

# Cloud-Based Step Counter using Built-in Accelerometer in Smartphone

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## Objetivos

Sensors available in mobile devices allow the capture of several signals such as the accelerometer that may paved the way to human activity and behaviour recognition [1]. In line with this, is timely and promising to develop a step counter app combined with complementary concepts like the cloud computing, and the web services for example.

## Tarefas a Realizar e Cronologia

- T1 Introduction to sensors, and cloud computing (2 weeks);
- T2 Review the state of the art (6 weeks);
- T3 Design and development (12 weeks)
- T4 Testing and evaluation (8 weeks)
- T5 Write the report (12 weeks

	Feb	Mar	Apr	May	Jun
T1	Х				
T2	Х	Х			
T3		X	Х	Х	
T4			Х	Х	
T5			Х	Х	Х

## **Requisitos Técnicos / Académicos**

Hard skills: Proficient in Programming

<u>Soft</u> skills: Enthusiastic, Competitive, Dedicated, Perseverant, Creative, Logical and Critical thinking, Desire to learn.

#### **Resultados Esperados**

- Source code and documentation of all code development;
- Project report.

### Referências Bibliográficas

[1] Validation of a method for the estimation of energy expenditure during physical activity using a mobile device accelerometer, Pires, I., Felizardo, V., Pombo N., Drobics, M., Garcia, N., Flórez-Revuelta, F. in *Journal of Ambient Intelligence and Smart Environments*, 2018; 10(4):315-326.