ABSTRACT

VULNERABILITY ANALYSIS FOR WEBSITE USING BLACK BOX TESTING APPROACH CASE STUDY BASIC DATA OF EDUCATION WEBSITE IN REGIONAL GOVERNMENT XYZ

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Today, information security is very crucial. According to the Open Web Application Security Project (OWASP) in 2017 there are several vulnerabilities that often occur on websites such as injection flaws, sensitive data exposure, cross-site scripting (XSS), etc. This will impact the attacker in exploiting the system, retrieving information or important data on the web. According to ID-SIRTII, the most domains that were targeted for cyber attacks in Indonesia is .go.id domain. The Department of Education in Regional Government XYZ uses the website to disseminate information to outside parties. The Department of Education uses the web to manage basic data of education (Dapodik). Therefore, security must be ensured to maintain the integrity of the information on the website. One way to maintain the integrity of information on a website is by conducting vulnerability assessment. Vulnerability assessment is a series of actions to identify and analyze the possibility of security vulnerabilities in the system (ISACA, 2017). This final project provides a black box testing for vulnerability assessment of web application by mean of analyzing and using combined set tool to detect vulnerabilities, so that can immediately resolve vulnerabilities before an attack occurs.

Keywords: information, security, web application, vulnerability assessment, black box testing