

# FITNESS TRACKING GADGET

## GROUP 15 - ADAPTIA

### PROJECT INTRODUCTION

Our community partner:

Hong Kong Society for the Blind(Yuen Long)

Service provided : Residential service,

Physiotherapy service

Service target: aged blind, aged with visually impaired,  
patients with dementia

- Arouse awareness of public on elderly exercise
- Motivate the elderly to do sports
- Help staff achieve better efficiency



### DESIGN RATIONALE

We have a vision to implement a gadget that can help improve the elders' well-being, and coming up with an idea to innovate a fitness tracking gadget with reference to the concept of Fitbit and the technology of TinyDuino and Bluetooth which can help record their exercise level. This will motivate them to exercise more, at the same time making the recording process of the staff easier.



### LIMITATIONS & DIFFICULTIES

- Only suitable for narrow range of exercise equipment
- Limited sensitivity of the accelerometer and gyroscope
- Gadget should be set by staff before exercising

### INDIVIDUAL REFLECTION

“Adaptia” is our group project name that means helping the elderly become easier to adapt daily life.

Through this project, we hope to innovate the Fitness Tracking Gadget by applying engineering background to reduce human error and obtain more accurate amount of exercise. Moreover, we have recognized the situation and limitations of the elderly home and public health issue about the elderly in the society.

### CONCLUSION & RECOMMENDATIONS

Through conquering many challenges on technical issue, we knew how to transfer the amount of exercise so as to provide convenience for analyzation of physiotherapists and reduce workload of staff.