ABSTRACT

Sign Language is a type of language used to help deaf children to communicate. The Indonesian government has created their own standardization system for sign language called SIBI (*Sistem Isyarat Bahasa Indonesia*). Deaf children have characteristics of lack of memory ability, therefore they need media for repetition in learning. The existing mobile-based learning could support repetition in subject is already available, but not all the designs on mobile technology are suitable for children's needs. This is proven by testing the existing application using USE Questionnare which obtained a usability average of 58%, which mean that the application could not provide convenience and satisfaction for users. Therefore, in order to create a user interface that suits the needs of the user, the User Centered Design method is used. The usability testing of the prototype application has been conducted is 90% with a very good category. If the result of the usability is a very good value then the application could be used very easily and very satisfied for user.

Keywords: *deaf children,* SIBI *sign language, user centered design, USE Questionnaire*