



Mobile Learning Environment for Educational System

Varun Kumar.M*
Assistant Professor
SITE, VIT University, India

Udhayan.G , Manikandan.K, Kannan.T, Santhosh Kumar.A
M.C.A
SITE, VIT University, India

Abstract:-In this real world scenario, everything is performed in computerized manner, but recently it should be moving from computer system to mobile system for trading and commercial purpose. Many small applications are developed and executed via mobile. Likewise computer learning system is slowly reducing and changing into mobile learning system. so it has to be concern, in this paper, we designed a application related to mobile learning such as “Integrated Mobile Learning Environment for Educational System”. In this project ,by mobile every students can accessing the data ,according to their own rights through WI-FI connectivity, maximum number of users can accessing the data, lively see the lectures else the lectures video is already stored, whenever we need we can be learn from it, those things are implemented ,showed the desired results.

Keywords:-M-Learning ,ML System, WML,WAP

I. INTRODUCTION

Generally, people are easily adaptable with the new technologies that are easily consumed by them. Similarly, the world is ruled by the different kinds of wireless technologies, we cannot be able to measure, day to day life anyone discover new thing. Likewise the wireless technology is developing in the educational system. it is totally different from the traditional system to mobile learning system. Distance education is developed by joining with the mobile communication and increases their knowledge. In class room, network service should be provided for real time learners; they can be able to accessing the data whatever they want in anywhere. There is a maximum difference arise between the normal network based learning and mobile learning. Interactivity should be held between two-way. the main advantage of the mobile learning is more convenience to develop the conservative classroom teaching and online learning method. so, in this project, by mobile every students can accessing the data, according to their own rights through WI-FI connectivity, maximum number of users can accessing the data, lively see the lectures else store the lectures in videos whenever we need we can be learn from it, those things are implemented, showed the desire results.

II. ARCHITECTURAL DESIGN

Mobile learning system has been working according to this architectural design. The system is comprises of three layers such as data link layer, presentation layer and logic layer.

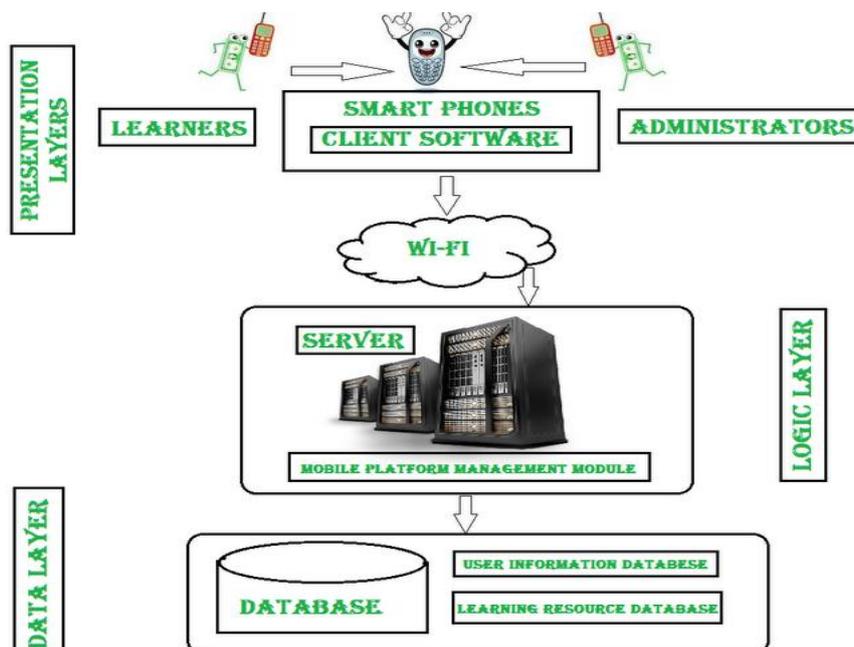


Fig 1:Architecture Diagram

A. Data Layer

Data layer which offers the data resources for the applications. The ML-system which needs the database information about the user and the learning resource. In consumer database information not only keeps the basic information about the students, teachers, and administrators, it save the current details which is generating presently, updating the data also in data layer.

B. Logic layer

Logic layer which is play the main role in ML-system.in this layer all the services should be condensed .it is having a duty to concern the application request of the presentation layer and create the logical appraisal on the result. If the logical approximation is authorized then the data is called by the system from databases, and make the contract with the data, finally the results have to be return to the presentation layer.

C. Presentation Layer

The presentation layer is used for user friendly between the consumer and the system. it is having a duty to deal with the dialog between the consumer and the system. The consumer software is present in the consumer application programs of the mobile equipment operation system and browsers. If the user visit the ML system server via the browser and back the data to the browsers according to their requests .it offers the individual varies user interface for students, instructors and administrators.

This integrated ML system is satisfied these non-user requirements:

Performance: Integrated Mobile Learning Environment for Educational system provides a high performance for the users who are all using this system.

Reliability: This system is one of the best reliability systems for the user of this Interactive Mobile Learning system.

Security: This application provides a highly secured system to the user to maintain their information in an efficient manner.

Portability: This system can able to run in all latest Mobile Phones with its domain as a basic application for the users.

III. FUNCTIONAL DESCRIPTION

We designed two modules such as user information database it refers students information which is stored in this database. And another module is resource learning database it refers the every resource which is mean that teaching videos, lectures and the faculty details is stored in this database. The students, teachers, and teaching methodology is varies from every classes in the universities. For this concern we are implemented our application in this field. Before going to describe about our module we are detailly describe about other functionality which works in this system.

Initially we have to fix the web camera all class rooms and other administration side also. Then we establish the wireless connection throughout the campus. We can access the ML learning system within the campus only out of the campus we cannot access. Because this learning system is workable based on the intranet method level only it is not developed in internet level.

A. User information database module:

In this module, we are creating a individual unique id for each and every student. All the information about students will be stored in the database. According to the data mining and data warehousing every information about the student which is automatically updated by the administrator of all the students own database.

B. Resource learning database module:

In this module is created for getting the lively lectures videos, or already taught lectures video which is stored in this database. Every faculty is having a unique id similar like a student. They have posted every lecturing video in this page. Whoever need have to access using by their own login.

IV. WORKING DESCRIPTION:

If the student want's to learn the lecturer by lively through mobile. The learners mobile have to contain a certain software for accessing the videos lively in ML-system .initially the client have to establish the Wi-Fi connection their mobiles similarly the faculty is also before going to start the lecturer have to connect the wireless connection in their pc's .those connection are connected to the server which is called a mobile platform management module. This module is activated by the logic layer. The function of the logic layer is condensing all the services and concentrates the user request which is present in the presentation layer. If the user is valid then it called the system for accessing the database .in these there are two resources link is available which is lively watching the lecture else past videos and also other information of the user need is present in these database which is present in the data layer.so if the user logs in , all the information about the user is stored in the user information database module. When he login automatically the details about him is displayed on the page.

A. Solution Methodology:

The proposed solution for the system is to reduce the existing problems and we made it with different optimized types of coding in the program development and makes an enhancement in the videos for the fast Video Streaming even through the mobile devices of most of the types which are normally used by the most user with the latest technology.

In our system we have done through Wi-Fi whereas in previous system they [1] had created the application and done the M-learning. In our case we have created a unique id for the students so that they can login through Wi-Fi by their respective id.

WML (Wireless Markup Language) is the first markup language standard for wireless devices. It is supported by all the major mobile phone manufacturers. Over the past few months new WAP (Wireless Applications Protocol) phones have

become extremely popular and many large websites have created special 'mobile' versions of their site. So we used these as tools.

V. IMPLEMENTATION

We have implemented this system is accessing the data through Wi-Fi and learning the lectures through video stream lively and also access the stored videos whenever we need the whole system is implemented in java 5 platform and get the desired results..

VI. CONCLUSION

The integrated mobile learning environment education system is mainly developed for the student's purpose only because if the students are not intention to attending the class but they need the knowledge about the subject this ML system is used. The main advantage of the system is portability. Because this is also applicable in laptops, pcs but all the time we cannot carry over along with them. But in mobile we can access the data anytime and anywhere and we will learn. And also accessing the video is very fast comparing than the existing one. This design is possible only intranet. We will develop the application into higher platform and make the possible into through web services also like video conferencing.

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