in spreading education to each and everyone .[3] The conveniences of learning

online are numerous. Students and those who are interested in learning over the computer can choose their own timing that is convenient to them and classes can be taken at their own place.

This Virtual Classroom System is designed in such a way that the students and scholars i.e.[4] Clients can communicate with the server when it is logged on and the client can retrieve the text files from the server by issuing the request . Clients have his or her own log in name and password which help them to get connected with the server. Here, the students are provided with the facility of attending the classes of their choice and can choose the faculty according to their wish.This Virtual Classroom System is available anytime without any restriction that means we can access it 24 hours a day. It engages students and scholars in a rich learning experience. Data transfer rate optimization matches the user's connection speeds. It is real time collaboration between a faculty and the scholar. We can share documents, applications, streaming videos and many more. Developing a Virtual Classroom System (VCS) to promote a greater number of students to indulge into the field of Education. It integrates the benefits of a physical classroom with the convenience of a "no-physical-bar" virtual learning environment, minus the commuting

hazards and extra expenses . It will usher in the immense flexibility and sophistication in the existing learning platform structures, with the perfect blend of synchronous and asynchronous relation. It provides a means of collaborative learning for the scholars. In the recent era of globalization, technological advancement has increased dramatically in every sphere including the mainstream education system. Profound investments in technology in this new decade have given rise to a worldwide explosion of information. Many educational institutions including colleges and schools have been mystified by this information chaos. They are mostly driven by the goal to use newly found access to Global Data Communication.[5]

Brief Literature Survey

Virtual education was first hired within the mid-1990s and has come to be a commonplace approach of distance training utilized in K-12 jurisdictions. The utmost common definition of a digital faculty is an entity accredited through a kingdom or governing frame that gives publications thru distance transport – maximum usually the use of the online. While digital colleges could even be labeled in distinct ways, the three commonplace strategies of transport are through impartial, asynchronous or synchronous means. Presently, the good sized majority of digital faculty college students attend a detect organization of academically capable, encouraged, impartial learners. The advantages related to digital education are increasing the tutorial access, offering first rate studying opportunities, enhancing pupil consequences and skills, bearing in mind academic choice, and accomplishing administrative efficiency. However, the studies to help those

conjectures are restricted at the simplest. The challenges related to digital education contain the idea that the foremost convenient college students usually successful in online studying environments are those who've impartial orientations within the direction of studying, notably encouraged through intrinsic sources, and have robust time management, literacy, and era skills. These traits are usually related to grownup learners. This stems from the truth that studies into and exercise of distance training has usually been focused on grownup learners. The trouble with this awareness is that adults analyze it differently than younger learners. Researchers are calling for extra studies into the weather that account for K-12 pupil fulfillment in distance training and digital faculty environments and extra layout studies tactics than conventional comparisons of pupil success in conventional and digital schools and colleges.

LIMITATION OF SYSTEM

PRESENT

Here the prevailing system may be a manual classroom system. We'd like to allocate an area physically to conduct classroom sessions. Both faculty and students got to attend the classes physically. We also got to provide some infrastructure for the classroom. Faculty must take the daily attendance manually and store it inside a book. If a student asks some doubt then the whole class is going to be disturbed. When the school is giving some notes the candidate has got to store the notes manually during a book. Since doing these manually

may be a tedious process we'd like to supply a web learning channel within the sort of interactive classrooms.

Disadvantages:

- Both students and school must come and attend the classroom physically.
- Faculty must take the daily attendance manually and store it during a book.
- Students must take down the notes manually.
- Student can't ask the doubts without disturbing others.

PROPOSED SYSTEM

The Interactive Classroom system is to exchange the prevailing manual system with a software solution. The Interactive Classroom is developed with the aim of providing the convenience of learning online using RMI (Remote Method Invocation), is one among the most distributed technologies. This technique provides straightforward thanks to both the parties (Faculty and therefore the candidate who wants to attend the class) in learning just by providing or creating a Virtual Classroom System.

By using this application both faculty and therefore the student can attend the session

very easily and communicate with one another very efficiently.

Merits of this System:

- Providing a Virtual classroom environment which doesn't require any room Physically.
- Provides an effective channel between the school and therefore the student.
- Faculty can view the list of attendants within the class.
- The student can ask the doubt to the faculty and it won't be reflected in other students' systems.
- Students have the power to store all the notes issued by the faculty.

Major Modules

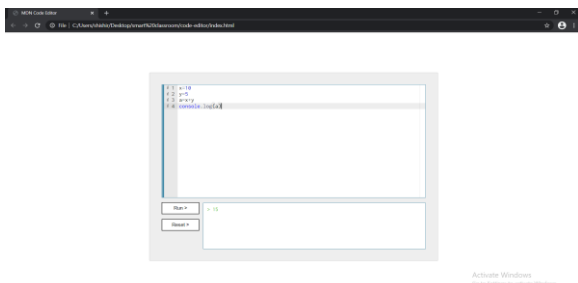
- Registration (sign up/ log in/ log out) :People can register themselves as student or teacher, and that they are going to be assigned to their respective batch/class.
- Video Conferencing :Online classes, presentations or any sort of meeting are often done using this feature.
- Coding Platform : students can code, compile and see the output on this platform.

- Central wall System : Teachers can post any information here like all announcements or any achievement of a student. Additionally they will allow some students to post also for instance a club president can post about some competition etc.

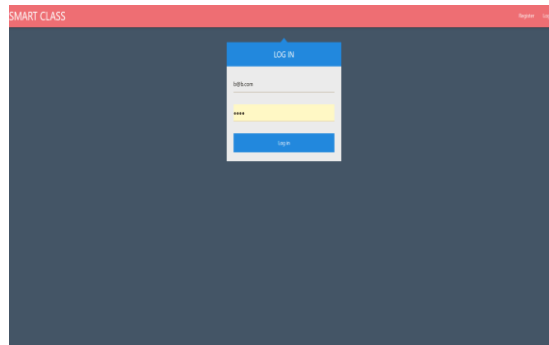
USE CASE DIAGRAM



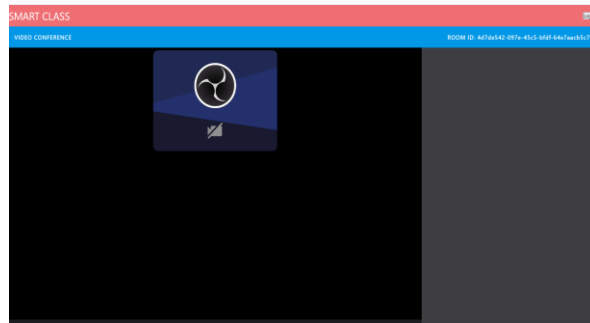
Code editor snapshot



LOGIN PAGE



Video conference



Conclusion

Virtual Classrooms would definitely provide a replacement revolution in our education system scenario. The portability it provides is useful from a student's point of view. The feature makes it a far better education tool for college kids.

Finally we will conclude that the utilization of this application will make a real mark within the education society then learning would be affordable to distances.

REFERENCES

1. Balasubramanian, V. & Turoff, M. (1995). A systematic approach to user interface, design for hypertext systems, Accepted 28th HICSS. Bengu , G. (1994). An interactive multimedia courseware on manufacturing processes and systems. International Journal of Applied Engineering Education.
2. Bieber, M., & Kimbrough, S.O. (1992). On generalizing the concept of Hypertext, *Manage. Information Systems Quarterly*, 16(1), 77-93. Bouton , C. , & Garth , R.Y. (1983). Learning in groups, (New Directions in Teaching and Learning, No. 14). San Francisco: Jossey-Bass.
3. Cohen, K.J., & Rhenman, E. (1961). The Roles of Management Games in Education and Research, *Management Sciences*, 7(2). Davie , L.E. , & Palmer, P. (1984). Computer teleconferencing for advanced distance education, *Journal of University Continuing Education*, 10(2) , 56-66.
4. Hiltz, S.R. (1993). Correlates of learning in a virtual classroom. In *International Journal of Man Machine Systems*, 39, 71-98.
5. Hiltz, S.R. (1994). *The virtual classroom: Learning without limits via computer networks*, Norwood, NJ : Ablex Publishing Corporation. Hiltz, S.R. , & M. Turoff (1985). Structuring computer-mediated communications to avoid information overload, *CACM* , 28(7) , 680-689.
6. Hiltz, S.R., & Turoff, M. (1993). *The network nation: Human communication via computer*, Addison Wesley Advanced Book Program, 1978. Revised edition published by MIT Press.
7. Hopkins, R.H., Cambell, K.B., & Peterson, N.S. (1987). Representation of perceived relations among the properties and variables of a complex system, *IEEE Transactions SM & C*, 17(1).
8. Hsu, E. (1989). Role-event gaming simulation in management education: A conceptual framework & Review. *Simulation & Games* 20(4), 409-438.
9. Hsu, E. (1991). *Management games for management education: A case study*. Unpublished doctoral dissertation, Graduate School of Business, Rutgers University, Newark , NJ.
10. Hsu, E., & Hiltz, S.R. (1991). Management gaming on a computer-mediated conferencing system: A case of collaborative learning through computer conferencing, *Proceedings of the Twenty Fourth Annual Meeting of the Hawaii International Conference on System Sciences*, Vol. IV. (pp. 367-371). Washington, DC: IEEE Computer Society.

