Object-oriented design process model

ABSTRACT

Design is a first step in the development phase for any engineered product or system. It is defined as the process and strategies used to manage complexity. Software design process is an iterative process whereby the requirements are transformed into a ñblueprintò for constructing the software. A design model is developed based on the combination of intuition and judgment, a set of principles and heuristics, and a process of iteration that leads to final design specifications. Without a proper design, a software system may fail to deliver its intended service and often will lead to some consuming maintenance activities. Therefore it is necessary for software developers to do the design process thoroughly before they start implementing the system. Object-oriented design is not an easy task. It is even difficult for a novice designer or for an experienced designer who wants to shift to object-oriented approach. Throughout literature, there are varying schools of thought on what constitutes object-oriented design. What is the process involved in this phase and what are components or structures? This paper presents four popular object-oriented design methods, and then a process model of object-oriented design for novice designer is proposed. The model consists of a process and four components. The process model is part of the model of a guidance system to assist novice designers in designing object-oriented systems.

Keyword: Object-oriented design; Process model