Evaluation of Asian mental models pattern of web user-centered interface design using eye-tracking technology

Abstract

This study utilised eye-tracking technology to evaluate the results from the ASEAN mental model pattern of web object locations in a web user-centered interface design. Two experts and four volunteers participated in an eye-tracking experiment. The selected web object locations led to fewer fixations and participants found the target web objects faster. The eye-tracking data showed that users have clear expectations of where web objects are located on a web page. With the utilisation of the eye-tracking technology, a more precise and objective tool can be used to improve the classification of web user-centered interface design. It was concluded that eye-tracking technology is accurate and useful for knowing what a user looks at and understanding the user's behavior. Finally, it was established that there was an improvement when using the information generated by the eye tracker. The study showed that web objects located according to user expectations were found faster and remembered more easily. Placing web objects at expected locations and designing their appearance according to user expectations facilitates orientation, which is beneficial for first impressions and the overall user satisfaction with the website experience.