

Abstract

Smartphones are a technological advancement that can be accessed by anyone, including people with disabilities, one of which is the visually impaired. Accessing smartphones requires supporting media that can help the blind to complete the task they want to complete using a screen reader application. For people who are blind, the screen reader application currently used is still causing problems, such as screen interaction commands that are not understood by the user and the interaction design that makes it difficult for the user. From these problems, we will build an application user interface model for blind people to carry out activities on smartphones called BantuBaca using the Goal-Directed Design method. The features of the BantuRead application include a screen reader, voice commands, and an image reader. The research was conducted with 7 participants with visual impairments. The usability value obtained in the third iteration design produces an average value of 93% with the ease of use factor with a value of 94% with a good category so that the modeling of the BantuBaca application user interface follows the goals and needs of users in helping access smartphones.

Keywords: Blind People, Goal-directed Design, Interaction, Screen Reader, User interface
