

Team Meeting

29/04/2019

12:00

EEE 502

Meeting called by: ALL

Type of meeting: Initial project planning and research

Attendees: Zed Al-Aqqad, Ethan Benarroch, Jonas Frieling, Simon Hanassab, Peter Udvardi, Daniel Varga

Notekeeper: Jonas

Minutes

Agenda item: Vital Signs

Discussion:

Types of vital signs that we should consider tracking in our wearable. Many possible however only some will be feasible.

Conclusions:

We should focus on heart rate, blood oxygen, blood pressure, step count, and temperature. Delirium would be too complicated to reliably track. Environmental conditions will fluctuate too much under clothing.

Action items	Person responsible	Deadline
✓ Find suitable sensors for vital signs	Peter and Simon	3/5/2019
✓ Consider further vital signs	Daniel	3/5/2019

Agenda item: Innovation Ideas

Discussion:

Consider possible USPs for our product – try to improve against similar competition. Consider methods of energy harvesting, to avoid constant charging. Allow for overnight usage. Is blood oxygen being measured on other wrist devices?

Conclusions:

Blood oxygen is currently not measured on other similar devices. Thermal energy harvesting would be a neat solution to our charging method. This can be alongside a USB charging option for top-up. Realistically thermal energy would be sufficient for the device in idle mode.

Action items	Person responsible	Deadline
✓ Find thermal harvesters	Peter	6/5/2019
✓ Blood oxygen measurements	Daniel	6/5/2019

Agenda item: Data Analysis

Discussion:

See current methods of anomaly detection with machine learning for vital signs. Visualisation of data? What will form as a base station – a tangible product or just a mobile application?

Conclusions:

Further research is needed in all areas of discussion.

Action items	Person responsible	Deadline
✓ Anomaly Detection methods	Zed	6/5/2019

Action items	Person responsible	Deadline
✓ Base station	Jonas and Ethan	6/5/2019
✓ Data visualisation	Zed	6/5/2019