ABSTRACT

Dedi Iskandar, 92318008
DESIGN BUILD AND TEST THE QUALITY OF E-RECRUITMENT WEB APPLICATIONS BASED ON ISO/IEC 9126 AT A FINANCING COMPANY IN INDONESIA

This research aims to design, create, and test the quality of e-recruitment web applications at a financing company in Indonesia based on ISO/IEC 9126. ISO/IEC 9126 is the most complete quality model based on it's criteria and structure, so it's better than the McCall, Boehm, Dromey, and FURPS models. Methods used in this study are Research and Development (R&D) including potential identification and problems, analysis and data collection, application design, implementation, application validation, application revision, and application trials. E-recruitment web application was created using LAMP (Linux, Apache, MySQL, PHP). Application quality testing based on 6 factors namely functionality, reliability, efficiency, usability, maintainability, and portability. Functionality factor was tested using black box testing. The efficiency factor was tested using GT Metrix (Yslow) and PageSpeed Insight. The reliability factor was tested using stress testing (LoadStrom, LoadImpact, and WAPT 8.1). The maintainability factor was tested based on instrumentation, consistency, and simplicity aspects. The portability factor was tested using multiple web browsers, and usability factor using Computer System Usability Questionnaire. Based on the results of the research that has been done, e-recruitment web application is able to run well with some revisions from recruitment experts and programming experts. Application test results based on ISO/IEC 9126 have met the application quality factor standards of functionality, reliability, usability, maintainability, and portability. The efficiency factor still does not meet the application quality factor standards.

Keywords: web application, e-recruitment, ISO/IEC 9126, software quality, Research & Development (R&D)

Bibliography (1995 – 2020)