

ABSTRAK

Pesatnya perkembangan teknologi informasi membawa tantangan baru dalam menjaga keamanan siber, khususnya di sektor pemerintahan. Pemerintah Kabupaten Bangkalan melalui Dinas Komunikasi dan Informatika menghadapi kebutuhan mendesak dalam membentuk tim *Computer Security Incident Response Team* (CSIRT) sebagai langkah strategis menangani ancaman siber. Sistem CSIRT berbasis *website* dirancang menggunakan metode *Waterfall* yang terdiri dari lima tahapan: analisis kebutuhan, desain sistem, implementasi, pengujian, dan pemeliharaan. Pada tahap analisis kebutuhan, dikumpulkan informasi mengenai kebutuhan fungsional dan non-fungsional sistem. Desain dilakukan menggunakan *Unified Modeling Language* (UML) untuk merancang arsitektur sistem. Implementasi memanfaatkan *framework* Laravel untuk aplikasi web dan MySQL sebagai basis data guna mengelola informasi insiden secara efisien. Pengujian dilakukan melalui *User Acceptance Testing* (UAT) yang mengacu pada standar ISO/IEC 9126 untuk mengukur kualitas sistem, pengujian yang dilakukan mencakup aspek *functionality*, *reliability*, *efficiency*, *usability*, *maintainability*, dan *portability*. Hasil UAT menunjukkan aplikasi mendapatkan penilaian sangat baik pada seluruh aspek. *Functionality* memperoleh nilai sebesar 91,3%, *reliability* 90,3%, *usability* 93,0%, *efficiency* 91,4%, *maintainability* 89,1%, dan *portability* 90,9%. Seluruh aspek masuk ke dalam rentang 80% sampai 100% sehingga termasuk dalam kategori 'Sangat Baik', menunjukkan aplikasi mampu memenuhi kebutuhan pengguna dengan tingkat kepuasan tinggi.

Kata kunci: CSIRT, Laravel, *User Acceptance Testing*, *Waterfall*

ABSTRACT

The rapid development of information technology brings challenges in maintaining cybersecurity, particularly in the government sector. Bangkalan Regency Government, through the Department of Communication and Informatics, faces an urgent need to establish a Computer Security Incident Response Team (CSIRT) as a strategic measure to address cyber threats. The CSIRT system, built as a website, is designed using the Waterfall method, consisting of five stages: requirements analysis, system design, implementation, testing, and maintenance. In the requirements analysis stage, information was gathered about the system's functional and non-functional needs. The design phase used Unified Modeling Language (UML) to structure the system's architecture. Implementation used the Laravel Framework for web application development and MySQL as a database to manage incident information efficiently. Testing was conducted through User Acceptance Testing (UAT), referring to ISO/IEC 9126 standards to measure system quality. The testing covered functionality, reliability, efficiency, usability, maintainability, and portability. UAT results showed that the application achieved excellent ratings in all aspects. Functionality scored 91.3%, reliability 90.3%, usability 93.0%, efficiency 91.4%, maintainability 89.1%, and portability 90.9%. All aspects fall within the range of 80% to 100% thus categorized as 'Excellent', proving the application meets user needs with high satisfaction.

Keywords: CSIRT, Laravel, User Acceptance Testing, Waterfall.