

SECURITY VULNERABILITY ANALYSIS OF THE KELURAHAN RIMBA SEKAMPUNG WEBSITE USING THE OWASP ZAP FRAMEWORK

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ABSTRACT

The security of web-based applications is a crucial aspect as cyber threats continue to evolve. This study analyzes the security vulnerabilities of the Kelurahan Rimba Sekampung website using OWASP ZAP to identify security gaps and provide mitigation solutions. The methodology includes automated website scanning, result analysis, and the implementation of recommended security improvements. The initial scanning process detected several vulnerabilities categorized under Broken Access Control, Security Misconfiguration, Cryptographic Failures, Vulnerable and Outdated Components and Software and Data Integrity Failures. The findings revealed 15 vulnerabilities in the initial scan, which were subsequently addressed, reducing the number of detected vulnerabilities to 12. The proposed security enhancements, such as strengthening Content Security Policy (CSP), implementing stronger encryption, and configuring HTTP headers and cookies, contributed to minimizing security risks. The results of this study are expected to serve as a reference for website administrators in enhancing security and protecting user information from cyber threats.

Keywords: *Website Security, OWASP ZAP, Vulnerability, Penetration Testing, Security Assessment*