

Software Project Management

Alexander Liu

ID 13211127

Zhejiang Normal University

Software Project Management

Abstract

The object of project management software is a software engineering project. It covers the entire process of software engineering. For the success of the software project development, the key problem is to work on software project scope, may risk, need resources (people, hardware / software), to achieve the task, experienced a milestone, spend effort (cost), schedule, accomplish know fairly well. This management should begin before the technology work began, continue in the software process from concept to implementation, when the software engineering process at the end to end.

Keywords: software engineering, project management, planning,

1 Introduction

Software project management is to make the project according to the scheduled cost, schedule and quality of the successful completion of analysis and management activities of the staff, product, process and project.

Software project management can be avoided due to the decrease in the development of process of error repair errors produced by the huge cost

2 Background

Software project management is put forward in the United States in the mid 1970s, when the U. S. Department of defense devoted to the study of the software development cannot be submitted on time, budget and quality is not up to the requirements of the user. The results showed that 70% of the project because of the improper management rather than technical reasons. So the software developers began to pay attention to the management of software development. By the middle of 1990s, software R & D project mismanagement problems still exist. According to a survey on the implementation of the software engineering, software development is still difficult to predict, only about 10% of the project can be delivered at a predetermined cost and schedule

3 Estimation

Software process capability describes a development organization development software development for the high quality software product ability. CMM (Capability Maturity Model) is the United States Carnegie Mellon University Software Engineering Institute (CMU/SEI) in 1987 proposed assessment and guidance software R & D project management set method, with 5 evolutionary level to describe the software process capability. Now CMM is version 2. CMM describes the software process of five levels of maturity (initial level, repeatable level, defined level, quantitative management level has been optimized, grade), maturity reflects the capacity of software process.

*452599625@qq.com

Copyright 2016. The material in this article is copyrighted by the respected authors. The article is based on work to support Software Project Management module.

Software Project Management (2016/17)

Author Name: Alexander Liu

University: Zhejiang Normal University

Title: Software Project Management

Supervisor: Dr. Kenwright

The initial stage is characterized by the lack of effective management of software organization software process, software process is in disorder, sometimes even chaotic, almost no definition of the process, the success of software projects to the occasional personal heroism instead of group behavior, so it is not to be duplicated; be repeated level software organization project planning and project tracking stability, process control, the success of the project is repeatable; defined level is characterized in that the software process has been promoted into the standardization process, and thus more stability, repeatability and controllability; software has quantitative management level in software process and software product are quantitative objective and quantitative management, so the software process capability is predictable, the production of software products is of high quality; optimization level is characterized by the amount of process Feedback and advanced new ideas and new technologies to promote the process of continuous improvement, improvement of technology and process improvements to planning and management as a routine business activities.

4 planning

Software project planning is a start-up phase of a software project into the implementation of the system, mainly including: determine the detailed project implementation scope definition, to submit the results of the work, the assessment of the implementation of the major risk in the process, make project time plan, cost and budget plan, human resources planning, etc..

The software project management process from the beginning of the project planning activities, while the first plan is to estimate the activity: how long does it take, how much, and how many people need to work. In addition, we must also estimate the needed resources (hardware and software) and may be related to the risk. According to the size of the project can be estimated is needed to complete the project workload, we can estimate the use of one or more technologies, these technologies are mainly divided into two categories: decomposition and empirical modeling. Decomposition technology needs carved out of the main function of the software, and then realize the estimation of each function required to program the size or number of person months. Experience in the use of technology is to predict the workload and time according to the experience formula. To achieve a specific model using automated tools

Acknowledge

Dr. Kenwright

References

Baidupedia