ABSTRACT

The advancement of Information Technology (IT) has provided convenience for humans in accessing and sharing information. One example of IT advancement can be seen in the proliferation of online websites and the increasing use of social media. Referring to the survey results conducted by the Association of Indonesian Internet Service Providers (APJII) in 2021-2022, internet users in Indonesia reached 77.02% of the population or approximately 210,026,769 million users. This figure represents an increase of 3.32% compared to 2019-2020 [3]. One form of internet utilization is through the use of websites. Websites can be used by individuals, organizations, and companies for various purposes. One such application in education is E-Raport, an electronic report application for schools, which has two types of logins: one for administrators and one for school teachers. The security of the information system of the E-Raport website-based application is crucial given that it contains student data and information related to the learning process. Any security vulnerabilities could potentially be exploited by attackers for data theft, misuse, or service disruption. This study aims to analyze the security of the information system of the XYZ school's E-Raport website-based application using the Information System Security Assessment Framework (ISSAF). Based on testing using the ISSAF framework, several security vulnerabilities were identified: 2 medium-level vulnerabilities, 4 low-level vulnerabilities, and 3 informational vulnerabilities. Additionally, there are many open ports on the E-Raport website that could be exploited by attackers. However, during testing, the database and passwords were not penetrated by the tester. Nevertheless, the E-Raport website is considered secure, and the author provides recommendations to assist the school in improving the E-Raport website. This could help the management of XYZ school system to enhance the security of their system.

Keywords: Information System Security, ISSAF, Penetration Test, Website Based Application