What is software development process

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Introduction

The general process of software development process that software design ideas and methods, including the function of software design and implementation of algorithms and methods, software, the overall structure design and module design, programming and debugging, program debugging and testing and prepared and submitted to the procedures and so on a series of operation

1.Demand analysis

First,system analyst to confirm the needs of the users.Then use the relevant software tools listed major functional modules of the system to be developed.Followed by in-depth understanding and analysis needs.Finally,Systems analysts confirm once again to the user needs.

2.Outline design

First, developers need to outline design software systems. Outline design needs to be considered in the design of software systems, including the system's basic processing, organizational structure of the system, module division, distribution function, interface design, operation design, data structure design and error handling design, detail design software to provide basis.

3.Detailed design

On the basis of the outline design, detailed design required developers of software systems.Describe and implement algorithms, data structures, classes and relationships of model.It needed to note that all levels of the system software for each program.And it is easy to coding and testing.

4.Coding

In the software coding phase, developers write programs to start detailed work.Achieve the function of each module.In order to achieve the system requirements.

5.Test

Test system to the user,and the user confirm each function.After completion of the test, complete acceptance and complete some final help documents,the overall project come to the end.Of course,it need to upgrade and repair in the future,until the software is completely eliminated.

6.Software Delivery

After the software is tester and software get the requirements,the software developers should submit installer,database,requirements report,resign report and testing report to user.

7.Acceptance

User acceptance.It is very easy.If user like it,you will success.

8.Maintain

According to user needs changed or circumstances changed,the application need to modify all or a part of.

About Model

The software process is a framework for a series of tasks to be completed in order to obtain high quality software, which provides the steps to complete the task. A life cycle model is usually used to describe the software process concisely. The life cycle model provides that the life cycle is divided into stages and each stage of the implementation of the order, therefore, also known as the process model. The common process models include waterfall model, rapid prototype model, incremental model, spiral model, fountain model, etc.

Waterfall Model

This feature has a double meaning:

1 after the completion of the previous phase of the work, in order to begin the next phase of the work;

2 the previous stage of the output of the document is the first phase of the input document, therefore, only the output of the previous stage of the document is correct, the latter stage of the work to get the correct results.

Spiral model

The basic idea of the spiral model is to minimize the risk by using the prototype and other methods. A simple way to understand this model is to take it as a rapid prototype model of the risk analysis process before each phase.

The large-scale software project spiral model is mainly applicable to the internal development. If the risk analysis costs nearly the entire project budget, the risk analysis is not feasible. The fact that the project is greater, the greater the risk, so the necessity of risk analysis is also larger. In addition, only the internal development of the project, in order to abort the project when the risk is too easy.

The main advantage of spiral model, it is a risk driven, but it may also be a weakness of it. Unless the software developers have rich experience in risk assessment and the specialized knowledge, otherwise there will be real wind: when the project actually is heading for disaster, developers may also believe that everything is normal.

Summary

I have a certain understanding of the software development process, I know that software development is a need to work together to complete the work of many people. In the process of development, each person must make clear their own part of the time to set a certain time to complete, try not to drag time, because it will affect the entire development time.

My references are from a book called

<Software Development>
<BaiDu Encyclopedia>
<WeiJi Encyclopedia>