Mobile and Embedded Computing

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What is this course about? (1)

- "Mobile"
  - Portable devices with wireless communication, running applications or stand-alone

- "Embedded"
  - *"An embedded system is a computer system with a dedicated function within a larger mechanical or electrical system"* [Wikipedia]

- In this course, we will combine those two: We will talk about *wireless networks of embedded systems*

What is this course about? (2)

- We will see
  1. different technologies for wireless communication, ranging from small personal area networks (PAN) to large cellular networks
  2. operating systems for small embedded systems, especially for *Wireless Sensor Networks* and the *Internet of Things*
  3. how mobility is implemented

- We will <u>not</u> talk about
  - general mobile OS (iOS, Android,…), UI design,…
  - hardware and low-level aspects (batteries, antennas, signal processing, …)

Material

- Material will be posted on Teams
- There will be
  - Slides
  - Exercise sheets
  - Instructions for project
  - Links to relevant publications, websites, etc.

Assessment

- There will be an exam about the topics addressed in this course, counting for 60% of the final grade

- You will do a project → 40% of the final grade

- Exercises will not be assessed, but they will prepare you for the project work