

307CR 2016-17

Lab week 1(b)

Dan Goldsmith

Lab part 2

Recap

Last time we looked at existing pervasive systems. This time you are required to design a pervasive systems of your own.

Based on **ONE** of the following scenarios, draw a diagram of the system and explain how the components work. You will be expected to present your work in the second hour.

Task

Pick **ONE** of the scenarios and:

- Draw a basic system diagram showing the components how they are connected and how they communicate
- Discuss how various parts of the system are powered
- Show how data is collected and processed
- Explain how the user interacts with the system

Scenario 1

A new tech company is trying to get into the health and lifestyle market by producing a new monitoring device. They want to be able to offer something more than companies like fitbit and apple smart watches. Design a system that utilises at least one device to provide full health and monitoring for a single user

Scenario 2

A R&D company is planning on building a new multi-million pound office and want to know what technologies can be incorporated to make everyday life easier. The building includes hot-desk offices, 2 eateries, a gym, recreational facilities, a coffeehouse, meeting spaces and lecture theatre.

Scenario 3

After several robot missions to Mars, NASA are looking at creating a Wireless Sensor Network that can monitor a large area of the planet for environmental properties. Develop a system that would be able to do this and comment on how to get data to and from the planet.