

Implementation of the UCD Method in UI/UX Design for Web-Based and Mobile Applications to Improve Attendance Tracking in the Pelem Village Office

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ABSTRACT

The attendance system is one of the important administrative activities in government agencies to record employee attendance in a structured and well-documented manner. However, an attendance system that has not been designed according to user needs can cause difficulties in use and suboptimal management of attendance data. This study designed the UI/UX of a web-based and mobile attendance application at the Pelem Village Office using a User Centered Design (UCD) approach so that the system design is more in line with user needs and experiences. Usability evaluation was conducted using the System Usability Scale (SUS) method quantitatively by distributing questionnaires to respondents who had tested the application design. The results of the study show an increase in the SUS score from both platforms after design improvements based on user input. In addition, the evaluation results also show an increase in the ease of use and acceptance of the system by users. The use of the UCD method in the design process and the SUS method in the evaluation proved to be effective in improving the usability and quality of the attendance application design.

Keyword: *User Centered Design (UCD), UI/UX, Attendance, Web, Mobile, System Usability Scale (SUS)*