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Research Article

Design and Implementation of Dancing Information Management System Based on Visual Processing

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With the advent of the information age and the continuous updating of modern educational methods, the learning form of schools has developed into a diversified structure, and the status of network teaching in the modern educational mechanism has also been continuously improved, achieving irreplaceable results in modern teaching. The advantages of network teaching in its breadth and ubiquity have been recognized and now accepted by students. At present, most of the schools relax students' study areas and increase students' interest in self-directed learning. A good online teaching method is an educational method formed by comprehensive use of modern educational technology. To sum up, it is imperative to develop a system that is suitable for schools to manage many dance resource websites. The dance resource information management platform organically integrates related digital resources around a certain theme to form a resource combination covering text, pictures, audio, video, and other types of materials, specifically related to content associations and subject indexing. This dance digital resource information can be revealed from multiple dimensions through the information system. It is convenient for users to retrieve and browse various information. This method facilitates the interaction between teachers and students, thereby greatly improving the utilization rate of digital information resources. The three-dimensional teaching of dance classroom is realized. Through the platform, a wealth of characteristic dance resource information can be collected from all over the world. Through the system's reorganization of dance information, value-added services of characteristic dance resources are realized, making the dance material novel and professional. The system has strong operability and practicability to achieve the integration of teaching design and diversification of learning applications.

1. Introduction

Dance is an art of human movement. Dance shows the overall human form in time and space through regular and beautiful human movements, expressions, and combined images. Moreover, it is used as the main means of expression, focusing on the expression of language or other artistic means. This method is difficult to surface the deep spiritual world of people, including delicate emotions and deep thoughts. It analyzes the contradictions and conflicts between man and nature, between man and society, and in man himself through a distinctive character, thereby creating a vivid dance image that can be perceived by people [1–3]. It expresses the aesthetic emotion and aesthetic ideal of the dancer. In turn, it reflects the aesthetic attributes of life. In addition, due to the characteristics of the human body's movement and continuous flow and change, dance must exist in a certain space and time. In dance activities, there is usually a musical accompaniment. Generally, specific clothing is required. Some dances also hold various props. If you are performing onstage, lighting and sets are also indispensable. Therefore, dance can also said to be a spatial, temporal, and comprehensive dynamic modeling visual art. The information resources of dance are complex and diverse. The dance is expressed in the form of multimedia information. The forms of dance information resources include text information, audio information, video information, and other information storage methods [4–7].

The dancing information management platform organically integrates related digital resources around a specific theme, using virtual dance classroom technology to enrich the current dancing teaching model. Through

platform construction, characteristic dance resource information can be collected from various places. Video data is more and more widely used as multimedia information that contains more information content and is more intuitive. On the other hand, with the increasing popularity and continuous development of network technology, more and more video information appears on the network. The system reorganizes dance information to realize value-added services of characteristic dance resources. At present, multimedia technology is booming at an unprecedented speed. Multimedia plays an increasingly important role in people's daily life [8–11]. It is very different from the text data of the past. Therefore, many problems arise when introducing video data into traditional databases [12–15]. Then, the determination of the video retrieval unit and the extraction of retrieval features are realized, in addition to the final realization. Content-based retrieval is not considered by traditional database management systems. In addition, the establishment method of video index and the design of user interface are also very different from traditional database systems. It is necessary to manage the video data on these networks. These managements have become an important development direction in the field of multimedia information processing. Video data is rich in information and complex in structure. These problems and the rapid development of the network lead us to study the video database management system.

Through the research and analysis of the key technologies required by the system, we have verified the feasibility of each technology. We are able to carry out actual project development work. The research goal of the system is a dancing information management platform built with network technology, computer technology, and modern information management technology. The main content of the project research needs to develop a dancing information management system suitable for dance majors. By implementing this system, dance schools can collect, analyze, and organize dance information resources. Then, the functions of resource rating and other functions are coordinated and integrated. The specific research contents are as follows: the front-end user platform of the dancing information management system and, according to the standardization of dance information resources, unified collection and processing organization, through systematic retrieval and establishment of a resource level rating mechanism. Through the functions of demand analysis, system design, and system research and development, a retrieval platform with dance information resources is developed. A user platform is built for teaching resource rating functions. The dancing information management system can be effectively maintained, through various methods such as requirements analysis, system design, system development, and testing. On this basis, the dance information resources are collected, analyzed, and organized [16–19].

Dance is associated with multimedia data, and multimedia resources are associated according to system requirements. On this basis, the system is modeled and associated with entity classes. The design of multimedia database needs to consider user needs. User design needs to focus on entity classes and association classes. The design of the database needs to learn from a lot of existing work, as to complete the application of object-oriented programming language. We believe that efficient mapping between relational databases is very important [3, 10, 20–22]. The system has a large amount of stored information and a high concurrent access rate. Database design becomes the key of dancing information management system. The system architecture software is a key point in the entire software development process. Different types of systems require different architectures. In addition, these initiatives also save on research and development costs. This is also a brand-new software system, which realizes these functions through the continuous deepening of construction technology [23–26]. For the two architectures, it is also the design focus of the dancing information management system. Dynamic websites are designed, and information systems are implemented. The system utilizes the current popular architectural techniques. The content and system functions of the requirements analysis phase are written and debugged. Through the test work, the separation of the presentation layer and the logic layer of the dynamic website is realized. This improves the maintainability of the code. In terms of system functionality, management information systems are a mixture of organizational theory, accounting, statistics, mathematical models, and economics [27, 28]. The system adopts computer technology, network communication technology, data fragmentation technology, and other methods. It is a typical multidisciplinary cross-edge technology. In order to make up for the after-school auxiliary work in the existing dance teaching process, to help students better recognize the inadequacies in dance work, the system helps to improve the teaching efficiency and quality and enhance the professional competitiveness of dance. The system can effectively promote the overall improvement of students' abilities. From the point of view of sociotechnical systems, organizational structures interact with each other. There are many different scenarios for the creation of these new organizational structures. The latest design methods can be adopted through system analysis and design. The specific influencing factors include organizational environment, organizational strategy, and organizational goals. Therefore, the management information system is not only a technical system but also a social system. The research framework of this paper is shown in Figure 1.

2. The Review of Research on Dance Resource Management Information System

In terms of system function, MIS is a mixture of organizational theory, accounting, statistics, mathematical models, and economics. This system mainly uses computer technology, network communication technology, data fragmentation technology, and other methods. This method is also a multidisciplinary edge technology. From the point of view of sociotechnical systems, different organizational structures interact with each other. The introduction of the system will lead to the creation of new organizational structures. However, the analysis, design, and introduction

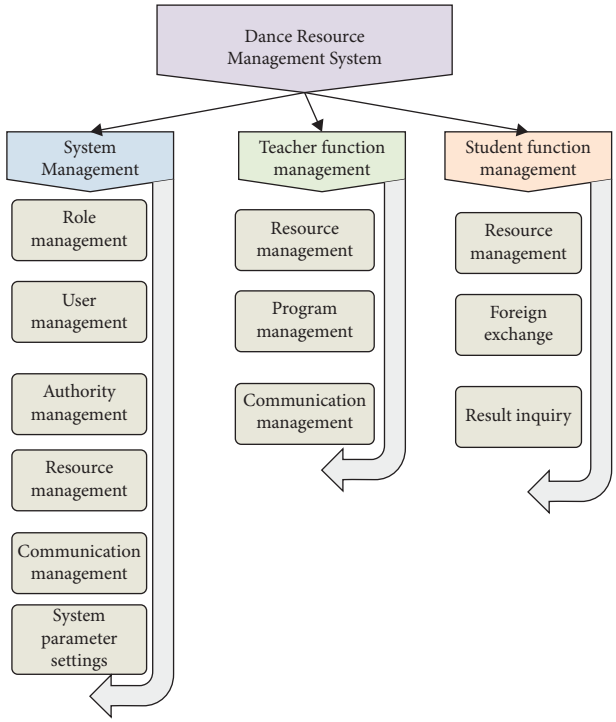

Figure 1: The architecture diagram of dance resource management system module.

of existing organizational structures also play an important role. This method mainly affects the organizational environment, organizational strategy, and organizational structure of the system.

2.1. The Main Structure of the Management System. C/S system architecture is a client and server architecture with many existing applications. It is software system architecture. Through it, the advantages of the hardware environment at both ends can be fully utilized, and the tasks can be reasonably allocated to both ends of the service, thus reducing the communication overhead of the system. At present, most software systems are two-tier structures in the form of CS. Because the current software application system is developing towards distributed application, different applications can process the same business. Different modules share logical components in application. Therefore, both internal and external users can access various versions of the application system. A new application system can be extended through the logic in the existing application system. This is the development direction of the current application system. The traditional architecture mainly adopts the open mode. It is only the openness of the system development level. In a specific application, both ends of the service also require specific software to support because of the failure to provide the open environment that users really expect. The software of the architecture needs to develop different software versions for different operating systems. The replacement of products is very fast. The current iterative model has been difficult to adapt to the simultaneous use of hundreds of computer users. In addition, this mode is expensive and inefficient. The model research framework is shown in Figure 2.

B/S architecture is browser and server architecture. The characteristic of this architecture is that the computers accessing the server generally do not need fixed programs and networks, as long as the server can be accessed by using a browser. The design of the system needs to pay attention to the choice of the architecture. The client-server architecture is a well-known software system architecture, including browser structure and server structure. With the rise of technology, structural changes or improved structures require more attention. The client needs to send service instructions to the server through the client. The specific software operates on the server. Then, the result of the operation is sent to the client. Through this mode, the effect of the server's execution operation is maximized. However, in the present, with the continuous development of the computer field, there are many programs whose layout is not on the server. Software development starts to take place independently of the server. The way operations are performed is also iterative. This also requires technical administrators to continuously optimize the code of the program. B/S architecture is characterized by its strong user sharing. This makes the maintenance of the server easier and saves many human resources. However, this technical means requires the server to be highly efficient. This method has high requirements on the hardware of the server. This technology has dominated the computer development field for a long time due to its unique breadth and flexibility. For example, our daily use of mailbox website access is achieved in this way.

2.2. Overview of Modeling Language UML. Unified Modeling Language (UML) is a language for visual modeling of software-intensive systems. UML describes and visualizes the products of object-oriented development systems. The language became a standard language for documentation. The Unified Modeling Language is a nonproprietary third-generation modeling and specification language. The user interface is implemented entirely through the browser. Part of the transaction logic is implemented in the front end. The main transaction logic is implemented on the server side. The structure utilizes the ever-mature and popular browser technology to realize the powerful functions expressed by complex special-purpose software. UML is used during the research and development phase. It is mainly used to illustrate, visualize, and build system frameworks. We need to develop intensive software systems through object-oriented methods. UML presents a set of best engineering practices. These best practices are very effective in modeling large-scale, complex systems. Especially in the field of software, architecture has been proven effective. UML can run through every stage of the software development cycle. In addition, the system architecture was adopted by OMG and became an industry standard. UML is most suitable for data modeling, business modeling, and object modeling. As a modeling language, UML enables developers to focus on

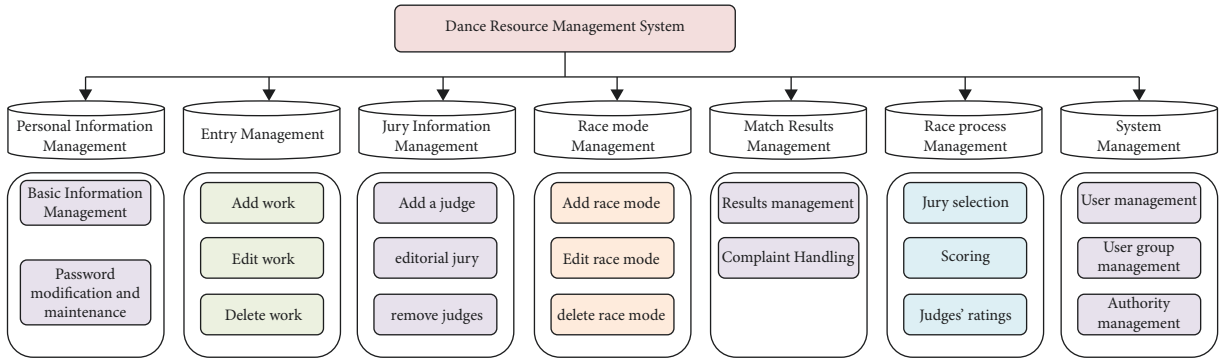

Figure 2: Overall functional system diagram of dance resource management system.

building models and structures of products. The language is not implemented using programming languages and algorithms. After the model is established, it can be converted into the specified programming language code by UML tools. The definition of UML consists of two parts: UML semantics and notation. UML semantic description is based on UML's precise meta model definition. This method provides a powerful extension mechanism. In the process of semantic definition, the hierarchical model structure is adopted. Specifically, it includes a one-dimensional model, a two-dimensional model, a multidimensional model, and a user object. UML notation represents the graphical notation and textual representation of UML semantics. This method is a modeling tool to investigate and analyze the software system from different aspects. UML can be classified into two categories: static modeling mechanism and dynamic modeling mechanism. The specific definition includes the following types of pattern analysis diagrams.

2.3. Overview of Subsystem Functional Analysis. Dance is a visual art that combines time and space. Therefore, the multimedia technology of dance can make everyone understand the knowledge of dance more intuitively. The multimedia information of dance includes video, audio, text, and other contents. We need to effectively classify and manage these resources and enable students and teachers to have good interactive learning. At the same time, it can also allow many dance lovers to get in touch with better dance teaching and training. In dance resource management, resources can be divided into two categories: one is divided according to the type of dance; the other is divided according to the level of dance. Student users can learn according to their own requirements. The main influencing factors of sports performance and training process are shown in Figure 3.

3. Design of Dance Management Information System

This chapter analyzes the system requirements around the architecture-based dance management information system, using object-oriented analysis and design methods, as well as the Visual Unified Modeling Language for analysis.

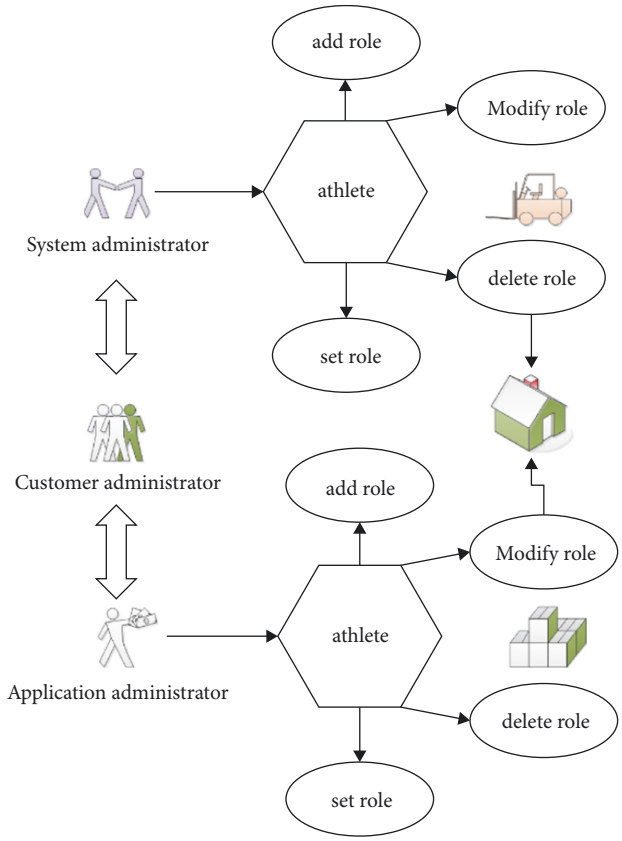

Figure 3: The relationship diagram of each role in the dance management system.

Modeling tools are used to model the logistics management information system. Then the function of the system is analyzed. Specifically, three system roles are divided, and then case analysis carried out for each system role is used. The idea of system development has become clearer. This method gives full play to the characteristics and advantages of the object-oriented analysis method and lays a solid foundation for the subsequent system design.

3.1. System Design Principles and System Common Frame Design. Develop a personal study plan. In addition, you can also ask relevant questions and wait for the

teacher to reply. Individual student users can also upload their own contact videos. Wait for the teacher's correction. Group student users can also upload their own programming. Students can also upload outstanding dance works. Thus, a resource collection covering various types of materials such as text, pictures, audio, and video is formed. The content of this collection is relevant, and the subject index is relatively complete. The information of these dance digital resources is revealed from multiple dimensions. Students can learn from each other's work and offer others to observe. With the advent of the information age, the form of learning in schools has developed into a diversified improvement. The status of online teaching in the modern education mechanism has continuously improved. Online teaching has played an irreplaceable role in modern teaching. Network teaching has been accepted by current students because of its extensive and universal advantages. Currently, most schools relax their students' areas of study and increase students' interest in independent learning. A good online teaching method greatly facilitates students' learning style, thereby saving a lot of workers, material resources, and other resources. The substantive meaning of network teaching is to use the network as the basic condition for teaching and to carry out learning exchanges between teachers and students through the network.

The transformation formula of fixed indicators is as follows:

$$y_{ij} = \begin{cases} \dfrac{\min\left|x_{ij} - a_j\right|}{\left|x_{ij} - a_j\right|} & x_{ij} \neq a_j, \\ 1 \quad x_{ij} = a_j. \end{cases} \tag{1}$$

Interval transformation formula is as follows:

$$y_{ij} = \begin{cases} 1 - \dfrac{q^{j/1} - x_{ij}}{\max\left\{q_1^j - \min\limits_{i\in\{1,2,\cdots,n\}} x_{ij}, \max\limits_{i\in\{1,2,\cdots,n\}} x_{ij} - q_2^j\right\}} & x_{ij} < q_1^j, \\ 1 \quad x_{ij} \in \left[q_1^j, q_2^j\right], \\ 1 - \dfrac{x_{ij} - q^{j/1}}{\max\left\{q_1^j - \min\limits_{i\in\{1,2,\cdots,n\}} x_{ij}, \max\limits_{i\in\{1,2,\cdots,n\}} x_{ij} - q_2^j\right\}} & x_{ij} > q_2^j. \end{cases} \tag{2}$$

Through the following announcement $P(X_c, Y_c, Z_c)$ in space connected to the camera O and OP the focal point of the image plane, the projection position $p(x, y)$. Using the geometric relationship of central keyhole imaging, the following proportional relationship can be obtained:

$$\begin{aligned} x &= \frac{fX_c}{Z_c}, \\ y &= \frac{fY_c}{Z_c}. \end{aligned} \tag{3}$$

The homogeneous coordinates and matrix can be expressed as

$$Z_c \begin{bmatrix} x \\ y \\ 1 \end{bmatrix} = \begin{bmatrix} f & 0 & 0 & 0 \\ 0 & f & 0 & 0 \\ 0 & 0 & 1 & 0 \end{bmatrix} \begin{bmatrix} X_c \\ Y_c \\ Z_c \\ 1 \end{bmatrix}. \tag{4}$$

The teaching mode helps students communicate in a timely manner. If the number of people in teaching is large, it is difficult for teachers to achieve one-on-one learning exchanges. Therefore, it is particularly important to carry out teaching work through the Internet. The system can facilitate users to retrieve and browse various information, thereby greatly improving the utilization rate of digital information resources. A good online teaching method is not just simple courseware; it is more than just providing a video file to watch. It is a multi-integrated teaching method formed by synthesizing and benefiting modern teaching technology. However, the most critical content of online courses is that teachers provide students to learn. It is available through the course's instructional website. However, the collection of many websites is bound to bring a sense of complexity and disorder to students. To sum up, this paper develops a system suitable for schools, which can be applied to comprehensive management of many dance resources. The construction of the website system is imperative. Model analysis results are shown in Figure 4.

At present, the demand for independent learning of students is increasing. Teachers' online teaching resources should be adequately guaranteed accordingly. Teachers can build a website of course resources through the Internet, and there can be courseware for students to learn and video files to watch on the website. Teachers can also guide students' learning on the Internet and provide good guidance for students' learning through messages or online communication. A lot of time is also saved for students and teachers.

Extra relative risk (ER) is used to reflect the effect of environmental factors on sports health risks. The ER value is based on the relationship coefficient in the regression model β. The calculation formula is

$$RR = \exp(\beta x), \tag{5}$$

$$ER = (RR - 1) * 100, \tag{6}$$

$$ER(95\%CI) = [\exp[(\beta \pm 1.96se)x] - 1] * 100. \tag{7}$$

The constraint conditions are equations (3)–(5):

$$\begin{aligned} f(x_i, \omega) - y_i &\leq \xi_i + \varepsilon, \quad i = 1, 2, \ldots, l, \\ y_i - f(xi, \omega) &\leq \xi_i + \varepsilon, \quad i = 1, 2, \ldots, l, \\ \xi_i \xi_i * &\geq 0, \quad i = 1, 2, \ldots, l. \end{aligned} \tag{8}$$

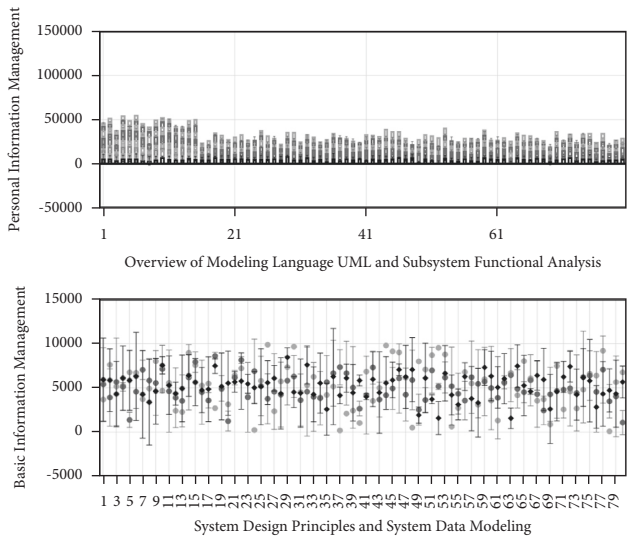

Figure 4: The design survey results of dance management information system.

The final information $i_t \times C_t'$ is expressed as the value that can be obtained, C_t, from the output information of the joint forgetting gate:

$$C_t = f_t * C_{t-1} + i_t * C_t'. \tag{9}$$

The calculation method is

$$h_t = o_t * \tanh(C_C). \tag{10}$$

Therefore, this also provides a direction for the application of network resources in the modern education system. The network is a new thing, and many fields have not yet formed a fixed model. Therefore, this requires teachers to continuously improve the application technology of network teaching. On the one hand, we constantly innovate the learning mode of online courses. In addition, each branch module is connected in series through the teaching network, to attract students' attention, so that students can take the initiative to learn. This enables students to actively communicate with teachers. Model analysis results are shown in Figure 5.

The concept of dance resource management information system is very rich. The system is not only a management system for developing dance resources. Due to the inseparability of information between teachers and students, in this way, the teacher-side management information module must be developed, as well as the student management module, the teacher-student online communication module, and so forth. The dance management system should summarize and classify the dance resources of the whole school. This makes it easier for students to search for resources online. Based on the demand analysis of dance competition system, four kinds of participants of the system can be identified. They are contestants, judges, test administrators, and system administrators. At the same time, students can also learn systematically according to the teacher's existing lesson plan. It makes the system really play a role as a bridge connecting teachers and students in learning and communication. At the same time, it also facilitates the school's management of dance resources and teacher and student information. It greatly played the role of the network in the teaching and management of colleges and universities and then made the management of modern education more convenient and reasonable. Based on the above analysis of system functional requirements, the participants in the system can be divided into the main roles of the system. Examples of these roles are system administrator roles and user roles. Then, the functional requirements of the system are reconfigured. We need to further rationally plan each module in the system. The following will focus on the detailed analysis of the functional requirements from each role of the system. Model analysis results are shown in Figure 6.

3.2. The Realization Process of Dance Resource Management Information System. The design of the information system is based on the actual needs and according to the following principles: Specifically, the principle of functional integrity is included. More and more enterprises are developing in the direction of intensification and scale. In the outline design of the system, it is necessary to map the requirements into the software structure according to certain steps. According to the demand analysis of the logistics management information system, the system can be designed in detail. The whole system can be designed as several modules or subsystems. Each subsystem has relatively independent and interrelated functional modules. Different entity function modules in the subsystem support corresponding functions and services. I first break down the entire system in detail, providing support permissions for specific content. Teachers to upload resources use the teacher management subsystem. The student management subsystem is used to complete resource learning and uploading. Then, the modules are subdivided further, adding details. For example, system management includes department information management, role management, and user information management. However, information operation management is divided into two parts: adding and modifying. Model analysis results are shown in Figure 7.

The system has advantages in terms of infrastructure and technical approach. The system can tightly integrate different levels of information flow. System solutions follow the principle of modularity. The system can be configured on demand, keeping the architecture flexible. The system is easy to install, and each basic module and business module can run in any combination and then comprehensively meet the current and future personalized needs. The object-oriented method is adopted to realize the function of data encapsulation. The principles of sustainable development are as follows: The functions involved in different participants are not exactly the same. In the dance competition system, the contestant user can perform the following operations. First, check the information on the site and modify your personal information and password. The system should have good continuity and smooth expansion. Carry out long-term macro planning before system construction. This paper needs to further adapt to the new needs of market

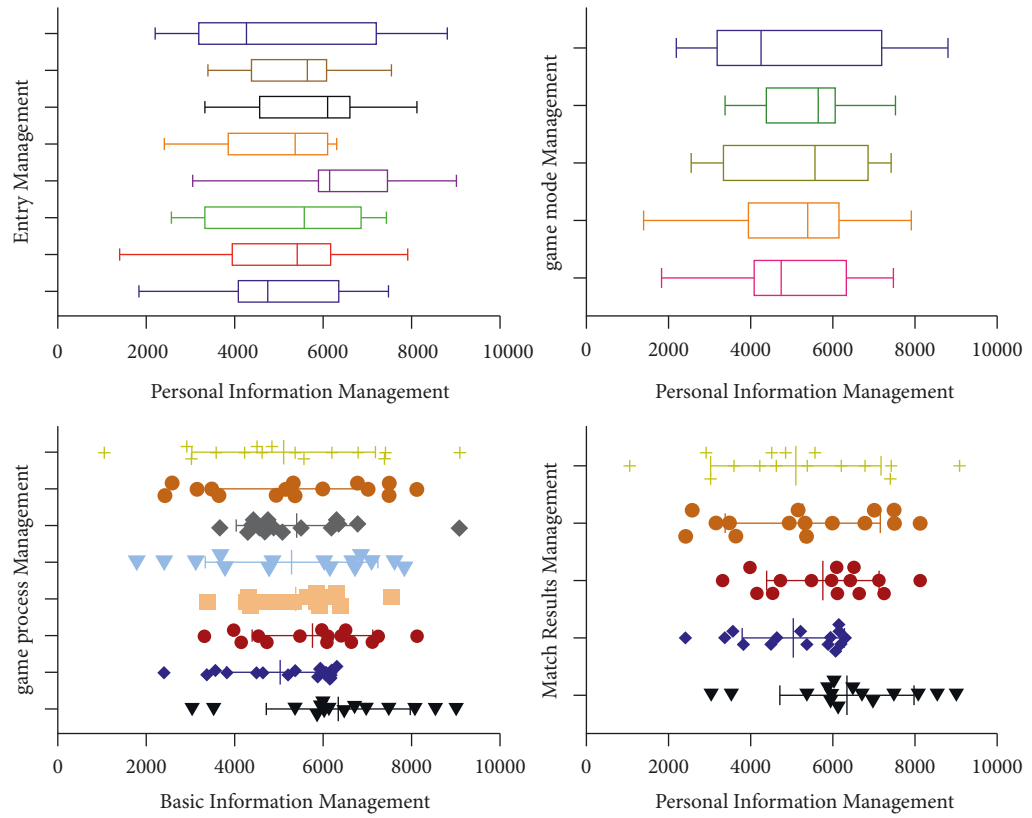

Figure 5: The main factors that determine the dance resource management information system.

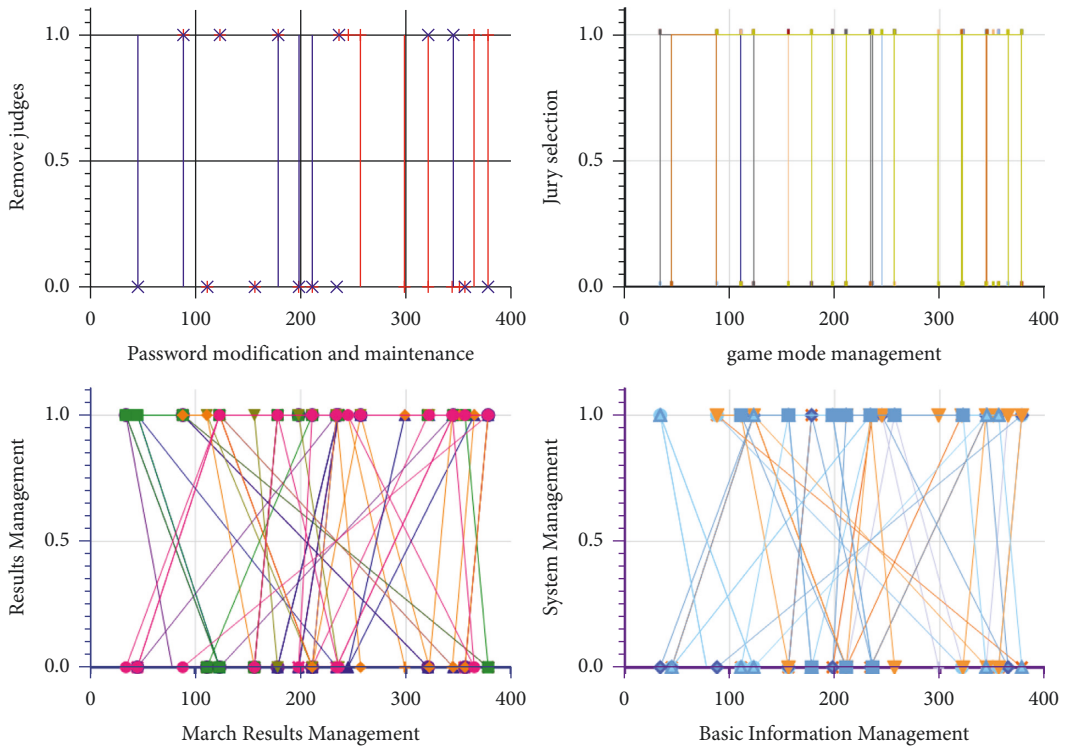

Figure 6: The main factors that determine the success or failure of dancing competition.

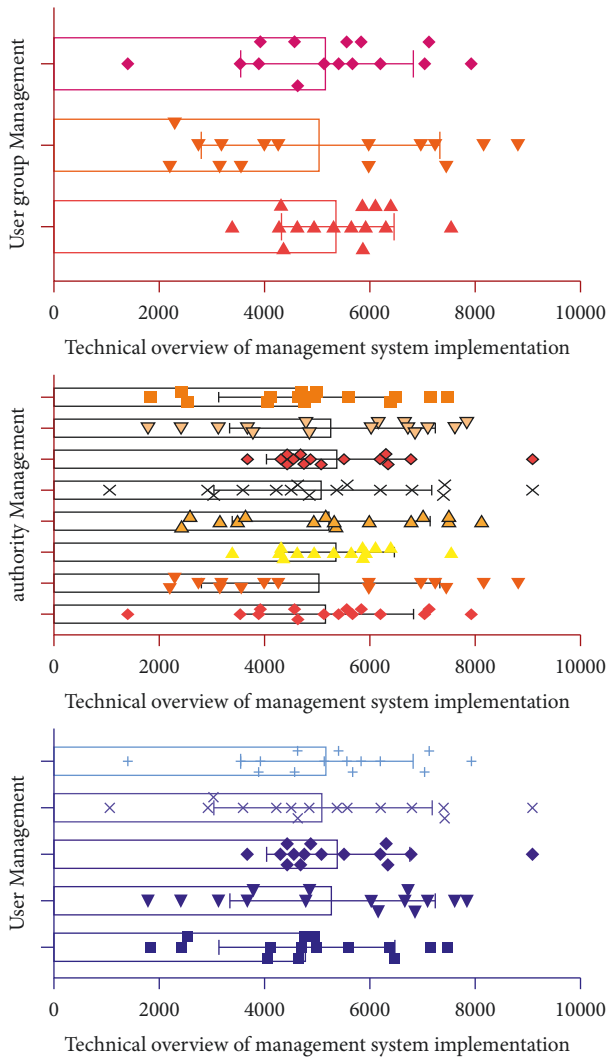

Figure 7: Comprehensive results analysis of the management system implementation.

development. The system needs to cultivate its own compatibility to cope with complex business requirements. The system needs to provide an interactive system with friendly interface, simple operation, and smooth process. This system can improve the efficiency of managers. The data entry interface is designed to make the user's job as easy as possible. This reduces the error rate of input. To this end, the design should consider reducing the user's memory burden as much as possible and increase automatic data entry to make the interface predictable and consistent and prevent user input from errors. As for being standard and open, all programs and interfaces have a unified standard, so that the system has excellent portability. The open interface enables easy application expansion and portability. For focusing on safety and efficiency, it has high network security and operational efficiency and can guarantee providing high-quality service and fast response speed. The system of stability and security adopts a multilevel protection system. There are three levels: network level, database level, and application level. On the premise of ensuring the reliability

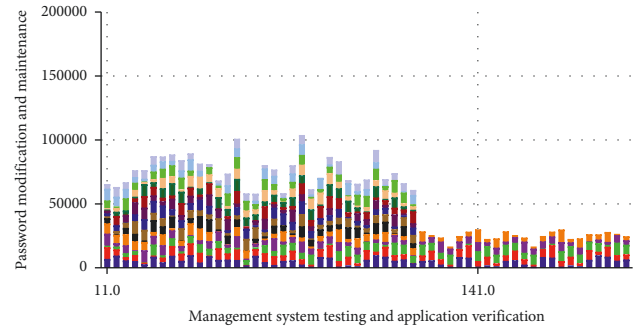

Figure 8: The results of management system testing and application verification.

and stability of the system, it is necessary to further improve the performance. Using multithreading, data connection pool and load balancing technology can achieve good parallel performance. In this way, the real-time interaction capability of multiple users and large data volume is guaranteed. Model analysis results are shown in Figure 8.

System outline design is an important link between requirements analysis and detailed design stages. The task of this phase is to translate requirements into system functionality. Moreover, these system functions are organized in some way to form a system framework. A top-down, systematic approach is needed in the overall outline design of the system. View information about other people's work. View judge information. Check out the game mode. See how matches scored. Check out the game flow. In the dance competition information system, the judges can carry out various targeted operations. The system requirements are gradually disassembled. Moreover, map it to the specific function module of the system. Modularization refers to the process of gradually dismantling from top to bottom when solving a complex problem. Each module completes a specific function, and all modules are organized in a certain way. In this way, a complete system framework is constructed to complete the functions required by the entire system. Dividing the system into multiple modules is to reduce the complexity of the software system and improve readability and maintainability. However, the division of modules cannot be arbitrary, and its independence should be maintained as much as possible. Therefore, each module only completes the independent subfunction required by the system. Moreover, the connection with other modules is minimal and the interface is relatively simple. Try to achieve high cohesion and low coupling to improve the independence of modules. Lay the foundation for designing high-quality software structures. Model analysis results are shown in Figure 9.

3.3. Technical Overview of Management System Implementation. The whole dance management system includes several major modules, namely, system management, teacher function management, and student function management. System management needs to manage the user rights, teaching resources, and communication forums of

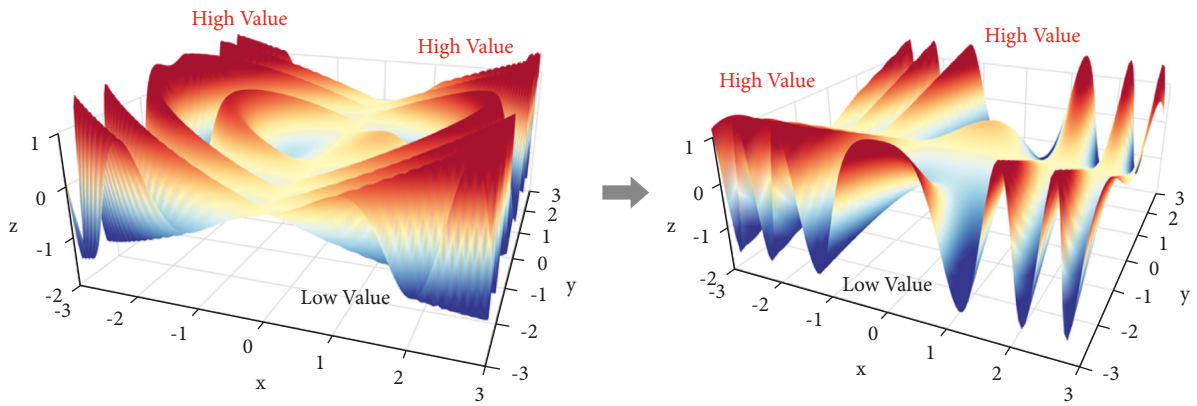

Figure 9: The schematic diagram of result monitoring and dancing process monitoring.

the entire system, including the daily maintenance of the system. Teacher function management mainly manages the resources uploaded by teachers. In turn, resources can be arranged to form a teaching plan. At the same time, the system manages the student interactive communication section. Student function management is mainly for students to classify and manage the resources they view. Moreover, you can ask questions about a resource in the interactive communication section. Model analysis results are shown in Figure 10.

On this basis, the system needs to strengthen the effectiveness of dance teaching. The system needs to promote interactive activities between teachers and students across the boundaries of colleges and universities through online classrooms. It makes up for the shortcomings of traditional dance teaching mode. It breaks the neglect of paper teaching materials for the cultivation of students' ability, so as to realize the three-dimensional teaching of dance courses. Through modern network technology, accept remote information, transmission technology, multimedia production, and development of electronic teaching materials, so that the dance material is novel and professional and has strong operability and practicability. Thus, the system can achieve the integration of teaching design and diversification of learning applications. At present, most of the schools relax students' study areas and a good online teaching method can greatly facilitate students' interest in learning. At the same time, it also saves many human and material resources. The essence of network teaching is to provide the basic conditions for network teaching. Learning exchanges between teachers and students through the network. Model analysis results are shown in Figure 11.

3.4. The Key Technology of Management System Realization. The dance management platform organically integrates related digital resources around a certain theme. The system finally forms a resource collection covering text, pictures, audio, video, and other types of materials and subject content. The information of these dance digital resources is revealed from multiple dimensions. On the one hand, it is convenient for users to retrieve and browse various information, thereby greatly improving the utilization rate of

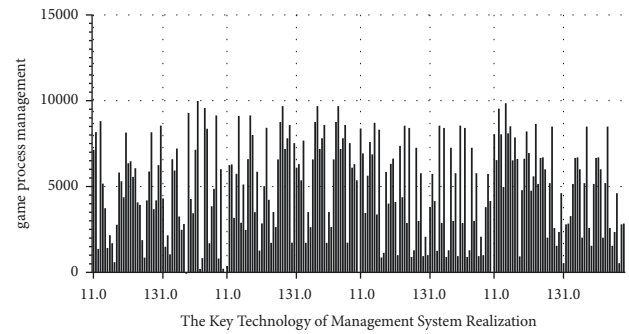

Figure 10: Monitoring and classification analysis diagram of dance training process.

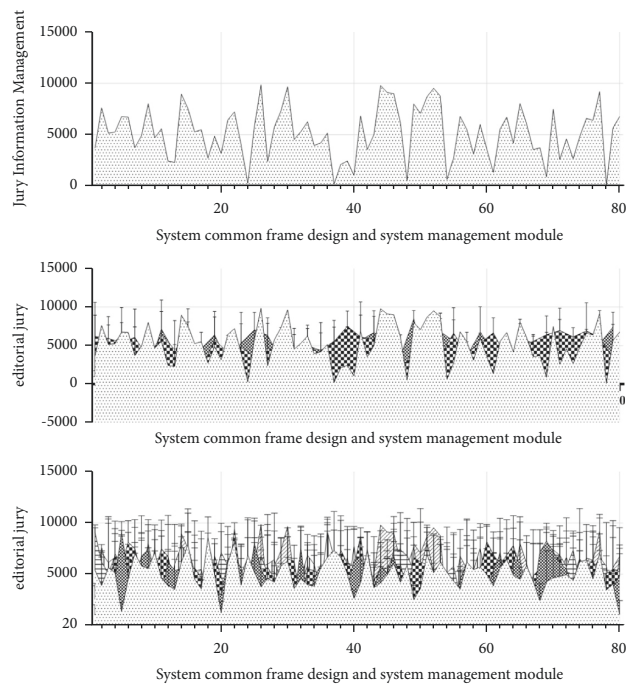

Figure 11: Classification and analysis of system common frame design and system management module.

digital information resources. In this way, the practical experience of using the virtual dance classroom teaching method is realized. Through the platform, a wealth of characteristic dance resource information has been collected from all over the world. Then the reorganization of the dance information is carried out. The value-added of characteristic dance resources is realized.

4. Conclusion

4.1. Management System Testing and Application Verification. People's requirements for designing products themselves are gradually increasing. It is not just about the actual cost of the product or the system itself. At the same time, people pay more attention to the actual output and benefit of the product itself. Therefore, the value of a design does not depend on the complexity of a system's implementation. Instead, more attention is paid to whether the product can solve the problem in the actual application process and provide greater convenience to the existing efficient management. Therefore, the analysis and design of dance management system. Analysis needs to be from three aspects: social feasibility, economic feasibility, and technical feasibility.

4.2. The System Performance and Stress Testing

(1) Social Feasibility. The development of the Internet is not just about changing our way of life. At the same time, it also has a huge impact on our daily behavior and thinking patterns. With the development of society, the scale of dance competitions has gradually expanded. However, the management requirements of competition entries and processes are also increasing. The traditional manual management method is no longer suitable for its development, including viewing the information on the site, modifying personal information and passwords, and viewing the information of the players' works. This paper has the primary task of analyzing the requirements of dance competition system and identifying participants and giving further introduction to the personal information management module. After users log in to the system, they can view personal information in user management. Therefore, through the application of information technology, great convenience can be brought to the information management of dance competitions, so as to help and improve the management efficiency of dance competitions. Furthermore, many labor costs are saved. Relieve the burden and pressure on the competition management staff. It can be seen that the whole system has good social feasibility and application value. *(2) Economic Feasibility*. The establishment of the system is through direct investment in the construction of the bank. Therefore, the economic viability of the entire system itself must be considered. Moreover, the actual construction cost. Include the expected economic benefits. Judging from the actual application results at home and abroad. After logging in, modify and save the password.. Player users can view works in the entries management module. Judge users can view and rate works in this module. Exam administrators can view and manage work information in this module. This includes adding works, editing works, and deleting works. The analysis and design of dance management system can simplify the repetitive work in competition management on the one hand. Labor cost is saved by computer operation. It makes the process of dance competition management more standardized. Putting the system into use makes the management of dance competitions scientific and efficient. Therefore, the system construction is economically feasible. *(3) Technical Feasibility*. In the realization process of dance management system, realization is through technology, frame technology, and database mode. Since these framework applications are all open-source frameworks, it is more convenient to learn and solve errors. Moreover, there are many existing plug-ins available, which are more convenient for program development and application. Therefore, it is feasible to realize the development and design of the dance management system technically.

Data Availability

The data used to support the findings of this study are available from the corresponding author upon request.

Conflicts of Interest

The author declares that there are no conflicts of interest.

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