

Software Development process?

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Abstract

This short report gives a brief and concise explanation to Software Development Process and the means of software development process management. The report has been formatted, so whether or not you are currently a software project manager, actively working on a project team, or completely in the dark about this mysterious field, this report has something for you. This is an ambitious report, but not unrealistic, and we know that software project management is a little bit of an art and involves a lot of practice. There is so much more to know than this report is able to present however, it gives a taste of the subject and a high-level view of core components. It's not that we necessarily excluded anything from this report, but it would be unrealistic to try and cover every possible aspect in a couple of pages. For the sake of practicality.

Keywords: software development, requirement analysis, methodology

1. Introduction

Software Development Process is the process of transforming user requirement into a set of software system activities. It is based on division of activities in each stage of life cycle.

Software development process includes: requirement analysis, designing, coding, integration, test, installation, acceptance, etc. The whole software development process can be divided into five sub-process: feasibility study, requirement analysis, design, coding and testing.

2. Feasibility Study

Before development software, feasibility study

is indispensable. Its purpose is to definitively answer the questions "what to do?", "how to do?", "is it possible to complete", etc.

3. Requirement Analysis

It determines functional and performance requirements of software. Extracting the requirements of a desired software product is the first task in creating it. While customers probably believe they know what the software is to do, it may require skill and experience in software engineering to recognize incomplete, ambiguous or contradictory requirements. Its main jobs can be concluded as: [Yongchang Ren 2011]

- **Requirement Elicitation** Determine various requirements of target system.
- **Requirement Analysis** Analyze requirements obtained, and then give the system solution.
- **Write Requirement Specifications** It is the stage achievement, which can facilitate the communication of users, analysts and designers.

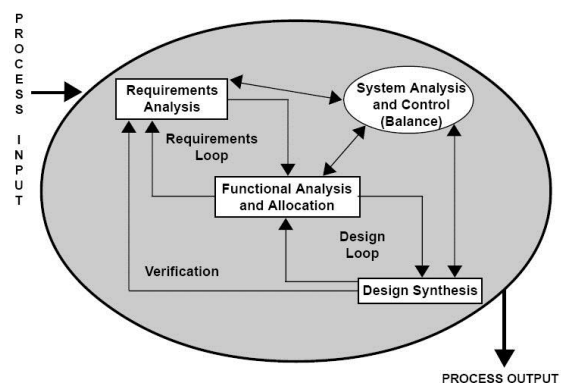


Figure1: A systems engineering perspective on r

requirements analysis.

4. Software Design

It includes two stages:

- **Preliminary Design** Its main job is to change use case diagrams (obtained from requirement analysis) into software structure and database structure. [Yongchang Ren 2011]
- **Detailed Design** At this stage, designers should finish the realizations of all kinds of algorithms in each function module which refers to many aspects.

5. Methodology

In Software developing, software development methodology is to divide software development work into different stages, which can be better managed. Common methodologies include waterfall, prototyping, spiral, etc.

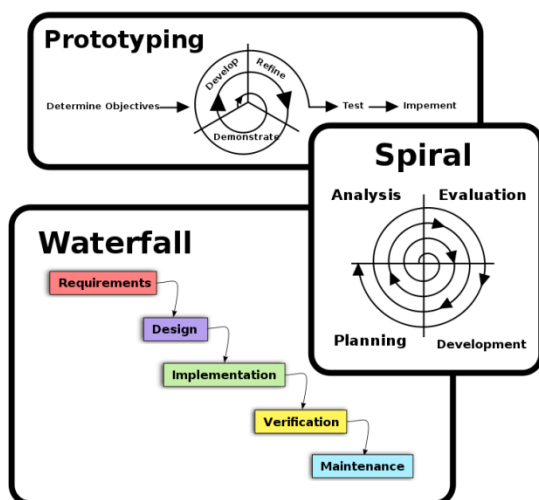


Figure2: The three basic approaches applied to software development methodology frameworks.

6. conclusion

This article just gives a brief explanation to software project management. A software development process is a structure imposed on the

development of a software product. There are several models for such processes, each describing approaches to a variety of tasks or activities that take place during the process. Software development process.

Reference

Yongchang Ren, AND Tao Xing, 2011, *Software Project Management*, Jilin University Press.