MEASUREMENT OF SOFTWARE QUALITY USING ISO/IEC 25010 STANDARDS ON THE WEBSITE OF THE DEPARTMENT OF INFORMATICS ENGINEERING STATE POLYTECHNIC OF BENGKALIS

Nama Mahasiswa   : Nursahiba

NIM   : 6304201253

Dosen Pembimbing   : Depandi Enda, M.Kom

ABSTRACT

In 2019, the Department of Informatics Engineering at Bengkalis State Polytechnic constructed a website as an information channel. Since its development, this website has never undergone quality assessment according to specific measurement standards. Therefore, in this research, testing was conducted on the Department of Informatics Engineering website using the ISO/IEC 25010 standard, employing the software product quality model. The aim was to address this issue, and a research study was conducted to measure software quality using the ISO/IEC 25010 standard. Measurements were taken on 8 characteristics: Functional Suitability, Usability, Performance Efficiency, Compatibility, Reliability, Security, Maintainability, and Portability. The results of quality measurements, obtained by administering questionnaires to users, indicate an average quality percentage of 82%. Additionally, Performance Efficiency testing using the GTMetrix tool resulted in a GTMetrix test value of 78%, and Reliability testing with the Loadster tool yielded a value of 99%. Security measurements using OWASP ZAP identified various risks with high, medium, and low levels. Maintainability, assessed with phpcpd, scored 96%, and Portability, evaluated with the BrowseEmAll tool, reached 100% due to its flawless operation across different browsers and devices.

Keywords: Software Quality Measurement, ISO/IEC 25010 Standard, Website, Informatics Engineering, Bengkalis State Polytechnic