

ABSTRACT

Kartika Clinic as a healthcare facility requires an effective and efficient management system for handling patient data and services, where the current manual data management causes various obstacles such as difficulties in data retrieval, risk of data loss, and slow patient service processes. In accordance with the Ministry of Health Regulation Number 24 of 2022 concerning Medical Records which regulates the requirement for an integrated Electronic Medical Record (EMR) system from the registration process to medication retrieval, this research aims to design and develop a web-based clinic management information system by implementing the Kanban process model to optimize workflow and improve service efficiency at Kartika Clinic. The system development uses the Kanban process model approach which enables workflow visualization, work in progress (WIP) limitation, and service process optimization, where the system is developed using web-based programming languages with an integrated database starting from registration, initial examination, main examination, cashier, to pharmacy modules in accordance with applicable regulatory standards. System testing is conducted using the black box testing method to ensure system functionality runs according to user requirements and data security standards set in the regulations. The research results in a clinic management information system that can manage examination registration, medical records, payments, and reporting displaying integrated data and graphical visualizations, where the implementation of the Kanban model in the system has succeeded in improving workflow transparency and service efficiency, and the black box testing results show that all system functions have performed as expected, with a 100% testing success rate and system interoperability as required by the Ministry of Health Regulation.

Keywords: Management Information System, Clinic, Web, Kanban, Black Box Testing.