

# Intelligent web-based E-learning system

Deepa K<sup>1\*</sup>, Gangeswar P<sup>2</sup>, Manikandan M<sup>3</sup>, Charulatha C<sup>4</sup>

<sup>1</sup> Assistant Professor, Computer Science and Engineering, M.Kumarasamy College of Engineering, India

<sup>2</sup> Computer Science and Engineering, M.Kumarasamy College of Engineering, India

<sup>3</sup> Computer Science and Engineering, M.Kumarasamy College of Engineering, India

<sup>4</sup> Computer Science and Engineering, M.Kumarasamy College of Engineering, India

\*Email: [deepak.cse@mkce.ac.in](mailto:deepak.cse@mkce.ac.in)

## Abstract

This paper is based on Web Application and it is host on the cloud web server. The main theme of that paper is study oriented material are bind to form the single website. It is mainly used for students to refer there department's major paper oriented topic. This paper servers in the way of a video tutorial, presentation and relevant edition of book. It can be categories into a different part of languages C, C++, JAVA, database, computer networks etc. Whatever area the user wants they can be searched to use that material. There are three categories of user they are an admin, moderator and visitor. Admin having all permission to view the detail of the users. This will help to know what requirement the user needs. The visitor is a general user to visit the website to surf the study content and having some doubt about the subject they permit to post on that site. Moderator is the intermediate between the admin and the visitor, they have to upload the videos and presentation content and have to reply the posted questions also. The web framework was developed with the help of python-Django 1.11.1. It is one of the web frameworks that has inbuilt module and API. The user gets login with the help of Google authentication. In that way they detail can be stored in the database. Sqlite3 version database is used for fast retrieving and storing the data. The front end of this project is using HTML, CSS, and JavaScript. This will provide the good user-interface. The hijacker module is used to improvise the search content.

**Keywords:** API, python-Django1.11.1, Sqlite3, HTML, CSS, JavaScript.

## 1. Introduction

In earlier days, the teachers are refer the book to take the class for student. After the some years later the government give the book for students. Then the teachers not refer apart form that book. Student also use the same book for study. If student or teacher want to study apart from the book, they want go to the library. But the library is not near the student place. So student don't known apart from that book and they know about some knowledge particular topic. After some years later, the internet was introduced to education system. But the student are not using the internet and till some students are using the book. Today many government schools and private school students are take the so many books and notes and go to school. So the students are easily tired. Today many college students are use the internet for studying. Many online education portal and tutorial are in online for school student and college student. Now a day's people moving new technology is based on the network. The network is a many to many communication system. The network is easily to communicate to everyone and any place to use. The education system process that use World Wide Web as a communication technology.

In this system is based on cloud web server. Intelligent web based e-learning system to login three categories. They are admin, moderator and visitor. Admin to control all permission to view the details. The visitor to visit the website to study content. Moderator is the

intermediate between admin and visitor. They have to upload the videos and presentation content and study materials.

Intelligent web based e-learning system (IELWBS) to login user to create login account for user. The admin monthly once to update the materials to send the notification for user. The student and staff both are used and download the materials from this e-learning system. In the system to used web framework was with help of python Django. The hijacker module is used to improve the search content. The user gets login with the help of Google Authentication. The (IELWBS) to use frontend HTML, CSS and JavaScript and backend Database and Sqlite3.

## 2. Related Works

### A Survey Paper on E-Learning Based Learning Management Systems (Lms)

When the e-learning management system (LMS) is based on internet and Artificial Intelligence. The LMS is used to unified cloud system. When the management system are used different modules. The e-learning management system is provide course management module, student management module, feedback management module and online assignment module. The course management module is used for only facilities. When the facilities to added the new course and update the database. The student management module used for student only. The feedback management module student

give the feedback for each subject and teacher performance. When the e-learning management system teacher upload the materials. When the system is provide multimedia assisted teaching environment and fuzzy knowledge. The learning management system to follow automatic assignment evolution and keyword matching system. This system mainly focus on reduce the teacher work. In the proposed system, we cannot upload a tutorial videos and regularly not updated the study materials. Quiz event not implement the proposed system.

## E-Learning Model Based On Semantic Web Technology

When the E-learning Model based on semantic web technology is worked from virtual class room to control remote access method. The semantic web technology is focus on RDF data model and OWL ontology language. This system to be implemented many web based application. The web is a machine readable language. This software is used to read, share and reusable. When the semantic web technology ideas implemented as WWW, URL, HTTP, HTML. This technology to permit both teacher and student to get the feedback session. The semantic web technology to added course description, documentation, announcement, URI, Link and Quizzes. The sematic web technology feature as course registration, upload course and document, student assignment, interactive tutorial and assessment. The e-learning on semantic web technology to implement PHP, Apache web server and MySQL database.

## Review of the Techniques for Smart Learning Systems

When the smart learning system is based on self-paced learning systems. This system student can share the ideas about their answers to assignments. When the system are for MySQL and Data Base Management System (DBMS). The smart learning system to be implemented as Databases Management, video streaming and web programming language. This is system followed by Flipped Learning system. When the Flipped Learning system student watching Lecture video's at home. The student are to solve the problems under the teacher guide from class itself. The smart learning system to upload a Database Lecture videos, smart Application and content management system. This system to be performed client and server system. The server system to be developed as Java Language and client system is written as HTML5 and JavaScript. The smart learning system management to check for student assignment. The proposed system positive effect of augmented reality and virtual reality. This system mainly focus on selflearning system to be implement upcoming soon.

## New Designing Of E-Learning System with Using Network Learning

In the system of e-learning is based on network learning method. The network learning method today is provides course management system. When the course management system many course to be added. The course management system work is based on application method. This application method review of available of data. The network learning method to using virtual space. This method to covered teacher interaction and communication. The feedback session student themselves provides about successfully. When the feedback session design is based on network. This feedback session to used e-school, e-college and e-university. The network learning potential of open source software for education and training period. When the software learning platform are key issues in attempting to developing technologies. The virtual and sematic space for their education goals and receiving positive feedback.

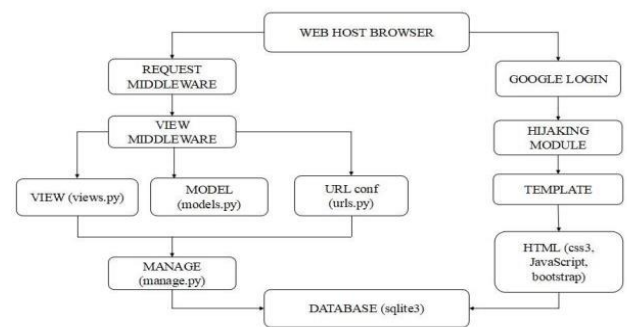
## E-Learning for Secondary and Higher Education Sectors

The secondary and higher education is based on education level. The traditional and conventional teaching method is used to school education system. This system various studies conducted by researchers and considering. When the e-learning system is mixed kind of research. Different tools are developed from the e-learning system. Teacher carefully to select published research article. Investigate how case studies are too presented for evaluation of student result to use for the e-learning system. Our interest to classification of selected research paper to different education level are used. This system almost covered all e-learning aspects in terms of research in development tool. The investigated rate of adaption for e-learning related experience.

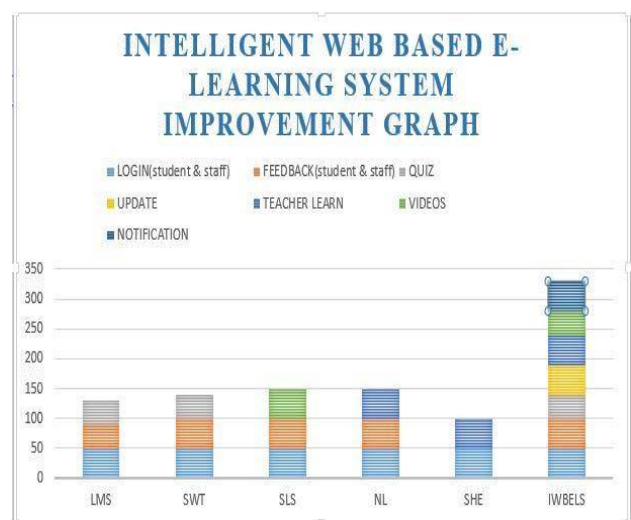
## 3. Problem Statement

When the e-learning system to used digital way learning system model. The user to find study logo very easily manner. Then user to refer very short time period. When the system to used different assistantautomatic assignment evolution and keyword matching system. The user to gets help as Google Authentication from the e-learning system.

## 4. Working Process Flow Diagram



## 5. Performance Evaluation



This paper have been researched for two to three months and it has the most benefits than the before implementation process. It gives the better performance rather than before implementation. The performance of our paper is very high and useful to all the peoples.

## 6. Conclusion

In our paper, there are many materials to get form student and teacher easily. We can reduce the class hours and save time for both student and teacher. In the system to use monthly once to update the materials to send the notification for students and teacher. In the future we are going to implement the videos as well as to get the notes form this videos for student reference.

## Reference

- [1] Chirag Patel, Mahesh Gadhavi, Dr. Atul Patel "A survey paper on e-learning based learning management Systems (LMS)" International Journal of Scientific & Engineering Research, Volume 4, Issue 6, June-2013.
- [2] Fayed Ghaleb<sup>1</sup>, Sameh Daoud<sup>1</sup>, Ahmad Hasna<sup>2</sup>, Jihad M. ALJa'am<sup>2</sup>, Samir A. ElSeoud<sup>3</sup>, and Hosam El-Sofany<sup>2</sup> "ELearning Model Based On Semantic WebTechnology" Department of Mathematics, Faculty of Science, Ain Shams University, Egypt. <sup>2</sup>Department of Engineering and Computer Science, Faculty of Engineering, Qatar University, Qatar <sup>3</sup>Computer Science Department, Princess Sumaya University for Technology, Amman, Jordan [hasnah.jaam, helsofany]@qu.edu.qa, International Journal of Computing & Information Sciences Vol. 4, No. 2, August 2006, On-Line 63.
- [3] Jaegeol Yim, Sangheon Kim "Review of the Techniques for Smart Learning Systems" <sup>1</sup>Department of Computer Engineering, Dongguk University at Gyeongju, 38066 Korea {yim}@dongguk.ac.kr Advanced Science and Technology Letters Vol.127 (Education 2016), pp.1-5 <http://dx.doi.org/10.14257/astl.2016.127.01>.
- [4] Amin Daneshmand Malayeri, Jalal Abdollahi "New designing of E-Learning systems with using network learning", Amin Daneshmand Malayeri, Department of Computer Engineering, Young Researchers Club, Malayer Azad University, Malayer, Iran .amin.daneshmand@gmail.com and Jalal Abdollahi, Department of Computer Engineering, Hamedan University of Technology, Hamedan , Iranjalal.abdollahi66@gmail.com.
- [5] Sadia Ashraf Tamim Ahmed Khan Inayat ur Rehman E-Learning for Secondary and Higher Education Sectors: A Survey Ashraf Bahria University Islamabad, Pakistan (IJACSA) International Journal of Advanced Computer Science and Applications, Vol. 7, No. 9, 2016.
- [6] Iman Paryudi and Sri Rezeki C.N "Proposed Intelligent E-Learning System using Semantic Web". Department of Informatics, Faculty of Engineering, Pancasila University. paryudi@rediffmail.com, ichantjpto2009@gmail.com
- [7] Tomoko Aoki, Yutaka Kigawa "E-Learning System based on User's Consciousness and Characteristic". Faculty of Law Heisei International University Saitama, Japan. 2015 International Conference on Computer Application Technologies
- [8] M. Lawanya Shri, Dr. S. Subha AN Implementation Of "E-Learning System In Private Cloud" Assistant Professor School of Information Technology and Engineering, Vellore Institute of Technology, Vellore 632014. kmlavanya@vit.ac.in, ssubha@vit.ac.in.
- [9] Do-Yeop Lee and Chan-Sik Park Application of the Failure-Based "eLearning Process for Building Construction Education" Department of Architectural Engineering Chung-Ang University Seoul, South Korea {doyeop, cpark}@cau.ac.kr
- [10] M. F. Mgendi "Introducing WebBased Elearning Platform At An African University" Ardhi University, Disaster Management Training Centre, P. O. Box 35176, Dar es Salaam, Tanzania - mlenge@aru.ac.tz
- [11] Jaegeol Yim, Sangheon Kim "Review of the Techniques for Smart Learning Systems" Department of Computer Engineering, Dongguk University at Gyeongju, 38066 Korea {yim}@dongguk.ac.kr
- [12] Poonam R. Maskare, Sarika R. Sulke "Review Paper on E-learning Using Cloud Computing", Dept. of Computer Science and Engg., Amravati University, India Dept. of Computer Science, Amravati University, India .
- [13] S.Thilagamani , N. Shanthi," Object Recognition Based on Image Segmentation and Clustering", Journal of Computer Science, Vol. 7, No.11, pp. 1741-1748, 2011.
- [14] S.Thilagamani , N. Shanthi," Gaussian and gabor filter approach for object segmentation", Journal of Computing and Information Science in Engineering, Vol.14, Issue 2, pp. 021006, 2014
- [15] Dr.P.Santhi, S.Kiruthika," Lung Based Disease prediction Using Lobe Segmentation Based on Neural Networks", International Journal of Pure and Applied Mathematics", Vol.118, No.8, PP. 499-504, 2018.
- [16] P.Santhi, R.Vikram," Implementation Of Classification System Using Density Clustering Based Gray Level Co Occurrence Matrix (DGLCM) For Green Bio Technology", International Journal of Pure and Applied Mathematics", Vol.118, No.8, PP. 191-195, 2018.
- [17] S.Thilagamani, V.Manochitra,"An Intelligent Region-Based Method for Detecting Objects from Natural Images", International Journal of Pure and Applied Mathematics", Vol.118, No.8, PP.473-478, 2018.
- [18] S. Thilagamani, N.Shanthi, "A Novel Recursive Clustering Algorithm for Image Oversegmentation", European Journal of Scientific Research, Vol.52, No.3, pp.430-436, 2011.
- [19] S.Thilagamani and S. Uma Mageshwari," Risk appraisal for cardiovascular disease among selected young adult women in Coimbatore, India", Indian Journal of Science and Technology, Vol. 3, No. 6 , PP.672-675, 2010
- [20] T. Mekala, P. Nandhini," Modified Agglomerative Clustering for Web Users Navigation Behavior", International Journal of Advanced Networking and Applications, Vol. 05, Issue: 01, PP.1842-1846, 2013.
- [21] S Saravanan, V Venkatachalam,"Advance Map Reduce Task Scheduling algorithm using mobile cloud multimedia services architecture" IEEE Digital Explore, pp.21-25, 2014.
- [22] S.Thilagamani, N. Shanthi, "Literature survey on enhancing cluster quality", International Journal on Computer Science and Engineering Vol. 02, No. 06, pp1999-2002, 2010.
- [23] K.Deepa , Y.Naveen Raj, "Enhancing the Performance in WSN using Distributed Tracking Algorithm", International Journal of Pure and Applied Mathematics Vol. 118, No. 9 2018, 717-722.
- [24] G.Ranjith , M.Vinoth, "An Unified Approach for Effective Use of Cloud Metering Service", International Journal of Pure and Applied Mathematics Vol. 118, No. 9 2018, 801-806.
- [25] Dr.P.Santhi, K.Deepa, Classification System for Identifying the emical Structure Using the Support Vector Machine. Vol.03, No.1, June (2017). 2349-7866.
- [26] P. Santhi, S.Thilagamani," A Survey on Audit Free Cloud Storage via Deniable Attribute Based Encryption", IRA-International Journal of Technology & Engineering, Vol.5, No.1, PP.1-5, 2016.