A TECHNIQUE FOR COMPONENT BASED SOFTWARE DEVELOPMENT

NAVNEET KAUR & ASHIMA SINGH

Computer Science and Engineering Department, Thapar University, Patiala, Punjab, India

ABSTRACT

The software development paradigm is moving from traditional software development , which is based on building software systems from scratch, to Component-Based Software Development (CBSD), which is based on using the reusable components as building blocks for software development. The focus of this new approach is on development of new systems by selecting and assembling a set of existing components within an appropriate software architecture. This approach provides various advantages like reduced effort ,time and cost during software development , improved software system maintainability and flexibility by allowing new components to replace old ones and enhanced system quality by allowing components to be developed by those who are specialized in the application area and systems to be built by software engineers who are specialized in component-based software development. Although CBSD has proven its usefulness in the field of software engineering but it still consists of a number of issues or factors that affect many aspects of CBSD like integration and testing effort and affect the produced software cost, maintainability,etc .In this paper some issues and the techniques to resolve those issues have been discussed . Thus a technique has been proposed for Component Based Software Development Organizations(CBSDO) to be used during the development of the software system by using CBSD approach.

KEYWORDS: Black Box Component, CBSD, CBSDO, Component, Reusability Software Architecture