Application of Plug-in Technology in Computer Software Technology

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ABSTRACT
With the continuous development and improvement of computer software technology, the plug-in technology also presents a good trend of development. The application of plug-in technology in computer software technology can provide convenience for software development and improve the expansibility of computer software. This paper introduces the overview of plug-in technology, analyzes the application principle of plug-in technology in computer software, and proposes the application and function of plug-in technology in computer software technology.

Keywords: Computer software technology, Plug-in technology, Application.

Introduction
With the rapid development of the social economy, the computer can meet the needs of social development only if the technology is constantly improved. The relevant people have a practical significance for the application of plug-in technology in computer software technology[1], which is conducive to the development of plug-in technology, improve the performance of computer software, the efficiency of resource utilization, and bring convenience to people's production and life.

1 Overview of plug-in technology
1.1 The concept of plug-in technology
A plug-in can also be said to be a program. The technician writes the corresponding plug-in program under the unified specification, and sets the application program interface that corresponds to the plug-in program.
In the specific operation process, the main function of application program is to standardize plug-ins by corresponding application program interface, so as to achieve the purpose of expanding the corresponding application functions. Uniform standard. The convenience of plug-in technology in computer software technology is that technicians can develop and design the plug-ins that can meet the demands of users only standardizing the predefined interface according to the actual development in users’ operation process, reaches the purpose of extending the functions of application software.

And after the corresponding source code is upgraded, the retranslation and arrangement of the whole computer program can be realized. In the process of updating the program, the relevant technicians may not translate the code through the using plug-ins, which saves work time, reaches the quality technical effect and also greatly improves the efficiency.

The application of plug-in technology in computer software technology can effectively improve the extensibility of computer software and effectively prolong the service life of computer software.

1.2 The function of the plug-in technology

The plug-in technology in the computer software technology is based on the unchanged software program and realizes the update and expansion of the software function. The application of plug-in technology is more widely used in the computer software technology for its unique functions. The functions of the plug-in technology are mainly shown in the following aspects.

The first is the expansibility. In the process of popularization and extensive development of computers, software development occupies an extremely important position. In the aspect of software development, the software development platform and the plug-in structure constitute the computer software. The software development platform takes the main position in the computer software, the plug-in is a supplementary module, and the function of the computer software is further expanded through the plug-ins. Although the plug-in is a supplementary module, the application of the plug-in is very common and can achieve better extension function. In using plug-ins, users may not re-compile the computer wholly in upgrading programs, and they can make the plug-in and effectively extend the corresponding functions through the corresponding software interface according to their own needs. The application of plug-in technology in the development of computer software can expand and improve the corresponding software functions, improve the work efficiency of the technicians, and at the same time, meet users' individual needs, and inject vitality into the use of computer software.

The second is the extensibility. Based on computer software system, the application of plug-in technology in computer software technology can effectively increase the extensibility of computer software and extend its function.

2 The application principle and types of plug-in technology in computer

2.1 The application principle of plug-in technology in computer software

With the continuous development and improvement of computer software technology and increasing diversification of computer software, the support of computer software for plug-in technology is also growing. The application of plug-in technology is more widely used in computer software, and its application principle is mainly reflected in the following aspects.
The first is interface. In fact, the interface is a standard communication protocol between the main program and the plug-in, which can ensure that the interaction between the main program and the plug-in is more standard and more effective. Interface is very critical for the application of plug-in technology in computer software technology. Only if the effective interface is ensured and the effective expansion of computer software functions and the effective insertion of plug-ins are guaranteed. The second is plug-in. The relevant technicians can insert the plug-ins into the computer software in a dynamic form and increase some basic functions of computer. Therefore, when the related technicians insert multiple plug-in with different functions into computer software, they can achieve the comprehensive improvement of computer software, strengthen the functions of computer software, and improve the shortcomings of computer software. It is worth noting that the plug-in provides a corresponding interface to the computer software and ensures that the calling behavior of the main program can be identified in time. The third is the main program. The main program also has an important position in the computer software and the application of main program can realize the startup computer software. When computer software is running after the start, the main program can load the plug-in into the process address. At the same time, the main program can realize the management of all the plug-ins. The main program can ensure the normal operation of computer software, which is indispensable in the computer software.

2.2 Types of plug-in technology in computer software

The types of plug-ins in computer software technology mainly include the following aspects. The first is the simple plug-in. Simple plug-in is very similar to commands in form, and is widely used in computer software technology. Simple plug-in is text-based, which have small expansibility and are simple. Simple plug-in is easy to be favored by the beginners for its free use and low degree of difficulty. However, because the free use degree of simple plug-ins are low, because the design is simple and the use process is simpler, so the simple plug-in has no special advantages. The second is the language plug-in. Language plug-ins mainly use scripts, the main advantage is that software itself can achieve the production of plug-ins, and do not need to add other complex tools in the production process. The language plug-in that uses script accounts for an important position in the office automation software, and the convenience of the production can be realized. However, language plug-in with using script also has some shortcomings, because the design and the use of the language plug-in also rely on the script, and the relevant technicians must master the special scripting language, which brings the technical difficult to them and makes the production of plug-in more troublesome. The developers of computer software must make the kernel interpretation by making programs, and then realize the use of language plug-in with using the script. Therefore, compared with simple plug-in, the language plug-in with the script is easy to be used, but the process of making plug-in is too troublesome. The third is the existing program environment plug-in. The existing program environment plug-in needs professional computer talents to be produced, and it is quite difficult to make it. On the basis of using the original program environment, this plug-in can realize the utilization of various resources of programs through multiple custom interfaces. In the development and design of specific computer software, the technicians apply plug-ins in the computer software system by combining their own demands and referring to various functions and conditions. The existing program environment plug-in has some shortcomings in the specific use, because the design of the plug-in requires the use of multiple custom interfaces.
However, multiple interfaces will inevitably imbalanced in the use of the process, which raises a higher technical requirement. Normally, it is not easy for ordinary people to correctly make and use the plug-in. Compared with the previous two types of plug-in, the production of existing program environment plug-in is more complex, but it can provide more functions for computer software.

3 Application of plug-in technology in computer software technology

3.1 Component object model

Components are the specific application unit of component object model. On the basis of unified way, information interaction and communication can be realized between different software components. The component object model can regulate information interaction and communication for different types of components, providing a good information environment for information interaction and communication between computer software components. When technicians are calling the interface, they should pay attention to the unity of similar plug-ins, and develop software plug-ins based on the component object model. When they are developing the computer software database, they can apply the relevant plug-in technology and use the independent design body to improve the computer software database instead of simply dividing the database module. In addition, the application of plug-in technology in the computer software database can better realize the refinement of the database module. The related technical people can block the information exchange and communication between different types of database module and realize the complete barrier between different database modules by using plug-in technology, provide great convenience for the development of computer software and database design, expand the application function of the computer software database. At the same time, it also effectively promotes the improvement in the development and design efficiency of computer software database.

3.2 Dynamic link library scheme

The dynamic link library scheme is a kind of executable computer software mode, which has its own specific functions. However, the dynamic link library scheme must call the host program application function through the function or the output class, and cannot achieve its own independent operation. In the specific application of dynamic link library, the relevant designers should be familiar with the corresponding plug-in calls and the rules and standards of programming, so as to achieve the purpose of calling software plug-ins centrally. In the computer Windows system, the relevant technical persons can also achieve the reuse of different components of the software system by applying the dynamic link library scheme. Compared with the component object model, the use of dynamic link library is more common and more adaptable.

3.3 Increasing the attention of the plug-in application system

The application of plug-in technology in computer software technology should increase the attention of the plug-in application system. On the basis of the analysis of the main principles of the computer software system, the relevant technical staffs should let different types of plug-ins be associated. The connection port of computer software and plug-in is the main interface. The associated port is the main endpoint of connecting plug-ins and computer software, and it can realize the division of major software systems and plug-ins. In the connection between the main system and plug-in of computer software, there will be an exchange protocol to clarify all the
contents of software plug-ins when software plug-ins are inserted, which can effectively reduce the damage of plug-ins and ensure the security of plug-ins. In the current computer software system, the integrated operation of the plug-in and the computer software has been realized. However, the independence of the plug-in cannot be ignored. In the specific application of plug-ins, the relevant technicians should apply plug-ins and ensure that the application of plug-ins can meet the actual needs of computer software according to the specific circumstances and the demands of users.

3.4 Timely cleaning of plug-in components

The timely cleaning of plug-in components is also very important for the application of plug-in technology in computer software technology. The relevant technicians can reduce the system pressure by clearing up plug-in components in time. The plug-in components occupy a part of the existing space of computer software system, and parts of the plug-in components are not valuable. Therefore, the relevant technical staffs should timely clean plug-in components on a regular basis, help computer software system reduce stress and improve the efficiency of computer software system.

4 Conclusion

The application of plug-in technology in computer software technology has very important practical significance. The related technicians use the plug-in technology to carry out the concrete operation of the computer software system, which can improve the efficiency of computer operation and realize the optimization and integration of the computer software application system. The relevant technicians should actively explore the application of the plug-in technology and reasonably match the different types of plug-ins, so that the computer software becomes more systematic and professional.

REFERENCES
