

ABSTRACT

PlayKids is a-based application system 4-12 *mobile* designed for or aimed at vulnerable children aged years. This application was created with the aim of directing the compatibility of music availability with the music consumption needs of children. Because until now the available digital music service facilities are random, even mostly for adult consumption. By using this application, parents no longer need to worry about watching their children when listening to music. Children can listen to music freely according to their age and can be used as a means of education and entertainment. The research process is divided into two stages, namely the design stage of *prototype* the application *mobile* PlayKids using the method *UX Lifecycle* and the testing stage *prototype* using the method *usability testing(USE Questionnaire)* as its evaluation. The stages of implementing the method *UX Lifecycle* consist of analysis, design, prototype, and finally evaluation. The recap results of the value *usability* on the questionnaire *USE* show that all attributes have a value for the *usability* user with an average value above 3, namely 4.25. In addition, the average percentage yield for the index covering three aspects (*system, user, interaction*) is 84%and the overall average relative efficiency yield is 73%. Thus, it can be concluded that the PlayKids application in the form of a *medium fidelity prototype* that has been created has a aspect value *usability* because PlayKids is easy to use, learn, and understand by users. PlayKids has met the five aspects of *usability* so that it can be implemented as an application that can be operated by users. Meanwhile, the results of the T test prove that H_1 is not equal to 3 (accepted) according to the results of the mean score *USE* of 4.25.

Keywords : *UX Lifecycle, Usability Testing, USE Questionnaire, Prototype Medium Fidelity*