

Activities Tracking System

The elderly population is experiencing high growth in most of the countries. Today, 8.5% of the total population worldwide is aged 65 and above. Most of the elderly preferred to stay at home most of the time. Due to a limited movement within the household, many of them engaged in only a few physical activities. According to the World Health Organisation (WHO) tracking physical activity of a person confined to home can attribute to a reduction of high blood pressure and weight as well as reduce risks of heart disease, stroke, type 2 diabetes and various types of cancer.

In view of this, one of the research centre (Digital Home and lifestyle centre) in the Faculty of Engineering, MMU has initiated a project to develop a wearable tracking device to track physical activities and indoor position. The device would be placed on the waist of the person to record their daily activity. The collected data would then be used for analysis and detection of any abnormal behaviour. Weekly results would be consequently shared with a respective caretaker or a hospital to ensure the patients' health and quality of life is being improved. This is a practical example of how engineering students can contribute to our society; implementing their knowledge of hardware design as well as software analysis.

#engineering #multimedia #university #mmu #physical #activities #quality #of #life #hardware #software #design

#elderly #population #stay_at_home #physical #activities #world #health #organisation



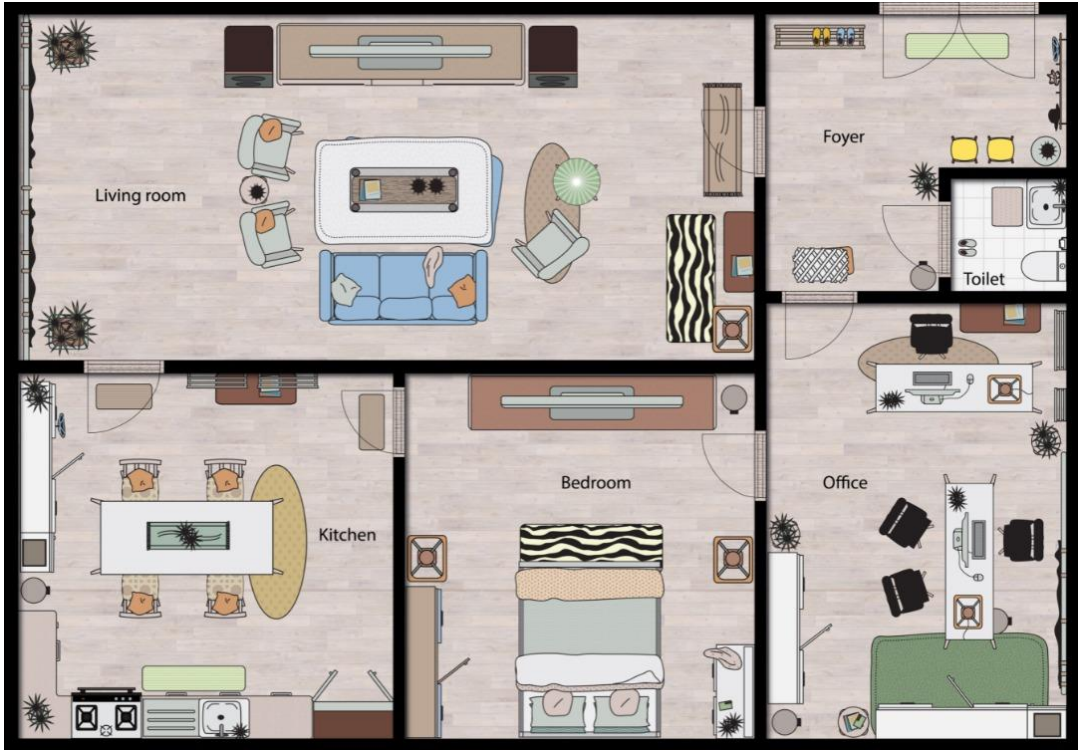
Scan to watch the video
demo



Tablet to display the physical activity outcome



Wearable tracking device developed by an engineering student



The layout of Digital Home and lifestyle centre for indoor positioning tracking.



DIGITAL HOME & LIFESTYLE CENTER

DHALC

Tablet to display the physical activity outcome



Another version of the tracking device developed by an engineering student.