User Interface Design for Electronic Learning Software: Promoting Usability and Facilitating Learning for Children

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Abstract

Computing devices have become ubiquitous in our technologically-advanced world, serving as vehicles for software applications that provide users with a wide array of functions. Among these applications are electronic learning software, which are increasingly being used to educate and evaluate individuals ranging from grade school students to career professionals. This study will evaluate the design and implementation of user interfaces in these pieces of software. Specifically, it will explore how these interfaces can be developed to facilitate the use of electronic learning software by children. In order to do this, research will be performed in the area of human-computer interaction, focusing on cognitive psychology, user interface design, and software development. This information will be analyzed in order to design a user interface that provides an optimal user experience for children. This group will test said interface, as well as existing applications, in order to measure its usability. The objective of this study is to design a user interface that makes electronic learning software more usable for children, facilitating their learning process and increasing their academic performance.

This study will be conducted by using the Adobe Creative Suite to design the user interface and an Integrated Development Environment to implement functionality. These are digital tools that are available on computing devices such as desktop computers, laptops, and smartphones, which will be used for the development of software. By using these tools, I hope to create a user interface for electronic learning software that promotes usability while maintaining

functionality. This study will address the increasing complexity of computing software seen today – an issue that has risen due to the progressive implementation of new functionality. This issue is having a detrimental effect on the usability of electronic learning software, increasing the learning curve for targeted users such as children. As we make electronic learning software an integral part of educational programs in our schools, it is important to address this in order to guarantee them a successful learning experience.