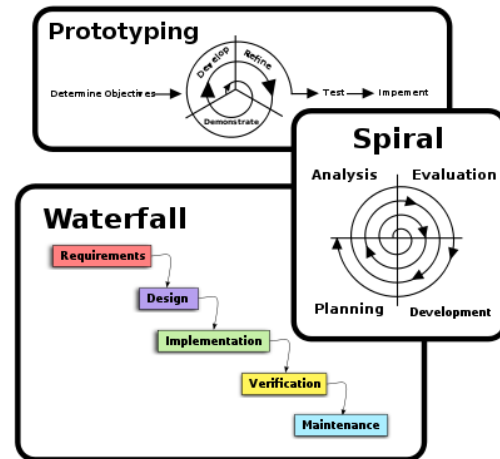# Software Development Processes?

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Abstract

In software engineering, a software development methodology (also known as a system development methodology, software development life cycle, software development process, software process) is a splitting of software development work into distinct phases (or stages) containing activities with the intent of better planning and management. It is often considered a subset of the systems development life cycle. The methodology may include the pre-definition of specific deliverables and artifacts that are created and completed by a project team to develop or maintain an application.

to refer to a specific process chosen by a specific organization. For example, there are many specific software development processes that fit the spiral life-cycle model.

Introduction

Software development process is software design idea and method of general process, including the function and implementation of algorithm and method of software design, the general structure design and software module design, programming and debugging, alignment and testing, and write, submit the application.

Method

Common methodologies include waterfall, prototyping, iterative and incremental development, spiral development, rapid application development, extreme programming and various types of agile methodology. Some people consider a life-cycle "model" a more general term for a category of methodologies and a software development "process" a more specific term

History

The software development methodology (also known as SDM) framework didn't emerge until the 1960s. According to Elliott (2004) the systems development life cycle (SDLC) can be considered to be the oldest formalized methodology framework for building information systems. The main idea of the SDLC has been "to pursue the development of information systems in a very deliberate, structured and methodical way, requiring each stage of the life cycle—from inception of the idea to delivery of the final system—to be carried out rigidly and sequentially" within the context of the framework being applied. The main target of this methodology framework in the 1960s was "to develop large scale functional business systems in an age of large scale business conglomerates. Information systems activities revolved around heavy data processing and number crunching routines".

Overview

a) Demand research analysis

1. Related system analyst and preliminary understanding customers' needs, and then use WORD list to develop big function module in the system, each function module what small function module, demand for some more specifically related to the interface, in this step can be preliminaries defined inside a small amount of interface.

2. Systems analyst in-depth understanding and analysis of demand, according to their experience and demand with a word or related tools to make a document system functional requirements document. This document will clear case with a system in a big function module, big function module with small function module, and cases of the related interface and interface functions.

3. Systems analysts and users confirm the demand again.

b) Preliminary design

First of all, developers need to profile software system design, the system design. Profile design need considering the design of software system, including the system of basic processing procedure, system of organization structure, module partition, function distribution, interface design, operation design and data structure design and error handling, etc., provides the basis for software detailed design.

c) Detailed design

On the basis of general design, developers need in order to undertake the detailed design of the software system., described in the detailed design implementation specific modules involved in the main algorithm, data structure, class hierarchy and call relations, need to explain the procedure of software system at all levels of each (each module, or subroutine) design consideration, for coding and testing. Shall guarantee the demand for software fully allocated to the whole software. The detailed design should be described in detail enough to code according to the detailed design report.

d) Encoding

In software coding phase, developers of data structure and algorithm analysis and module to achieve design requirements and began working as a specific program, realize the function of each module respectively, so as to realize the function of the target system, performance, interfaces, and interface requirements.

e) Test

Writing good testing. Give users, users use after confirm each function one by one.

References

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2. Geoffrey Elliott (2004) Global Business Information Technology: an integrated systems approach. Pearson Education. p.87.