

DEVELOPMENT OF THE INTERNET SHOP MANAGEMENT SYSTEM,
INTERACTION OF THE SYSTEM WITH THE USER

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The article presents a practical way to create a simple and intuitive control system for an online store. The aim of the work is to write an application to simplify the interaction of the user with the database when working with the filling of the online store, to simplify the use of the online store itself, as well as to create a simple and understandable management interface and to develop protection against an unauthorized access from the outside. This task was solved using the PHP scripts language.

Introduction. Currently, people are trying to digitize as much information as possible, which will provide access to it from any digital device anywhere in the world, with only access to network resources.

This allows you to make the most common and usual actions more quickly. For example, to make purchases. But few people have thought that behind the system dealing with sales there is a complex logic of order processing and demonstration of goods. The management system is engaged for orders management and filling of the store. This means that this system operates with large amounts of data, including payment data, customers personal data, as well as data of the store itself and data about the goods. This implies that this system must meet some of the security requirements and provide access to a narrow circle of people.

In view of the growing demands of the population, the requirements to the interfaces of the products being developed are also increasing. As in any web application, the method allows you to get the required information in an acceptable way.

Choice of technologies. This part of the application is an integral part of the online store, hence it is also a web application. That's why the development was carried out in the PHP language. This language implemented work with the access to the information in database. This language allows to establish a quick connection to the database.

Such languages as Javascript and CSS were used in addition to the PHP language to improve the appearance of the interface: CSS is a formal language for describing the appearance of a document written with the use of a markup language. It serves mainly for creating cascading style sheets. Javascript is a programming language that gives interactivity to pages. It serves for creating applications and application parts.

Interface design. For convenience of use, there was used a method of grouping tasks into certain theme blocks, when developing the interface. This type of grouping allows to simplify and speed up blocks search, and also to organize the data on the screen, for better readability and understanding.

Comparison of access through the system and through the database. To add information to the online-store directly through the database, the user sometimes needs to add links and descriptions to a large number of tables (Fig. 1)

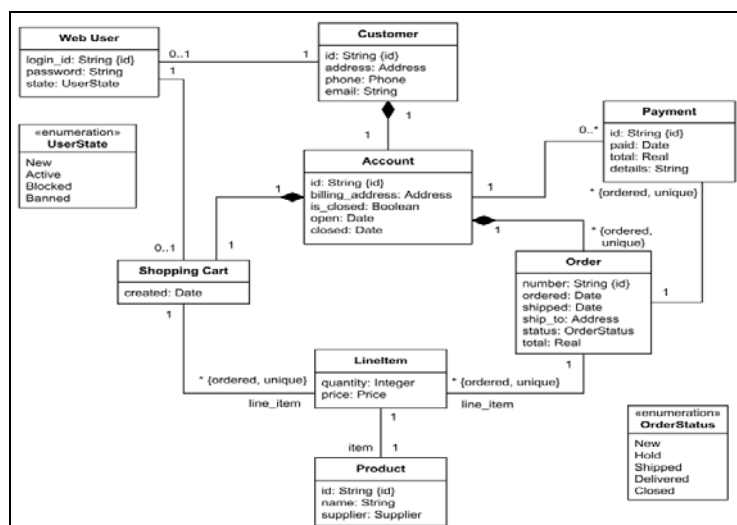


Fig. 1. Number of tables in the online-store database

Figure 1 shows that you need to use a large number of tables to add information. Also, when placing an order, you will have to search the necessary information in all the tables, when it requires an update. This significantly complicates the work with the filling of the online-store, and the very process of working with it. It is for this purpose that the content management system of the online-store is being developed (fig. 2).

The image shows a web-based 'Sales Form' interface. At the top left, it says 'Sales Form' with a gear icon. Below this, there are several input fields and a radio button group. The 'Date' field contains '13-APR-2011' and has a calendar icon and a placeholder '[dd-MMM-yyyy]'. The 'Name *' field contains 'Maxwell Schwartz'. The 'Region' field is a dropdown menu showing 'West'. The 'Product Category' section has three radio buttons: 'Furniture', 'Stationary' (which is selected), and 'Grocery'. The 'Product *' field contains 'Standard Label'. The 'Sales' field contains '2000' and 'USD'. The 'Cost' field contains '1600' and 'USD'. At the bottom of the form, there are two buttons: 'Add to Zoho Reports Database' and 'Update'.

Fig. 2. Adding information to the database via the interface

In Figure 2 you can see that the same process of adding data becomes much easier and faster by using the control system. Simplicity is achieved by the fact that all links are set in advance through the program code, and the user does not need to keep track of all the tables for the availability of data, the system will do everything itself. The user only has to enter the data necessary to add, or select the data that needs to be changed. Access directly through the database is very complicated, and even if the user has all the necessary data about the structure of the database, this process still remains quite long. No one is immune from human errors and usual inattention, which can lead to loss of data, and as a result - to a possible loss of profit from the online store.

Data protection against an unauthorized access:

Since this system operates with all the data that is in the database: user data, accounts, card numbers, passwords – a lot of problems can emerge, if you lose this data. Proceeding from all this, it can be concluded that the data is subject to protection. The closure of direct access to the system, so that no one can access the data, can be the simplest method of protection. But then arises the following situation when the right of access should be given to a certain group of people who can work in the system. The solution to this problem is to create a user group that has been granted an access to work with this system. This allows you to restrict access to third parties, and to provide access to the system to a selected circle of people. But sometimes this may not be enough, and outsiders can take possession of the rights to access the system. This will require a second stage of protection, which is to encrypt passwords and card numbers, so that no one can see the "open" data on passwords and card numbers. The system itself can be a protection stage as well, because it's not the user himself who interacts with the database, but the system itself. Data protection with the help of the system is explained by the fact that the user can enter incorrect data, while interacting with the database, which, as a minimum, will result in the presence of incorrect data, and as a maximum, in cleaning, or even deleting the database itself. The system must check the input data for correctness and request a data re-entry, or perform editing on its own.

Interaction with the user:

The system must interact with the user to facilitate information retrieval and to increase productivity. If the system allows the execution of orders, the user must see that the order has arrived. The system must notify about this. In this case, the user does not have to look through the data himself in search of the order, the system must do it itself, automatically. This is an example of a complex interaction with the system, but there are

simpler examples as well. The system has blocks describing the data from the database tables, and the user intuitively understands, which part of the system he is working with at the moment. Interface availability plays an essential part in interaction with the user, as it provides a convenient and understandable process of work in the system itself.

Conclusion. The development of a management system is an integral part of creating an online store, because it allows not only to simplify and speed up the work in the system itself, but also to protect the data of the user, customers, and the data of the store itself. The development of the interface greatly simplifies the understanding of the system elements, which also facilitates further work.

REFERENCES

1. PHP. Hypertext Preprocessor [Electronic resource]. – Access mode: <http://php.net/manual/ru/intro-what-is.php>. – Access Date: 28.09.17.
2. From Wikipedia, the free encyclopedia. CSS [Electronic resource]. – Access mode: <https://ru.wikipedia.org/wiki/CSS>. – Access Date: 28.09.17.
3. Javascript – что это такое? | Все что вы хотели знать о хостинге и сайтостроении[Electronicresource]. – Access mode: <http://articles-hosting.ru/329/javascript-%E2%80%93-что-это-такое.html>. – Access Date: 28.09.17.