ABSTRACT

The study was conducted at Capiz State University Mambusao Satellite College, Mambusao Capiz, from April 2022 to May 2023. The study aimed to develop Computer Aided Instruction for Distributed System of Capsu Mambusao Satellite College. Specifically, the study aimed to enhance the knowledge of students using the developed system; design a system that would suit the academic needs of students taking distributed system subjects; develop a system for Distributed System that would make the teaching- learning process more manageable, and determine the acceptability of Computer Aided Instruction for Distributed System of Capsu Mambusao Satellite College in terms of functional suitability, maintainability, performance efficiency, compatibility, reliability, usability, security, and portability. The researchers used the waterfall model to develop the computer-aided instruction for Distributed System. The interview was conducted to gather data. JavaScript, MongoDB, Notepad, Chrome, and Microsoft Office are used to develop the system with the following hardware specifications such as at least 2 gigabytes of space on hard disk, at least 512 megabytes of memory, and an Intel Pentium processor and a high version of the microprocessor. The study's respondents are 61 students and seven Computer Science Department faculty members of Capsu Mambusao Satellite College. The respondents evaluated the system using functional suitability, maintainability, performance efficiency, compatibility, reliability, usability, security, and portability. The questionnaire was used to collect the data adopted based on ISO 25010 Standards. The researchers gathered the questionnaire after the respondents provided the necessary information. The data were tallied and analyzed using percentage and mean. Generally, the results revealed that the developed Computer Aided Instruction for Distributed System for Capsu Mambusao Satellite College enhanced students' knowledge. The system is suitable to students and highly acceptable to 4rth year students and faculty in terms of functional suitability, maintainability, performance efficiency, compatibility, reliability, usability, security, and portability, with a mean of 4.21.