UNIVERSITI TEKNOLOGI MARA

EVALUATING THE QUALITY OF SOFTWARE USING THE ISO/IEC 9126 STANDARD AND KTL'S GUIDELINES

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STUDENT'SDECLARATION

I declare that the work in this thesis was carried out in accordance with the regulations of Universiti Teknologi MARA. It is original and is the result of my own work, unless otherwise indicated or acknowledged as reference work. This report has not been submitted to any other academic institution or non-academic institution for any other degree of qualification.

In the event that my report be found to violate the conditions mentioned above, I voluntary waive the right of conferment of my degree and degree to be subjected to the disciplinary rules and regulations of Universiti Teknologi MARA.

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ABSTRACT

Quality requirements of software products are often described in vague and general terms. As a consequence it is difficult for test engineers to evaluate the quality of the software product as no unambiguous and quantitative reference, of what quality in that context means, exists. Software Quality is defined as the totality of functionality and features of a software product that bear on its ability to satisfy stated or implied needs. This research project describes a method to identify the most important quality characteristics by means of risk assessment, to define completion criteria and to subsequently measure software quality characteristics using the ISO 9126 standard. A Quality Model is a set of quality characteristics and relationships between them, which provides the basis for evaluating product software quality and specifying its requirements. In this research project, I present my experiences and guidelines for evaluating quality of product software for each characteristics and subcharacteristics defined in ISO/IEC 9126-2. This study will benefit to Software Testing Community and also provide information for academician and industry in IT to deliver a better or good quality of software product.

Keywords: quality, Software Quality, Quality Model, ISO/IEC 9126

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