IMPLEMENTING MULTI-CRITERIA DECISION-MAKING IN A MOBILE ANDROID-BASED APPLICATION FOR DETERMINING EMPLOYEE LEAVE AT WONOSOBO ISLAMIC HOSPITAL

HASNA NUR FAIRUZ NAFIS
Informatics Study Program, Faculty of Science & Technology
Yogyakarta University of Technology
Jl. North Ringroad Jombor Sleman Yogyakarta
E-mail: hasnafairuz025@gmail.com

ABSTRACT

Employee leave management is a critical component of human resource management, particularly in a hospital environment characterized by a demanding work schedule and high service expectations. The traditional manual leave application process often presents various challenges, including delays in approval, recording errors, and a lack of transparency in decision-making. Consequently, this study aims to design and develop an Android-based application that facilitates digital leave applications for employees while enabling management to handle and approve leave requests more systematically and efficiently. This application employs the Weighted Sum Model (WSM) algorithm to enhance the decision-making process related to leaving approvals based on multiple criteria. This approach allows the system to rank each leave application according to several key factors, including length of service, type of leave requested, and duration of leave. The test results show that the developed application can improve the efficiency of the leave request and approval process, reduce the possibility of recording errors, and provide better transparency in employee leave management.

Keywords: Employee leave, Android, Multi-criteria decision making, Weighted sum model, Hospital