

ABSTRACT

Room reservation management at Diponegoro University Rusunawa still faces several challenges due to the complexity of residential administrative processes, including occupancy period management, lease renewal, resident re-registration, periodic payment administration with different payment schemes for specific resident categories, document management, and room availability monitoring. These processes are currently managed through separate administrative mechanisms, which may lead to service delays, data entry errors, and difficulties in providing accurate real-time information. This study aims to develop a web-based Room Reservation Information System for Diponegoro University Rusunawa that integrates residential administrative processes into a single platform to improve efficiency and effectiveness. The system was developed using the ICONIX Process method, which consists of the requirements, analysis/preliminary design, detailed design, and implementation stages. The system was implemented using the Laravel framework and MySQL database and evaluated through Black Box Testing based on the defined functional requirements. The testing results from 68 test cases showed that all functional requirements were successfully implemented. Based on these results, the developed system fulfills the defined functional requirements and can be used to support room reservation management and residential administration at Diponegoro University Rusunawa.

Keywords : Room Reservation, Rusunawa, Information System, ICONIX Process, Laravel.