

Abstract

Needs of person with severely sight impaired is important to note, one of those needs is mobility needs. One way to meet these needs is by using tools.

BlindNav is a tool in the form of hand strap and Android application intended for people with sight impairment. This tool is equipped with ultrasonic sensors to determine the distance of obstacles around the user with a vibration alert on the hand strap, this application is also equipped with a GPS to navigate and panic button that will send notification to the mobile guardian of the user location when pressing the panic button. Other than that, guardians of the sight impaired can perform tracking to see the location of the hand strap's user, adding additional destinations for user with sight impaired, and history crashes experienced by hand strap's user.

Keywords: BlindNav, Sight impaired, mobility, hand strap