# PERSONAL MONITORING SYSTEM OF CLINICAL & ENVIRONMENTAL CONDITIONS

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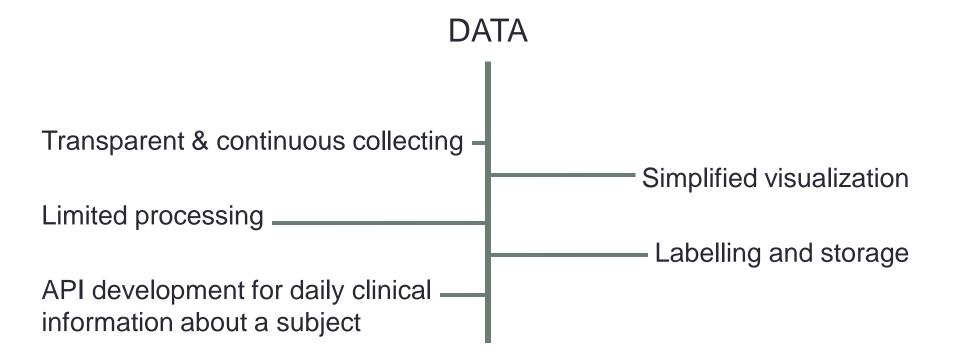
# Contextualization

- Increased proliferation of mobile devices for monitoring vital signals and physical activity
- Use of geolocation to keep track of the environment the patient was exposed to
- Need for quality labelled quotidian data in the medical field
- → A new paradigm of medical monitorization

#### Problem

- The inconvenience of having to be inside a medical environment (e.g. a hospital) for collecting information difficults the access and gather of relevant data
- The imperfect form of passing information (e.g. symptoms, etc.) to medical personnel reduces the chances of diagnosing and understanding diseases in early stages
- The lack of medical datasets lead us to visualize an information. system capable of passively collecting data and partially process it for further usage by applications, machine learning models and other technologies

# Goals



# **Tasks**

- Selection of medical and environmental devices suited for our needs (entire team)
- Formal planning of entire system (entire team)
- Creation of an online server (André Pedrosa & João Alegria)
- Creation of a user interface (Filipe Pires)
- Writing of documentation (entire team)



#### Related Work

- Beyond Health Tracking: A Personal Health and Lifestyle Platform
  - https://ieeexplore.ieee.org/document/5753876
- Pervasive health service system: insights on the development of a grid-based personal health service system
  - https://ieeexplore.ieee.org/document/5556532
- UPHSM: Ubiquitous personal health surveillance and management system via WSN agent on open source smartphone
  - https://ieeexplore.ieee.org/document/6026787



#### **QUESTIONS?**

For more information, please check our CodeUA Project: <a href="http://code.ua.pt/projects/personal\_monitoring\_system/wiki">http://code.ua.pt/projects/personal\_monitoring\_system/wiki</a>

