Design and Implementation Electronic Management System

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Abstract: It is generally considered that a key component of electronic government in the future will be electronic management, as a means the designed electronic management system requires hardware components for network connections and software applications to control the data stored and searching, the data entries will be divided for colleges in mustansiriyyah university will be naming a number of employees with each employ has an username and password to protect the data from attacks. The implementation using Window Server, Apache, MySQL and PHP. The electronic management system will promote e-learning programs and also the development and usage of open-source technologies.

Keywords: Electronic Management, Database Server, Web Server, Electronic Government.

1. Introduction
The era of e-government which can be defined as the use of technology within government to achieve more flexible operations better quality of service and simple open access to government information and services is now underway [1]. The interaction between students and teachers take place through some form of information technology. The system consists of necessary hardware and software to process requests and delivers content to clients through local network.

Given the tremendous development in e-learning, we decided the work of electronic management system for the Department of Computer and software. Any can Section administration electronically via computer through a database of all with respect to the section of the head of the department and its decisions Section and Student Affairs and the examination committee and faculty affairs administration by connecting section internal network and contains the server from which is controlled system programmatically work through username and password for some people, such as the passage of the specific department head section and the decision to take control of incoming and outgoing as well as the name and information about faculty and students.

The system has developed, implemented and tested two of such system dedicated only for the purpose of e-management using the latest technology [2].

2. Implementation of Electronic Management System
The implementation environment has been chosen to be consisting of Apache, MySQL and PHP as it is open source, mature, compatible and well tested. The various services of the model are being realized as grid services [3].

The new educational technology facilitates design, delivery and management of educational actions for end users [4]. The given network design proposed to connect all universities in one networks by dividing the networks in two type one networks for the Networks Operation Center (NOC) which putted in the university of Al-Mustansiriyyah, as NOC and each college must have traditional internet connectivity for the employees in the management system with basic LAN connections, Fig.1 shows the architecture of system. The system required software application to control of e-management with web server application.

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using APACH web server with design the web page using PHP language and data base server by using MySQL.

Architectural framework of the proposed e-management system in Fig.1 consist of VSAT (very small aperture terminal) service to permit them communicate with each other, this service count on the number of employees that will be manage the data admittances, VSAT networks are composed of least cost earth station for use in a wide assortment of telecommunications enforcement. Web Server will be the responsible for web control and managements this will allow us to make the searching and editing under web dealings, to allow each user (student ,researchers , faculty) browsing the web page of e-management from any site just he had line connectivity will be fine to searching and get the free data. The proposed web server is HP or IBM hardware component with high hardware performance to support all activates, for this hardware we must put web application as a software package like APACH server that will be operate with PHP to manage the web contents. All data will be stored in one server called database server, for hardware requirement we must select very high hardware performance server from original company like HP, IBM etc and putting database application like MySQL package to control and manage all data editing also it will managing the user security by enter username and password from text in pages and equiponderate it with username and password store in system.

![Figure 1. Architectural Framework of the Proposed E-management System](image)

3. Software Application
In our work the implementation was done by using free package of APACH and MySQL to implement our proposed system e-management enable employ from searching in all official books in college at the same time , also they can download softcopies, from web sites of e-management. We will review the application of electronic management system in the department of computer and software engineering at the university of mustansiriyah see Fig.2.
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Figure 2. Organizational Structure for proposed system

The user can log in e-management by first website is called welcome page see Fig. 3.

Figure 3. home page

3.1 Head of Department

Head of department is the full administrator for all admin (office book editors or data entries) also he allow each editor an user name and password for edition and adding office books see Fig.4.

Figure 4. Authentication level

Head of Department is the manager and can be looking at the information in any teaching faculty of the department. After head of department login in e_management system page in Fig.5 is opening. He can enter information on the faculty, professors notifications, and the formation of committees, curriculum,
members of the board of the department, structural section, the official books of the outgoing and incoming as well as enable it to give grants to the secretary.

Upon entering the head of the department on a page of the teaching staff able to review all the teaching staff through broad search boxes empty and consisting of scientific title, the last certificate obtained by the teaching, functional class and age see Fig.6.

Search result will be a review of all records as in Fig.7 illustrates the existence of records and include the name of teaching the title of scientific and last certificate obtained by functional class and with the angel and the date of appointment with some observations he wish to have written the department head for any teaching record see Fig.7

From Fig.6 head of department can be updating, deleting, and adding the information of any teacher. For professors notifications, and the formation of committees link see Fig.8
Clear from Fig. 8 that the work of the department head can edit the information while the normal user cannot do so, but only browsing see Fig. 9.

Figure 8. Professors notifications

Head of department can give permission to access secretary Add and edit information about incoming and outgoing as well as the search for the official books to facilitate access to official wrote the previous task see Fig. 10 and Fig. 11.

Figure 9. User browsing

Secretarial reservation information from the official writers such as number and date of the book and point of issue and address and also the validity of her amendment, deletion and added to the official books in both incoming and outgoing see Fig. 11.

Figure 10. Authentication Secretary

Incoming and outgoing is a page that contains the official books for a Department of Computing and Software The only secretarial department head can access it cannot be any average user to brief a section...
And that the safety and privacy of mail and be via user name and password see Fig.12 for searching about official book.

![Figure 12. Searching about Official Book](image12)

The result for searching about official book in Fig.13.

![Figure 13. Result Searching for Official Book](image13)

Students can download the curriculum as well as graduation projects of previous years and this is an important feature in the electronic management system because it provides e-learning service see Fig.14, Fig.15, Fig.16.

![Figure 14 The curriculum](image14)

![Figure 15. Graduation Projects](image15)
Electronic management system that the user can recognize on the available equipment in the department laboratories, as well as to identify the laboratory administrators and download brochures any laboratory see Fig.17.

Student Affairs can explore students notification, results, students names see Fig.18.

Electronic library offers softcopy for books available in department library see Fig.19.

Teachers in department can explore examination table, news and members for examination group see Fig.20.
3.2 Section Decisions
Decision of department is admin for office book for students as data entries also he allow each editor an user name and password for edition and adding office books see Fig.21, Fig.22, Fig.23, Fig.24.

4. Electronic Government in Iraq
Iraq government resemble other countries are only in the initial phases of adopt information and communication technologies to progress financial management information and reporting, organize the delivery of government services, promote communication with the citizenry, and avail as a catalyst for
empowering citizens to react with the government ministry of science and technology and ministry of communication have pre proceedings for foundation infrastructure of E-Government in Iraq since 2004. Both ministries declare that after year 2010 is manifest achievement of infrastructure of communication in Iraq for ready plan of electronic polity to offer variety of services to followers and public community [4].

5. Conclusion
Today due to the evolution of networks and internet there is a fast development in information and accessibility and data sharing of this information. It is substantial reign effective e-management systems produce the learning process supplemental effective and responsive. The system has been designed with simplicity in intellect with a user cordial graphical user mediator. The electronic management system intended to reduce the time and effort to improve achievement and provide interactive e-services to followers. The developed e-service can be categorized as government to follower type of electronic management.

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References

