

Development of a multifunctional hand watch to store and organize pills for elderly people

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Abstract

Most of the elders need a simple reminder of the pill time, especially those with Alzheimer of any stage. The concept of our Pills attachment is simple, where a watch is created that will have a heart rate monitor, a clock, timer/alarm, and pockets to carry pills around. heart rate monitor is to record data for their heart activity where when they visit the doctor, he/she will have a clear analysis of the heart activity. The timer/alarm will be lighting, vibration, and beeping to make sure that it is noticeable. In this study, a concept and detailed design are introduced, in addition to market forecasting and financial analysis.

This work is accomplished as a course project of the Product Design and Development course that is running through the fall 2019 semester at Prince Sultan University.

Keywords

Development, Design, Elderly watch, Smart, Marketing.

Biographies

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Tamer A. Sebaey is an associate professor of design and product at Prince Sultan University. Tamer's main research interest is the design, manufacturing, testing, modelling, and optimizing the composite structures for transportation application. His PhD studies were conducted at the University of Girona in Spain and got the best thesis award for 2013 through the whole university. The main focus of applications for his research is the aeronautical. However, other applications as the automotive, piping, infrastructures, etc., are also of interest to him. He was an assistant professor from 2013 – 2018 and then he got the promotion to associate professor, due to excellence in research, in 2018. Tamer is an active researcher with more than 40 articles on Scopus with h-index of 15 (As per Nov. 2019 Records). He is also an active member in the composite scientific research community with several presentations in international conferences and industries. He is also a recognized reviewer in most of the composite materials and structures journals. His current activities focus on the design of composites for more safe transportations.