

# Optimization Design and Realization of English Language and Literature Teaching Management System

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#### Abstract

The rapid development of information technology is revolutionizing and changing the current education. In recent years, with the further deepening of the reform of English education in colleges and universities, "student-centered" has become the main form respected by colleges and universities. English teaching focuses on the observation of students' daily performance, and pays more attention to the cultivation of students' application ability. On various learning websites, the Internet can provide them with multi-effect resource sharing, and the form of multimedia teaching has also been greatly welcomed in our country. The comprehensive management construction of the campus network can effectively improve the teaching management level of the school. This paper mainly expounds the optimization and realization of the English language and literature teaching management system, analyzes the current teaching environment, and proposes some effective solutions.

Keywords: English teaching, teaching management system, system optimization

### 1 INTRODUCTION

With the development of informatization, my country's education has developed rapidly, and computer software has gradually appeared in the teaching management of major colleges and universities, and has become the main means of teaching management [2]. Teaching management is an important project in colleges and universities. In the process management of English, the most important thing is the students' application ability, which is generally used to check the students' usual performance. Teaching management is not static, it is a management process with dynamic attributes, with many levels of work, and colleges and universities can share and manage resources through its application. The expansion of the school scale of colleges and universities can expand the number of students [3]. After the number of students increases, the new educational environment and educational philosophy will have a greater impact on the teaching reform of the school, so the task of teaching management will become more onerous. Therefore, it is necessary to have a complete, simple operation and high practicability teaching management system [4].

## 2 DESIGN AND IMPLEMENTATION OF ENGLISH TEACHING MANAGEMENT SYSTEM

First, analyze the needs. When designing an English optimization system, certain requirements need to be met. In the process of designing, the management system should objectively display and manage grammar, writing, speaking and other content, and finally appear in the final grades of students [5]. The system can not only show the learning progress of students, but also have a certain understanding of the degree of mastery of the knowledge learned in the learning process of students. The English optimization system designed in this paper can establish a good teacher-student mutual assistance platform, and can effectively improve the students' learning level in the design of questions and answers, tests, etc [6].

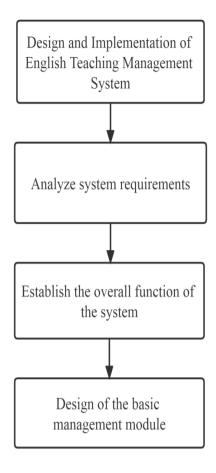


Figure 1: the Design and Implementation of English Teaching Management System

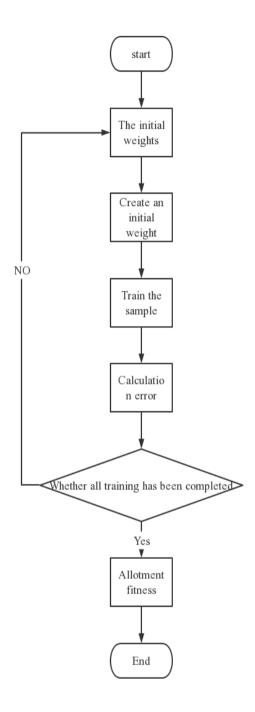


Figure 2 Flow chart of improved genetic algorithm

Second, the establishment and realization of system functions. Based on NET, the system establishes a procedural teaching platform, which is suitable for college students' English learning and practice, and conducts targeted tests based on students' actual learning conditions and business needs [7]. In the end, the realization objects of the computer system correspond to the daily business, the corresponding design of the system is carried out, the targeted database is designed according to the management theory of the software, and the corresponding information management and user

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management are designed for it. and study modules such as exams.

**Table 1**. Design and implementation of English teaching management system

| Design and implementation of English teaching |                        |  |
|---|------------------------|--|
| management system                             |                        |  |
| analyze the needs                             | In the process of      |  |
|   | designing, the         |  |
|   | management system      |  |
|   | should objectively     |  |
|   | display and manage     |  |
|   | grammar, writing,      |  |
|   | speaking and other     |  |
|   | content, and finally   |  |
|   | appear in the final    |  |
|   | grades of students.    |  |
| the establishment and                         | Based on NET, the      |  |
| realization of system                         | system establishes a   |  |
| functions                                     | procedural teaching    |  |
|   | platform, which is     |  |
|   | suitable for college   |  |
|   | students' English      |  |
|   | learning and practice, |  |
|   | and conducts targeted  |  |
|   | tests based on         |  |
|   | students' actual       |  |
|   | learning conditions    |  |
|   | and business needs.    |  |
| the design of the                             | User management        |  |
| management module                             | objects mainly include |  |
|   | system administrators, |  |
|   | students and teachers, |  |
|   | among which students   |  |
|   | are the main object of |  |
|   | user management,       |  |
|   | and students can       |  |
|   | conduct a series of    |  |
|   | operations that help   |  |
|   | learning through the   |  |
|   | system, such as main   |  |
|   | learning and testing.  |  |

| For the teaching early   |
|--------------------------|
| warning module, when     |
| using this module, the   |
| system needs to          |
| retrieve the database,   |
| and when the system      |
| performs automatic       |
| retrieval, it needs to   |
| issue an early warning   |
| to the automatically     |
| generated information.   |
| The system, the login    |
| interface mainly         |
| displays the basic       |
| information of the       |
| students, such as:       |
| personal information,    |
| points information,      |
| etc., to keep abreast of |
| what the students        |
| have learned, whether    |
| they have been tested    |
| or not. topics, etc.     |
|                          |

Third, the design of the management module. The management module design includes user management and basic management. User management includes teaching management, student attendance management, online test management, etc. User management objects mainly include system administrators, students and teachers, among which students are the main object of user management, and students can conduct a series of operations that help learning through the system, such as main learning and testing. The roles in the database can be assigned correspondingly according to the following code:

/Retrieve the corresponding role String strRole = SearchRole(User.Identity.Username) /Users can customize roles

Gurrent.User = Generic Principal (User.Identity.stuRole)

Fourth, teaching warning. Teaching early warning needs to follow certain usage principles to ensure that the operation meets the needs of automation. For the teaching early warning module, when using this module, the system needs to retrieve the database, and when the system performs automatic retrieval, it needs to issue an

early warning to the automatically generated information. The system will also send the specific situation of the student to the corresponding counselor [9].

The fifth is the online learning and examination module. Students log in according to the student number and name set by the school when they enter the school. The system, the login interface mainly displays the basic information of the students, such as: personal information, points information, etc., to keep abreast of what the students have learned, whether they have been tested or not. topics, etc. When the user is logged in, the code to be filled in is:

/Verification process when students register <script language=javascript>

If (from.name.value==)

Alert (login account cannot be empty!)

Form.name.focus()

Return false:

Iffrom.name.value.length<5

Return false:

## 3 RELATED TECHNOLOGY OF ENGLISH LANGUAGE AND LITERATURE TEACHING MANAGEMENT SYSTEM MODULE

UML system is one of the main modeling languages in software development, which can design database and analyze system architecture. The most important thing in software design is to see whether it has certain practicability, and to analyze the needs of the system, so as to construct a scientific and reasonable system architecture. In the process of system construction, it is necessary to carry out a system architecture [8]. A complete management system architecture can cooperate with each other for the UML system. Although it has a certain independent operation, it also cooperates with each other, and combines it with the system requirements., according to the different functions of the system, it is divided into corresponding modules, and each sub-function module has a certain division of labor and cooperation, which has a certain improvement in the ability of the system to process data and is convenient for extensive development and utilization [10].

**Table 2**. Related technology of English language and literature teaching management system module

| Related technology of English language and literature teaching management system module |                          |
|---|--------------------------|
| UML system  | B/S structure            |
| A complete  | With the rise of the     |
| management system   | Internet, this structure |
| architecture can  | has gradually been       |
| cooperate with each   | widely used, and users   |
| other for the UML   | can use it anytime and   |
| system. Although it has   | anywhere only through    |
| a certain independent   | a browser. The           |
| operation, it also  | application of the B/S   |
| cooperates with each  | structure architecture   |
| other, and combines it  | can speed up the         |
| with the system   | running speed of the     |
| requirements.,  | software, and then       |
| according to the  | transport the data to    |
| different functions of  | the relevant Page        |
| the system  | Handlers section.        |
| With the rise of the  | With the continuous      |
| Internet, this structure  | expansion of the         |
| has gradually been  | university management    |
| widely used, and users  | system, the application  |
| can use it anytime and  | of database technology   |
| anywhere only through   | has also greatly         |
| a browser. The  | improved the efficiency  |
| application of the B/S  | of work, which is also   |
| structure architecture  | helpful for future work. |
| can speed up the  | In terms of data query,  |
| running speed of the  | some operations such     |
| software, and then  | as deletion and          |
| transport the data to   | modification will also   |
| the relevant Page   | be added., has never     |
| Handlers section.   | stabilized the operation |
|   | of the teaching system.  |

The second is the B/S structure. With the rise of the Internet, this structure has gradually been widely used, and users can use it anytime and anywhere only through a browser [11]. The application of the B/S structure architecture can speed up the running speed of the software, and then transport the data to the relevant Page Handlers section.

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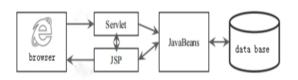


Figure 3: Schematic diagram of JSP pattern

Followed by JSP technology. JSP can play an important management role in the system and can adapt to the operation and management of the system distribution network. During the development of the system, JSP can transmit text and build it into a powerful service processor. Users can store their logic in the corresponding tags, which is convenient for the Internet to calculate [1].

The last is database technology. Database technology is a relatively complete entity. The databases currently used are relational databases. The characteristic of this database is that it can accurately calculate the stored data and can also provide a strong guarantee for the residual data [12]. With the continuous expansion of the university management system, the application of database technology has also greatly improved the efficiency of work, which is also helpful for future work. In terms of data query, some operations such as deletion and modification will also be added., has never stabilized the operation of the teaching system.

#### 4 CONCLUSION

In this era of information explosion, China's distance education still needs continuous improvement and progress. Therefore, colleges and universities must rely on mobile communication technology to enable people to learn at any time, so as to achieve international learning and operation. The system described in this article can work through the client, which reduces human intervention and therefore reduces errors. For the clear processing logic between each module, based on the proof of the experiment, it has a certain help and promotion effect on the learning of English.

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