ABSTRACT

In today's digital era, the management of capstone design or final projects in higher

education institutions is still often conducted manually and separately across study programs.

This leads to various problems, such as irregular supervision workflows, delayed

communication between students and supervisors, and difficulty in monitoring the progress of

the final project. The main issue addressed in this study is the absence of an integrated system

capable of managing the entire capstone design process efficiently and comprehensively.

The proposed solution is the development of TAKU, a web-based capstone design

management information system that enables both lecturers and students to manage final

project processes in a centralized and real-time manner. The system provides features such as

topic submission by both lecturers and students, group formation, supervisor selection, project

supervision, and evaluation.

Test results show that TAKU performs well functionally and provides a positive user

experience. Based on testing using Katalon Studio, most of the main features could be executed

automatically, although minor technical issues were found in the dropdown element. In terms

of usability, respondents stated that the system is user-friendly, intuitive, and capable of

accelerating final project management processes. Therefore, TAKU is considered effective in

supporting a more structured and efficient capstone design management.

Keywords: Capstone Design, Final Project Management, Web-based System

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