ABSTRACT

Designing Frontend of Website-Based Cooperative Management System Using Reactjs Framework with SCRUM Method
(Case Study: Village Unit Cooperative (KUD) Rukun Tani Cilongok)
Izaz Rakha Anggara
NIM 21102096

This research aims to design and implement the frontend of a web-based cooperative management system for Koperasi Unit Desa (KUD) Rukun Tani Cilongok using the ReactJS framework and the SCRUM development methodology. The background of this research stems from issues in the current manual management of savings and loans data, which results in delayed record-keeping and low operational efficiency. The frontend development process was carried out through four sprints based on a predefined backlog. Each sprint produced key features, such as the login page, admin and user dashboards, loan application submission, savings record management, transaction reports, and profile settings. The system was designed using a modular approach in ReactJS and integrated with a REST API from the backend. Evaluation was conducted through functionality testing using the blackbox method and usability testing using the System Usability Scale (SUS) approach. The results of the blackbox testing showed that all features functioned as required, and the System Usability Scale (SUS) yielded a score of 86.25, which falls into the category of excellent usability. This indicates that the system is user-friendly and well-received by users. Therefore, the developed system is considered successful in supporting the digitalization of cooperative management and improving the efficiency and accuracy of savings and loan data processing.

Keywords: Cooperative, ReactJS, SCRUM, Frontend, Management System, Usability, SUS, Blackbox Testing