ABSTRACT

Learning is a dynamic process that aims to change a person's behavior through the acquisition of knowledge, skills, and positive attitudes from various resources. In today's digital era, the use of technology in education is more rapid to support the effectiveness and efficiency of learning preparation activities. One of the instruments that can be utilized is in a digital-based learning management system that is able to integrate various processes, from registration to the learning stage. Telkom University Language center is one of the institutions organizing TOEFL ITP courses which so far still relies on manual processes in managing participant and instructor data and registration. This can cause various obstacles such as delays in administrative work, human error and limited access for participants to learn. This study aims to design and implement a website-based TOEFL ITP course management system using the Design Thinking approach. This study begins with the process of empathizing the suitability of user needs through interviews with admins, instructors, and participants. The findings are used to formulate identifying feature needs, followed by the design stage from low fidelity wireframe to high fidelity prototype using Figma, then developed with React JS. This prototype was tested with Usability Testing conducted on admin staff, instructors and participants through the Maze.co platform to get feedback based on the design and scenario, each participant has done well from direct success of 100% and mission unfinished 0%. Then the second test to obtain this evaluation using the System Usability Scale approach shows an average score of 75 for admins who get a B, for participants 78.5 who get an A-, and 75.83 for instructors who get a B+. These scores are in the “Acceptable” and “Good” categories overall.

Keywords: TOEFL ITP, Design Thinking, Learning Management System, Interface, React JS