ABSTRACT

The Si Cantik Bangsa application is a mobile platform for recording gender equality data at the village level. However, several undetected bugs have been found during its implementation. This study aims to identify bugs that were previously undetected by applying black-box testing through a combination of manual and automation testing approaches, integrated within the Software Testing Life Cycle (STLC) framework. Testing was carried out on 46 identical test scenarios to compare the effectiveness of both approaches in detecting bugs. The results showed that automation testing accelerated execution time, whereas manual testing yielded a higher bug detection rate. The implementation of STLC in the testing process successfully structured and systematized each phase, allowing previously hidden bugs to be identified. This study demonstrates that well-planned and comprehensive testing is essential to ensure the quality and stability of an application both before and after its release.

Keywords: Testing, Aplikasi, Mobile, Aplikasi Mobile, Blackbox testing, STLC (Software Testing Life Cycle).