Abstract

Personalization of E-learning can be done by personalizing E-learning features which are learning content and learning activities provided. In this study E-learning content personalization was carried out based on the Felder-Silverman Learning Style Model (FSLSM). FSLSM is a method of classifying learning styles into 4 dimensions, namely perception, processing, input and understanding. FSLSM classifies learning styles using the Index of Learning styles (ILS) questionnaire consisting of 44 questions. In the system that was built, the ILS questionnaire was digitized to map E-learning users based on their learning style. Afterwards, content personalized algorithms were designed so that users could access the content that were suitable to their learning styles, then learning content was designed for each dimension of the FSLSM using ADDIE modeling, which was the stage for creating E-learning content. In testing the designed algorithm, the Delphi method was used, which is a method that collects expert opinion on a problem. To test the system that was built, the System Usability Scale (SUS) method was used to measure acceptance of user. For a system, however, to test the compatibility of the personalization content with the curriculum from the educational institution at the research site, an evaluation was conducted with the material expert. The results of this research, getting agreement on the accuracy of the design of content personalization algorithms from 3 E-learning experts, the system that was built got SUS 75.33 which was acceptable with grade B, means the system was accepted as a learning tools to help them in learning process based on SUS assessment, while personalized content obtained in accordance with the curriculum from Material Expert.

Keyword(s): Delphi Method, E-learning, FSLSM, Material Expert Instrument, Personalized E-learning, SUS