

ABSTRAK

Samuel Zakaria H (03081210034)

PENGEMBANGAN SISTEM PEMINJAMAN RUANGAN BERBASIS WEB GUNA MENINGKATKAN EFISIENSI DEPARTEMEN STUDENT LIFE DI UNIVERSITAS PELITA HARAPAN KAMPUS MEDAN

(xvii + 132 halaman: 74 gambar; 28 tabel; 12 lampiran)

Proses peminjaman ruangan di Universitas Pelita Harapan Kampus Medan yang masih manual menimbulkan kendala seperti keterbatasan akses informasi, ketidakefisienan administrasi, dan kesulitan memastikan ketersediaan ruangan. Penelitian ini mengembangkan sistem informasi "Room Ease", aplikasi berbasis web untuk mengatasi masalah tersebut. Menggunakan metodologi *waterfall*, sistem diimplementasikan pada Google Cloud Platform dengan fitur utama berupa kalender interaktif untuk pengecekan ketersediaan ruangan, layanan notifikasi *real-time*, dan pengelolaan data berbasis peran pengguna. Pengujian sistem dilakukan melalui dua metode: pengujian fungsional untuk memastikan kesesuaian dengan spesifikasi, dan *user acceptance testing* (UAT) yang melibatkan Student Leaders, Akademik, Student Life dan General Affairs. Didapati hasil dari pengujian sistem ini memberikan kecepatan dalam proses peminjaman, serta kemudahan akses dan manajemen ruangan kampus. Sistem berhasil menciptakan proses yang lebih efisien, transparan, dan mudah diakses, dengan potensi pengembangan seperti fitur prioritas peminjaman, integrasi sistem pembelajaran, dan perbaikan antarmuka pengguna.

Kata Kunci: Room Ease, Sistem Peminjaman Ruangan, Google Cloud Platform, Pengujian Fungsional, User Acceptance Testing

Referensi: 12 (2020-2024)

ABSTRACT

Samuel Zakaria H (03081210034)

WEB-BASED ROOM BOOKING SYSTEM DEVELOPMENT TO IMPROVE EFFICIENCY OF STUDENT LIFE DEPARTMENT AT UNIVERSITAS PELITA HARAPAN MEDAN CAMPUS

(xvii + 132 pages; 74 figures; 28 tables; 12 appendices)

The manual room booking process at Universitas Pelita Harapan Medan Campus faces several challenges including limited access to information, administrative inefficiencies, and difficulties in verifying room availability. This research develops an information system called "Room Ease", a web-based application designed to address these issues. Using the waterfall methodology, the system is implemented on Google Cloud Platform with key features including an interactive calendar for room availability checking, real-time notification services, and role-based data management. System testing was conducted through two methods: functional testing to ensure specification compliance, and user acceptance testing (UAT) involving Student Leaders, Academic staff, Student Life, and General Affairs departments. Testing results indicate that this system provides faster booking processes and easier access to campus room management. The system successfully creates a more efficient, transparent, and accessible process, with potential developments such as booking priority features, learning system integration, and user interface improvements.

Keywords: Room Ease, Room Booking System, Google Cloud Platform, Functional, Testing, User Acceptance Testing

References: 12 (2020-2024)