

ABSTRAK

PENGEMBANGAN MODUL ADMINISTRASI SURAT AKTIF KULIAH PADA SISTEM INFORMASI PORTAL PROGRAM STUDI TEKNIK INFORMATIKA UNIVERSITAS LAMPUNG

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Pengembangan modul Surat Keterangan Aktif Kuliah pada Portal Program Studi Teknik Informatika Universitas Lampung bertujuan untuk menyediakan sarana pembuatan surat secara otomatis, efisien, dan terintegrasi, dilengkapi dengan tanda tangan digital berbasis *QR Code* sebagai validasi keaslian surat. Pengembangan dilakukan dengan metode *Rapid Application Development* (RAD) selama 120 hari melalui tiga iterasi, menghasilkan masing-masing delapan kebutuhan fungsional pada setiap modul. Pengujian fungsional menggunakan metode *Blackbox Testing* menunjukkan bahwa seluruh fitur pada kedua modul berfungsi dengan tingkat keberhasilan 100%. Evaluasi pengalaman pengguna dilakukan dengan *User Experience Questionnaire* (UEQ) yang melibatkan 30 responden. Hasil pengujian menunjukkan kategori “*excellent*” pada seluruh skala, yaitu daya tarik (2,28), kejelasan (2,38), efisiensi (2,47), ketepatan (2,31), stimulasi (2,09), dan kebaruan (1,71). Hasil tersebut mengindikasikan bahwa modul yang dikembangkan tidak hanya memenuhi kebutuhan fungsional, tetapi juga memberikan pengalaman pengguna yang sangat baik.

Kata kunci: *Rapid Application Development* (RAD), *Blackbox Testing*, *User Experience Questionnaire* (UEQ).

ABSTRACT

DEVELOPMENT OF THE ACTIVE STUDY LETTER ADMINISTRATION MODULE IN THE STUDY PROGRAM PORTAL INFORMATION SYSTEM OF INFORMATICS ENGINEERING UNIVERSITY OF LAMPUNG

By

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The development of the Active Study Certificate module in the Portal of the Informatics Engineering Study Program at the University of Lampung aims to provide an automated, efficient, and integrated letter issuance system, equipped with a QR Code-based digital signature to validate the authenticity of the document. The development was carried out using the Rapid Application Development (RAD) method over a period of 120 days through three iterations, resulting in eight functional requirements for each module. Functional testing using the Blackbox Testing method showed that all features in both modules operated with a 100% success rate. User experience evaluation was conducted using the User Experience Questionnaire (UEQ) involving 30 respondents. The results indicated an “excellent” rating across all scales: attractiveness (2.28), perspicuity (2.38), efficiency (2.47), dependability (2.31), stimulation (2.09), and novelty (1.71). These findings demonstrate that the developed modules not only meet functional requirements but also deliver an excellent user experience while enhancing document security and authenticity through QR Code integration.

Keywords: Rapid Application Development (RAD), Blackbox Testing, User Experience Questionnaire (UEQ).