

ABSTRACT

This paper discusses designing wearable tracking device through design for wearability approach. Wearable tracking device is a common product for remotely monitoring children's activity, using the form of accessories. Wearability of a device is not limited to its physical comfortability when worn by the user, but also mental comfortability and social context of the location where the user worn the device. In Indonesia, the common activity for the children is attending school, where schools are typically required the students to wear uniform. Using Rational Design Method, this paper conveys the alternative form of wearable tracking device through the social context of student uniform. Through the steps of Rational Design Method and Design for Wearability, the alternatives for wearable tracking devices are obtained from different attire of uniform such as shirt, pants, belt, socks, and shoes. These alternatives are then evaluated to obtain the most suitable concepts based on the Design Guidelines for Wearability. Then, the product architecture is established for each suitable concepts and from that, the visualization of the concepts, which based from the design of a belt, are created using 3D CAD software. Thus, the chosen concept is designed through the application of Design for Wearability where it is based on belt which is one of the attire of uniform for students through the consideration of contextual-awareness.

Keywords: *wearable tracking device, wearability, Design for Wearability, alternatives, uniform, concept*