ANALISIS *BROKEN LINK* MENGGUNAKAN *AUTOMATION SOFTWARE TESTING* DENGAN PENDEKATAN *MEAN TIME BETWEEN FAILURE (MTBF)*

ABSTRACT

Automation testing *is a test in which some program code is written and uses other software to test software, which runs automatically. Automated testing in this study uses Selenium Webdriver, a framework used to automatically control web browsers using specific programming languages. The system that has been designed aims to assist users in testing the website to be tested, and the system can be run with real-time testing. In this system, the Mean Time Between Failure approach is applied, an average time interval that passes between one failure and the subsequent failure. On the SMKN 1 Probolinggo website, testing is carried out manually and automatically. Manual testing was carried out using the black box testing method, concluding that there were 33 test scenarios with 'Failed' status and 18 with 'Pass' status out of 51 total test scenarios. While the automated tests carried out resulted in total broken link damage reaching 540 out of 952 links. There is total damage to the link, resulting in a Mean Time Between Failure approach value of 0.631 second, which means the average failure time that occurs when testing is carried out. Link damage on the tested website with an average crash time of 52.6%, while for an average non-damaged optimal time on the website, it is only 47.4%.*

Keywords: *Testing, Automation Testing, Mean Time Between Failure, Selenium Webdriver*