Design and Implementation of Martial Arts Training Venue Management Information System

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Abstract. In the design of this system, we use the Asp.net language function better, the system database using SQL Server 2005, and system architecture using the B/S system. The user of the system is divided into the stadium administrators and ordinary users. The administrator is in charge of the system management and maintenance, implementation of the rights to increase, query, delete and modify the entry, etc. The martial arts gym management system function structure is divided into five main modules—site management module, training management module, member management module, equipment management module and system management module.

Introduction

Along with the popularization and application of information technology in all areas of society, office automation management has increasingly become a trend. The information office has changed the traditional mode of operation, thus to improve the information and the efficiency of data processing, greatly saving manpower, material resources and labor. Vigorous development in Sports today makes people in the stadium’s function and performance demand rising. \cite{1} Martial arts operating stadiums in the management aspect are facing many problems, such as low efficiency, insufficiency, and performances are not enough and so on. In order to solve these problems effectively, to improve the operations benefits of Wushu stadiums, this paper has carried out the design of the stadium management system of Wushu.

Site management module can realize the management to the common grounds and rooms, practice management can realize each item of sports consumption of the coach training séances, membership management mainly for members of the basic information and consumer information, and booking information management \cite{2} is the convenience of customers to arrange sports consumption. Besides, equipment management is to realize each site infrastructure, equipment and sports equipment for effective management in the Wushu stadium, and system management is mainly realized on the system login, exit, permissions, roles and account management. The basic flow, code and interface to realize the function of each module design is analyzed after the overall framework of the system.

Finally, the basic modules of the system functional testing and performance testing results showed that the function of the system can reach the expected goals, good performance. The use of Wushu sports venue management system can improve the efficiency of management.

Demand analysis

In the present society when computer information technology is very mature and network technology is widely used, how to maximize the implementation of enterprise management automation, network, \cite{3} reduce the labor intensity of the daily management work, and in a large number of extracting useful information management data, as used by policy makers have become the main direction of application research on computer software. Considering the daily gym management and maintenance staff liquidity, venue project settings dispersion and large amount of data, using modern information management system is imperative. B/S contracture is shown in Fig. 1.
Stadium management system through the adoption of efficient ticketing and settlement system, advanced management software, the Internet technology will be the gym each venue management unify. By the front desk with the director, office practice management, combines the label printer and the computer, realized from the venue booking, tickets cashier, to authentication [4], site dispatching automation, and a series of work make the business management, staff assessment, performance analysis and so on various aspects to improve, rapidly improve the level of management, a solid customer base, increase economic efficiency. And it can be daily, weekly, monthly submitted to the director, sports of all kinds of business income situation of the project, generate reports, provide the reference for the curator. System constructure is shown in Fig. 2.

The information management system for the needs of sports combined NET platform for development and design. This includes the following components: technical analysis, system analysis, requirements analysis, database analysis, and implementation of the division of functional modules.

With the increasing pace of life in modern society, the rapid development of science and technology, and people's understanding of fitness, people's management requirement of the sports stadium is becoming more and more. Sports venues, namely sports facilities in general, are to satisfy the sports training, sports competitions and the public purpose-built sports consumption needs. The most direct role and function of the stadium is to provide the necessary and appropriate sports place for the sports. In addition, as for the indirect effects of sports venues, sports venues plays an important and irreplaceable role in protecting physical and mental-health of people and promoting economic development and social progress. Gym management system is a sport venue management system aimed for the Wushu Sports field. Based on the full study of specific business of sports stadiums and analyzing the current situation of sports venues, the Gym management system is designed and implemented according to national and local legal provisions and regulations and combined with our government department's experience in building computer application system.

The design of the overall framework of the system

Firstly, during the development process of the system, needs are analyzed and every function is designed by adopting the thought of the analysis and design of JAVA language. Applet system technology used to achieve separation of data and view makes the system a technically extensive and maintained, strongly system. The system introduces the design and implementation of stadium management system in detail and the system's structure, fruitier and characteristics are described in detail. Application to proven management system for sports stadiums gives network resources into full play in terms of the advantages of sports facilities management, which is economical and
convenient, improving the management efficiency and level of sports facilities. System parameters information works follows as Table 1.

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**System test**

The paper mainly described the main problems solved through the analysis of development meaning and development trend of sports facilities management. It describes the overall business of the system, analyzes specific business and displays the final realization of the key technology of the system and interface. The paper analyzes a set of development application software system in relation to stadium operations. Stadium operations include site billing, single point of consumption, the cash register checkout, business inquiries, membership management, facility management system maintenance, which are an important part of stadium management business. Through the analysis of the stadium business data, stadium management system can identify different groups of customers and determine business goals to achieve service differentiation. ADO.Net contracture is shown in Fig. 3.

Through the implementation of Wushu Sports Stadium management business by this paper, the basic process of business management is completed. And through that the venue operator records are facilitated, the sports facilities management workflow is standardized and facility management quality and efficiency are improved. As the stadium management system continues to develop, how to realize the intelligentization of the management systems and automation of system optimization will be the following and further study of the system.

**Part codes of system**

```csharp
protected void Page_Load(object sender, EventArgs e)
{
    if (!IsPostBack)
    {
        cx.Items.Add;
        cx.Items.Add;
        cx.Items.Add;
    }
    protected void Button1_Click(object sender, EventArgs e)
```
Conclusions

This paper mainly aims at the design and implementation of martial arts training venue management information system. This system, in view of sports management information nets, is combined with the NET platform development and design. This paper mainly expounds the following parts: technical analysis, system analysis, demand analysis, database analysis, functional module design, and function module, finally draws a conclusion. The workstation uses Windows 98/Windows 2000 operation system; the server uses Windows 2000 Server as its operation system, and SQL server 2000 for database. Based on all the data, the implementation of martial arts training venue management will be greatly improved.

References

