Computer-aided examination system essay sample

Technology, Computer

The field of Information Technology is very dynamic in nature. Its diverse effects lead to continuous development of our society as well as our lives. The development of thousands of different productivity tools provides timely and superb outcome in every institution where this technological innovations takes part. In the field of education, implementation of computerized based system that stores, processes and allows a user to manipulate data easily and its speed of performance incomparable that affected our way of working is seldom applied by school here in Philippines.

A Computerized Entrance Examination system is a software application under the information systems. It supports the institution to take entrance examinations fast and produce reliable results. It also reduces human effort in validating and checking the answers, accommodate maximum students at a time with less percentage of errors. This application is also useful because it can make transaction and process paperless. Nowadays, computers have infiltrated all the aspects in our society. The computer is the most likely one of the great technological mechanism for the increase human productivity and advantages. It can now simply make our works easier and lighter. With this great thing it won't be more useful without the computer's software.

Statement of the Problem

The main objective of this study is to determine all the strength and weaknesses of the existing Entrance Examination procedures in Isabela State University – Ilagan City Campus. Specifically, it aims to seek answers to the following pertinent questions:

1. What are the problems encountered by the examiners and examinees during entrance examinations? 2. What are the complications, interruptions or delays experienced by the students in getting their examination results? 3. Does the manual system highly efficient regarding in the speed process? 4. Does the manual system highly effective with regards to the accuracy of the results? 5. Does the manual system meets the demands and expectations of the examiners and examinees by giving evaluated reports for each examinee?

Statement of Assumption

This system is based on the following assumptions:

1. The Entrance Examination procedures of Isabela State University – Ilagan Campus is currently using a manual system.

2. Students' records and examination results can be easily misplaced causing the data integrity and data security to fail.

3. A Computerized Entrance Examination is needed for efficient and effective processing of results and evaluation.

Objectives of the Study

General Objective
The main purpose of the study is to develop a Computer-aided Entrance Examination.

Specific Objective

To help users, in this case the examiners, into the system changing the traditional process of taking the entrance examination.

To produce accurate and reliable results and support faculties by evaluating students' aptitude in by means of decision-support feature of the system.

Local Area Network (LAN) Based Computer Aided Examination System. Improve the manual retrieval and storage of information.
Lessen work for the teachers checking the test paper of the examinees. Reduce time in organizing question and in processing the examination of the student. Promote paper less examination.

Significance of the Study

This study expected to be beneficial to the following individuals:

To the Examiners. The aspiring students of ISU-Ilagan will have a fast-processing entrance examination and will be able to help themselves and the faculty members to evaluate in course selection. To the Faculty Members. The faculty associates will lessen their work as the checking and evaluating will be automated. Reducing the resources such as time, space, effort and resources. To the Parents. The parents will be benefitted by the system by the fast transaction it offers. This, in their perspective, their sons and daughters will take the examination and will get the result in the same day. Thus, it saves money and time. To the Future Researchers. This study will serve as a reference or guide for related studies and can be a basis for improvement of this or another system.

Scope and Limitation

The study will focus on Computer-Aided Entrance Examination of Isabela State University – Ilagan City Campus. This study will include automation in checking of results, evaluating performance base on the scores gathered and will be a useful tool in processing transactions faster. Still, its effectiveness and efficiency is limited by a number of reasons.

Scope:

Local Area Network (LAN) Based Computer Aided Examination System. The system has a server computer for a database.
The system has a timer for every examinee.
It can randomize question.
They can review their answers if they have remaining time otherwise the examination is automatically ended. Show the result right after the exam.

Limitation:
The system will only be implemented at Isabela state University – Ilagan City Campus. Computerized systems need power to operate. However, at times of power interruption, entrance examination procedure will be back to manual system.

Review of Related Literature and Studies

Related Literature

Foreign:
According to Gurewich (1999), the database system makes the work faster

for every institution for the mere fact that instead of doing things manually, with the use of computer technology everything is done faster.

In 2001, James stated that computer are extremely reliable device and very powerful calculators with some great accessories applications like word processing, problem for all of business activities, regardless of size, computers have three advantages over other type of office equipment that process information because computer are faster more accurate more economical.

According to Kroenk (2002), the early 1970's database processing was considered an esoteric subject of interest only to the longest corporation with the largest computer. During the late 1980's and early 1990's LANS were more complex and were not simply a matter of choosing the right cable to be able to inter-work. Equipment protocols and even applications needed to be carefully chosen to ensure that not just compatibility, but also optimum network performance, was achieved. Over the last few years for better or worse the world has gone towards the Internet Protocol (IP), making the issue of protocol selection almost redundant. The drive to IP was largely due to the fact it was supplied free with UNIX and more powerful and complex protocols, such as OSI, fell by the wayside.

Local:

According to Ralph (1999), the development of technology through the years have enabled us to do more with less effort from the orientation of the light

bulb to the industrial revolution and beyond, we have continuously tried to in a more efficient means of doing tasks.

According to McKinney, computers provide opportunity to perform more complex tracking student's progress and outcome. Bryant and Crokett also added that computerized databases for recruitment and application, and tele-counseling have provided tools enabling more efficient management of huge amount of data about student's.

Data as defined by Paris are file of information, which have been organized and for quick and easy access to specific topics. Print databases such as the library card catalog are familiar to everyone. A computerized database is organized similarly, but with files of information loaded onto software disk or computer tape with computerized databases, the researcher's calls up information by typing in established index terms, number or words.

Related Studies

Foreign:

Data processing in computer science is the analysis and organization of data by repeated use of one or more computer programs. Data processing is use extensively in business, engineering and science and to increasing extent in nearly all areas in which computers are used. Business use data processing for such tasks as payroll preparation, accounting, record keeping, inventory control, sales analysis, ant he processing of wide variety applications, including the processing of seismic data of oil and minera exploration, the analysis of data from scientific experiment. Local:

According to Torres et. al (2002) conducted a study that resolves around the importance computerization of student information. This study was conducted with the hope that it would help minimize time and effort in processing student's information in Maulawin National High School. The basic feature of this study is after the storage and access of retrieving and updating the data.

According to Alcaira (1999) stated that the using of computer are continue to grow, the need for a more timely information and data processing comes on demand keeping the record of any manual operations need the application, because handling it manually will only be conflicting.

Justification

Definition of Terms

Certain technical terms were used in the study. Thereof, the researchers defined them for further understanding. Computer Aided Examination. It refers to an automated examination that utilized the use of computer to administer examination. Computerized: It means operated controlled or done through computers Server: A computer on a local area that is running software for controlling access to all or part of the network and its resources and shares its resources with client. Client: is a computer program that obtains data from a program on another computer, often linked on a network. A computer that retrieves information from and/ or uses resources provided by a server or main computer. LAN (Local Area Network): are high-speeds networks confined to a limited geographical area. High speeds over

limited distance make LAN's very suitable for joining computers within a building or building complex.

Hardware: It is the physical part of a computer system where the software is fund HIPO: It is a document tool that graphically pat ray functioned the chart from the general level down to the detailed levels which was based in the study. This chart is composed of boxes where in each box represents functioned module. Input: or data that is entered into a computer or computer device. Output: Information that from a computer or computer device after it has been processed. Process: a set of instructions currently being processed by the computer processor. The act of manipulating altering or viewing data. Software: a collection of instructions that enables a user to interact with the computer or have the computer perform specific task for them. Computer programs and applications, such as word processing, that can run on a particular computer system. System: This term refers to any group of components that interfere with a component one another to achieve one or more predefined goal. User: It refers to one who manipulates the computer or he can called programmer.

Bibliography

http://www. casecomms. com/index. php/technical-information/pocket-books/local-area-networks#DefinitionLAN http://www. slideshare. net/alvinbobadilla/chapter-1-2
http://www. buzzle. com/articles/impact-of-technology-on-education. html
[1]McKinney, Kristen (1997): The use of Computer Data System I Academic Counseling Outcome or Community College Students. [2]Paris Lyn (1895)

Computer Database: application for the Social Studies ERIC Digest no. 25

[3]Microsoft Encarta Encyclopedia 1993- 1997: Microsoft Corporation. All rights reserve [4]Woolk. D. W., Kim and W. Luther: " An object Oriented Approach to Multi- Media Database; Preceding of the ACM SIGMOND Conference. pp. 311"