Software Development Processes (Methods)

Yingying Shentu (Student NO: 13211105)

Zhejiang Normal University

Software Project Management

Abstract

This short report gives a short introduction to the software development processes. The division of software development processes is significant to the software management, resource investment and the failure of software project. Thus, it is vital for software project managers to have a fully understanding to the definition and task of every stage.

1   Introduction

Software development processes which transfer user requirements to collection of software system activities is based on the activities in different stages of life cycles. The processes include five stages : feasibility study, requirements analysis, project, coding, test. Then the report will take a glance to the stages in details.

2   Feasibility Study

The feasibility study is related to three questions: "what to do?", "how to do?" and "if it can be made?". It is basically according to the development plan and the development plan would be deeply made only if the feasibility has been studied. If the conclusion of the feasibility study is a yes, a detailed development plan will be required. The development plan ensure the required

resource based on the target, performance, function, size of the program. Then the development will turn to the next stage: requirement analysis.

3   Requirement Analysis

Ensuring the requirements of a desired software product is the first task when creating it.

● Requirement obtain

Ensuring the requirements of every aspect of the target system, such as function requirement and performance requirement. Building a method frame to gain the requirements of users.

● Requirement analysis

Analyzing and summarizing the requirements, then give the systematic solution and the logical model of the target system.

● Requirement evaluation

Evaluating the work in this stage.

4   Software Project

● Preliminary design

The preliminary design includes building the overall structure of systems, dividing the modules and ensuring the interface according to the requirements.

It is mainly to design and organize the modules.

- Detailed design

  The mission of this stage is to give a detailed description to the functions of every module and according which to obtain the Software process description.

5   Coding

Realizing the software function on machine by using the computer language. Translating the processes to a program and testing the correctness of the program.

6   Test

Including unit testing, integration testing, confirming testing and system testing. There are mainly two methods to test: the static test method and the dynamic test method.