

Software Quality Assurance in Component Based Software Development - a Survey Analysis

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Abstract : Component Based Software Development (CBSD) is a new trend in software development. Selection of quality components is not enough to ensure software quality in Component Based Software System (CBSS). A software product is considered to be a quality product if it satisfies its customer's needs and has minimum defects. Authors' survey different research papers and analyzes various techniques which ensure software quality in component based software development. This paper includes an investigation about how to improve the quality of a component based software system without effecting quality attributes. The reported information is identified from literature survey. The developments of component based systems are rising as they reduce the development time, effort and cost by means of reuse. After analysis, it has been explored that in order to achieve the quality in a CBSS we need to have the components that are certified through software measure because the predictability of software quality attributes of system depend on the quality attributes of the constituent components, integration process and the framework used.

Keywords : CBSD (component based software development), CBSS (component based software system), quality components, SQA (software quality assurance)

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