Security in website applications is important, namely by detecting security vulnerabilities with risk estimation and provide relevant solutions. The writing of this scientific paper aimed to minimize the level of vulnerability of website security by conducting penetration testing on the Batam Religious Harmony Forum website with the intention of it can provide information on problems and solutions from the results of the penetration testing. This Pentest uses the Open Web Application Security Project (OWASP) method. After the completion of the first penetration testing and the development of the follow-up website, the penetration testing were conducted again after refactorization to compare the level of security vulnerability of the two penetration testings.

Keywords: E-Government, FKUB, OWASP, Penetration Testing, Information Security.