

ABSTRACT

The development of information technology has brought significant changes in the world of education, especially in terms of learning methods. Bina Negara 1 Baleendah High School, one of the schools under the Graha Bakti Negara Foundation (YGBN) in Baleendah, Bandung Regency, previously used Google Form and Microsoft Excel to distribute questions to students and recap grades from students, but the process was not optimal. This research aims to develop a question processing website application using the Lean UX method. This method has 4 stages, namely: declare an assumptions, create an MVP, run an experiment, and feedback and research. Initial testing uses A/B testing to determine user preferences, which will then be implemented into the program code. In addition, testing also uses the System Usability Scale to evaluate the ease of use of the question processing application interface design. The results show that the Lean UX method is effective in producing interface designs that meet user needs. A/B testing can identify user preferences which are then implemented into the program code. System Usability Scale testing shows a score of 85% on the teacher role and a score of 88% on the student role, both of which are in the “Best Imaginable” category. The System Usability Scale test shows a score of 85% on the teacher role and a score of 88% on the student role, both of which are in the “Best Imaginable” category. This reflects that the developed system has a very high level of usability, can be well received by users, and has great potential to be recommended as a more adaptive and measurable digital learning evaluation solution. This application is expected to make it easier for teachers to distribute questions and manage grades automatically, as well as improve students' experience in taking quizzes online. This research contributes to the development of a web-based learning evaluation system that is more structured, efficient, and adaptive to today's educational needs.

Keywords— Lean UX, Quiz, A/B Testing, System Usability Scale, usability, educational web application