

Conducting standardized tests for students applying for admission to Faculties of Physical Education and Sports Sciences through a special electronic system

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Abstract:

Workers on the subject of tests for admission in Physical Education & Sport Sciences College for the beginning of each academic year to great efforts in the process of testing as well as the steady increase in the number of students competing for seats to study for a degree in physical education jurisdiction, there are several tests to students, and standard grades are calculated for each test in conformity with traditional manual calculation methods, and then extract the desired number for admission, this our results in many problems, through difficult to demonstrate results with accuracy and speed, errors and omissions contained With the increase in the numbers of applicants, in addition to discrimination or preference among students at the expense of others.

Keywords: Physical Education, Sport Sciences, special electronic system

I. Introduction

This research has been set up and a special electronic system design by rival students studying in colleges of physical education, has been using the programming language Visual Basic.net application and databases Access 2013 to build this system, so the system calculates and create standard grades and standard grades and find the arithmetic mean and standard deviation, and then extract the desired number for students, proving the system in a central computer server connected to a set of distributed places where tests, work the system from the moment of registration For the student, and all tests are done electronically in accordance with the special Windows for each test, then the system automatically calculate the values for each student and then announce the results of the quick acceptance and high accuracy with many charts and reports, and document information for each student under within each database regarding student to be used later in the registration process.

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The concept of electronic management:

The concept of electronic management is an integrated electronic system that aims to transform normal administrative work from manual management to computer-based management, by relying on powerful information systems that help in making administrative decisions as quickly as possible and at the lowest costs. The aim is to introduce full transparency and accountability, leading to the improvement of electronic management within any institution.

In a more precise sense, electronic management: It is an integrated digital system that aims to transform the normal administrative work from the manual mode to the electronic one, by relying on powerful information systems that help in making the administrative decision in the fastest time. This, of course, has benefits such as speed in completing work and assisting in decision-making by providing permanent information in the hands of decision-makers. With the reduction of administrative work costs and the increase of achievement performance. It overcomes the problem of geographic and temporal dimensions. Addressing bureaucracy and bribery, any events of reforms in the administrative structure in society, developing the work mechanism and keeping abreast of developments, in addition to overcoming the daily problems of work with the existence of a secure, robust and compatible information infrastructure.

Shifting from traditional management to electronic management:

In order to shift from traditional management to electronic management, the following stages must be achieved:

- Automating it by state institutions and converting all paper information of the government and its ministry into electronic information.
- Securing the necessary infrastructure to link all state institutions with a single information network and exchange information between various parties.
- Determine all transactions between the citizen and each institution and convert them into electronic transactions.

Objectives of electronic management:

- Public administration development: reducing paperwork and reusing solutions.
- Improving services: reduced mobility, anytime and anywhere delivery, and ease of access to information.

Benefits of electronic management:

- Speed in completing work.
- Helping in decision-making by providing permanent information to the decision-makers.
- Reducing administrative work costs while raising the level of performance.
- Overcoming the problem of the geographical and temporal dimensions.

- Address bureaucracy and bribery.
- Raising the efficiency of management personnel.
- Abolishing the National Paper Archives system and replacing it with an electronic archiving system with its flexibility in dealing with documents and the ability to quickly correct errors that occur, publish documents to more than one party in the least possible time and benefit from them at any time.

Technology in the field of education:

Technology is the technical means that allow people to improve their surroundings, and enables them to know the use of tools and machines to do complex tasks efficiently and efficiently. We use the technological application to control the world in which we live. Technology enables people to use knowledge, systems and tools that make their lives easier and better. They use it to improve their business performance.

The role of technology in education:

Today, different types of technology are used to achieve different goals. In the classroom, for example, there is use of various printing programs, e-mail correspondence, database programs, and text formatting that develop the skills of organized work, and planning programs facilitate scientific concepts and mathematics concepts. It is important to take into account how these electronic tools differ and the advantages that distinguish each of them and make them useful in the field of education.

Research problem:

Dealing with students 'tests and obtaining the values of these tests manually is a difficult matter that many committees suffer annually during the exam period for many reasons, including:

- A fixed period of exams
- The significant increase in the number of students applying
- The injustice inflicted on many students by not receiving their entitlements correctly
- The many errors that occur in calculating standardized test scores
- The huge amount of papers and files that are spent in the tests and the space they occupy
- The provision of large numbers of teachers to conduct these tests

Therefore, the use of modern electronic methods prompted us to the following research questions:

- Is it possible to design an electronic system to avoid these problems?
- Does the system have the ability to save data (student files and document them)?
- Can the work be completed with the required speed and accuracy?

Research importance:

The importance of the research lies in the following:

- Eliminate favoritism and apply the principle of transparency
- Using an electronic system that automatically manages the work of the examination committees
- Accuracy and speed of delivery of test results
- Avoid making previous mistakes
- Documenting students' data electronically in the database for later use

Research objective:

The research aims mainly to:

Development of work on the testing system by designing and building an electronic system for standardized tests for students applying for admission to Faculties of Physical Education and Sports Sciences, thus reducing paperwork and improving services as well as reducing mobility and ease of access to information

Introduction to the system:

This system represents a great importance for educational sports institutions that adopt the principle of competitive tests for admission through the elimination of manual work and the shift to automating testing processes to avoid the mistakes of the previous, so in light of recent developments and the need to switch to modern electronic methods, and in view of the great effort made by employees And teachers of the Faculties of Physical Education and Sports Sciences by working in examination committees every year and the steady increase in the number of students in order to complete the tests and calculate their results, as the standard scores for each test are calculated according to the traditional mathematical methods, by reference to reference tables for the committee to determine the student's score after comparing it with The corresponding values in the game's table, as in the appendix (1,2), in order to then extract the required number of students according to their results, and thus we have many problems, through the difficulty of extracting the results accurately and quickly. Which are sometimes subject to damage or burning or other reasons previously mentioned, and to the errors that may occur as a result of that, Therefore, in this research, an electronic system was prepared and designed to carry out the tasks of these committees, where the system is installed in a central computer connected to a database within a local network that includes a group of computers distributed in the places where the tests are conducted. For those admitted for the purpose of carrying out the administrative work related to the examination committees of the students competing for study seats in the Faculties of Physical Education and Sports Sciences, where the system calculates and finds the standard grades and the modified standard grades and finds the arithmetic mean, the standard deviation and the torsion coefficient and then extract the required number, this system can administer Work electronically in a correct manner without making mistakes, in addition to documenting all data later and exporting it for accepted students. All tests are done electronically according to special windows for each test, so that after that the system calculates the values

automatically for all students, and then announces the admission results quickly and with high accuracy, with many charts and reports showing.

System implementation (some system windows)SYSTEM LOGIN WINDOW :

At the start of implementation, the user will see the security window for entering the system, Figure (1). It is specific to the entity authorized to work in it, so there are multiple competent bodies according to the formed committees, and each of them has its own password, and the work is divided into a supervisor who manages the work and contributes to solving problems that may occur to the system (ADMINSTATOR), and his work is specific and when needed only.

In addition to other committees that work within the examination committees. Where it is not possible to enter the system until after the conditions of entry are fulfilled (the authorized employee and his password), otherwise the system will send alert messages to the user as in Figure (2).

Committee window:

The work of the examination committees is distributed through the following window and as shown in Figure (3), where by pressing the private key in the name of the test committee another safety window appears for the members working in this committee due to the privacy of each committee's work. As it is not allowed to enter the window designated for a particular committee without obtaining the committee's password, the system is designed to be multi-entry and multiple interfaces according to the details of each test.

Admission tests:

The admission tests in the Faculties of Physical Education are classified into four multiple groups:

Medical Tests:

Among the medical tests there are multiple tests as shown in chart (1), the student must pass them, and if he fails in one of the tests, he will refuse to accept him and cannot complete the rest of the subsequent tests, and in the work of the committees he needs devices such as the Rostameter and the vision test board or by vision The examinations are carried out by specialized committees skilled in this field, and these tests include:

a. Height measurement test: The student is subject to a test of his height through the Rastameter, and he must pass the minimum limits for height.

B. Weighing test: Weighing according to the Rasterometer, the examination is subject to minimum and upper limits.

C. Body exam: The student is examined physically, if there are abnormalities in the spine, upper or lower extremities, and the examination is given by vision.

R. The feet test: Examine the student's feet if there is flatness in the feet.

e. Body test: examines the student through seeing the body (fat or thin).

Physical Tests:

The physical tests are divided into five basic tests, which are, as shown in Chart (2):

- a. Running test (60) meters: The test measures the maximum speed of each competitor.
- B. 540-meter running test: In this test, the speed tolerance of the competitors is measured.
- C. Stability Wide Jump Test: The explosive power of the legs is measured and the jump distance is recorded.
- R. Hitch pull test: The strength of the arms is known and the number of each competitor is recorded.
- e. Abdominal Exercise Test: The strength of the abdominal muscles is known and the number recorded for each contestant.

V. The tests are conducted according to simultaneous or asynchronous times and on more than one computer connected to the network, as the system allows work on many computers at the same time to exploit resources and to speed up the completion of tests, as one committee can divide its work among more than one person and each one has a window that he controls and its inputs and with multiple devices,

Where the supervisor of the test calls each contestant according to the windows designated for the examination committees to know the identity and number of the competing student in order for the data he obtained after each test to be entered. Time, number, distance, ...) within the specified field to be saved in the database, where the system will later calculate the standard scores for each contestant.

Skill Tests

The skill tests are divided into five basic tests:

- a. Skills test in handball game.
- B. Skills test in volleyball game.
- C. Basketball skills test.
- R. Skills Test in Football Game:
- e. Test your gymnastics skills.

Where the system can be implemented by linking the halls in which the exams will be conducted at the same time and through the multiple windows of the exam committees. The supervisor of the football skill test can test students according to their codes and enter their data into the system, and at the same time the supervisor of the basketball skill Or handball, to be tested on students, and thus the system saves all data at the same time for each student in the database.

Personal Interview And T-heretical Exam:

The last two tests are of two types, the first is the theoretical test, which is a written test that aims to identify the student's advanced level in the theoretical aspect of Mathematical Education, and the second test is a personal interview and the purpose of it is to know the student's personal ability and suitability. The personal interview and theoretical examination committees summon each student separately, check his code and name, then ask questions to him, and then list the grades obtained by the student in front of the field for each test.

II. Conclusions:

1. The system was applied to all available data for students of the College of Physical Education and Sports Sciences - University of Diyala.
2. High speed and accuracy in completing the work compared to manual work through multiple system entry via the computer network
3. Reducing manual work and switching to electronic work to eliminate errors that occur manually.
4. The system is designed with graphical windows and dialog boxes that are easy to use and do not require much experience.
5. The system produces many electronic and paper data at a very high speed, such as (names of those admitted, students 'grades according to a specific test, an individual report for a particular student and the value of the grades obtained, reports with the names of students according to gender, specialization or test.
6. Saving all data in a database in order to be retrieved when needed

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