

Original Research Article

Design and Implementation of Evaluation Management System Based on Java Web

Yanfei Sun

Zibo Vocational Institute, Zibo, China

Abstract: The system adopts the B/S model and it is a network application platform designed and developed based on the current situation of evaluation management. Through conducting a needs analysis of the system, designing the overall architecture, functional modules, and platform construction, the system is ultimately implemented and basically meets the business needs of the evaluation management. Through the demand analysis of the system, the design of the overall structure of the system, functional modules, platform construction, and so on. It can basically meet the needs of the evaluation management business.

Keywords: Evaluation Management; B/S structure; Java Web

With the continuous expansion of the university scale, logistics management is becoming more and more complicated. Many universities have multiple campuses, there are several or even dozens of students and staff dining halls. These dining halls are not centralized, but still need to be centrally managed. There are also many problems with school dining halls, such as poor hygiene, high prices, and unpalatable food. How to effectively improve the efficiency of canteen management is an urgent problem for schools to solve. This not only improves work efficiency, but also avoids the trouble of manual operations in the past, allowing managers to accurately and effectively manage catering.

1. System design requirements^[1]

Compared with traditional paper information, electronic information systems have several advantages. Firstly, it can save the printing process and costs. Secondly, it can fully utilize the advantages of computers in information processing, and establish a database for users to query and call at any time. Thirdly, with the rapid development of communication technology, reading websites has become a commonplace. Finally, due to the large population in China, there are also a large number of netizens, and such a wide distribution plays an excellent role in the evaluation and dissemination of canteens.

(1) The performance requirements of the system include the accuracy and real-time processing requirements. During the development and production process of the system, it is necessary to consider the workload. The processing capacity and response time of the system can meet the processing needs of information.

(2) In the process of system research and development, it is also necessary to consider the changes in the selection of data tables and the ways users query them. The system should be an open system, as long as it meets certain standards. It can simply join and reduce the configuration of the system hardware, and replace the system upgrade and update through the software repair.

2. Design and implementation system

2.1. Overall system structure design^[2]

This system uses a B/S structure and provides a network management platform that allows users to manage the platform and query information as long as they are online. The advantages of this system are simple operation, complete function, good expansibility and cross-region operation.

The physical structure of the system implementation is shown in Figure 1.

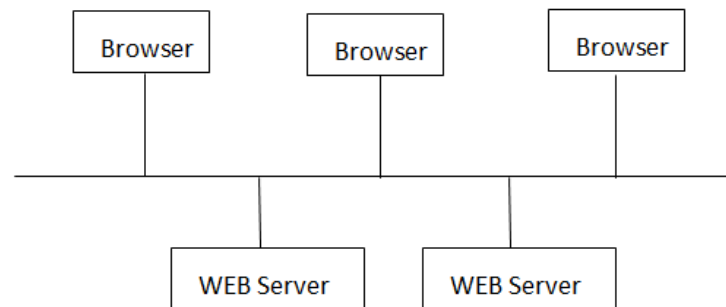


Figure 1. Physical structure.

2.2. System function design

2.2.1. System function design^[3]

The system is divided into two main parts, the front end and the back end, and it is divided into five small modules.

(1) Administrator management of dietary information function module: The function is to add, view, modify, and delete dietary information.

(2) Administrator management of cafeteria information function module: The function is for administrators to view, add, modify, and delete cafeteria information.

(3) Administrator management of cafeteria evaluation information function module: The task is to view and delete cafeteria evaluation information.

(4) Administrator management of user information function module: The task is to view and delete user information.

(5) Services available to users on the system website function module: Users have the ability to view news information, modify passwords, view cafeteria information, search for cafeteria information, and post evaluations of cafeteria information.

2.2.2. System function analysis

Here are introductions to the functional requirements of administrators.

Function requirement analysis for administrator to manage diet information:

(1) The function of adding dietary information

After logging in, the administrator can add food information to the review website, so that users can learn about the website news and updated information when visiting the website.

(2) The function of checking diet information

After the administrator logs in and clicks on News management, all the website news is displayed, allowing

the administrator to know the food information he has published.

(3) The function of modifying diet information

After entering the news management page, the administrator can modify the food information in it, so as to make some corrections to the food information published in the past.

(4) The function of deleting diet information

After entering the news management page, the administrator can select the food information that he wants to delete, in order to delete some outdated news.

Function requirement analysis for administrator to manage canteen information:

(1) The function of the administrator to view the canteen information

After the administrator logs in, you can select film management to enter the view of the added canteen information, which can be a good view of the added canteen information.

(2) The function of the administrator to add canteen information

When the employee information of the pharmacy changes or needs to be modified, the editing function of the employee information enables the administrator to make changes to the employee information conveniently.

(3) The function of the administrator to modify the canteen information.

If the canteen information of the store needs to be modified, the administrator can modify it by modifying the canteen information.

(4) The function of the administrator to delete the canteen information

If the administrator wants to delete the canteen information that has been published, he can select the canteen information to delete.

Function requirement analysis for administrators to manage the evaluation information of canteens:

(1) The function of the administrator to view the evaluation information of the canteen

After logging in, if the administrator wants to see the canteen evaluation published by the user, he can choose the canteen evaluation management to view the canteen evaluation information published by the user.

(2) The function of the administrator to delete the canteen evaluation information

When the administrator wants to delete the canteen evaluation published by the user for some reasons during the canteen evaluation management, he can select the canteen evaluation information that he wants to delete and delete the canteen evaluation.

Function requirement analysis for administrators to manage the user information:

(1) The function of the administrator to view the user information

When the administrator wants to view the information of the registered user, he can enter the user management to view the information of the registered user.

(2) The function of the administrator to delete user information

When the administrator wants to delete some users for some reasons after viewing the registered user information, he can select the user information he wants to delete.

2.3. Operation process design^[4]

To launch the user into the website, you need to use the account and password. And then the database logic verifies the data. If the verification is successful, the user can perform data operations in the system. The effective data flow executes the corresponding data SQL statements of the database, and completes operations such as

adding, deleting, modifying and querying, and finally flows the data from the database to the system interface, and displays the results.

The system flowchart is shown in Figure 2:

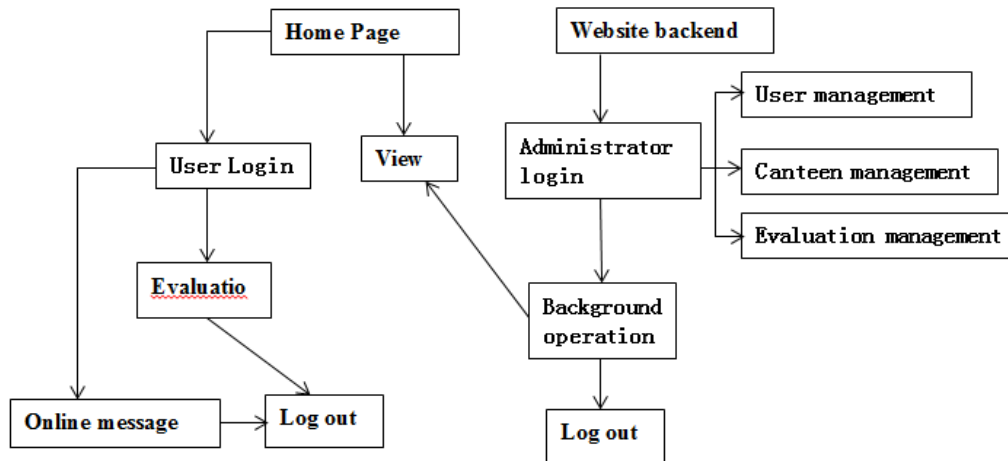


Figure 2. System flow chart.

Process analysis: Firstly, on the front end of the website, users complete registration and the administrator verifies it. Then they can log in to the system to view food information, system introduction, all comments on the canteen, canteen ranking, online message and online evaluation of the canteen. Users can search by food name and type. The administrator uses the back end to log in to the system as an administrator, and he can use the system's user management, food information management, canteen information management, all comment record management, message management, system management and other functions.

2.4. Evaluation management module design^[5]

The evaluation index module is a complex module involving multiple factors. In order to complete such an evaluation module, comprehensive inspection, testing, calculation, and analysis are required. Analytic hierarchy process is one of the important methods for conducting comprehensive evaluation, providing data analysis and decision-making basis for the establishment of the index system. It is a simple method for making decisions on some complex and ambiguous issues, especially for those that are difficult to fully quantify. The key of analytic hierarchy process is to construct a reasonable hierarchical structure model and pairwise comparison matrix, determine the weight of the criteria layer to the target layer, the weight of the scheme layer to the criteria layer, and thus determine the combined weight of the scheme layer to the target layer. According to the combined weight of the scheme layer to the target layer, it is used as the indicator of the evaluation scheme to be evaluated, and the optimal scheme is obtained by sorting according to size.

In order to evaluate dishes scientifically, representative and typical factors should be selected as influencing factors. Through hierarchical analysis and management practice, it is found that factors affecting dish evaluation can be roughly summarized into four categories: sensory, nutrition, cooking and price, and these four influencing factors correspond to different evaluation indicators respectively. From the perspective of senses, color, taste and mouthfeel are the main indexes that affect the evaluation of a dish. From the perspective of nutrition, protein content, carbohydrate content, fat content, mineral content and vitamin content are the main indexes that affect

the evaluation of dishes. From the perspective of cooking, the way of collocation and cooking are the main indicators that affect the evaluation of dishes. From the perspective of price, selling price and relative price are the main indicators that affect the evaluation of dishes.

3. Conclusion

Taking the evaluation and management of canteens as the research object, this study analyzes and summarizes various business processes of similar management work, and combines with the specific actual situation to analyze and design the evaluation and management information management system. Through the design of these functional modules, it meets the business management needs of general canteen evaluation and management, and improves work efficiency and management level.

References

1. Zhang Haifan. Software Engineering [M]. Beijing: People's Posts and Telecommunications Press, 2002.
2. Li Gang. Lightweight Java EE Enterprise Application Practice [M]. Beijing: Li Gang, 2014.
3. Zhao Siyun. Analysis of the Comprehensive Evaluation System for College Canteen Dishes [J]. Modern Vocational Education. 2016, (34): 49.
4. Zhang Jianfei. Java EE Development Technology. Harbin Institute of Technology Press. 2013.
5. Chen Lingling et al. Comprehensive Evaluation System for College Canteen Dishes [J]. Science and Technology Innovation and Application. 2015 (33): 13-14.