Software development methodologies literature review examples

Technology, Development



Business Information Systems

Introduction

Software development methodologies have one main concern; to create software. The creation is more organizational than rather than technical. To be able to understand properly what software development methodology entails, one needs to understand the introduction as well as the historical background of each one of them (Wiegers 2005). By taking the long route, one is able to appreciate what has been achieved so far in software development and what is still being researched.

This paper is a discussion of a variety of soft ware development methodologies and their level of efficiency in business information system.

Data modeling/information systems

Data modeling makes use graphs to represent the existing condition of data and transmits it for use by the consumer as well as the developer (Rivkin 1996). Through the process of data modeling, the developer creates an illustration of the functions related to the process in modeling as well the enterprise that seeks to execute the roles. The developer tries to portray the pattern of information flow and activities. To achieve this role, the developer creates a foundation through definitions, visualization, validation and understanding the character of the information process.

After depiction of the pattern of information, the developer then establishes a frame work of data together with the features of the information to be stored. This is important because it is used to generate a PC software code

which is used in application. In addition, it helps when preparing a specification to a function which facilitates the computer's ability to buy or make is software. To create a model, an interview called a business analysis is conducted. The facilitator which is part of the interview asks a several questions meant to get the necessary information which gives a description to the process. Although is important that the facilitating devise have a little information about the process, participants can always compliment the source of information.

One advantage of the model lies in its ability to differentiate between the existing situation of data and random collection of ideas (McCarthy 1995). By being able to sense the difference, the system can recommend modification, enhancement or maintenance of state of affairs.

Soft ware prototyping

Since its proposition in 1970, software has been used to implement and design feedback for people using it in the project. As the name suggests, software prototyping refers to the process of coming up software prototypes programs (Davis 2005). The process can take place in the development of software and is related to common prototyping in engineering.

Between, 1960-1970, software prototyping went through a single process by building the whole process and then finish up by removing the inconsistencies. This made the program to be expensive and unable to keep record of time.

Dynamic systems development method (DSDM)

DSDM is a frame work used to deliver projects and is mainly used to develop software. It was proposed for the first time in 1994 to tame Rapid Application Development (RAD) techniques. By 2007, DSDM had become very common way of carrying out project management as well as providing solutions (Conde 2002). To be used effectively for a project, DSDM is applied incrementally and iteratively so as to embrace the law of agile development. The process involves the customer/user.

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