Research on Management and Maintenance of Office Software Engineering

Lianzhi Shi^{1,a,*}, Jiale Ren^{1,b}, Pengtong Fan^{2,c}

¹*R&D Department, Hangzhou Ptop information Technology Co.,Ltd, Hangzhou,China* ²*R&D Department, Zhejiang Yixiong Intelligent Technology Co.,Ltd, Hangzhou, China* ^a shilz@ptopinfo.com, ^b renjl@zjyxit.com, ^c fanpt@zjyxit.com *Corresponding author

Abstract: Along with the constant development of computer technique, more and more software projects have been developed, and their performance has been enhanced. While it is very important for us to have a great deal of convenience in our everyday life, it has failed in practice, which has caused many problems. So, to guarantee the stable and secure software project, it is necessary to enhance the maintenance and administration of various software, so as to make full use of their functions.

Keywords: computer software; security maintenance; measures

1. Introduction

With the constant advancement of computer technology, an increasing number of software projects have been developed, resulting in enhanced performance. While the convenience offered by these projects is crucial in our daily lives, practical implementation has often fallen short, leading to numerous issues. Therefore, it is necessary to strengthen the maintenance and administration of various software projects to ensure their stability and security while making full use of their functionalities. Today, software has permeated every aspect of our lives. From the mobile applications we use to the enterprise-level software systems we rely on, software projects have become an integral part of modern society. However, as software projects increase in scale and complexity, maintaining and managing them has become increasingly challenging. Firstly, the importance of software maintenance cannot be underestimated. Software operates in a constantly changing environment, facing various challenges and threats such as security vulnerabilities, bug fixes, and feature enhancements. Timely maintenance ensures that software remains in optimal condition, providing stable, efficient, and secure services. Secondly, effective software project management is crucial. Management involves project planning, resource allocation, team collaboration, and progress tracking, among other aspects. Efficient management ensures timely delivery of software projects and adherence to expected quality standards during the development process. Additionally, management facilitates communication and collaboration among teams, improving work efficiency and the likelihood of project success.

To enhance the maintenance and administration of software projects, a series of measures need to be taken. Firstly, establishing robust software development and maintenance processes is key. This includes clear requirements analysis, comprehensive design documentation, strict coding standards, and comprehensive testing plans. Secondly, introducing dedicated maintenance teams with deep technical knowledge and experience enables timely identification and resolution of issues. Furthermore, regular software updates and upgrades are crucial in ensuring stability and security of software projects. In conclusion, as the number and complexity of software projects continue to grow, strengthening their maintenance and administration becomes crucial. Only through effective maintenance and management measures can we ensure the stability and security of software projects while fully harnessing their functionalities and potential.

2. Safety maintenance of computer software engineering

There are usually three kinds of maintenance for software engineering. Firstly, it is necessary to make sure that the software is able to meet various situations and maintain the software. Secondly, for the purpose of correction of a number of mistakes in the software, a number of corrections are made. Thirdly, to ensure the capability of the system, we should enhance the functionality of the software and

maintain it perfectly. Based on related investigation information, among all the repair jobs, the 2nd and 3rd kinds of repair are 80 percent. Meanwhile, it's maintenance cost is more than 70 percent of the lifetime of software. This demonstrates how important it is to maintain software.

The use of computer technique is necessary in the new social economy development program, which is a kind of unique tool. Ever since the invention of this kind of instrument, the efficiency of our daily life has increased. So it is necessary to maintain the computer technique as a component of the job. Actually, the hardware configuration of the system and the client relations.

In the process of maintaining the handset software, we need to take into account the production and living needs of each person, so we need to have a thorough understanding of the application. Numbering in computer science is generally preserved by binary coding. The method of operation has several shortcomings. In this way, there will be a number of normal faults during the actual usage, which is harmful to the concrete application of the handset. Maintaining the handset's software will help to raise the computer technique quality and make it better. The target of the computer technique.

2.1. Enhancing software engineering quality

Since the majority of the software developing companies are small in size, the number of jobs is low. Therefore, it will easily result in a shortage of software development personnel and a shortage of specialized jobs. Therefore, it is impossible to ensure the quality of PC software project management.

Improving the quality of software engineering, reducing research and development costs, and developing modules are of great significance. When the process is extended, only modules or module levels need to be added. When applying this method, it is convenient to repeat the experiment and measurement process, easily identify errors during the process, and then make effective adjustments to improve process efficiency. At the same time, structural programs can also be used to improve system maintenance. Therefore, we do not need to grasp the operational status of the module, but only need to understand its properties[1].

2.2. Build software quality objectives

As for the software project, it should have the characteristics of reliability, changeability, portability, test stability, high efficiency and usability. But if we want to realize these objectives efficiently, it will cost us a lot of money, and then it will be difficult for us to do so. This is mainly due to the contradiction and interdependence of these characteristics. To realize these characteristics, it is necessary to enhance the proper usage of procedures, bring into play their proper functions, establish appropriate quality targets, and adapt the priority of software engineering in accordance with various circumstances, and push forward the continuous development of software engineering.

Because the application range of computer software continues to expand, we need to set up a perfect PC software administration system, which can be managed scientifically and efficiently, so that all the departments can carry out their tasks properly, so that they can efficiently utilize the work efficiency of the programmers. In the course of applying computer software, we must continually alter our requirements in order to increase our clients' satisfaction.

2.3. Emphasis on the selection of programming languages

Under the present circumstances, it is convenient for us to make a great difference in our daily life. In the course of applying computer software, we can make our workers know what we are doing, and we can get the data in real time. Therefore, we should enhance the application of PC software. Not only can we enhance our cooperation, but we can also save time and increase our productivity. It can not only enhance the collaboration among staff, but also enhance their relationship with their clients and raise their working efficiency[2].

The choice of programming language is very important in maintaining software engineering. The low-level language is a kind of Machine Language and Edge Changing Language, which is hard to comprehend and grasp, and hard to keep. High level languages are more easily understandable and maintainable. In high level languages, however, it's very important to know what's different and make effective use of it. In addition, there are a number of non procedure fourth generation languages, which don't require the user to define the arithmetic, but only require the developer to propose his request, and then perform the related intelligence calculation by the compiler. Therefore, it is necessary to adopt

various maintenance methods in order to guarantee the smooth running of the software project and to achieve the function of software engineering.

3. Main measures for daily management and maintenance of computer software

3.1. Installation and use of antivirus software

Anti-Virus Software is designed to stop or eliminate malicious software, like viruses, from your computer.

A firewall is a program (or hardware) that controls network activity. A number of antivirus software that has the fire wall characteristic, but cannot use the fire wall to turn back is the antivirus software (besides the Trojan Fire Wall this marketing term). It's not nonsense, it's true that some people have mixed up the firewall with the virus.

Nowadays, the competition of anti-virus software is becoming more and more intense. Most of the official business anti-virus software can be downloaded from the official site for free. Periodic anti-virus therapy can keep the computer running in a long time and increase the work efficiency.

3.2. Maintenance of hard disks

The vulnerability of the PC's hard drive is greater than that of CPUs and storage. In addition to the outside body shock, the reason for the destruction of the HDD is also due to the overwork of the day. One of the most important reasons for the over-working of the HDD is that it is necessary for the users to uninstall the unwanted software on a regular basis in order to decrease the working load of the HDD. Moreover, it is necessary to make a scientific and reasonable division of the hard drive space, to use a disc scanner to optimize the system's directory, to increase the operating speed of the PC's HDD, and to increase its lifetime[3].

Keep Computer Working Environment Clean The Hard Drive is attached to the External Space by means of an Ultra Thin Filter Sheet. The utility model is applicable to normal indoor conditions and does not need to be equipped with cleaning equipment. In case of severe dust pollution, it can be absorbed into PCBA, main shaft motor interior and breathing filter. So it has to be dustproof. Have damp condition, the voltage unstable can cause the hard drive to be destroyed.

Get into the habit of shutting down your hard drive while you're at work. It can lead to intense friction between the disc and the disc, which will destroy the hard drive. Should notice when turning off the HDD display is still blinking, only when the HDD is not blinking, the HDD is shut down.

Correct removal of the hard drive, notice the shock resistant removable hard drive is better off after 10 seconds to turn off the hard drive entirely. In startup, a high-speed rotation of a hard disc can result in a friction between a disc and a read-out head, resulting in a failure of a disc or a read/write head.

3.3. Regular management and maintenance of computer software

While installing the software on your computer, you should be careful not to download any related software. You should look closely at the download regulations. You should be careful when you perform the download. Computer users should try their best to select an official site to download software and enhance the safety of the software. In the case of a computer system, it is necessary for the user to regularly clear the buffer of the program so as to decrease the workload of the computer system.

Apart from maintaining and using the system software, it is also responsible for maintaining the application software in normal usage. Install, operate, update and maintain is a key component of software. When installing the software, we should not only install it, but also note that it should not be installed on the system. The system has a high-frequency harddrive and has a lot of traffic. Make an effort to place the install documents in one uniform folder, which is not only nice but also easy to manage. Don't install unnecessary features when installation of software, so as to reduce the amount of time and time spent on the application, we should try to use it with the hardware so as to ensure that it works well and that it won't be too "heavy".

Computers aren't going to be used forever. They need to be maintained regularly for better performance. Firstly, it's the system's software, and it's not always updated. Therefore, the system

software will release a number of system fixes, which can be used by the user in case of trouble, which can improve the safety and stability of the system. Also, the app is regularly updated to correct errors or issues, since it is more likely that the app will be updated more often than it will be in the system, so keep an eye out for any new releases.

Moreover, in the course of normal usage, we should also cultivate a good individual custom. You need to have a policy on how to manage a file or program. The classification of documents makes it easy to locate and utilize documents, and also makes it easy to manage dry system. You will also require regular backup of the registry on your system. Due to the computer registration will be overwritten in the course of the operation and access to all kinds of periodic backup register can be recovered as soon as possible, it is convenient to use.

3.4. Timely upgrade for patch installation

As the computer technique improves and develops, the software update rate becomes more and more frequent. But on the other side, there is an increasing number of errors during the software update. Apart from cleaning and maintenance, we also need to know how to apply all kinds of safety fixes to make sure that the software is safe. Though it is difficult to use a secure patch, it is necessary to make sure that it is safe for a computer system to maintain it.

The security code is composed of a variety of technological and administrative norms which offer security assurance for the building of a system platform, such as a variety of technological norms and norms which offer security assurance for the net system, the application system, the critical data, the back-up system, etc., and all kinds of administrative rules and norms which can efficiently manage the net system, the application system, the critical data, the back-up of the disaster, and the important incidents.

It consists of the following four parts: (1) Fire Wall System: technology index, fire wall device configuration request: (2) Cryptographic System: device configuration request: (3) Antivirus System: Functional and Device Configuration Requirements; (4) Tamper-Proof System: Functional and Device Configuration Requirements; (4) Tamper-Proof System: Classifying Denial of Service Attack and Functional Requirements for Service System. 6) Network Management System: Functional and device configuration requirements. Standard classification is a criterion for building an IT platform[4].

3.5. System maintenance and vulnerability detection

In order to maintain a computer software, it is necessary not only to restore the software, but also to enhance its ability to resist the virus. One of the most important ways to enhance the safety of a computer is to apply a specific flaw detecting tool. Generally, the security of this region consists of the scanning flaw, the cipher of the individual, the fire wall technique and the access control procedure. The main job of maintaining the system is to protect Golden Hill Security System and 360 Security Guardian.

Firstly, a lot of systems provide an auto-update option that can be used to correct bugs in time. This is typically restricted to the OS themselves, and in Linux, to the software that is installed from the repository. Administrators might also be able to run programs that cannot be automatically updated, and it is their responsibility to detect and correct any flaws in the software. Most of the software vendors have a section on their Web site where they publish updates and safety announcements. This is worth periodic revision of the comprehensive updates and the Common Vulnerability and Exposure Data Base (CVE), which is frequently used for the listing and classification of all the main software weaknesses, thus providing a useful resource. Unfortunately, it takes time to keep track of all the newer editions, and you can easily lose key messages. There is, however, a tool like a vulnerability scanner to facilitate this process. Weakness can be attacked, the hacker will usually use this content.

A vulnerability scanner is a tool that can efficiently do what an attacker would have to do in order to gain access to a separate server. They look at the open ports to see what is going on. Then, we will look at a known software flaw database to see if it is susceptible to one of them. Alternatively, they can mark unsupported programs that might require an upgrade in order to qualify for a safety update. Some of the instruments might even be more advanced. When a Web site is found, it will be searched for weaknesses in common Web programs.

3.6. Try not to install the software on disk C.

Generally, the memory volume of a computer's C-disc is comparatively low, and it is the primary place where the system is installed. Many programs are installed in the C. During the start-up of a computer, a nonsystematic program may interfere with the running of the system. Even if the user uninstalls the program on the C-disc, there are still a number of undeleted files which remain in the system for a very long time, which makes the system more likely to make mistakes, and it also brings about the safety of the system.

When dividing, the hard disc is divided into two parts, i.e., the C-disc is located on the most inward, and the other discs are disposed on the outer side, whereas the original location for reading the data is on the inside of the disc. Every time the data is read, it will go back to where it came from, instead of random placement. This system is installed on a C-disc, so that it can reduce the searching time of the CD in order to increase the speed of the system.

Since the C-disc is a system disc, there should be a certain amount of room available for the application of the page when it is running. As soon as the C-disc is filled, it will not produce any kind of GC, and all kinds of applications will not work properly. Even if it starts, it will not be able to get into the system. Therefore, do not place critical files on Disc C as much as possible..

4. Conclusions

Therefore, it is necessary to know the content of the software project from various angles, grasp the foundation of the computer software project, and use the related management and maintenance skills. Furthermore, it is necessary to apply advanced techniques to learn how to manage and maintain it in order to increase its productivity, enhance its R&D capability, extend its applied area, and let it be incorporated into everyday life and productive activities. The electric computer is going to be a necessary component in everyday life in the future. Updating the operating and maintaining level of the system will threaten the safety of the PC server. That's one of the developing tendency. Computer experts must be aware of the necessity of such a riddle, and work diligently.

In practical application, it will increase the efficiency of the mobile software. The idea that the computer technique overhaul has already appeared in the old management way, but it has not developed for a very long time. The main cause of this problem lies in the lack of proper handling of the shortage of computer technique, which has impeded the continuous development of the idea of computer science and technology. Many firms have spent large sums on re-engineering and designing software, like gold, chemistry, and HR, but they haven't been able to get what they want. This is an issue which needs to be taken into consideration. The question at which phase, damages the maintenance of the computer technique. Therefore, it is not an easy entire procedure to design a mobile telephone program, but it is necessary to have good ideas and techniques to operate and maintain its own innovation and design.

References

[1] Liu Xiang. Effective Methods and Practice of Software Engineering Management [J]. Science and Technology Information, 2014 (30): 116.

[2] Wu Yetong. Management and Security Analysis of Computer Networks [J]. Network Security Technology and Application, 2014 (12): 131-134.

[3] Zhang Lingzi. Daily management and maintenance analysis of computer software[J]. Electronic technology and software engineering, 2016, 07 (13): 76-77.

[4] Xue Zhiwen. Elfrequent management and maintenance of computer software[J]. Electronic fabrication, 2013, 13 (07): 25-26.