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## College Students Sports Qualified Standard Integrated Management System Software Application Analysis

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**Abstract:** This study mainly analyze the application of college students PE qualification standard integrated management system software and aimed to explore more qualified, effective and scientific application software systems which take on relevant teaching activities. At present, with the computers widely used in various fields, computer technology increasingly welcomed by the sports teachers in school physical education management. College students PE qualification standard integrated management system is redacted by using computer relational database management system software which can make the data statistics, search, delete, modify, input and establish can be printed according to a certain format which can manual labor seems relatively fast and accurate and very neat appearance and be able to save a lot of time, is an ideal integrated management approach. The study first discussed the design ideas of the management system and then analyzed the design structure of the system; finally, studied the common problems and solutions of college students PE qualification standard integrated management system software in the process of application which hopes to provide some ideas to constantly upgrade the college students PE qualification standard management level.

**Key words:** Sports qualified standard, management system, management thinking

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### INTRODUCTION

College students sports qualified standard since 1992, the data management statistics collection are basically relying on manually copying and statistical completed in previous years, requires a lot of manpower and time. From 1995 years related working personnel began to try to use the computer manage college students' sports qualified standard data. The current national universities and colleges in the implementation of the state education commission issued by the college students' sports qualified standard, whether it is in accordance with the current or previously issued relevant standards, in the practice process if are using artificial statistical manner, then need to spend a lot of time and the TAB workload is very large, Along with the science and technology and computer application in the field of all over the country more and more widely, whether it is in control or enterprises conducted scientific management, all gradually began to show a huge computer power. the wide application of Computer database integrated management system provide the operation of effective and practical method for college students sports qualified standard integrated management to solve the data. The Management of college students' sports qualified standard main purpose is to facilitate the printing of the

data, query, custody and statistical running smooth. With the wide application of computers in various fields, computer technology in the school's sports teaching management become more and more welcome for teachers (Xia *et al.*, 2012).

According to the standards of numbers that draw up by the state education commission, its main goal to achieve is, first, to realize the students effective calculation results, according to each year output any one person and a class of personal card and card two forms. Second, realize the content of each file management that related to the standard. This system is mainly use computer relational database management system software and compiled, can make the data statistics, search, delete, modify, input and established, can according to certain format printing into related statements. it can makes manual labor appear to be relatively fast and accurate and very neat, can save a lot of time, is an ideal integrated management approach. According to the design requirements, under the case that works provide relevant original data, use this system can effectively perform a variety of data input, query and modify and delete work. Requirements of the system must be able to effectively guarantee the accuracy of the results calculated results, effectively established with data related to the relevant files. The working principle of this

system is mainly embodied the data that collect by the sports teachers and instructors, the teacher in charge and doctors. Such as student’s physical health, shape, skills, sports scores and extracurricular actual physical exercise, etc., according to every year input to the computer in the middle accurately and print out students each year personal registration card and class’s and grade’s statements. The system main block diagram is shown as Fig. 1.

The purpose of this study is to analyze the reasonable, effective and scientific applications of college students PE qualification standard integrated management system software, then services related teaching activities; the research content is: Through analyzing the management system design and design structure can deeper analyze the common problems encountered in the college students PE qualification standard integrated management system software application process and eventually find a way to deal with.

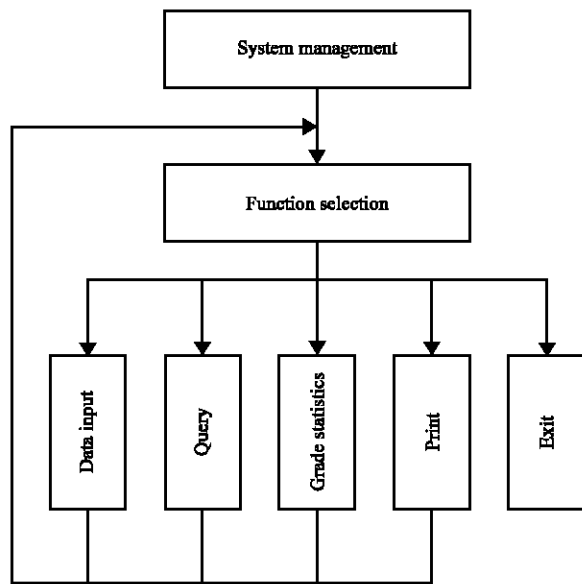


Fig. 1: System main block diagram

**MANAGEMENT SYSTEM DESIGN**

The main following of this management system is convenient and scientific principle that can make the data accurate and calculation is correct. Mainly according to the college students’ gender, age and sports standard test items and gradually set up more than forty field, use college students’ sports qualified standard management system software, its operating results completely accords with college students’ sports qualified standard of the relevant provisions. The characteristics of this system are mainly embodied in has good maintainability and reliability and can regulate and accurate data to modify, entry, with high efficiency and fast retrieval function, with statistical data query and other related functions, the system design is as follows: Along with the computer technology in all areas of development, the computer becomes more and more attention by the teacher in the school sports management process. Using the computer integrated management system software can be convenient data printing, query, storage and statistics and can facilitate use data to analyze the data and reasonable to carry out scientific research activities, can receive the good result. With manual management comparison, it can be concluded that the computer software management characteristics, as the Table 1 shows, from the diagram can be learned, computer management way whether data flexibility, convenience or reliability better than artificial management way. The content of the management mainly includes data input, namely input standard of points, such as bonus, extracurricular exercise, body function and physical form. It will combine login exercise standard performance and sports performance automatic conversion component number to the calculation process. Automatically calculated lung capacity index of students and Welker index and must have backup, recovery, security, printing, scores statistic, query results and modify functions (Zhang, 2012).

Table 1: Computer management with the comparison of manual management

Work content	Manual management	Computer management
Data collection	Get have calculation results from the teacher place directly, the teacher workload is big and the error rate is high	Enter the original data into the computer, the computer directly check score
Data check	Cannot check detail	The computer automatically checks
Data storage	Keep the paper take up large space	Take up the space is very small
Data statistics	Time-consuming and error-prone	Quick and easy, statistical more content
Data query	Browse and find difficulty, easy to lose	Diverse and easy ways to search
Data analysis	Large amount of calculation and difficulty	Computer expertise
Submittal data	Manual preparation of the report	Direct printout
Data communication	Communication between schools is difficult	Have the condition of network transmission

**Management method:** Our school computer management used in sports management systems are self-developed software, this software is mainly used in academic year of study and management method, convenient, reasonable, practical application of the results would be better. Management processes as shown as Fig. 2.

**Functions and features of the management system:** According to the national physical culture education and set by the university student sports qualification standard and national standard of physical training of schools at all levels set by the standardization and the sports qualified standard of physical training requirements, integrated sports management software is divided into six auxiliary pictures and a main picture, the whole system mainly consists of nine function modules constitute, The data processing is shown as Fig. 3 (Kaba, 2012).

**Input function module:** The requirements of the module is the entry must be easy to maintain, fast and accurate

work, file data entry need to enter the name or code and effectively establish the class file. after the new students enter the school, they should register and asked to enter the number of students, gender and the teachers, professional and class name, etc. Finally to set up related personal files, input student's high school graduate school, domicile of origin, graduation date, admission date, date of birth, gender, name and number, etc. The admission compliance scores is mainly need to rely on gender, term, age and different class respectively entry. The standard choice of various schools for the National Physical Training project is different which need to select subprojects has been tested in each of the five major categories of projects. The recorded results must speed, easy operation, intuitive, the system centralized takes into consideration the characteristics of college students' sports, entry form shown in Fig. 4.

After school, the sports teachers shall according to the different data of the class and grade, such as medical check-up date, eyesight, vital capacity and chest

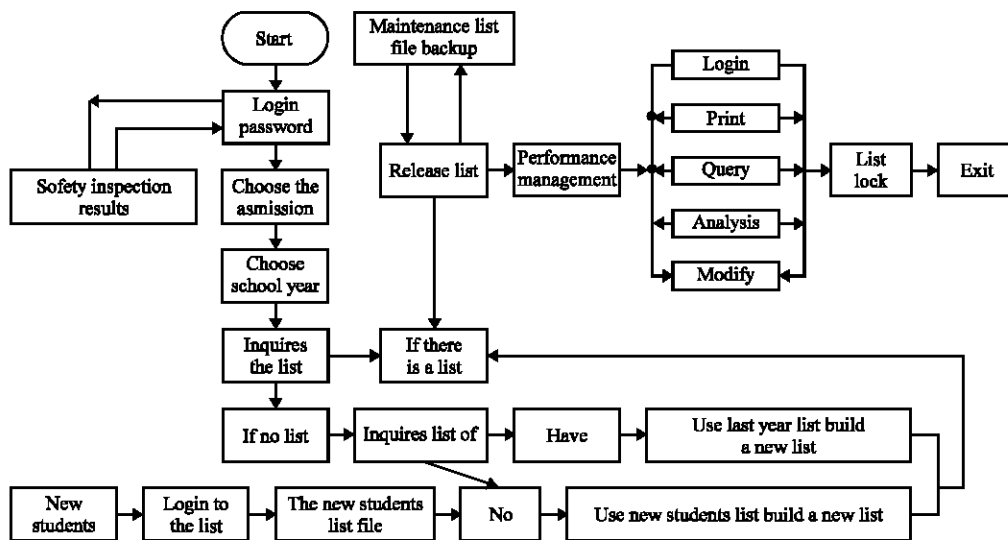


Fig. 2: College students' sports qualified standard computer management schematic diagram

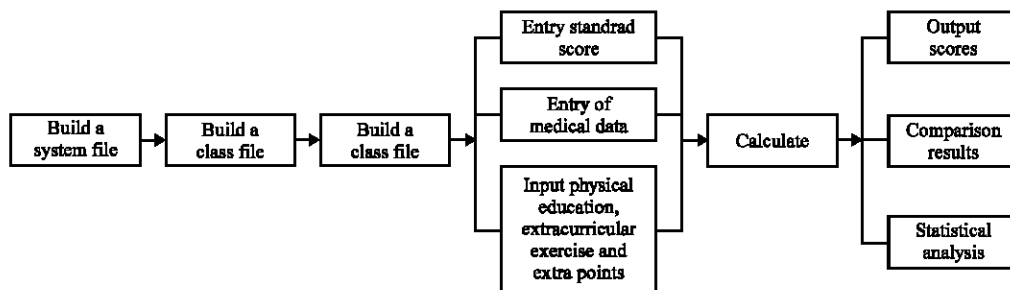


Fig. 3: Data processing

National physical exercise standard project selection (Man)

The first kind	The second kind	The third kind	The fourth kind	The fifth kind
50 meter race 100 meter race 10x4 race	100 meter race 1500 meter race 1500 meter skating 200 meter swimming	High jumping Long jumping Standing long jump	Shot put Throw the medicine hall	Chirning Parallel bars Arm symptoms Bend Srm Duspension
Start input	Cancel input			

Fig. 4: Project entry form

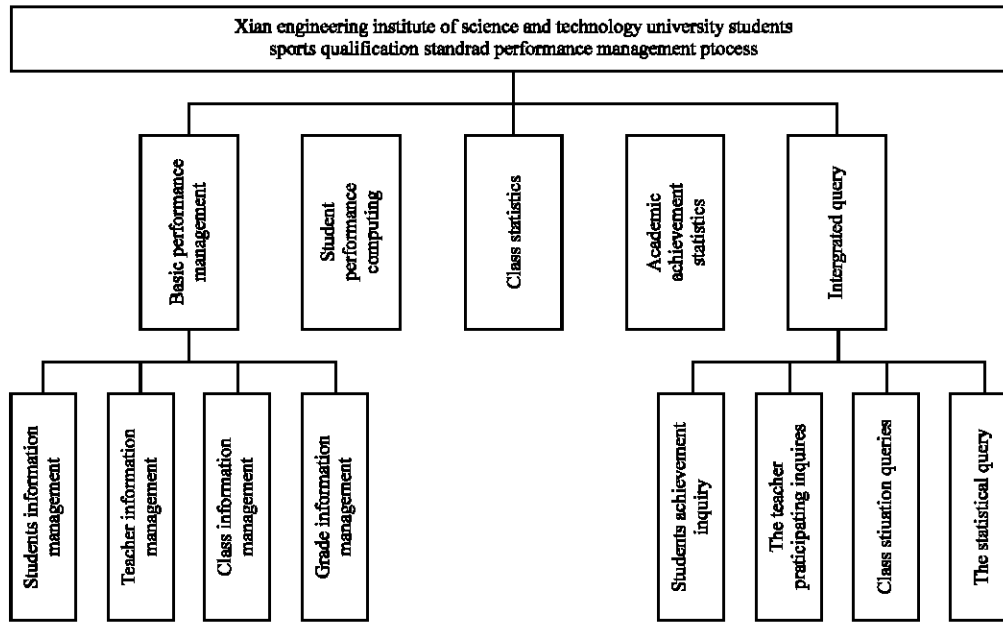


Fig. 5: Management flow picture

circumference, etc., through the examination of the data that judge the students' own age and then calculate the students' vision, body function and body shape of the project. The current college students sports qualified standard management system is mainly to classification and sorting the student sports scores and related data, effective statistics a percentage. It can be convenient to college students to query their scores and teacher classroom situation. It mainly have System maintenance, data statistics, print and query records deleted, data modification and data entry function, these functions can realized effectively on college students' sports qualified standard performance management, the management of the flow chart shown as Fig. 5.

**Initialization module:** Its main function is to establish a database of information for the students, mainly concluding student age, where the faculty, professional,

nationality, place of origin, date of birth, admission date and the name of the school attended before enrollment. Its role is to simplify the system of secondary school student's basic entry process and to ensure that the student's basic information and the information in a database keep accuracy and norms.

**Maintenance module of the data:** This module is referred to the system of the core module, for its function mainly includes, First, the data for the examination results of the students, teachers, classroom classes related entry Second, for any project, any record-by-semester-by people to be modified in accordance with the needs for graduates, repeaters, transfer, drop out a series of special circumstances students to delete them from the database records. Its main role is to be able to fully shows that the academic performance of the students, help classroom teachers reasonable grasp students' learning, a

reasonable discussion of teaching methods effectively enhance the effect of the teaching. To transfer, Withdrawal, graduates the academic performance of students with special circumstances and individual students separate print it out to stay at the end as the preservation of information, the repeater student achievement and basic information can automatically be taken to the class where he will go (Carmeli *et al.*, 2012).

**Make-up processing module:** The main function is the advanced standing, desert, lack of test and test failed, etc. Various kinds of situation of students teachers, project, class, name, system for comprehensive treatment, including students' make-up scores and project and after finishing record to the makeup of the library and the result after make-up examination to registration and marking. Its role is to contribute to department understand the list and the number of failing physical exam and as one of the main basis evaluation tool. It helps the Provincial Board of Education and Sports Commission of the student sports exercise unified check standard compliance rate, reasonable statistics shipment number of failing students and classroom teachers, so that, teachers can make an effectively discussion and continuous improve the teaching methods to enhance teachers' teaching level effectively (Gao and Wu, 2012).

**Inquiries modules:** Effective and flexible query capabilities provides a convenient for information and data query, fully aware of the students print query results stored in the database, the preliminary results of statistical analysis and data logging functions. Help the teaching Ministry and the teaching department query teachers and students' test scores. It can be seen as an important part for teachers promotion title, Be able to use it query student achievement in the distribution of scores section, make it become one of the important basis to carry out scientific research to improve student academic achievement and studying teaching methods.

**Print module:** The main function is provide national standards for physical training and college students Sports Training Standards print tables, after printing reported the sports test results table to the relevant departments, also can greatly reduce the heavy workload of teachers and be able to reduce a lot of people mistakes, make registration card and Tables more accurate and standardized.

**Data backup and restore functions:** In order to prevent hard drive failure caused the loss of the system among the data, the module provides data recovery and backup

functions, data backup, that is, the data in the system from the hard disk to copy to a floppy disk, when the hard disk data destruction can take advantage of data restore the function, copy the system data from a floppy disk to the hard disk.

## DESIGN STRUCTURE OF THE SYSTEM

First, analyzing and finishing the raw data of the physical education. Students raw data, including the student's file, obtained from the measurement of the basic data of the student body, the quality of students' compliance scores, the results of the physical education and students participate in extra-curricular activities attendance rates. Database management software can convert the above raw data into student achievement and index data, that is extracurricular activities score, physical education achievement standard score and achievement, physical function score and the index score of the body and the index, these data independent of each other and they can exist collective in accordance with the relevant standard. At the same time, the computer also may calculate the throughout school year eligibility criteria by further adding the students two data, the entire conversion process of the data is composed by a plurality of modules, where each module is constituted by a plurality of sub-modules, each module are independent of each other and can effectively realize the processing functions of the different modules and can also preferably linked each other. Student test scores and the original data can timely modify data in the data input process and you can opt out at any time enter and re-enter, this module has the function of calculation, you can directly obtain response of the students of the achievements after data entry score. After modify the data, the system will automatically recalculate the results to ensure the accuracy of the results obtained and also can be used to delete data which do not need, you can accurately delete records by the two ways of name and school No, using buffer ways can delete operation and can effectively prevent the loss of data (Miyatake *et al.*, 2011a).

Print and query module query in different ways according to the needs, query class in accordance with the Teacher classification and the classification of the student number, can also be in accordance with the standard statistical way to query the individual students condition and all the students of the college, the query results can be displayed directly select the print function to print out the report, the data in the report can select individual achievements and set to a data or secondary data of the school year. The main function of data statistics module is the individual results of the statistics

students and be able to classify statistics, the work of the hospital-wide statistics, class statistics, as well as teachers statistics. System maintenance module including password maintenance, data removal, data recovery and data backup, password maintenance provide information to the administrator, prevent misappropriation or be destroyed and the removal of the data refers to the system can effectively remove the relevant data has been entered, that is the so-called system initialization, the data recovery is to realize the data return from an external storage medium toward the system, the backup function the data mainly refers to the conversion of system backup data to outwardly memory.

**Design basis for the system:** The country forging standards means is the national standards for physical training included five categories of experience measuring project and select an item from each project, the five project tests must be done within a year, using score percentile system. Be able to determine the compliance level after the sum of category 5 projects achievements testing, its level can be divided into excellent, good and pass, at the same time also be able to calculate compliance score and then through the target score obtain forging quality of Students, that is the students' physical quality score.

**System's operating environment:** The system running mainly includes stand-alone operation and network operation two sides. System running hardware requirements should higher than CPU486, the memory is 16 M. This software share disk space should reach 100 MB or above. Taking into account the increasing trend of college sports library, the hard disk is best able to select more than 1.2 GB. The operation of the network need to have a network server, the terminal is not limited to the network cable, network card, etc. (Lage *et al.*, 2011).

**Software testing:** The comprehensive test system for particular institutions 8 classes, learned by the result of the test, the entry form is more convenient and flexible, query modification is more convenient, more accurate judgment and accurately calculate. All used the ject-oriented programming techniques, the program has a Windows screen, the interface is very intuitive and friendly, easy to operate, using the Chinese menu, practicality, the entry of the original data can be automatically analysis, statistics and computing, output the form in accordance with the needs, make data more computerization, management more effectively avoid the phenomenon of loss of College Students' Sports score.

The system good run fully meet the eligibility criteria and requirements for institutions, is an important step of sports teaching development process, effectively enhance the quality of the teachers on student achievement accounting, relieve teachers labor intensity in accounting student achievement, making the Sports data management gradually began to move toward standardization.

#### **COMMON PROBLEMS AND SOLUTIONS THAT OFTEN APPEAR IN COLLEGE STUDENT SPORTS ELIGIBILITY CRITERIA INTEGRATED MANAGEMENT SYSTEM SOFTWARE APPLICATION PROCESS**

**On the processing of the retained students:** Built a basic list of students can be used until graduation, because some students repeating every year and the student retention time is different, it is very important to ensure list of students accurate. Every year will adopt a new list, so each list must have some certain connection. This treatment would be more convenient. There are three methods can be used to deal with the repeater. First, in the process of input result if it is found that students have repeated or does not exist, then use the function of the repeat guide deal with it directly. Second, the repeater guide existed in the query module. Third, it can copy or deleted the repeater information directly in the browser module of the score (Miyatake *et al.*, 2011b).

**Effectively improve the ability to enter information intelligence:** In order to input the importation easily, the system provide several ways to enter the data. First, according the student number of the student class continuous Login. Second, follow the way of the Teacher login. Third, disorderly query input mode refers to query a student number and then enter a number. Fourth, fuzzy query input method that refers to the input a few of the student number. Fifth, through the copy modification way input the data. College students' sports training qualified standard mainly includes six content, each data can have several projects, can be as far as possible through computer input (Singh, 2011).

In addition to the extra-curricular activities need to adopt a second input, other all can use the first input method, so that you can make a lot of calculations through the computer, Because the computer belong to a separate module, after the completion of the original data input work can calculate at any time to check and correct errors exist and effectively improve the reliability and correctness of the data. If the score data obtained at the second input section, then it may be directly input.

**Dismembered method:** In the current sports computer data management application process, the data login often operate by one or two sports teachers, the workload is big, especially physical education achievement and exercise standard performance login, the student number usually reach thousands of people. If you can make physical teachers input result in the unit or the home computer, then copy to the school teaching system, it can achieved dismembered effect, so as to provide convenience for the data input.

**Data security management:** In order to effectively guarantee the safe operation of the College students' sports qualified standard integrated management system software, the system need to set up a three-level password, That is the login member, chief and administrator password, If the password input error then it will make the data into the system, in normal put out the system or shut down the system, the computer will lock the data automatically, any illegal modify the data are able to provide a certain amount of alarm function (Koyuncu, 2011).

**Data maintenance and storage:** If the database is too big then it is easy to be damaged, in accordance with the school year or the school session, school data can be stored separately in a small database file. On one hand, you can speed up the query and run the speed of the system, on the other hand will be conducive to back up the data and effectively reduce database corruption causing data loss. The three backup saved data management is the floppy disk backup and disk backup, effective provide the data recovery function.

### CONCLUSION

The system is the eligibility criteria of the college students' physical exercise as well as the standards of the National Physical Training as the basis. Combine the country forging compliance with the physical education curriculum teaching, sports extracurricular physical exercise activities, the results of the medical examination and the bonus together. Use the currently more popular programming language, Visual FoxPro 3.0, write the

program, it can copy the score of the students during the school to a floppy disk and effectively overcome students easy to loss or after graduation achievement is not easy to inquire about the problem, ensure that students study result accuracy and integrity and increase the teachers' teaching efficiency.

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