

User-Perceived Quality Factors for Certification Model of Web-Based System

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Abstract : One of the most essential issues in software products is to maintain its relevancy to the dynamics of the user's requirements and expectation. Many studies have been carried out in quality aspect of software products to overcome these problems. Previous software quality assessment models and metrics have been introduced with strengths and limitations. In order to enhance the assurance and buoyancy of the software products, certification models have been introduced and developed. From our previous experiences in certification exercises and case studies collaborating with several agencies in Malaysia, the requirements for user based software certification approach is identified and demanded. The emergence of social network applications, the new development approach such as agile method and other varieties of software in the market have led to the domination of users over the software. As software become more accessible to the public through internet applications, users are becoming more critical in the quality of the services provided by the software. There are several categories of users in web-based systems with different interests and perspectives. The classifications and metrics are identified through brain storming approach which includes researchers, users and experts in this area. The new paradigm in software quality assessment is the main focus in our research. This paper discusses the classifications of users in web-based software system assessment and their associated factors and metrics for quality measurement. The quality model is derived based on IEEE structure and FCM model. The developments are beneficial and valuable to overcome the constraints and improve the application of software certification model in future.

Keywords : software certification model, user centric approach, software quality factors, metrics and measurements, web-based system

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