

CONSTRUCTION OF UNIVERSITY SPORTS MANAGEMENT PLATFORM BASED ON MOBILE TERMINAL

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Abstract

Through the investigation of the current situation of extracurricular sports activities, physical education curriculum teaching and the management of sports venues in colleges and universities, it is found that there are certain deficiencies in the development and management of these three parts of the school. At present, there is a gap between the management of students' sports activities and the management of the Internet model. According to the School Sports Work Regulations, the school sports management platform APP is theoretically analyzed. Through the construction of the overall management framework of college sports APP platform, the functions of each management department in the framework are defined. On the basis of the overall framework construction, the contents of each part are designed accordingly.

Keywords

college sports; management platform; mobile terminal; MVC ; QMUI Android

In higher education, physical education is an essential part of implementing quality education and an important means of cultivating all-round talents. Through reasonable physical education teaching and scientific physical exercise process, we can achieve the educational goal of strengthening students' physique, exercising students' will, cultivating students' sports hobbies and "lifelong sports" awareness. Through the investigation on the physical education teaching and students' sports activities of Shandong Agricultural University, Taishan University, Tai'an Campus of Shandong First Medical University and other universities in Thailand, it is found that how to mobilize the enthusiasm of students for physical exercise, improve the effectiveness of physical education teaching, strengthen the management of after-school sports activities, improve the utilization rate of sports facilities, and improve the networking and intelligent level of sports management are urgent problems to be solved in the current sports management of colleges and universities. The popularity of mobile Internet and smart phones has provided technical means for the innovation of college sports management [1].

1. Function analysis of building college sports management system with APP as the carrier

Through the investigation of the current situation of extracurricular sports activities, sports curriculum teaching and the management of sports venues in colleges and universities, it is found that the degree of students' participation in sports activities and the management of school sports still have shortcomings. The management of public sports facilities in schools varies from school to school, and the degree of openness to students varies. There are a series of problems in the management and utilization of old stadiums and gymnasiums. The management of students' physical education mainly analyzes the management functions of physical education courses and extracurricular sports activities. Mobile Internet is changing college students' lifestyle. Through the research on the changes of college students' sports behavior before and after using sports APP, sports APP can have a positive impact on students' sports behavior. With the rapid development of mobile Internet, APP has become an indispensable life tool for students. Based on the characteristics of convenient use, convenient communication and large coverage of APP, this paper discusses the school student sports management system and public sports management system. Mobile APP can solve the problem that there is deviation in information transmission in the process of information communication, and students have insufficient understanding of the sports document notice. In the process of public sports facilities management, the management department has overall control over the use of sports facilities and students' feedback information can not be handled in a timely manner.

Through the field survey of students' sports work, access to relevant information, understand the actual situation of students' sports work in school sports at this stage, and aim at the existing deficiencies. On the basis of the establishment and functional division of sports management departments in colleges and universities in the Regulations on School Sports Work, a management system for extracurricular sports activities, sports courses and public sports facilities based on APP applications has been initially established (Figure 7). In the school sports management, follow the Tremmer's Law in management, use the characteristics and functions of each department to manage the fields they are good at, and assign corresponding functions. The management system is divided into two parts: student sports work and school public sports facilities management. The student sports work system is divided into three levels of management institutions. The school sports work committee acts as the first level leading body for sports work, and the sports department, college (department), Youth League Committee, and student office act as the second level management institution. Physical education teachers, physical education departments of colleges and departments, youth league committees of colleges (departments), student associations and clubs are the three level management organizations.

1.1. Functions of school sports authorities at all levels in the management system of extracurricular sports activities

Extracurricular sports activities in schools in china are an important part of school

sports work. Students' extracurricular sports activities are a kind of sports work jointly managed and implemented by multiple functional departments in various forms. According to the "School Sports Work Regulations", the function of each department in the management system of students' extracurricular sports activities is analyzed, and the main responsibilities of each department are clarified to make the management of sports work more standardized.

1.1.1. Functions of the first level management organization in the management system of extracurricular sports activities

According to Article 24 of Chapter 7 of the Regulations on School Sports Work [1], each school should have a deputy head in charge of sports work. When making plans, summarizing work, and selecting advanced students, sports work should be listed as an important content. The leader of the school sports work committee is the vice principal in charge of sports work of the school. The main function of the school's extracurricular sports activities is to discuss the plan of extracurricular sports activities of the school throughout the year; carry out macro management on students' physique monitoring, morning exercises and daily students' sports card punching, and grasp the school's sports work. The macro design and supervision of the APP middle school students' sports work management and service platform, and the top-level design. Through the college sports APP, we can get feedback from various workers and know the data of student sports work in a timely manner. For the problems of sports work fed back by students daily and the constraints of participating in extracurricular sports activities, the work of the Sports Department should be adjusted as a whole in a timely manner. Provide policy support for the development of college sports APP, and actively advocate the cooperation of various institutions.

1.1.2. Functions of the secondary management organization in the management system of extracurricular sports activities

Compared with the establishment of the school sports department in the School Sports Work Regulations, the management of student sports work also needs to play the role of the secondary administrative units (colleges and departments) of the school. Colleges and departments are the basic units of student management, and extracurricular sports activities belong to the daily life of students. Use administrative management to manage students' extracurricular sports activities, and manage students' extracurricular sports activities through their units.

Functions of the Physical Education Department: The Physical Education Department is composed of school professional physical education teachers, who are responsible for the management and implementation of all aspects of school physical education. In the aspect of extracurricular sports activities management, it manages and implements the students' physical health test, morning exercises and extracurricular sports activities.

The management function of monitoring students' physical health: use college sports APP to timely feedback the progress of testing work, and upload and process the overall progress of testing work and testing results in a timely manner through big data processing. The students' physical fitness test should be managed in a simple and efficient way. The main responsible department for students' physique is the school sports department, which plays a connecting role in the physique test. Implement the

physical health work of the school, implement the physical education work committee's arrangements for the physical health side test, ensure the orderly development of the testing work, and better deal with the current situation of tight time and heavy task of physical health testing.

First, the physical fitness monitoring instrument instructions, test items, scoring standards, and student test results are released through college sports APP. Teachers from the Ministry of Physical Education are responsible for interpreting and publicizing the Standard and doing a good job in testing students. Explain the key contents, especially those involving students' own interests. The test results are linked to the awards and awards, and the students who fail the test cannot graduate on schedule, so they should communicate with the teachers in the student affairs offices of each college.

Second, the physical fitness testing platform of college sports APP was established, and the testing team interpreted the testing work in detail on the platform. Establish a testing team to implement the testing work. At present, a major problem in school testing is the shortage of school testing teachers. With the increase of the school's investment in testing, the hardware has basically met the requirements of the Standard. Publish the operation steps and precautions of each test instrument. Students can solve the problem of shortage of testers by conducting self-service tests according to mobile phone prompts. Timely deal with the students' opinions on the testing work and the testing problems encountered, and timely discuss and make decisions on the common problems encountered by students. Through the mobile phone or computer background management system, the testing staff can complete the processing of the application for supplementary testing and retesting. In the whole application process, paper-based written applications are removed to improve work efficiency. Finally, through the use of college sports APP, the standardization and scientificity of testing work are improved, and the efficiency of testing work is improved;

The management function of morning exercises: strengthen the reform and management of the Sports Department for morning exercises in schools, improve the reform of the forms of morning exercises through the establishment of college sports APP, increase the ways and sports items for students to participate in morning exercises, and formulate the standards for various indicators of morning exercises. Students can freely choose the activity form of morning exercises. Supervise students' morning exercises by presenting physical indicators of online students' morning exercises and punching cards, and timely report the students' morning exercises to the school sports committee. Do a good job of communication with the physical education department of the college and department, and timely communicate with students who do not participate in morning exercises and do not meet the standard of morning exercises. For the current school morning exercise students lack of awareness, the development of a single form of phenomenon, the development of students' morning exercise mainly exists in the lack of physical activity. The form of school morning exercises needs to be reformed; The management function of after-school sports activities: reduce the work of the Sports Department on the management of students' independent participation in physical exercise, and strengthen the publicity of sports professional knowledge. The main function is to solve the problems encountered by students in daily sports through

college sports APP, build skills teaching for students to participate in various sports, exercise plans with different physical and technical levels, and popularize sports health knowledge. We should combine extracurricular sports activities with physical education courses, and the two interact. Physical education can not meet the needs of participating in physical exercise for the current students' mastery of physical exercise skills, students' insufficient physical activity in sports activities, and the uneven professional level of sports APP in the market. Through the construction of college sports APP, sports professional knowledge is popularized, and students' understanding of physical exercise is deepened. Solve the problems that students have in the process of sports, and make students' extracurricular sports activities more scientific.

Functions of college (department) sports: plan and implement the extracurricular sports activities of the college (department) through administrative management, and give full play to the role of college student work in the overall development of students. Strengthen the leadership and responsibility of sports administration, and bring student sports work into the scope of daily management. To manage and implement students' physical health test, morning exercises and after-school sports activities.

The management function of students' physical fitness test: establish a two-level management system of physical education department and college for physical fitness test. The physical education department of the school is responsible for the implementation and management of the students' physical fitness test. The main function of the college is to interpret and publicize the Standard, so as to fully mobilize the initiative and enthusiasm of students to participate in the test. The college understands the test progress and test results of students in the college through the college sports APP background management system, and reasonably arranges the test time for students in the college with the college sports. The students who fail the test shall be managed and classified, and students shall be organized to exercise from the college level. Do a good job of the college students' physical condition archives, and understand the overall physical health of students. Really link test scores with awards and graduation, and improve the importance of physical health in students' cognition; Management function of morning exercises: The online monitoring function of college sports APP can reduce the pressure of college on the management and supervision of morning exercises. The main responsibility of the college is to publicize morning exercises, improve students' awareness of the importance of morning exercises and correct their attitude towards participating in morning exercises. Through the use of college sports APP by students, the college mobilized students to organize students to exercise according to different sports hobbies. It has solved the problem of single organizational form of morning exercises and lack of professional guidance of sports. Formulate the assessment system and standard, regularly check and summarize the students' morning exercise status through background data, and quantify the students' morning exercise evaluation. The Student Affairs Office of the College is convenient for student management. It manages the implementation of students through counselors, teachers or class cadres to prevent students from cheating; The management function of extracurricular sports activities: to guide the Youth League Committee, the Student Union and the sports club to organize daily collective physical exercise, regularly check

and publish the students' exercise, and play a supervisory role in the students' physical exercise. Strengthen the college's management of students' extracurricular sports activities, and increase the leadership of extracurricular sports activities through the college's direct leadership of students' daily life. To solve the problem of students' insufficient participation and sense of participation in the current after-school sports activities carried out in the form of sports competitions. The establishment of college sports APP, to a certain extent, has solved the problem of students' lack of sports skills and no guidance. The main restricting factor of extracurricular sports activities is the unity of the organization form. The college is the unit to punch in the daily exercise of students and evaluate whether the degree of physical exercise of students meets the requirements of the school.

Functions of Youth League Committee and Student Office: their main responsibilities in extracurricular sports activities are to build sports associations for school students and organize various sports competitions. At present, it is the main organizational force for schools to carry out various forms of sports activities, as well as the organizational structure of sports clubs and sports associations. The main function of Youth League Committee and Student Affairs Office is to manage students' after-school sports activities.

Management function of extracurricular sports activities: through the establishment of college sports APP, the Youth League Committee and the Student Affairs Office of the school mainly manage student associations. First, establish online sports associations and clubs, manage the sports associations and clubs established by students, and help students carry out sports activities. Establish various sports clubs according to the degree of students' participation in sports events, establish and improve the rules and regulations of sports work, and review the proposal of students to establish clubs. Supervise and manage the daily work of the established associations and clubs. Second, organize and carry out various sports activities to enrich students' after-school life. Publicize various sports activities organized at the school level through the college sports APP platform, and mobilize students to actively participate in various sports activities. Organize various sports competitions and interesting competitions, and give play to the leading role of the Youth League Committee and the Student Affairs Office in student groups. Supervise the approval of sports activities organized by various associations, referee training of sports clubs and daily centralized exercise of clubs. To ensure the controllability of students' sports activities and prevent accidents. Third, do a good job in publicity, and publicize the sports activities held by various departments of the school. Make students understand various sports activities and competitions, and improve their participation in sports activities. Propaganda work has an important impact on students' subconsciousness, imperceptibly improving students' motivation to participate in sports. Fourth, check and summarize students' sports activities, record all sports competitions and clubs' daily sports activities through college sports APP platform, summarize the holding of students' extracurricular sports activities throughout the year, and quantify the number of sports activities per capita.

1.1.3. Functions of the three-level management organization in the management system of extracurricular sports activities

The establishment of the three-level management organization belongs to the micro management of school sports management, and the work is more specific and single. Give full play to the characteristics of each department and clarify the work responsibilities. Physical education teachers are under the management of the Ministry of Physical Education, and their functions are defined according to the work of the Ministry of Physical Education. Physical education teachers are a link between the preceding and the following in the student sports work system. They should not only participate in the school sports plan, make decisions and discuss, but also be responsible for the implementation of sports work. Reduce the role of physical education teachers in the daily management of students' extracurricular sports activities, and improve the role of guiding students' professional sports knowledge. To manage and implement students' physical health test, morning exercises and after-school sports activities.

The management function of students' physical health test: First, the technical actions of the physical health test project are demonstrated and explained through the APP terminal, and the problems in the test are answered and released in a timely manner. Scientifically interpret the content of the Standard, publicize the arrangement and requirements of physical fitness testing through physical education classes and college sports APP platforms, and mobilize students in their physical education classes to correct their attitudes and participate in physical fitness testing. To enable students to master correct technical actions, improve the standardization of students' technical actions in the test process, and reduce sports injuries in the test process. Second, sort out the students' test data and do a good job of physical health files. The results of physical health test will be collated and reported, and the overall test results of the school will be analyzed to provide data support for the reform of school physical education. Third, physical education teachers should release the steps and precautions for the use of various instruments on the APP platform, and supervise the testing process by using test instruments skillfully and normatively. Do a good job of training on the use of the instrument to make the testing work standardized and orderly. Students do not understand some new testing instruments in the testing process, and the non-standard use in the testing process leads to inaccurate test results. In addition, guide students on the test site to ensure the accuracy of various test data;

The management function of morning exercises and after-school sports activities: At present, the guidance of physical education teachers for students' extracurricular sports activities is concentrated on students' sports competitions and training. With the school's attention to extracurricular sports activities, the demand for physical education teachers' extracurricular sports guidance is increasing. The physical education teachers in the school are limited, and can not meet the needs of the whole school students to guide extracurricular sports activities. Through the use of college sports APP, this management platform can answer and guide students' doubts in the process of sports. First, construct various sports professional knowledge through college sports APP terminal. Construct the core part of extracurricular sports activities in APP, including

skill learning of sports events, daily training plans and sports competitions. Make different training plans according to students' different skill levels and physical conditions. In particular, the students who fail in the physical health test should formulate training plans and training contents to meet the needs of students with different training objectives. Second, online guide students' extracurricular physical exercise, guide students' sports associations and club construction. The main restricting factor for students to participate in extracurricular sports activities is the lack of sports skills and no guidance. Through the communication platform, physical education teachers guide the problems and training plans encountered by students in the process of exercise, which increases the scientific nature of students' exercise.

Functions of the college (department) sports department: the college (department) is mainly responsible for the daily management of students, and the college (department) sports department is responsible for the implementation of the college sports work. To manage and implement students' physical health test, morning exercises and after-school sports activities.

The management function of students' physical health test; Through the counselors and teachers in charge of physical education, all students are mobilized to actively participate in the test, and the importance of physical health test is publicized. Coordinate the schedule of physical health test and organize students to participate in the test. Through the college sports APP background management, the students' physical health test results of the college (department) are summarized and reported to the college leadership department. Analyze and process students' test scores, establish students' physical health files, and focus on students who fail the test to ensure that students can graduate successfully; The management function of morning exercises: First of all, for the centralized organization of morning exercises, through the morning exercise system of college sports APP platform, the statistics of students participating in various exercises are carried out. The students of the college (department) shall organize morning exercises in a centralized way according to different projects. Centralized management of students' morning exercises is also conducive to preventing students from taking advantage of system loopholes to replace others in sports; The management function of extracurricular sports activities: to manage students through the college's administrative management of students and improve the systematicness of management. Do a good job of online supervision, and count the number of times students clock in and exercise time every week. Urge students to organize exercises by themselves to meet the training requirements of the school.[2]

Functions of the Youth League Committee, Student Union and Club of the College (Department): Managing students through student organizations is a major feature of the Youth League Committee and Student Union. For these two student organizations, the main function is to organize students' sports activities and sports competitions of various scales, and manage and implement students' extracurricular sports activities.

The management function of after-school sports activities: build the college (department) sports association and sports club, and build the sports association and sports club through the college sports APP platform. Adapt to the new online management mode of clubs, set up sports associations and club structures, and control

the club size. Make the construction and development of sports associations and clubs scientific and reasonable, achieve a reasonable overall layout, and make the construction scale and activity scale under effective control. Build sports associations and clubs with college characteristics or project characteristics, combine characteristics with tradition, and improve the construction level. To standardize the organization of college sports activities and formulate rules and regulations. Carry out college wide sports activities to improve students' participation in sports activities. The Student Union of the Youth League Committee of the college (department) manages the student sports activities of the college, and is responsible for the management of the online club of the college (department). The sports activities organized by students should not only meet their own training needs but also meet their own personal interests. Students' sports activities are organized in a way that combines points and areas. Various forms of competition and training are carried out according to students' choice of clubs and their level of sports skills. Through the guidance of college sports APP, students can improve their sense of sports participation, so as to improve their motivation for sports participation. Work well with the Youth League Committee and the Students' Union of the school, combine the joint surface with the Youth League Committee and the Students' Union under study, and expand the influence of sports activities in your college.

1.1.4. Functions of students in the management system of extracurricular sports activities

Students are the object of all sports management functional departments and the subject of the feedback mechanism of students in the whole management system. Sports management is a complex system of multi department and multi item sports affairs management. The administrative functional departments at all levels form an organic whole through mutual correlation and influence. In the process of various sports work, it is inevitable that there will be some phenomena inconsistent with the expected results. Students' suggestions on testing work and difficulties encountered by students during the implementation of various extracurricular sports activities and physical health tests carried out by the school, questions and messages to the competent department through the college sports APP client. The competent department shall solve the students' suggestions and problems in a timely manner, and correct and remedy the problems in the testing work. In the extracurricular sports activities, students give feedback on sports professional knowledge, skills and training plans provided by the school according to their own sports needs, and put forward their own sports needs. Feedback on the effect of sports associations and clubs through college sports APP, evaluate the overall construction, and timely correct the problems in students' self-management. Feed back the problems in the morning exercises and extracurricular sports activities, so that the supervision and management departments at all levels can solve the problems and management loopholes, make the school sports management reflect human nature, and try to meet the personalized needs of students. Through the college sports APP platform, increase the students' feedback channels and improve the feedback efficiency. Improve decision execution feedback re decision Efficiency makes the decision-making of the school sports management department more scientific.[3]

1.2. Functions of school physical education departments at all levels in physical education curriculum construction and management system

The physical education curriculum in colleges and universities is at the core of the physical education work in colleges and universities. Through the construction of sports curriculum standardization by sports staff, the general goal of school sports management can be better achieved. The construction and management of physical education curriculum are mainly managed and planned by the school physical education department and physical education teachers. Through the research on the construction and management of physical education curriculum in schools, we can explore a management model that is suitable for the development of schools and conforms to the nature of education by following the teaching rules. Through the college sports APP, we can manage the curriculum construction and management, pay attention to the laws of sports teaching and the needs of discipline development, and manage the students' sports curriculum teaching.

1.2.1. Functions of the first level management organization in the construction and management system of physical education curriculum

The school physical education work committee is a management organization composed of the school principal in charge of physical education. It formulates the general goal of physical education teaching in the school according to the national, local and school three-level curriculum management. Analyze the physical education teachers and facilities that the school has, summarize and scientifically predict the overall goal of school physical education teaching. Through the feedback of college sports APP students' demands and suggestions on sports courses, the adjustment of sports items and teaching management of sports courses are adjusted in a timely manner. Give full play to the school physical education work committee's macro construction and supervision of the school physical education curriculum to ensure the smooth development of the physical education curriculum.[4]

1.2.2. Functions of secondary management organization in the construction and management system of physical education curriculum

The physical education department in colleges and universities is the main body of physical education curriculum planning, management and implementation, which reduces the administrative intervention in the process of management. The teaching management of physical education curriculum needs to control the process of physical education teaching according to the characteristics of physical education teaching laws, constantly improve the quality of physical education teaching, and require physical education professionals to build and manage physical education curriculum. Among the secondary management organizations, the Ministry of Physical Education is mainly responsible for the construction and management of physical education courses.

Functions of the Physical Education Department: The Physical Education Department formulates the rules and regulations of school physical education curriculum management and school physical education curriculum assessment system according to the overall goal of school physical education teaching. To establish and improve the implementation methods of physical education curriculum in all aspects, including the content of physical education curriculum, curriculum teaching implementation,

management and evaluation system of physical education curriculum. Construction and management of course content. In the physical education APP physical education curriculum module of colleges and universities, build the physical education knowledge and physical exercise content of the physical education curriculum, and form the physical education teaching combining inside and outside the class. Students can learn at any time and anywhere through the client, breaking the time and geographical restrictions, learning knowledge in their spare time and answering questions online. Discussion and formulation on the establishment of sports items in school physical education curriculum. It is required to gradually form the teaching mode of "one school, one quality" and "one school, multiple quality" advocated by the state, and actively form the teaching mode with its own characteristics. According to the situation of students' sports hobbies, the paper discusses the scale of physical education courses, the allocation of teachers, the division of teaching sites and other matters. The physical education department of the school is responsible for the formulation of the teaching objectives and performance assessment plan of the school physical education curriculum. According to the designated sports teaching content, organize and construct the sports teaching resource module of college sports APP terminal. 2、 The construction and management of PE curriculum evaluation system, and the establishment of teachers' teaching evaluation system. Supervise and manage teachers' lesson preparation, classes and course assessment. Through the college sports APP platform, the Ministry of Physical Education supervises and inspects teachers' lesson preparation to ensure the quality of teachers' lesson preparation and curriculum innovation. Evaluate the classroom teaching process, and assess the teachers' teaching methods and teaching modes according to the course teaching objectives and lesson preparation. Develop a student evaluation system to evaluate the teaching content, teaching mode, teaching methods and course assessment methods of teachers according to the students in the process of physical education courses, and the physical education department can timely understand the needs of students in the course. In combination with the evaluation of the physical education teaching of teachers by the physical education department, timely make an evaluation of the physical education curriculum. Through college sports APP, we can do a good job in the process evaluation of sports course teaching, which is convenient for adjusting the teaching process. The evaluation results of physical education teaching will be published, and students can choose appropriate sports events and teachers according to their own conditions.

1.2.3. Functions of the three-level management organization in the construction and management system of physical education curriculum

Through the formulation of the construction plan of the school sports curriculum by the school sports decision-making department, the physical education teachers in the three-level management organization implement the specific plan of the physical education curriculum. Physical education teachers are the implementers of physical education curriculum construction and the managers of students' physical education classes.[5]

The functions of physical education teachers include: participating in the overall physical education teaching plan of the school, and implementing the physical education

teaching work of the school. Participate in the construction of college sports APP sports teaching resources, and the construction of their own sports network resources. First, build relevant resources of curriculum content on college sports APP. Analyze the existing teaching conditions and combine the teaching objectives and syllabus of the skill level classes at all levels to formulate the curriculum teaching plan, the teaching progress of the semester curriculum, and the teaching assessment standards of the curriculum. Show the teaching methods and styles of the teachers themselves, and make teaching videos of the teaching process, so that students can intuitively understand the teaching methods of physical education and guide students to practice. Physical education teachers have more teaching content to upload video materials related to the course content and make extracurricular sports training plans. Expand the content of textbooks to meet the diversity of students' sports needs. Students' interest in sports will be increased by uploading some highlights of the games, so as to enhance their enthusiasm for learning. The popularization of sports health care knowledge will increase students' mastery of sports knowledge. Students should select several modules according to their own needs for physical education courses, and combine both in and out of class, skill practice and theoretical knowledge. Second, establish the physical health test files of class students on the college sports APP platform, diagnose sports skills at the beginning of the course and formulate sports prescriptions. According to the results of the physical health test of students and the skills evaluation of students' static physical quality, the teaching plan should be adjusted in time according to the overall situation of students' physical quality, and the teaching methods and means should be adjusted in time. To enable students to master the sports skills they have learned to achieve the teaching objectives is conducive to the targeted organization of physical training in the physical education curriculum. Do a good job of after-school guidance for students, and conduct online question answering and communication. Students can exercise independently in and out of class through the exercise prescription issued by the teacher. Third, establish the curriculum evaluation system, and combine the process evaluation, development evaluation and result evaluation of students' physical education curriculum. Pay attention to process evaluation and development evaluation, and observe students' progress and participation in physical education according to the status of students' physical health files and skills diagnosis in the physical education APP physical education curriculum module of colleges and universities. Teachers understand the process evaluation of students on the physical education class, and adjust the students' classroom exercise intensity and time after class through their physical acceptance of the exercise load of the physical education curriculum. Whether students can adapt to the teaching methods and modes adopted by teachers in motor skill learning, so that teachers can adjust the teaching plan in time. Through students' evaluation of the classroom, teachers adjust the PE curriculum with positive feedback and negative feedback, so as to teach students in accordance with their aptitude.[6]

1.2.4. Functions of students in physical education curriculum construction and management system

Classroom feedback is an important part of the effective implementation of physical education curriculum teaching. Students provide feedback on the implementation of

physical education curriculum according to their physical and mental receptivity. Students are the process of physical education teaching. The content of physical education curriculum is a system composed of three elements: physical education knowledge, original sports skills and physical exercise. Teachers adjust the contents of these three elements through the feedback information from students on physical education. In the feedback system of college sports APP platform, students will give feedback on all aspects of course teaching: whether the teacher's teaching content can meet the students' sports needs, students will evaluate the teaching content according to their own sports skill level. The overall progress of the course and the feedback of the classroom progress can facilitate the teachers' overall teaching plan to adapt to the development of students' sports skills and physical health. Evaluate and feed back the adaptability of teachers' teaching methods and the practice methods of organizing students to learn in the process of physical education course learning, and propose teaching methods suitable for themselves according to their own acceptance ability. It is more scientific for the curriculum evaluation system to put forward their own views on the evaluation system of physical education curriculum and feed back to the competent education department.

1.3. Functions of school sports authorities at all levels in the management of sports facilities

At present, the Internet has been applied in the management of all walks of life and achieved good results. It is more and more important to realize the network information management of college sports facilities. The construction of school stadiums and gymnasiums mainly adopts the administrative legalization management mode, which is managed by sports departments and schools set up departments. A small number of schools adopt the collective or individual contract mode, the whole property management mode, etc. At present, some domestic colleges and universities, such as the sports venues of Southwest Jiaotong University, have realized the network information management of the sports venues. Through the establishment and use of the platform, the effect of venue information disclosure, venue after-school operation and daily supervision and management has been optimized. Each management mode invested by the government has its own advantages. No matter which management mode is adopted, the function of sports venues and facilities in colleges and universities is to serve teachers and students. The service of sports venues in colleges and universities needs to meet the needs of four levels: the first level: to ensure the completion of the work tasks specified by the school's various undertakings, such as physical education curriculum teaching, daily meetings and ceremonies of the school. The second level: meet the basic training needs of teachers and students in school, and provide sufficient facilities for some projects, such as outdoor track and field, basketball court, football court, etc. The third level: meet the needs of some sports interests and preferences of teachers and students at school. The venues and facilities are relatively scarce, such as tennis courts, gyms, swimming pools, badminton halls, and some venues and facilities. Level 4: Respond to the call of national policies and moderately open to the society with or without compensation. In addition to daily use, the school also needs to maintain the stadium equipment. The school develops a maintenance mechanism for the stadium

equipment and assigns the responsibilities of sports facility managers at all levels in the stadium maintenance. Through investigation and reference to relevant materials, the current management of sports venues and facilities in colleges and universities is understood. Aiming at the problems in the use and maintenance process and the obstacles in information communication in the management process, an administrative management system of sports venues and facilities in colleges and universities is preliminarily established with the sports APP as the carrier.

1.3.1. Functions of the first level management organization in the management of sports facilities

The school sports work committee is a management and decision-making body established by the school, which is composed of school leaders in charge of sports, and is responsible for all matters related to sports in the school. The Regulations on School Sports Work points out that the school must formulate rules and regulations on the use, management and maintenance of sports venues, equipment and equipment, and assign special personnel to manage them. The school sports work committee is responsible for the use planning of school sports facilities and the establishment of rules and regulations, playing a role in overall planning of school public sports facilities, and formulating an appropriate management model to meet the needs of teachers and students in physical education curriculum teaching and basic sports. The main function is to build the management platform for the competent departments of the sports APP in colleges and universities to make overall planning for various stadiums and gymnasiums, and to do a good job in top-level design of the APP terminal, and to be responsible for the macro design and planning supervision of the entire management system. Supervise the management and operation of public sports venues and facilities through the college sports APP venue management platform. Solve the problems in the use process of sports facilities fed back by various management organizations, improve the efficiency of sports facilities maintenance, ensure the safety of use and safeguard the basic rights and interests of teachers and students in using the site facilities.

1.3.2. Functions of secondary units in sports facilities management

Through consulting materials and documents, experts have made suggestions on the existing problems and suggestions in the work of the sports management executive department, as well as the confusion in the management and untimely maintenance of venues and facilities in some colleges and universities. It is increasingly important to establish a management organization for public sports facilities in colleges and universities. The management departments of sports venues and facilities in colleges and universities are generally set up in secondary units such as sports colleges or logistics departments, which are responsible for the construction, daily management and operation of college sports APP management platform. Regularly report the demand and use of the site facilities to the school to shorten the maintenance and supplement cycle of the site and equipment.

The construction of platform management: First, establish the site facilities management system; Establish and improve the management system and use system of school sports venues and facilities, and form a complete management system for each department through the release of APP platform and accurate communication of

department responsibilities. The management department shall understand its own responsibilities and communication channels, and the site facility users shall abide by the rules and regulations and take good care of public facilities. Second, build a platform for the use and management of site facilities; First of all, we should meet the needs of students' daily physical education courses and specified extracurricular sports activities, make reasonable planning for sports venues, and establish equipment borrowing and returning system. Classroom locations for physical education courses of the whole school shall be divided and released, and places for students' extracurricular sports activities, morning exercises and physical health tests shall be reasonably arranged. Students can learn about the use of various venues and facilities through the client, and find free venues for exercise at any time. Third, build a sports facility maintenance management platform; Through the establishment of the management platform, the maintenance personnel and teachers and students in the school report the failure of the instrument in a timely manner to shorten the maintenance cycle and improve the maintenance efficiency. The maintenance cycle of college facilities is generally one semester or longer, and the repair of the damage of some equipment details has been lagging behind, such as basketball court nets, volleyball screens, and some equipment failures in the gym. Through the construction of the platform, the maintenance and repair knowledge of all kinds of equipment and equipment will be transmitted. At present, the professional knowledge level of school sports ground facilities management personnel is low, and the knowledge of equipment maintenance and repair is lacking. The staff learn to improve their business ability through text or video, undertake some simple maintenance tasks, and build a maintenance team with certain professional skills. Fourth, establish the operation platform of the venue; Build the operation system of school sports venues and establish the operation management system. At present, the main function of the university gymnasium is to serve the sports needs of teachers and students, and the operation has been mainly in the form of renting venues and collecting rent. Through the judgment of the operation potential of the venue, it is appropriate to open the venue to the public free of charge or with compensation during the holidays. For the opening of some swimming pools and other venues with high maintenance costs, students can book or pay through the platform. Control the capacity of the venue to ensure that students can carry out normal sports.

1.3.3. Functions of the three-level management organization in the management of public sports facilities

The Venue Facilities Management Office plays a connecting role in the entire management system and is the implementing agency for venue maintenance. We should not only do a good job in the management and maintenance of the school's public sports facilities with the superior management organization, but also provide management training for the management personnel and maintenance personnel. Implement the rules and regulations designated by the superior management organization, and formulate the specific work content of the site facility staff. Through the site facilities use management platform in the APP, the service work should be done first, the application for the use of site equipment for various extracurricular sports activities in the school should be handled, and the use order of each unit should be coordinated. In addition, all

work shall be allocated and supervised, and the scope of responsibilities of all staff shall be allocated. Supervise the staff through the platform to solve the problem that many management organizations of the school site facilities do not understand the status of the facilities. The school staff will be trained and the maintenance knowledge of various sports equipment will be uploaded. Through the investigation and the consultation of conference materials and documents, experts pointed out that the professional level of the management and maintenance of school sports facilities was low. Through the construction of the APP platform, the maintenance staff of the school are organized to learn and practice, so as to improve their professional ability.

The management and maintenance staff are the implementation agencies of all work, and directly manage and maintain the school's site facilities. Its main functions are: First, regularly inspect and maintain the equipment and sites under its jurisdiction; Install the management application on the mobile phone, and upload photos and videos of the site facilities regularly. Report the damage degree of site equipment and problems in use to the superior management organization at the first time. Supervise and manage the site facilities users. For example, the use of some indoor site facilities has special requirements for sports preparation. Users need to enter the site as required to ensure the standardized use of equipment. Do some simple daily maintenance work, deal with the loose screws and rust of some equipment, and report serious damage to the superior organization in time.

Do a good job of service; Be responsible for the implementation of the application for the use of sports equipment and the planning of the use of venues, and ensure the timely provision of sports equipment to ensure the normal operation of sports courses. Manage the operation of venues and control the number of users according to the capacity of venues. The number of people present displayed on the platform is used to control the flow of people and ensure the movement demand of users.

1.3.4. Functions of faculty and students in the management of public sports facilities

The purpose of the construction of all site facilities of the school is to better meet the training needs of teachers, staff and students. Provide students with sports courses and extracurricular sports venues and facilities, meet the basic needs of students' physical activities, and lay a material foundation for the improvement of students' physical health. Teachers, staff and students can download the information about the use of venues and stadiums for physical education courses from the university sports client, and learn about the number of users of each venue and the information about the facilities used to facilitate the selection of venues. The main function of teachers, staff and students is to feed back the effect of venue facilities management, and to feed back the damage of equipment during use to the management organization. During the use and operation of the school's stadiums and gymnasiums, the degree of influence on the use of the teaching staff and students' venues shall be reflected, so that the management organization can adjust its business strategy and achieve open operation without affecting the use rights and interests of students. Evaluate the management system of venues and facilities to see if it can serve the needs of students' daily sports activities. The needs of some sports venues and equipment are fed back to the school, so that the

school can reasonably plan all kinds of venues and facilities from the needs of students.

2. Design of college sports APP management platform

This chapter focuses on the design of college sports APP system platform, and explains the design concept of the whole system through four aspects: system framework, client function module, user authority and data processing. Through the design planning of these four aspects, a complete theoretical basis and support of the design scheme are laid for the realization of the system. It provides strong theoretical support and scheme support for the implementation of the system. The detailed design and implementation of the system in the later stage will be the subdivision and concretization of the outline design [7].

2.1. Design of college sports APP system framework

The college sports APP management platform is composed of two parts: the client and the server. The server is responsible for processing various business logics of the client, interactively processing the data transmitted from each client, and feedback and control. Users can obtain user information, behavior information, etc. through the mobile terminal device after downloading the APP client by using the mobile terminal device [1]. Through consulting relevant materials and investigations, the platform framework of the school sports APP management system is preliminarily constructed. The design of the system framework should follow a certain order. First, the overall structure of the management system should be designed, and then the upper organizational structure of the management system should be planned. From top to bottom, the main functions and structure of each module should be designed. The overall framework consists of six parts: the Sports Work Committee, the secondary administrative site and facility management organization of the school, the Facility Management Office, the school teachers and students, the venue management personnel, and the sports facility maintenance personnel. Among them, the school teachers and students, the venue management personnel, and the sports facility maintenance personnel can use the mobile client to handle their daily work, while the sports work committee of the management department The staff of the secondary administrative site facility management organization and the facility management office of the school can use the mobile client or use the computer to log in to the PC client for daily management of each module, and the data obtained by the two clients are synchronized.

The server of this design is developed using Stuts2+Spring+Mybatis framework, which has the advantages of short development cycle and reliable functions [8]. The research content and focus on the design of the client. The relevant part of the server setup is not the focus of this study.

2.2. Functional module design of college sports APP extracurricular sports activities management system

The management of school extracurricular sports activities is to manage the morning exercises, physical health tests and students' extracurricular physical exercises. For the current constraints on students' passive participation in extracurricular sports activities and participation in extracurricular sports activities, how to use network resources and

new management media to improve the organization and management of students' extracurricular sports activities. Use the college sports APP extracurricular sports activities management platform to provide various resources, ways and accurate and effective management for students' extracurricular sports activities, and improve students' motivation to participate in sports activities. The purpose of extracurricular sports activity design is to improve the standardized management of all aspects of students' extracurricular sports activities and provide various sports resources. The construction design of extracurricular sports activities requires the design of sports resources, rules and regulations of various sports activities in schools, sports associations, club management and other modules. Students' extracurricular sports activities are divided into three modules: morning exercises, physical health testing and after-school independent physical exercise.

2.2.1. Morning operation module

The main function of the morning exercise module is to provide students with the resources they need for morning exercises and supervise and assess students. The morning exercise management module is divided into four parts according to different functions: sports resources, project selection, student morning exercise assessment, and data statistics.

The morning exercise management module constructs and manages these four modules according to the different functions of management organizations at all levels. The specific operation of these four modules is: the physical education resource module organizes teachers to design the learning resources of morning exercises through the school physical education department. According to the level of physical education hardware facilities of the school and the sports needs of students, upload the organization of various sports, sports skills teaching resources and morning exercises term plan. Through this module, students can learn about the specific conditions of various sports activities and make choices. In the project selection module, students can click to enter the module and apply for the project. Self selection of sports events and organization forms. The operation of the assessment module is divided into student sports clock in and management supervision. Formulate the morning exercise assessment system and specific assessment methods, and the examiners supervise the students' morning exercise process according to the morning exercise exercise plan. During the morning exercise, students click the clocking operation through the assessment module to upload the sports data. In this module, students evaluate the degree of physical activity of the morning exercise program. The data statistics module is used by the person in charge of each college (department) to make statistics and publish the sports data uploaded by students. Students can query the morning exercise records through this module.

2.2.2. Physical health test module

The physical health test module focuses on the three functions of student physical health test management, service and guidance, and is divided into four parts: score module, test management, test service and notice. Expand and build these parts to make the physical health testing platform more close to the management needs and better serve the testing work.

According to the functions of school physical education management organizations at all levels in the physical health testing, the operation of the physical health testing module includes: the main operation of the score function module is to import the physical health system test results into the APP client, sort out and analyze the imported data, and generate the score report. Students can clearly see each test result and analysis result through the score query module. The generated data report is convenient for the establishment of students' physical health files and data. The main operation of test management is that the Sports Department and the staff in charge of the test manage the students' test work through this module, and report and release the progress update and overall plan of the test work; The person in charge of the college (department) should master the overall test situation of the students of the college, establish the student physical health file, master and organize the student test through the test information announcement module. Students have the operational power in the student appeal part of this module. For questions about the test results and deficiencies in the feedback test work, the school sports department handles students' complaints and feedback online; The operation of test service is built in the background by the school sports department to organize relevant teachers and staff to use test equipment, test guidance of test items and exercise prescriptions.

Students click to enter this module to learn all aspects of testing work as required, and choose appropriate exercise prescriptions according to their own conditions to improve their physical health. Students who have not come and have participated in the group test and applied for retest can apply for the test through this module; The main function of the notice and announcement module is to publish the test rules and regulations, and the notice in the process of the test work, so that students can view the specific arrangements for the test. The school sports work committee has the right to enter the entire functional module, supervise the process of each link of the testing work, and view the test data results. Based on the construction of college sports APP, the overall framework of the physical health testing function module is designed. Through the use of this management medium, it reflects the refined management in the process of test management and can reduce the tedious information notification links, simplifying each link and diversifying student services.

2.2.3. Extracurricular sports activity module

The idea of building this module is to adhere to the needs of students as the center, meet the needs of college students in sports and solve the constraints of college students in sports. Proceeding from the actual situation of the school and students, and from the realization of school sports goals and the improvement of students' sports skills and physical health. The design of the platform can not only meet the management of students' after-school sports activities by the management departments at all levels of the school, but also meet the daily sports needs of students. This module is divided into clubs, clubs and independent physical exercises. Through this module, most management departments manage and supervise students' daily sports activities, filling the gap in the current school management of students' after-school sports activities.

The main operation of the after-school sports activity management module is: the main operation of the school sports management department is the construction of

sports learning resources and the management of students' sports activities. In the management module of associations and clubs, the functional departments of various affairs supervise and manage the sports associations and clubs of student groups through this part. Review the affairs of the club and standardize the organizational structure of student groups; Supervise the sports activities carried out by students and assign relevant work; As for the construction of sports learning resources, the professional sports talents of the school organize and upload the corresponding knowledge of the module according to the sports needs of students and the needs of healthy development of students' physique; Publicity and guidance of sports events to improve students' participation; The main operations of students in this module are: the management and construction of associations and clubs. Through this module, students can build their own group activities and elegant demeanor display, and organize and manage corresponding sports activities; Students in the independent exercise module, according to their own sports needs into the corresponding module to obtain sports learning resources; Through the independent forum module, exchange sports knowledge and sports, and find like-minded students to make an appointment for exercise; To obtain the information of various sports competitions of the school, you can sign up for participation in this module. The construction of students' extracurricular sports activity module, to a certain extent, is combined with the school's advantageous projects and advantageous sports resources, and constantly updates the content of sports resources. Make good use of and build the management module to standardize students' sports activities and systematize the management of functional departments at all levels.

2.3. Functional module design of college sports APP sports course teaching management system

As the core part of school physical education, physical education curriculum teaching is an indispensable part of students' all-round development. Using modern network technology to improve the teaching mode and teaching management, in order to improve the quality of school physical education teaching. Through the construction of this module of college sports APP sports teaching, we can increase the way of school sports curriculum teaching management and provide more sports curriculum resources for students. The design of this module is divided into two parts: teaching management and teaching resources. Through the construction of these two parts, it can better serve the teaching management, students' sports needs and teaching feedback.

The main function of the physical education teaching module is the management of physical education teaching and the acquisition of physical education curriculum resources by students. The main operations of the teaching management module are the introduction of teaching information and curriculum management by the teaching management organization, the inquiry of teaching information by students and the evaluation of physical education teaching. The teaching management department imports the course selection results of the school's course selection system into the system, and imports the physical education assessment standards and results of various courses. Students can learn about various basic information and test scores of their physical education classes through the mobile phone client. The main function of the

information interaction module is to evaluate and answer students' questions about the process of physical education curriculum. The management department increases the supervision of the curriculum through this module. Students and teachers interact through this module to answer students' questions about the learning process and adjust the course content. The main operation of the teaching resource module is the construction of physical education curriculum resources by the physical education department and the acquisition of physical education curriculum resources by students. Students can choose their own PE courses and PE teachers through their understanding of teacher profiles and PE curriculum contents. Through the acquisition of physical education courses, students can learn independently without the restriction of region and time. In addition, obtain some theoretical knowledge and health care knowledge related to the curriculum to make up for the lack of theoretical knowledge of students at present. Through the construction of the physical education teaching module, we can make good use of this auxiliary teaching medium to improve the effect of physical education teaching and the enthusiasm of students to learn and exercise.

2.4. Design of functional modules of college sports APP venue facility management system

The design purpose of the school sports venues and facilities management platform is to improve the management efficiency, reasonably allocate and use the school sports venues and facilities to improve the service ability of the school sports venues and facilities. The system design shall adhere to the principles of progressiveness, standardization, convenience and safety to optimize the function of the overall system. For the construction of sports venues and facilities system, since the users are maintenance staff, students and school management personnel at all levels, the system is mainly simple and easy to operate. At the same time, different functions are designed according to different users of each module, highlighting the specific functions of each module so that relevant staff can perform their duties. According to the main functions of university stadiums and gymnasiums, the system design is divided into four functional modules, namely: site management, equipment management, teaching site planning and management module, and site equipment and facilities reservation management

2.4.1. Venue management module

The venue management module of college sports APP is also divided into venue management module and venue management module (Figure 15), and each functional module is divided into three parts. The venue management module is divided into: venue use status, venue daily inspection, and venue maintenance. The site management module is divided into: site use status, site daily inspection, site maintenance.

The main functions of this module are as follows: First, the venue and venue management module mainly records complete venue information, the venue management staff announces the use of venues, and the use status information is checked and maintained in real time. Students and teachers can enter the corresponding site information ID on the mobile client to obtain the site usage table and current usage status. The use status of venues and venues shall be updated in a timely manner to

facilitate teachers and students to find spare venues for exercise. Especially the stadium and tennis court, which have limited capacity and are scarce, should be updated in time. Second, the staff shall conduct daily inspection of the venue. This module is mainly used by venue managers to update relevant information through mobile clients. Daily facility safety inspection shall be carried out for the responsible venues, and facilities with potential safety hazards shall be marked and forbidden to use. Upload the inspected text and pictures through the mobile client, and upload the damaged equipment to relevant departments. Third, the venue, maintenance and repair, through the client to understand the specific conditions of equipment damage uploaded by the management department. The staff shall deal with and repair the simple damage in time. For some complicated problems, contact the manufacturer in time and deal with them through professional guidance or professionals. Upload the venue and venue maintenance records, and update the equipment status in a timely manner.

2.4.2. Equipment management module

The sports equipment module of college sports APP is divided into three small modules: equipment information management, equipment borrowing and returning, and equipment maintenance.

The main function of the equipment management module is to record the daily use, management and maintenance information of equipment.

First, sports equipment information management. The main operation is to register the basic equipment information and record the use of equipment. All the basic equipment information can be queried according to the equipment ID. Equipment management personnel shall register the basic information of sports equipment purchased by the school, including the number, name, product type, manufacturer, contact number, purchase date, location, service life, management responsible person and other attributes of sports equipment. Set the equipment classification number and ID in the system. Update the equipment use status and formula use plan. The user can know the basic information of the equipment through the interface to facilitate the user's planned application.

Second, the main operations of the equipment borrowing and returning module are: users and equipment managers use the equipment borrowing and returning operations in their respective clients. According to the user's ID, obtain the equipment borrowing and returning records in a timely manner. Students or teachers apply for the required equipment through the mobile client, and accurately apply for borrowing the equipment required for the course through the use plan of sports equipment. For daily borrowing application, make an appointment to register in advance.

Third, the equipment maintenance module is mainly used for the operation and maintenance personnel to check, maintain, repair and scrap the equipment. Make daily maintenance records of equipment, summarize and report them, and obtain all maintenance records of equipment according to equipment ID. Record the ID/of scrapped equipment and new equipment.

2.4.3. Planning and management module of teaching venues

Physical education course teaching is the main function of school sports venues.

Through the planning and management of the use of sports teaching venues, it is convenient for students and teachers to inquire about the location of classes and the use of venues. It includes three small modules: classroom teaching venue application, teaching venue arrangement and venue use status. The main function of the teaching venue planning page is to divide the school sports venues according to the teaching needs of physical education courses.

Specific operation: PE teachers apply for the venue application module through the classroom teaching module, upload the new information of sports curriculum teaching, and apply for the stadium. The information of physical education curriculum includes: the number of students, the requirements of venues and equipment, and the semester teaching plan. The venue management personnel summarize the information uploaded by teachers through the teaching site arrangement module. Set up the physical education teaching site for each class in the system, register the use of the site for the whole semester of physical education teaching and publicize the arrangement results. Update the venue information, and update the use status of the venue in a timely manner through the venue use status page. Through this module, students and teachers can enter the ID of the venue to know the name and scope of use of physical education courses in each venue.

2.4.4. Reservation management module of venues, equipment and facilities

The main function of venue and equipment reservation is to book students' daily extracurricular sports activities and some social personnel in open venues. It includes three parts: venue and equipment use query, venue and equipment reservation application, and venue and equipment management.

The venue reservation module makes the use and management of students and some collective activity venues more standardized and orderly. Specific applications for the use of venue facilities are divided into campus personnel and off campus personnel. For the application of teachers and students in the school, upload the activity content, the use quantity of site equipment and the activity organization unit through the venue and equipment reservation application module. Indicate the ID of the venue and equipment to be reserved. For the application of off campus personnel, it is necessary to upload the details of the activity, the requirements of the venue and the scope of the activity. The venue and equipment use query module enables the reservation personnel to know the use arrangement by entering the corresponding ID. The management of venues and equipment is to issue venue use requirements, application procedures and charging standards. Approval of reservation application and update of reservation usage. Keep records of the use of all venue equipment to facilitate the supervision and inspection of the superior department.

3. User rights

The user authority module is the authority set for each management structure and user. Users of different management organizations set different authorities according to their own functions. The teachers and students of the management organization and the personnel of each management organization have different operation permissions in different management modules through account login. Management organizations at all

levels, according to different functional divisions, supervise and manage the construction of platform content and affairs. The main authority of students is to obtain resources and exchange information through mobile clients.

4. Data processing

In the process of network operation, the data format returned by the server is generally XML parsing and JSON parsing. Because XML files are huge and have large transmission bandwidth, but their formats are unified and conform to standards, they can interact with other systems remotely and share data easily. Generally, DOM and SAX are used for parsing. DOM is the whole read in memory parsing, and SAX is read in memory line by line, and parsing can be terminated at any time. Both are relatively common parsing methods. Through analysis, JSON has the characteristics of simple format and small bandwidth consumption, and can directly perform key value analysis on data. For data processing, JSON parsing is generally used for a few data parsing tasks, while XML parsing is often used for data analysis tasks with large data size. The design and research of this paper involves a large amount of data processing and analysis tasks, so XML format is adopted for parsing [9].

References

- [1] China Internet Network Information Center. The 43rd Statistical Report on China's Internet Development [J]. Internet World, 2019 (1): 74-91
- [2] The State Council. Guiding Opinions of the State Council on Actively Promoting the Action of "Internet plus" [J]. Laboratory Science, 2015, 28 (4): 9-9
- [3] Li Xiaoyan. The Ministry of Education held a press conference to introduce relevant information about the Opinions on Strengthening School Physical Education to Promote the Comprehensive Development of Students' Physical and Mental Health [J]. Physical Education Teaching, 2016, 36 (5): 4-4
- [4] Wu Ruoxi and Wang Qingjun. Research on the development status, problems and countermeasures of sports fitness APP [J]. Journal of Shandong Institute of Physical Education, 2015,6:62-63
- [5] Zhang Ruilin. Sports Management [M]. Beijing. Higher Education Press. 2015 (2). 192
- [6] Liu Chuanhai, Wang Qingmei, Qian Junwei. The impact of sports apps on the promotion of physical exercise behavior and the formation of sports habits. Journal of Nanjing Institute of Physical Education, 2015.29 (3): 109-115
- [7] Qi Fang, Li Chao. Value Analysis and Marketing of Sports Software Based on SVG [A] 2009 (the 24th) China International Sporting Goods Expo and Forum on Sports Industry and Sporting Goods Development, 2009

[8] Xu Ligong. Why fitness apps get started quickly -- starting from the success of KeepApp [J]. Publishing Wide Angle, 2015 (Z1): 160-161

[9] Wu Ruoxi and Wang Qingjun. Research on the development status, problems and countermeasures of sports fitness APP [J]. Journal of Shandong Institute of Physical Education, 2015,6:62-63