UNIVERSITI TEKNOLOGI MARA

EVALUATING THE USABILITY OF LABORATORY BOOKING SYSTEM (ELAB) FOR FACULTY OF DENTISTRY, UITM SHAH ALAM USING STIMULATED RETROSPECTIVE THINK-ALOUD (RTA) METHOD

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ABSTRACT

Technology is being embedded into human life as it serves and assists people with daily job and responsibilities. Manual processes are systematically automated with the assistance of web-based systems and applications. The usability aspect had become essential to ensure the acceptance from the user. The prototype of Laboratory Online Booking System for Faculty of Dentistry, UiTM was developed in 2011 but it was not being evaluated before. The main objective of this study is to evaluate the Laboratory Online Booking System for Faculty of Dentistry, UiTM. The methodology involved is the usability evaluation by using Retrospective Think Aloud method with four HCI experts. An instrument of Nielson's severity rating for usability problem was also adapted into the study. The results were presented in three categories, that is; (i) cosmetic, (ii) minor, and (iii) major usability problem. As a result, the Laboratory Online Booking System (eLab) had mostly cosmetic and minor usability problems. Recommendations were given to improve the usability of the Laboratory Booking System (eLab). Recommendation are based on ten heuristic guidelines adapted from Jacob Nielsen with the priority indicator and comment for each of Laboratory Online Booking System (eLab) pages which will help developer priorities their task. Future work would involve usability evaluation with lecturers and students as the user of the system. The study will benefit the IT Community such as the system developer and designer in the enhancement of the future system usability. This study will also provide information and future reference for academician and future students as it details the usability evaluation of the Laboratory Booking System (eLab).

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