IMPLEMENTATION OF ROLE-BASED ACCESS CONTROL (RBAC) IN A WEB-BASED MOSQUE INFORMATION SYSTEM

Nama	:	Nurul Asrofi
NIM	:	6404221139
Dosen Pembimbing	:	1. Ristra, S.Pd., M.Ed
		2. Kasmawi, S.kom, M.Kom

ABSTRACT

The manual management of mosque administration and finances through physical bookkeeping and archives has the potential to cause inefficiency, reporting delays, and data security risks due to the lack of clear access rights restrictions. This study aims to design and build a web-based Al-Jami' Mosque Information System with the implementation of Role-Based Access Control (RBAC) security to improve data management efficiency and prevent unauthorized access to data and system functions. The system development method used is Waterfall, which includes the stages of needs analysis, system design, implementation, testing, and maintenance. The system was developed as a web application that supports the management of mosque activities, recording financial transactions, publishing announcements, and presenting financial reports, with RBAC implemented to limit user access rights based on roles so that each user can only access features according to their authority and maintain the integrity of financial and administrative data. System testing was carried out using functional testing (black box testing) and role-based access rights testing to ensure that all functions run according to requirements and that access restriction mechanisms are implemented correctly. Test results show that the system is capable of managing mosque activity and financial data in a structured manner, displaying financial reports transparently to the congregation, and protecting the system from unauthorized access through the implementation of RBAC. Therefore, the developed system can be an effective digital solution to support more efficient, transparent, and secure mosque management.

Keywords: Mosque Information System, Web-Based Application, Role-Based Access Control, Information System Security